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**2nd to 3rd September, 2015
Kuala Lumpur Convention Centre, Malaysia**

EDITORS

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WELCOME

Dear ICARBSS 2015 delegate,

On behalf of the Organizing Committee, I'm glad to welcome all participants to the International Conference on Advance Research in Business and Social Sciences, organized by Panoply Consultancy, Malaysia and MIRPUR University of Science and Technology, Pakistan which this year is held in Kuala Lumpur Convention Centre, Malaysia.

I wish to extend a warm welcome to fellow delegates from the various countries. I realize that you are fully dedicated to the sessions that will follow, but I do hope you will also take time to enjoy fascinating Malaysia with its tropical setting, friendly people and multi-cultural cuisine.

In few words, the Conference will give a wide overview of the most-recent advances in the areas of Accounting, Finance, Law, Management, Education, Psychology, Marketing, Communication & Culture, Society, Economics, Banking, and Political Science topics.

Let me conclude by thanking all the authors, the participants, the members of the Review Committee, the Session Chairs, the Keynote Speakers, all those who have contributed to build the Conference program, and all persons or organizations that have supported our work in many ways and have contributed to the success of ICARBSS-2015.

We look forward to seeing you in Indonesia in September 2016.
Thank you.

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SCOPE OF THE CONFERENCE

The International Conference on Advanced Research in Business and Social Sciences 2015 (ICARBSS 2015), provides such a platform for all academicians, researchers, professionals, practitioners and post graduate students to exchange their latest research findings, new ideas and experiences face to face interaction, in order to commercialize their ideas and to establish business or research relations to strengthen their ties with Global Partners for future collaboration. ICARBSS 2015 will be featuring invited speakers who will further explore the contemporary topic that is vital for the success, survival and sustainability of Business and Social Sciences.

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- ❖ Accounting
- ❖ Finance
- ❖ Law
- ❖ Management
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Burhanuddin has been active at all levels of the university development and one of the pioneers in building the faculties in Universiti Teknikal Malaysia Melaka and King Abdulaziz University Rabigh. He has experience in managing research grants and supervises under-graduate and post-graduate students. His teaching and research interests focus on the areas of multiple criteria decision making models, decision support system, optimization techniques, operational research, artificial intelligence, health informatics. He was awarded Bronze Medal in Malaysia Technology Expo 2009 (MTE 2009) with product Web Based Maintenance Decision Support System for Small and Medium Industries.

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INTELLECTUAL CAPITAL EFFICIENCY, COMPETITIVE ADVANTAGE, AND FIRM PERFORMANCE: EVIDENCE FROM SELECTED MANUFACTURING FIRMS IN INDONESIA STOCK EXCHANGE

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ABSTRACT

This study aims to investigate the influence of the efficiency of intellectual capital (IC) to the company performance by considering the competitive advantage. The research uses manufacturing companies listed on the Indonesia Stock Exchange during 2009-2013 according to JASICA version. This research segregates the sample into firms with sustained competitive advantage and firms with un-sustained competitive advantage. There are eight regression models proposed in this research. Based on the models, IC efficiency only has influence on ROE and ROA models, whereas capital employed efficiency has a strong influence on all models proposed. Thus, it can be concluded that the manufacturing companies in Indonesia are still heavily dependent on physical and financial capital than intellectual capital. Therefore, the contribution of firm efficiency (VAICTM) to company performance is not supported by this research.

Keywords: Intellectual Capital, capital employed/physical and financial capital, competitive advantage, VAICTM, resource-based theory.

INTRODUCTION

Knowledge is becoming the preeminent resource for creating competitive advantage. For many firms, in this modern economy, knowledge, not physical capital, is their critical asset. Firm's value is often partly based on the intangible or knowledge asset that it possesses. This phenomenon has become the academics and practitioners in accounting field consensus (Bozollan *et al.* 2006; Singh and Zahn 2008; Skinner 2008).

The importance of the knowledge role triggered the emergence of intangible assets, which then known as intellectual capital (IC). According to Seetharaman, *et al.* (2002), IC is an intellectual material – knowledge, information, intellectual property, experience – that can be put to create wealth. Another definition is the difference between a firm's market value and the cost of replacing its assets. Pulic and Bornemann (1999) stated that IC becomes the only company's competitive advantage. This competitive advantage then will contribute to the firm performance sustainability. There has been extensive literature proposing the relationship between IC and firm performance (Firrer and Williams 2003; Chen *et al.* 2005; Shiu 2006a; 2006b; Gan and Saleh 2008; Cheng, *et al.* 2010). However, there is only little empirical evidence able to reveal the significant relationship between IC and performance. Firrer and Williams (2003) indicated that the associations between IC and profitability, productivity, and market valuation are generally limited and mixed. Findings of Gan and Saleh (2008) show there are no associations between IC and market valuation. In contrast to Chen, *et al.* (2005), Shiu (2006a), and Cheng, *et al.* (2010), which showing the

relationship between IC with firm performance. However, these researchers must be observed carefully, considering the difference relational pattern between companies with positive IC efficiency value and negative IC efficiency value to firm performance (Shiu 2006b). The inconsistency of the relationship between IC and firm performance as described above has become the motivation of the importance of this research.

The IC importance as a resource which contributes towards the creation of competitive advantage has triggered the development of *resource-based theory* (RBT). This is due to the characteristic of IC as a resource that meets VRIN (*valuable, rare, inimitable, and non-substitutable*) criteria (Barney, 1991; Barney, et al. 2001). Kamukama et al. (2010) and Lin and Huang (2011) indicated the significant associations between IC and competitive advantage within the RBT framework. However, few researchers did further analyze in terms of how IC components influence the firm's competitive advantage and its performance.

Utilizations of IC in Indonesia have developed rapidly, conducted by the MAKE (Most Admired Knowledge Enterprise) Awards. Dunamis Organization Services has conducted an Indonesian MAKE Study since 2005. This event is a national knowledge management event where Indonesian MAKE Winners will share their best practice in implementing knowledge management in their organizations. The Indonesian MAKE the study is conducted, then, to enable enterprises in Indonesia to benchmark how successful their knowledge strategy is when compared to competitors or the world's leading knowledge driven enterprises and encourage leaders in creating intellectual capital and wealth through the transformation of individual/enterprise knowledge into world-class products/services/solutions. There are also several IC studies in Indonesia (Ullum, 2008; Suhadjanto and Wardhani, 2010; Suwarno, 2011). However, little evidence supports a relationship between IC, competitive advantage, and firm performance in Indonesia.

The purpose of this study is therefore, to empirically test the influence of IC efficiency to the firm performance by considering the organization's ability to sustain its competitive advantage. It is expected that this research can contribute in testing the RBT framework in the strategic management accounting field by using Indonesia's public manufacturing companies. Besides, it is also expected that this study can contribute in promoting IC as the strategic resource to increase the company's competitive advantage. Using data from annual report, this research is expected to give empirical evidence of financial report usefulness in giving the information related to IC, competitive advantage, and performance.

The remainder of the paper is structured in four sections. The next section is theoretical framework and hypotheses. This is followed by sections that discuss the research method and present results. Finally, conclusions, limitations, and implications are discussed.

THEORETICAL FRAMEWORK AND HYPOTHESES

RESOURCE-BASED THEORY

This study used RBT as the theory framework to test the relationship between IC, competitive advantage, and firm performance. RBT has emerged as one of the several important explanations of persistent firm performance differences in the field of strategic management. Since 1986, Barney has started the change of resource-based view to become a theory by introducing the concept of strategic factor markets as a market where the company gained or developed the resources, they need to implement the strategy (Barney and Clark, 2007). Furthermore, according to Barney and Clark (2007), those companies that develop its own resources and able to manage it will have the ability to maintain its superiority than if the company gains its resources from outside of the organization. Bundles of unique resources which are owned and managed by the

company allow the company to gain and sustain its superior performance. Thus, RBT's focus is the company's ability in maintaining abnormal return from their resources (Barney et al. 2001). These resources must be valuable, rare, inimitable, and non-substitutable. Resources are valuable when they enable a firm to conceive of or implement strategies that improve its efficiency and effectiveness. Rare means it is owned only by a few companies to generate perfect competition dynamics in an industry. Inimitable means the resources protected from the possibility imitated by competitors. Non-substitutable means this resource owned only by a few companies and unable to substitute with other products.

Conceptually, RBT continues to grow (Wernerfelt, 1984; Barney et al. 2001; Barney and Clark, 2007). RBT has been empirically tested in various subject areas, such as strategic management (Spanos and lioukas 2001; Schroeder et al. 2002; Ray et al. 2004), human-resource management (Gates and Langevin, 2012; Connelly et al. 2012), and accounting (Henri, 2006; Tom, 2010). Even though there are many conceptual or empirical studies related to RBT, this theory still debated by academics and practitioners. RBT debate often related to reasoning and the practical implementation (Priem and Buttler, 2001; Arend and Levesque, 2010).

THE RELATIONSHIP BETWEEN IC, COMPETITIVE ADVANTAGE, AND FIRM PERFORMANCE IN RBT FRAMEWORK

This research objective is to find the relationship between IC efficiency, competitive advantage, and firm performance. Competitive advantage is defined as an intrinsic property of firms that create value either by generating greater-than-expected returns than from available resources or by allowing a firm to outperform its rivals on certain behavioral measures (Porter 1985; Peteraf 1993; Barney and Clark 2007; Lin and Huang 2011).

According to Wernerfelt (1984) and Barney (1991) resource is an important antecedent for firm performance. That reason in line with RBT's perspective that there is competitive advantage diversity between companies because the difference of the company's resources. There are many types of strategic resources, such as physical capital, human resource, technology, instructional, organizational capital, or organizational culture (Teece et al. 1986; Barney 1991; Barney and Clark 2007). Mainly, these resources are known as intangible assets. Specifically, Bontis (1998); Pulic (2000), Petty and Guthrie (2000) classified intangible assets, which are the company's source of knowledge as intellectual capital or (IC). Overtime, a broad consensus has developed that IC can be characterized in terms of a tripartite model comprising human capital, external capital, and internal capital components (Petty, et al. 2009).

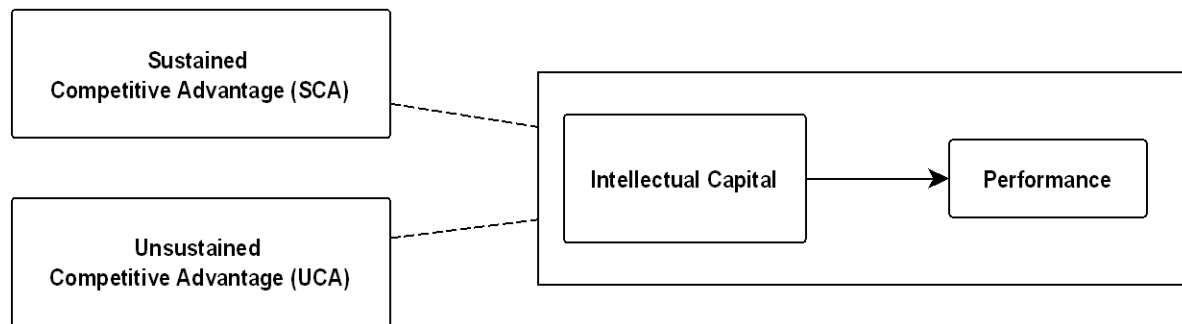
Basically, there are quite a lot of IC measurements, but this research is not focused on IC value, but on company's resource management efficiency in yielding value added by using VAICTM (*Value Added Intellectual Coefficient*). VAICTM focus is the value creation, so a measurement tool is needed to monitor resource efficiency in creating value (Pulic, 2004; 2010). This method widely used by researchers because the simplicity of data inputs to the model (Andriessen, 2004), because all required data are available for public and derived from audited information, so the objectivity is preserved.

Using VAICTM as value creation and IC efficiency proxy (showed by the combination of VAICTM elements, i.e. human capital and structural capital efficiency) based on the consideration of its relationship with competitive advantage and performance. The more efficient company in using its strategic asset, the bigger is the company's ability to create competitive advantage (Amit and Schoemaker 1993; Spanos and Lucas, 2001). Similarly with the research by Tang and Liou (2010) which showed that company which focused on intangible assets has sustainable superior

performance as the proxy of a company's competitive advantage. Kamukama *et al.* (2011) empirical evidence showed that competitive advantage becomes the mediation of IC and company's performance relationship. IC has put the company in a profitable competitive position thus implicates to company's performance optimization in the overall.

Below is the theoretical model of this study:

Fig. 1: Theoretical Framework



In addition, to achieve the expected goals, company also required to be able to survive in business competition. The company's ability to give sustainable value added for the stakeholders known as a competitive advantage. Tang and Liou (2010) segregated company's condition according to the ability to maintain its advantage during a specific period, according to Powell (2001) that is a group of companies with a competitive advantage and group of company with the competitive disadvantage. However, for this study the referenced definition is based on organization resource typology according to Powell and Arregle (2007), i.e. the segregation between a group of companies with sustainable competitive advantage (company's resource able to create value added and there are barriers to entry the industry); unsustainable competitive advantage (company's resource able to create value added but no barriers to entry the industry); and competitive disadvantages. This study used two groups of company, i.e. group with sustainable competitive advantage (SCA), and group with unsustainable competitive advantage (UCA).

As stated in RBT, resources with VRIN quality have strategic quality and contributed in giving profitable competitive position (Barney 2001; Barney and Clark 2007). Thus, IC as a set of company's intellectual resource and strategic asset is believed can contribute in creating superior performance (Firer and Williams 2003; Shiu 2006a; Gan and Saleh 2008) According to that argument, further search is needed to proof the RBT reasoning, which stated that company with unique and strategic assets will have a competitive advantage and superior performance.

HYPOTHESES

The uniqueness of the company's assets can be used to create company's competitive advantage. This competitive advantage will increase organizational performance. IC component as part of an organization assets with unique character must be managed properly through company's capability, i.e. strategy implementation in routine operational, which is expected to increase organizational performance. Several studies suggest that proper IC management able to increase organizational performance (Bontis, et al. 2000; Shiu 2006a; Gan and Saleh 2008; Choudhury 2010; Khani et al. 2011).

Various measures of performance will be tested further to get through comprehension about IC influence to organizational performance. Measures of performance that will be tested are market performance (market-to-book value/MBV), return on equity/ROE, profitability (return on assets/ROA), and productivity (asset turnover/ATO).

The difference between market value and company book value becomes the indication of company hidden value that represents IC. This is because the current financial report not explicitly reporting IC (Roslender and Fincham 2001; Shiu 2006a; Cheng et al. 2010; Dumay 2012). Efficient organization is an organization that able to create value, especially through IC resource will further increase the gap of market value and company book value (Pulic 2004). Moreover, there is indication that an investor pays different attention to the IC component efficiency (human capital efficiency-HCE, structural capital efficiency-SCE) or physical and financial efficiency (capital employed efficiency-CEE) (Firer and Williams 2003; Shiu 2006a; Gan and Saleh 2008). According to these arguments then can be formulated hypotheses as follows:

H_{1s}: There is a positive relationship between organizational efficiency (VAICTM) and MBV for a group of companies with sustainable competitive advantage.

H_{1b}: There is a positive relationship between intellectual capital efficiency (ICE) and MBV for a group of companies with sustainable competitive advantage.

H_{1c}: There is a positive relationship between capital employed efficiency (CEE) and MBV for a group of companies with sustainable competitive advantage.

IC contributed in increasing company financial performance. The more efficient IC management is the more increased company financial performance from the stakeholder point of view (Riahi-Belkoui, 2003; Margaretha and Rahman, 2006). Bontis and Fitz-enz (2002) study found positive influence from one of IC components, i.e. structural capital with financial performance. Margaretha and Rahman (2006) research on manufacturing companies listed in Jakarta Stock Exchange (now Indonesia Stock Exchange) found positive and significant influence between VAICTM value and IC component with ROE (Return on Equity). Phusavat et al. (2011) found the influence of capital employed efficiency (CEE) to ROE in Thailand companies, which mean investors in Thailand still prioritized the financial and physical capital in making decisions. According to that argumentation, then can be formulated hypotheses as follows:

H_{2a}: There is a positive relationship between organizational efficiency (VAICTM) and ROE for a group of companies with sustainable competitive advantage.

H_{2b}: There is a positive relationship between intellectual capital efficiency (ICE) and ROE for a group of companies with sustainable competitive advantage.

H_{2c}: There is a positive relationship between capital employed efficiency (CEE) and ROE for a group of companies with sustainable competitive advantage.

Efficient resource management is able to increase the company's ability in generating profits. The more efficient is the organization; the higher is the profitability. Efficient resource management, not only from the quantity side, but also in value creation; that will increase performance (Pulic 2004; 2010). Thus, the more efficient is IC management of the company resource, the higher will be the company probability to increase its profitability (Firer and Williams 2003; Shiu 2006a; Gan and Saleh 2008; Khani et al 2011, Phusavat et al. 2011). Several IC components also part of the company assets if they are managed properly, it will increase company profitability more. By using

return on assets (ROA) measurement as company performance, then it can formulate hypotheses as below:

H_{3a}: There is a positive relationship between organizational efficiency (VAICTM) and ROA for a group of companies with sustainable competitive advantage.

H_{3b}: There is a positive relationship between intellectual capital efficiency (ICE) and ROA for a group of companies with sustainable competitive advantage.

H_{3c}: There is a positive relationship between capital employed efficiency (CEE) and ROA for a group of companies with sustainable competitive advantage.

Resource management; whether it is tangible or intangible will efficiently increase company productivity measured by how capable is the company in managing an asset so it can maximally contribute in generating income (Gan and Saleh, 2008). The more efficient IC then the higher is company productivity because IC is the company the strategic assets (Shiu, 2006a). Human capital efficiency (HCE), structural capital efficiency (SCE), and capital employed efficiency (CEE) as the component of VAICTM also contributed in increasing productivity (Gan and Saleh, 2008). However, caution in the productivity interpretation measured with asset turnover/ATO because most of the company financial reports still use historical cost, so there is a possibility of bias in the ratio result (Brigham and Houston 2003:93). According to the description above, then can be formulated a hypothesis as follows:

H_{4a}: There is a positive relationship between organizational efficiency (VAICTM) and ATO for a group of companies with sustainable competitive advantage.

H_{4b}: There is a positive relationship between intellectual capital efficiency (ICE) and ATO for a group of companies with sustainable competitive advantage.

H_{4c}: There is a positive relationship between capital employed efficiency (CEE) and ATO for a group of companies with sustainable competitive advantage.

RESEARCH METHOD

POPULATION AND SAMPLE

This research population is all manufacturing companies (secondary sectors) listed in the Indonesian Stock Exchange in the year 2009-2013. Sampling method used is purposive sampling with the following criteria:

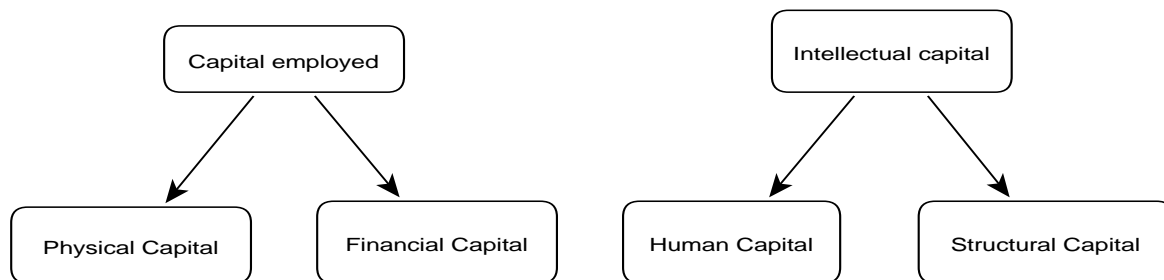
1. Included in secondary sectors JASICA (Jakarta Stock Industrial Classification) version with sector code 4 and 5. These sample criteria are intended because some of the sub-sector in the sector 4 (miscellaneous industry) and sector 5 (consumer goods industry) have criteria of knowledge-intensive industry according to the OECD (Organization for Economic Cooperation and Development).
2. Listed since year 2009-2013 also not delisting at those years. The year of research consideration is financial report published in three-year later. Furthermore, three years represent a minimal performance calculation and observable competitive advantage as envisaged by Spanos and Lucas (2001); Tang and Liou (2010).
3. Publish the financial report for the year of observation and had the data needed for this research.

MEASURES

INTELLECTUAL CAPITAL (IC)

The IC definition of this research refers to Pulic (2004) definition that differentiates human capital, structural capital, and physical and financial capital. Intellectual capital is the combination of human capital and structural capital, as shown in the picture below:

Fig. 2: Capital Types according to Pulic



Source: Andriessen (2004:365)

Pulic (2004; 2010) develop a measurement named VAICTM (value added intellectual coefficient). This measurement method has been used for much empirical research, and data input required derived from audited public financial reports, so the objectivity is preserved (Firer and Williams, 2003; Shiu, 2006a; Margaretha and Rahman, 2006; Ullum, 2008; Coudhury, 2010; Khani et al. 2011; Suwarno, 2011).

The basic assumption of VAICTM method is the human capital recognition as an asset not an expense. According to this assumption, below are the steps to calculate VAICTM:

- 1) Calculating value added as below:

$$VA = GM - SgaExp. + LExp.$$

Where VA is value added, GM is gross margin, SgaExp. It is selling, general, and administration expenses, and LExp. Is Labor expenses that are total of employee's salaries and wages expenses?

- 2) Next step is to calculate the value of human capital (HC), structural capital (SC), and physical and financial capital (FC).

$$HC = LExp.$$

$$SC = VA - HC$$

$$CE = \text{physic capital} + \text{financial capital} \\ = \text{total asset} - \text{intangible asset}$$

Human capital (HC) can be expressed by the labor wage and salary expenses. According to Pulic (2000), Structural Capital = Intellectual Capital – Human Capital. From this, Pulic concludes that structural capital (SC) is the subtraction of value added with human capital, this is aligned with the equation that IC is set of human and structural capital. Physical and financial capital (capital employed-CE) is a proxy of tangible assets so it is formulated as the difference between total assets and intangible assets (Cheng et al. 2005).

- 3) Calculating efficiency ratio of each capital, i.e.:
- (a) Capital employed efficiency (CEE) is the value added from physical and financial capital used in company business operational activities with calculation formula is:

$$CEE = VA/CE$$
 - (b) Human capital efficiency (HCE) is the value added from human capital used in company business operational activities with calculation formula is:

$$HCE = VA/HC$$
 - (c) Structural capital efficiency (CEE) is the value added from structural capital used in company business operational activities. Pulic approach for structural capital is different with other capital. According to Pulic the lesser human capital participates, the more structural capital is involved (Andriessen, 2004). The formula of structural capital efficiency calculation is:

$$SCE = SC/VA$$
- 4) To come to an overall measure of efficiency, Pulic adds the three efficiency measures:

$$VAIC^{TM} = HCE + SCE + CEE$$

or

$$VAIC^{TM} = ICE + CEE$$

Where:

$VAIC^{TM}$: Value Added intellectual coefficient

CEE: Capital employed efficiency

HCE : Human capital efficiency

SCE: Structural capital efficiency

Efficiency of a company's value creation proxy with $VAIC^{TM}$ is the aggregate from efficiency of all capitals used by the company, including tangible asset/employed capital, as well as IC which consist of human and structural capital.

COMPETITIVE ADVANTAGE

The competitive advantage definition used in this research refers to the RBT framework as it had been tested empirically by Tang and Liou (2010); that is company with a competitive advantage is company that has resource with VRIN nature. Proxy used is *Du Pont Identity*, operated by using *return on invested capital* (ROIC). ROIC formula is below:

$$ROIC = \frac{NOPLAT}{S} \times \frac{S}{IC} = \frac{(S - CGS - Adv - R\&D - Dep - SG\&A - tax) / S}{(FA + AR + Inv - AP + cash) / S}$$

Where,

ROIC : return on invested capital

NOPLAT : net operating income less adjusted tax (or equivalent with net profit)

IC : invested capital

S : sales

CGS	: cost of goods sold
Adv	: advertising expenses
R&D	: research and development expenditure
Dep	: depreciation expenses
SG&A	: selling, general, and administration expenses
Tax	: tax
FA	: fixed assets
AR	: account receivable
Inv	: inventory
AP	: account payable
Cash	: cash

In this research, the sample will be distinguished between a company with sustained competitive advantage (SCA) and un-sustained competitive advantage (UCA). This segregation refers to Tang and Liou (2010) which also refers to Porter (1985) and Priem and Butler (2001), which is revealed that SCA companies also the companies with superior financial performance compared to the average industry. Tang and Liou (2010) research based on RBT theory, so, the measurement is relevant for this research. Moreover, this research also intends to test whether competitive advantage able to strengthen the intellectual capital influence on performance.

According to the argument above, then, only firms having a three-year average ROIC above the industrial level are considered to have an observable competitive advantage or superior performance. This treatment refers to Spanos and Lioukas (2001) and also Tang and Liou (2010).

ORGANIZATIONAL PERFORMANCE

There are four performance measures that will be investigated, i.e. market-to-book value (MBV), return on equity (ROE), return on assets (ROA), and asset turnover (ATO). Market-to-book value is a proxy of market performance. This measurement indicated how much gap between market value and book value so it's able to represent the hidden value; value that's not listed in financial report, but considered by investors (Firer and Williams, 2003; Shiu, 2006a; Khani et al. 2011). Moreover, the gap between market and firm book value indicates investor expectation for the firm's prospect in the future. Firm's market performance variable in this research measured by this formula (Brigham and Houston 2003: 103; Wahlen et al. 2008:1045):

$$MBV = \frac{\text{market price per share}}{\text{book value per share}}$$

Where,

MBV : Market to book value
Market value per share : *closing price*

Book value per share calculated with this formula:

$$\text{Book value} = \frac{\text{common equity}}{\text{shares outstanding}}$$

Firm performance measured with ROE shows return on investment by shareholders. This research refers to Brigham and Houston measurement (2003; Firer and Williams, 2003; Shiu, 2006a; Gan and Saleh, 2008):

$$ROE = \frac{\text{net income}}{\text{common equity}}$$

Next performance measurement is ROA which is the company profitability measurement that is the company operational effectivity measurement. One of ROA ratio function is to find out company's ability in managing its assets (Brigham and Houston 2003). This is aligned with the research's purpose to find out intangible asset role; especially IC in performance. ROA formula is below:

$$ROA = \frac{\text{Net income}}{\text{Total asset}}$$

Firm ability to generate income is productivity. One of productivity measurement is an ATO (asset turnover), that is the measurement ratio of company capability to manage assets. Assets that are too high are likely to increase the cost of capital, but if assets are too low, then the company will possibly lose profitable sale (Brigham and Houston 2003). Productivity measurement in this research is to find out how good is the firm to manage assets, especially intellectual asset. Formulation to measuring ATO is:

$$ATO = \frac{\text{Total sales}}{\text{Total assets}}$$

CONTROL VARIABLE

This research used two control variables, i.e.:

- Firm size, which measured with logarithm (log) from total assets. This variable is used by Williams (2001), Firer and Williams (2003), Shiu (2006a).
- Industry type which is dummy variable (1 = firms in sector 4, and 0 = firms in sector 5). This variable is used by Shiu (2006a) and Khani et al. (2011)

REGRESSION MODELS

This research's objective is to investigate the influence of the IC efficiency of performance by considering company competitive advantage factors, so the sample that will be analyzed further is sustainable firm sub-sample. Moreover, by testing sub-sample of sustainable firm, it is also expected it can answer the question about RBT consistency that is, whether a company with the ability to manage resources with VRIN quality has sustainable competitive advantage, which will contribute in company performance optimization. Below are regression models used in this research:

Table 1: Regression Models

Model	Hypotheses	Regression Models
1.	H _{1a}	MBV = a + b ₁ VAIC + b ₂ IND + b ₃ SIZE + e
2.	H _{1b-c}	MBV = a + b ₁ ICE + b ₂ CEE + b ₃ IND + b ₄ SIZE + e

3.	H _{2a}	ROE = a + b ₁ VAIC + b ₂ IND + b ₃ SIZE + e
4.	H _{2b-c}	ROE = a + b ₁ ICE + b ₂ CEE + b ₃ IND + b ₄ SIZE + e
5.	H _{3a}	ROA = a + b ₁ VAIC + b ₂ IND + b ₃ SIZE + e
6.	H _{3b-c}	ROA = a + b ₁ ICE + b ₂ CEE + b ₃ IND + b ₄ SIZE + e
7.	H _{4a}	ATO = a + b ₁ VAIC + b ₂ IND + b ₃ SIZE + e
8.	H _{4b-c}	ATO = a + b ₁ HCE + b ₂ CEE + b ₃ IND + b ₄ SIZE + e

STATISTIC TEST TOOL

A statistic test tool used in this research is multiple linear regressions with influence test modeling as seen in table 1. Before the model test is performed, the sample will be divided into 2 sub-samples and will the difference will be tested with t-test for free sample. The statistic test in this research used SPSS 17.0 software.

EMPIRICAL RESULTS

The research sample is drawn from manufacturing companies listed in Indonesia Stock Exchange with JASICA version for the years 2009-2013. A final sample totaling 61 companies was maintained after eliminating for companies that do not meet the criteria and has insufficient data for analysis. The detailed sample can be seen in table 2.

Table 2: Sample Selection

Criteria	Firms
1. Secondary sector JASICA	136
2. Sector 3	(63)
3. Delisting	(1)
4. Using foreign currency	(4)
5. Insufficient data	(3)
6. Not listed consecutively	(4)
Final sample (firms)	61
Final observation (firm-years)	305

DESCRIPTIVE STATISTICS

Table 3 presents the descriptive statistics for the dependent and independent variables. The mean for MBV is 2.60, which implies that investors generally value the sample firms in excess of the book value of net assets as reported in the annual reports. ROA and ATO have a mean of 9.70 and 1.25 per cent, respectively. A VAICTM of 4.228 was obtained, indicating that the firm created 4.228 Rupiahs out of every 1 rupiah invested in the firm. However, if the components are examined individually, it is evident that human capital (mean = 3.49) is more efficient in comparison to physical capital (mean = 0.224). And so does the ICE (mean = 4.005) is more efficient than CEE (0.224). This is consistent with the findings of Firer and Williams (2003) study. The detailed descriptive statistic can be seen in table 3.

Table 3: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
VAIC	305	-2,84	28,41	4,2283	3,81514
HCE	305	-2,67	27,35	3,4917	3,55206
SCE	305	-3,14	1,97	0,5129	0,54970
ICE	305	-2,90	28,31	4,0046	3,78498
CEE	305	-0,27	2,25	0,2236	0,25710
MBV	305	-1,61	38,97	2,6040	5,22857
ROE	305	-206,26	323,59	11,2609	43,57400
ROA	305	-42,05	347,47	9,7066	27,83295
ATO	305	0,05	3,68	1,2549	0,58700
Valid N (listwise)	305				

SAMPLE SEGREGATION INTO SCA AND UCA SUB-SAMPLE

The sample is divided into two groups according to its ability to maintain competitive advantage. From data processing there are 35 companies that categorized as SCA and 26 companies categorized as UCA. Sub-sample description can be seen in table 4.

Table 4. Sub-sample Description

Sector	Sub Sect or	Sub sector's Name	SCA	UCA
4	1	Machinery And Heavy Equipment	0	0

Miscellaneous Industry	2	Automotive And Components	9	1
	3	Textile, Garment	5	8
	4	Footwear	2	0
	5	Cable	3	2
	6	Electronics	0	1
		Sub Total	19	12
5 Consumer Goods Industry	1	Food and Beverages	6	6
	2	Tobacco Manufacturers	3	0
	3	Pharmaceuticals	4	5
	4	Cosmetics and Household	2	1
	5	Houseware	1	2
		Sub Total	16	14

Two sub-samples will be investigated to observe each characteristic, so it can be able to perform further tests. T-test is used to distinguish the two sub-samples; for a sample characteristic as well as for ROIC ratio decomposition. T-test result can be seen in table 5.

Table 5: T-test Results

	<i>Levene's Test Equality of Variances</i>		<i>T-test for Equality of Means</i>	
	F	Sig.	t	Sig.(2-tailed)
ROIC_n	0,531	0,467	2,093	0,038**
TA	1,422	0,235	1,304	0,194
ART	0,145	0,704	0,651	0,516
CGS_S	7,818	0,006	-2,846	0,005*
APT	3,705	0,056	1,423	0,157
INT	0,273	0,602	0,145	0,885
SGA_S	4,592	0,033	-2,417	0,017**
DEP_S	3,399	0,067	-1,136	0,258

FAT	3,146	0,078	-0,824	0,411
TAX_S	0,045	0,832	3,112	0,002*
ADV_S	6,411	0,012	-1,137	0,257

**, **p-value* significant at <0.05, 0.01, respectively

Where,

ROIC_d : ROIC dummy (1 for SCA, 0 for UCA)
 ROIC_n : Absolute ROIC
 TA : Total Assets
 ART : Account Receivable Turnover
 CGS_S : Cost of Good Sold/Sales
 APT : Account Payable Turnover
 INT : Inventory Turnover
 SGA_S : Sales, General, and Administration Expense/Sales
 Dep_S : Depreciation Expense/Sales
 FAT : Fixed Asset Turnover
 TAX_S : Tax Expense/Sales
 ADV_S : Advertising Expense/Sales

From table 5 we can see that ROIC (ROIC_n) value for the two sub-samples are significantly different at $\alpha < 0,05$. This result indicates that both sub-samples statistically difference in competitive advantage characteristic. Total assets (TA) between the two sub-samples doesn't show any difference, so it can be said that both are comparable. So that the two sub-samples are able to be analyzed further.

The characteristics of the two sub-samples can be seen from the ROIC decomposition. From nine ratios of ROIC decomposition only three that indicate any significant difference, that is cost of production to the sale ratio (CGS_S) with sig. Value 0,005; cost of selling, general, and administrative to sale (SGA_S) with sig. Value 0,017, and tax cost to sale (TAX_S) with sig. Value 0,002. These results mean that the two sub-samples have a significant difference in the supplier relationship (CGS_S), intellectual asset management (SGA_S) and relationship with government (TAX_S). The negative score for CGS_S and SGA_S shows negative correlation between those ratios with competitive advantage, that is SCA companies will tend to have a lower cost per unit in both ratios compared with UCA companies.

CORRELATION ANALYSIS

Correlation analysis is the initial statistic technique employed to analyze the relationship between the dependent and independent variables. Findings from Pearson pairwise correlations indicate that VAICTM is significantly positively associated with HCE, SCE, and ICE ($p < 0,01$), and also with ROA ($p < 0,05$). As such, when the VAICTM increases, it is expected that human capital efficiency, structural capital efficiency, and intellectual capital efficiency, as well as ROA will also increase. There is a significant positive relationship between MBV, ROA, ROE, ATO with CEE at 0.01 significance level. This means that sample firms invested heavily on capital employed or physical capital. The increases of MBV, ROA, ROE, and ATO will impact the increase of CEE. The detailed of correlation analysis can be seen in table 6.

Table 6: Pearson Moment Correlations

	HCE	SCE	CEE	ICE	VAIC	MBV	ROE	ROA	ATO
HCE	1								
SCE	0.837**	1							
CEE	0.077	0.111	1						
ICE	0.900**	0.853**	0.080	1					
VAIC	0.910**	0.854**	0.151	0.900**	1				
MBV	0.176	0.245*	0.673**	0.181	0.228	1			
ROE	0.172	0.224	0.634**	0.176	0.220	0.802**	1		
ROA	0.217	0.285*	0.942**	0.223	0.288*	0.676**	.633**	1	
ATO	-0.110	-0.142	0.381**	-0.112	-0.084	0.385**	.204	0.304**	1

**, *correlation is significant at <0.05, 0.01, respectively

The regression models also meet the classical assumption, such as data normality, multicollinearity, heterocedasticity, and auto-correlation. There is no interference that able to affect the result of this research.

LINEAR MULTIPLE REGRESSIONS RESULTS

From 8 models proposed, only coefficient representing CEE is statistically significant ($p < 0.01$). It means that the sample firms still use the physical capital to in their business operations. Model 6 (ROA with IC components) is the best model with highest adjusted r-squared 90.6 percent. Model 7 (ATO with aggregate measure of VAICTM) only able to predict 1.3 percent. It is the lowest adjusted r-squared among 8 models. The detailed regression result can be seen in table 7, while the summary of hypotheses test results can be seen in table 8.

Table 7: Regression Results

Variabel	Model 1					Model 3				
	B	F	Sig.F	t	Sig. t	B	F	Sig.F	t	Sig. t
Constant	-1,852	4,354	0,008***	-1,035	0,305	1,824	2,845	0,035**	0,123	0,902
VAIC	-0,073			2,867	0,006***	0,605			1,703	0,095*
IND	1,064			2,024	0,047**	0,440			3,149	0,002***
SIZE	0,604					1,831			0,758	0,452
	Adj R-sq = 0,138					Adj R-sq = 0,108				
Variabel	Model 5					Model 7				
	B	F	Sig.F	t	Sig. t	B	F	Sig.F	t	Sig. t
Constant	11,385	6,511	0,001***	0,864	0,390	2,235	1,317	0,276	3,448	0,001***

VAIC	0,885			1,708	0,092*	-0,019			-0,739	0,462
IND	9,619			3,493	0,001***	0,204			1,502	0,138
SIZE	-1,187			-0,551	0,584	-0,129			-1,216	0,228
	Adj R-sq = 0,189					Adj R-sq = 0,013				
Variabel	Model 2					Model 4				
	B	F	Sig.F	t	Sig. t	B	F	Sig.F	t	Sig. t
Constant	-4,756	11,779	0,000***	-2,957	0,004***	-29,130	23,363	0,000***	-2,964	0,005***
ICE	-0,041			-0,702	0,486	1,149			3,305	0,002***
CEE	5,769			5,232	0,000*	69,305			9,397	0,000***
IND	0,299			0,880	0,382	-7,003			-3,481	0,001***
SIZE	0,879			3,475	0,001***	4,422			2,883	0,006***
	Adj R-sq = 0,406					Adj R-sq = 0,607				
Variabel	Model 6					Model 8				
	B	F	Sig.F	t	Sig. t	B	F	Sig.F	t	Sig. t
Constant	-7,643	172,073	0,000***	-1,676	0,098	1,875	3,644	0,010***	3,027	0,003***
ICE	0,706			4,000	0,000***	-0,022			-0,925	0,358
CEE	60,121			23,085	0,000***	1,102			3,118	0,003***
IND	-1,387			-1,315	0,193	-0,05			-0,034	0,973
SIZE	0,325			0,441	0,660	-0,100			-1,004	0,319
	Adj R-sq = 0,906					Adj R-sq = 0,130				

***, **, *correlation is significant at <0.01, 0.05, 0.01, respectively

Table 8. Hypotheses Test Results

Hypotheses		Hypotheses	
H ₁	Not supported	H ₃	Not supported
H _{1a}	Not supported	H _{3a}	Supported
H _{1b}	Supported	H _{3b}	Supported
H ₂	Not supported	H ₄	Not supported
H _{2a}	Supported	H _{4a}	Not supported
H _{2b}	Supported	H _{4b}	Supported

DISCUSSIONS AND CONCLUSION

According to multiple regressions result, it is obtained that all regression equations that used VAICTM as organization, efficiency proxy are not influenced performance, whilst regression model VAICTM decomposition into ICE and CEE has variant support. In regression model 2, 4, 6, and 8 that tested VAICTM component to company performance, shows that CEE has an impact on

company performance. This means the highest is company efficiency in utilizing physical and financial capital, then the highest is company performance. IC efficiency has an impact on ROE and ROA only, whilst MBV and ATO are not influenced by IC efficiency.

Overall, it can be said that IC is the phenomenon that began to grow in Indonesia and it can be used to gain competitive advantage, which also contribute to company performance. IC existence in Indonesia is still in the first stage; showed by MAKE Awards that just started in 2005, so it is not fully contributing directly to company performance. This is shown by the unsupported of hypotheses 1 to 4 which used VAICTM as the measurement of organizational efficiency or organization's ability to give added value. Value added creation by utilizing all capital both IC and physical and financial capital did not prove efficiently and effectively in increasing company's performance.

IC efficiency of Indonesia companies is not optimal yet. Proved by the study result that shows the only performance model that measured with ROE (model 4) and ROA (model 6) that had statistically positive and significant. Manufacturing companies in Indonesia still rely less on employee's intellectual in creating innovation. Although its orientation is to tangible asset (land, building, machine, and supply) but it should be noted that the asset cannot contribute optimally to a company's performance if it is not supported by sufficient innovation from intellectual capital produced by an employee (Phusavat et al. 2011).

Capital employed efficiency (CEE) is composed of VAICTM that dominantly influencing company's performance, which is shown by H_{1b} , H_{2b} , H_{3b} , and H_{4b} supported. Capital employed efficiency (CEE) is positively and significantly influencing all performance measurements. The sample; that is manufacturing companies, becomes one of the reasons why physical and financial capital becomes dominant. The investor still count on CEE in valuing a company. This trend also happened at companies in the developing economy area, such as South Africa (Firer and Williams 2003); Malaysia (Gan and Saleh 2008), Iran (Khani *et al.* 2011), and also Thailand (Phusavat et al. 2011), but the result is different with the studies in Europe and United States (Riahi-Belkoui 2003; Pulic 2004; Diez et al. 2010).

Whilst providing insights for scholars, shareholders, policymakers, and other relevant stakeholders, the findings from this research indicate avenues for further investigation. This research using financial instruments comes from company's annual report. According to Kaplan and Norton (in Humphreys and Trotman, 2011) financial based performance measurement should be associated with non-financial measurement to make a synergistic relationship in implementing the company's vision and strategy. The next research can be undertaken to investigate the relationship between IC efficiency and firm's non-financial performance.

Intellectual capital is resulted from organization growth and learning process. According to the balanced scorecard concept introduced by Kaplan and Norton, organization growth and learning process are performance drivers from the internal business process, that will drive customer perspective and will increase financial performance. This research only captures IC from a financial perspective and not explores further the perspective that related to internal firm process or customer. Thus, the research's result must be treated with caution because the IC and performance measurement is based on financial perspective only. However, this research gives important contribution that is the indication of company still having difficulties in making synergy between financial and non-financial performance, and also strategy. Unsupported of hypotheses 1 to 4 as an empirical proof that can be followed-up to conduct in-depth exploration. The next exploration can be related to firm characteristic, internal business process, and business environment. This study result implication also lead to conceptual exploration of the RBT concept

relationship with (Barney 1991; Barney *et al.* 2001, Barney and Clark 2007), balanced scorecard (Kaplan and Norton in Humphreys and Trotman 2011) as well as dynamic capabilities (Teece *et al.* 1997).

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STANDARD ACCOUNTING FOR SMEs TO HELP OR TO RUINED SMEs' GOING CONCERN?: LESSON LEARN FROM IMPLEMENTATION OF SAK ETAP IN ENTITY ABC

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ABSTRACT

This research explores how Implementation of financial accountability in the Small Medium Enterprise (SMEs) can help or ruined going concern of entity ABC. This research is a case study on Entity ABC, which has business related to various care to animal basically in health care of animal starting from preventive care to Curative and promotive care or services. The research methodology is a qualitative approach which is used also quantitative data and also field observation and in depth interview with the major key informant and supporting key informant. There are some findings: first, Entity ABC have fulfilled all the requirements to adopt SAK ETAP as standard accounting in preparing financial statements, second, Entity ABC financial performance decreased significantly in 2013 compared to last year performance third, there 3 factors exists in entity ABC, that might concluded adopt SAK ETAP is too expensive, 3 factors are, undeveloped business infrastructure, non global market focused and not enough resources for training and monitoring unintended consequences for adopting SAK ETAP. And only one factor is no exists in entity ABC is community or social centered values, fourth in entity ABC SAK ETAP is still too expensive for SMEs, as we know SMEs should focused on going concern, how to keep existing in their business.

Keywords: Pet Animal HealthCare, IFRS for SMEs, SAK ETAP, SMEs, Going Concern

INTRODUCTION

Small and Medium Enterprises (SMEs) are very important for countries economic growth, especially for developing countries due to SMEs are one of the effective means / solution for the development of entrepreneurship, which expected to help country suffered from several problems such as poverty, insecurity, unemployment, overpopulation of the modern era (Uma, 2013). According to Paslu and Vasiliu (2011), In EU economic the SMEs are also very important, there are four economic environment and financial understanding and communication is crucial, that is why, they believe that's SMEs also accountable in the financial report, and they trust that accounting standard should for many countries not just for one country.

Accounting information has a significant impact on business achievement, so to SMEs, but Dianita (2011) found that Human resources which engaged with SMEs in central Java have limitation in accounting skill and knowledge, even though they believed to account information has significant influence in preparing a SMEs business plan as well as its going concern. Additionally, khan (2011) findings that financial resources is a key factor for SMEs in success of business which can contribute to the economic growth of the countries as well.

Contrast to above statement there are some findings that have a different result, there are some findings that IFRS for SMEs/ SAK ETAP needs modification because adoption without

modifications or exemptions would provide few benefits for SMEs in emerging economies (Samujh, Devi, 2015). Additionally Samujh, Devi (2015) finds that the possibility of discouraging entrepreneurship activities in some countries which not yet ready with financial infrastructure, so they concludes IFRS SMEs is not appropriate for ASEAN countries with social or community centered values, undeveloped financial infrastructures, SMEs that are not related to global market, there are not adequate resources for training for implementations and monitoring of the IFRS for SMEs.

Based and previous introductions, the author interested to study this gap in the several prior researchers' conclusion. This research is not similar to prior researches in several terms. The differences are firstly, this is a case study in SMEs which is related to the animal hospital, secondly, there is adversely result since the entity adopted SAK ETAP the performance of entity decreases smoothly in three years and finally in this year 2014 in a loss position.

Expected contributions of this research to find out several things/factors should take into public decision maker considerations before legal standard, accounting for SMEs, and, to know financial accountability, which fit to the SMEs, possibility model financial accountability in simplest form compared to IFRS for SMEs or SAK ETAP. Finally, this paper can contribute to the knowledge of accounting standard for SMEs regulator or Body.

RESEARCH PROBLEM

Based on those introductions, there are some problems will arise in this paper as follows

- a. Do entity ABC financial Statement should adopt SAK ETAP / Standard Accounting for SMEs?
- b. Does SAK ETAP/Standard Accounting for SMEs help Entity ABC going concern?
- c. Is there any limitation in Entity ABC's financial infrastructure?

RESEARCH OBJECTIVE

- a. To know whether the entity ABC financial statement should adopt SAK ETAP / Standard Accounting for SMEs
- b. To know whether SAK ETAP/Standard Accounting for SMEs help Entity ABC going concerns
- c. To know whether any limitation in Entity ABC's business infrastructure

LITERATURE REVIEW

In India, according to the new Micro, Small and Medium Enterprises (MSME) Development Act in 2006 (Uma, 2013), the MSME definitions as follows: "Micro Enterprises is, where the investment in plant and machinery does not exceed 25 rupee". In Indonesia, standard Accounting for SMEs called SAK ETAP, this is financial standard, accounting for an entity without significant public entity and for an entity which published general purpose financial statement for external users. SAK ETAP effective in 2011, and for entity without significant public accountability.

Even though SAK ETAP converge with IFRS for SMEs, there are some differences between IFRS for SMEs and SAK ETAP, firstly, recognition of intangible asset based on cost method, secondly, subsidiary entity recorded as investment by equity method and no need to prepare consolidated financial statement, thirdly, accounting practice based on existing practice.

IFRS for SMEs is mini IFRS, this standard accounting have a to be a solution for SMEs to publish financial statements for raising funds to finance business, such as to request loan from a bank or other institution or other potential investor. There are some expectations for SMEs by using SAK

ETAP: SMEs easier to prepare financial statements, SMEs audited by the firm and have an opinion to the financial statement that has been published, the SMEs financial statement can give reliable information regarding their financial condition and achievement.

According to World Health Organization (WHO), Expert Committee on Organization of Medical Care (1957), Hospital is an integrity part of the social organization unit and health unit which have curative care, preventive care, and also hospital as a center of training and research to paramedic resources. In Indonesia, UU No. 44/ 2008 stated that the hospital provides healthcare for several functions such as, curative, preventive, rehabilitative and promotive for individual by inpatient health care, outpatient healthcare, emergency room.

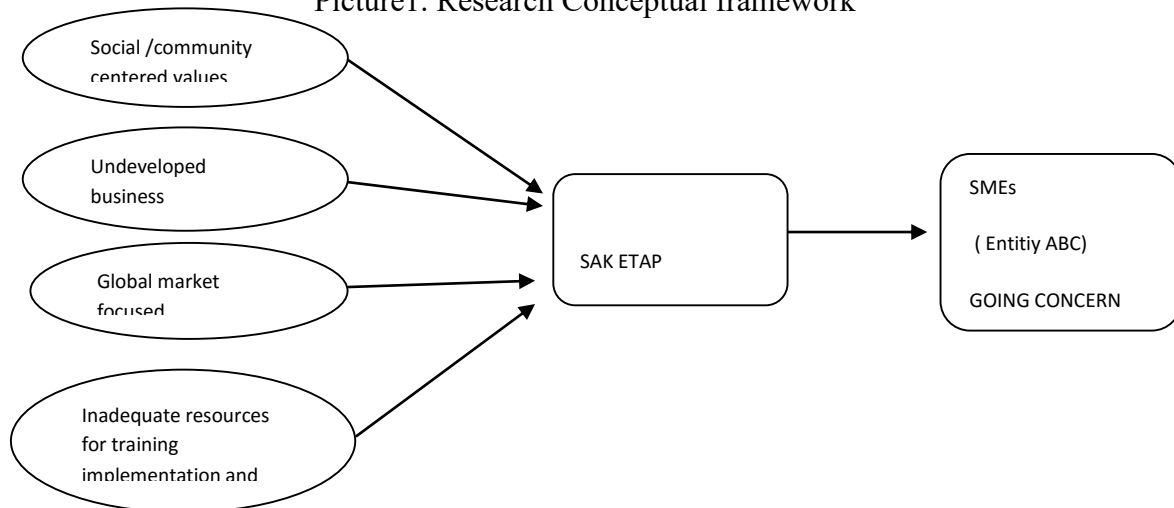
METHODOLOGY

This paper is a descriptive analytic approach, and give explanatory how SAK ETAP have been adopted in SMEs in Indonesia, namely entity ABC which run an animal hospital in Jakarta. Collect data techniques done through interview, document analysis and observation by tool SAK ETAP requirements and questionnaire.

This research uses primary data such as financial statement published by Entity ABC; Financial Statement consists of financial position report, profit and loss report, cash flow report, notes to financial statements. And also interview related to research objective, to key informan (financial manager) and support informan (staff finance, and cashier).

The conceptual framework of this research as follows:

Picture1. Research Conceptual framework



The research conceptual framework for this paper clearly describes in the picture 1, SMEs going concern and SAK ETAP as dependent variabel and several factors that impact adoption of SAK ETAP in SMEs financial statement presentation consists of undeveloped business infrastructure, non-global focused market, social or community centered values, inadequate resources for training for implementation and monitoring of SAK ETAP for unintended and dysfunctional consequences that have possibility will come up in those SMEs.

RESEARCH DESIGN

Operational research design by using quantitative and qualitative data to explore the answers and solutions of the research problems. Qualitative data collected from in-depth interviews Sanapiah, 1990). Quantitative data collect from financial statements of Entity ABC and all other supporting documents to complete the analysis.

RESEARCH LOCATION AND TIMING

Entity ABC is one of SMEs located in Jakarta, and has been chosen due to financial performance decrease smoothly and in the 2014 report the status in a loss position.

RESEARCH INFORMAN

Non Probability Sampling is judgment Sampling/Purposive Sampling. Research informan is staff finance manager as key informan and other finance staff.

COLLECTING DATA

Collecting primary data through direct observation and secondary data collected by gaining reading financial statements and detail supporting financial information and supporting documents.

- a. Processing Data: editing data to know quality of data or to know whether information's sufficient and fit to the research problem of this paper.
- b. Data grouping: grouping data by criteria and classifications to simplify process of summarization
- c. Summarizing Data: after grouping data, then summarized the data into criteria and groups.
- d. Analysis Data: analyzed data to answer the research problem of this paper to answer the research objective. Data of this research provided by indepth interview and then make a comparability study between the findings and the theory from the relevant literature review.
- e. Presentation Data: summarized above data in the form of narrative in the proper way based on findings and author summarization from informan either key informan or supporting informan.

PROCESSING RESEARCH

Collecting primary and secondary data in the animal hospital in Jakarta from March to May 2015

RESEARCH LIMITATION

There are some research limitations as follows:

- Time difference between operationalization of the condition/processing and the condition analyzed the financial statement and its supporting documents
- Some confidential data, such as lists of name of the entity ABC owners
- No Focus Group Discussion (FGD) because the difficulties to invite key people to FGD due to their daily/routine activities running the business, so operations research technique of collecting quantitative data from financial statements and the qualitative data from in depth interviews and participative observations. Without FGD we cannot know the management and staff feedback regarding the findings in order to answer research problems. In depth interviews is one way communications, if by FGD we will have two way communications. Even though by in depth interviews, we still have done the

cross check data to convince all those data are valid.

Entity ABC cannot provide service performance to the author so we cannot analyze going concern completely. We only use financial report information

FINDINGS

ABC FINANCIAL STATEMENTS AND SAK ETAP /STANDARD ACCOUNTING FOR SMES

Entity ABC has been founded since 2003, based on agreement between the management entity ABC and PT CDE. Management of entity ABC on behalf of Foundation XYZ and PT CDE for period 10 years since 2003, and has been extended for the period from 15 October 2005 to 15 October 2015. Entity ABC business related to maintaining environmental health through pet animal and companion animal, pet animal health promotion and health education and promotion to the society / community.

In doing the business, entity ABC gives professional health care to pet animal by one stop service to achieve customer satisfaction and give priority to pet animal welfare. Entity ABC provides a lot of facilities for animal healthcare, there are, pet animal medical check up for pet animal health certificate, vaccination, major and minor surgery, teeth scaling, USG, X Ray, Laboratory, acupuncture, grooming, therapy, in patient and out patient pet animal healthcare, travelling administration requirements for pet animal either for domestic or abroad place, the last but not least entity ABC also provides pet animal delivery services so, the owner of pet animal don't have to bring their pet animal to Entity ABC.

Management have made decision regarding standard accounting for financial statement preparation and Entity ABC has been adopted SAK ETAP since 1 Januari 2011. Based on indept interview, according to the managements the main reasons are, firstly, financial statements SAK ETAP based can give informations that reflects economic substance of the operational activities from entity ABC operational and business activities, secondly, cost and benefit judgments of SAK ETAP based is more efficient and effective.

Entity ABC can adopt SAK ETAP for preparing financial statements and fulfill requirements for an entity which decided to apply SAK ETAP. There are 34 owners of entity ABC, who deposited amount to Rp X and consists of 4000 share for 34 shareholders, additionally entity ABC not listed in BEI. It shows that entity ABC doesn't belongs to the public or does not have significant public accountability, due to it just belongs to 34 persons as owners/investors. Also, Entity ABC prepares general purpose financial statements, such as auditing purpose or raising fund's purpose. Entity ABC is not going to be listed company currently, and not in the position to take over fixed assets in capacity as fiduciary for a big group of society. All of the prior description as an indicator that entity ABC is an entity without significant public accountability, it means regulator allows entity ABC to use SAKT ETAP AS accounting standard in preparing and presentation components of financial statements.

SAK ETAP/STANDARD ACCOUNTING FOR SMES AND ENTITY ABC GOING CONCERNS

Based on the financial position report (Tabel 1) we can analyze the liquidity condition of entity ABC in 2013. From current asset entity ABC we can see its decrease in amount significant enough around 31% in 2013 compared to last year, due to cash and cash equivalent balance decrease drastically around 74% in 2013 compared to last year balance. The decreasingly of cash and cash equivalent balance basically from the acquisition of inventory and fixed assets, then due to decreasing 89% in current liabilities, it means entity ABC have paid its outstanding short term credit to creditors.

Table 1: Neraca entity ABC
Sources: financial statement, have been edited by the author

Entity ABC Neraca Per 31 December 2013 (in rupiah)			
	% Increase (Decrease)	<u>2013</u>	<u>2012</u>
ASET			
Asset Lancar			
Kas dan Setara Kas	(73,9 %)	364.658.513	1.398.041.270
Piutang Usaha	30,79 %	500.823.137	346.589.200
Piutang Lain-lain	62,33 %	36.900.000	13.900.000
Persediaan	<u>44,54 %</u>	<u>498.512.485</u>	<u>276.445.485</u>
Total Aset Lancar	(31,16 %)	1.400.894.135	2.034.975.975
Aset Tidak Lancar			
Aset Tetap-Net	<u>2,26 %</u>	<u>537.995.552</u>	<u>525.824.669</u>
Total Aset Tidak Lancar	<u>2,26 %</u>	<u>537.995.552</u>	<u>525.824.669</u>
TOTAL ASET	(24,87 %)	<u>1.938.889.657</u>	<u>2.580.800.644</u>
KEWAJIBAN DAN EKUITAS			
Kewajiban Jangka Pendek			
Utang Pajak	(94,26 %)	15.049.262	262.330.029
Deposit	(2,7 %)	7.146.853	7.345.132
Utang Lain-lain	<u>(71,92 %)</u>	<u>12.207.000</u>	<u>43.484.699</u>
Total Kewajiban Jangka Pendek	(89,01 %)	34.403.115	313.159.860
Ekuitas			
Modal Saham	0	200.000.000	200.000.000
Modal Donasi	0	162.619.908	162.619.908
Saldo Laba	<u>(18,2 %)</u>	<u>1.541.866.634</u>	<u>1.885.020.876</u>
Total Ekuitas	<u>(15,26 %)</u>	<u>1.904.486.542</u>	<u>2.247.640.784</u>
TOTAL KEWAJIBAN DAN EKUITAS	(24,87 %)	<u>1.938.889.657</u>	<u>2.580.800.644</u>

In the Profit and Loss Report (tabel 2) operational revenue and other revenue increasing at small percentage and tends to stabile year per year basis. Cost of Goods Sold and administration decrease in small amounts and tends to stabile compared to last year balance, unfortunately general and administrative expense increasing for about 0.3%. Total profit in 2013 decrease drastically for about 70% compared to last year balance. And per in depth interview, status profit and loss report in 2014 is in a loss position. We cannot use figures for financial statements in 2014, due to still not yet released until we are doing research for this paper.

Table 2: Profit and Loss ABC

Sources: financial statement, have been edited by the author

Entity ABC Profit and Loss Report For the year ended as at 31 December 2013 (in IDR)		
	2013	2012
Pendapatan Operasional	4.431.142.839	4.311.360.367
Harga Pokok Penjualan	<u>1.318.935.683</u>	<u>1.389.629.434</u>
Laba Kotor	3.112.207.156	2.921.730.933
Beban Usaha		
Beban Administrasi dan Umum	<u>3.098.251.009</u>	<u>2.750.349.050</u>
Laba Usaha	13.956.147	171.381.883
Pendapatan (Beban) Lain-lain		
Pendapatan Lain-lain		
Pendapatan Jasa Giro	2.670.628	4.697.581
Pendapatan Bunga	18.588.759	14.108.489
Pendapatan Sewa Ruangan	0	662.500
Pendapatan Lain-lain	<u>29.186.700</u>	<u>9.070.000</u>
	50.446.087	28.538.570
(Beban Lain-lain)		
Beban Bunga Bank	(512.911)	(953.414)
Beban Administrasi Bank	<u>(5.212.274)</u>	<u>(3.557.420)</u>
	<u>(5.725.185)</u>	<u>(4.510.834)</u>
Total Pendapatan (Beban) Lain-lain	<u>44.720.902</u>	<u>24.027.736</u>
Laba (Rugi) Sebelum Pajak	58.677.049	195.409.619
Taksiran Pajak Penghasilan	14.669.262	50.658.250
Laba (Rugi) Setelah Pajak	<u>44.007.787</u>	<u>144.751.369</u>

Statement of changes in equity (Tabel 3) shows that in 2013 tends decreasingly in retained earnings balance compared to last year balance, it happened due to profit decreasing drastically for about 70%. Profit decreasing drastically due to revenue stable in the amount for 2012 and 2013 but the cost of goods sold increased as prior descriptions in the previous chapter.

Table.2: Statement of changes on equity RS TUV

Sources: financial statement, have been edited by the author

Entity ABC Changes in equity report Per 31 December 2013 (in IDR)				
	Modal Saham	Saldo Laba (Rugi)	Jumlah Ekuitas	
Saldo 31 Desember 2011	200.000.000	1.977.943.477	2.177.943.477	
Koreksi	0	(13.801.689)	(13.801.689)	
Dividen	0	(223.872.281)	(223.872.281)	
Laba (Rugi) Tahun Berjalan	0	144.751.369	144.751.369	
Saldo 31 Desember 2012	200.000.000	1.885.020.876	2.085.020.876	
Koreksi PPh Badan	0	(242.186.029)	(242.186.029)	
Dividen	0	(144.976.000)	(144.976.000)	
Laba (Rugi) Tahun Berjalan	0	44.007.787	44.007.787	
Saldo 31 Desember 2013	200.000.000	1.541.866.634	1.741.866.634	

Cash Flow report entity ABC (Table 4) prepared by indirect methods as SAK ETAP stated. Based on performance in cash flow report in 2013 and 2012 entity ABC is in the deficit position for cash provided from operating activities, it means cash used by operating. There are no cash provided from operating activities. The same position for cash flow from investment activities and finance activities, are in deficit position, it means for 2013 no cash flow from activities raised from business of entity ABC. Cash balance still positive due to beginning balance of cash and cash

equivalent can counter the whole expenditures paid for 2013.

Table .3: Cashflow Report Entity ABC
Sources: financial statement, has been edited by author

Entity ABC Cashflow Report For the year ended at 31 December 2013 (in rupiah)		
	2013	2012
Arus Kas dan Bank dari Aktivitas Operasi		
Laba (Rugi) Bersih Penyesuaian	44.007.787	144.751.369
Penyusutan Aset Tetap	115.169.147	101.748.074
Koreksi	(242.186.029)	(13.801.689)
Koreksi Aset Tetap	0	300
Laba (Rugi) Setelah Penyesuaian	(83.009.095)	(232.698.054)
(Kenaikan)/Penurunan Aktivitas Operasi		
(Kenaikan)/Penurunan Piutang Usaha	(154.233.917)	(124.465.002)
(Kenaikan)/Penurunan Piutang Lain-lain	(23.000.000)	8.700.000
(Kenaikan)/Penurunan Persediaan	(222.067.000)	(100.836.500)
Kenaikan/(Penurunan) Utang Usaha	(247.280.767)	28.081.478
Kenaikan/(Penurunan) Deposit	(198.279)	(5.406.724)
Kenaikan/(Penurunan) Utang Lain-lain	(31.277.699)	21.740.249
Total Arus Kas dari Aktivitas Operasi	(678.057.662)	(172.186.499)
Arus Kas dari Aktivitas Investasi		
(Kenaikan)/Penurunan Aset Tetap	(127.340.000)	(105.763.300)
Total Arus Kas dari Aktivitas Investasi	(127.340.000)	(105.763.300)
Arus Kas dari Aktivitas Pendanaan		
Dividen	(144.976.000)	(223.872.281)
Total Arus Kas dari Aktivitas Pendanaan	(144.976.000)	(223.872.281)
Kenaikan/(Penurunan) Kas dan Setara Kas	(1.033.382.757)	(269.124.026)
Kas dan Setara Kas Awal Tahun	1.398.041.270	1.667.165.296
Kas dan Setara Kas Akhir Tahun	364.658.513	1.398.041.270

LIMITATION IN ENTITY ABC'S IN ADOPTING SAK ETAP

Entity ABC has been adopted SAK ETAP since 2009, and the financial performance for the last three years 2012, 2013 and 2014 decreasing drastically, indicated either declining in profit or liquidity performance, where as per 2013 deficit status in cash and cash equivalent it means cash inflow of 2013 can not pay all expenditures in 2013.

As we know from literature review, there are several conditions made entity in difficulties to adopt SAK ETAP, eventhough SAK ETAP is simplicity of PSAK, in other words SAK ETAP is more or less similar with IFRS for SMEs, but still we should make detil calculation on cost and benefits analysis to use SAK ETAP for standard on accounting for preparing financial stataments especially for SMEs that still busy or should focused on their going concern, how to keep continuing to produced goods or rendered services to their customer.

Based on in depth interview to key informan and observations to the supporting document of entity ABC, the author found there are some factors exists in entity ABC that would impact entity ABC going concern if they decided to adopt of SAK ETAP in SMEs for financial statement presentation .Factors found in entity ABC are undeveloped business infrastructure, no global focused market, inadequate resources for training for implementation and monitoring of SAK ETAP for unintended and dysfunctional consequences that have possibility will come up in those SMEs. Factors not found in entity ABC only social or community centered values, as describes in the following table (Table 5).

Table. 5. Summary of factors adopting SAK ETAP in entity ABC
(sources: Based on indepth interview, participative obseravtion, edited by author)

no	Factors	Found not found (Yes/No)- explanation
1	undeveloped business infrastructure	Yes- very simple
2	No global focused market	Yes- for domestic market only
3	Inadequate resources for training for implementation and monitoring of SAK ETAP unintended conseqencies	Yes- still busy to day to day business
4	Social or cummunity centered values	No- values decentralized

CONCLUSION

Entity ABC has fulfilled all the requirements to adopt SAK ETAP as standard accounting in preparing financial statements, such as no significant public accountability and presentation general purpose financial statement for external users.

Entity ABC financial performance, decreased insignificant amount, such as liquidity ratio decreased in 2013 compared to last year, same conditions or status on profit and cash flow

Based on literature review, and compared to entity conditions, there 3 factors exists in entity ABC, that might conclude adopt SAK ETAP too expensive, 3 factors are, undeveloped business infrastructure, non global market focused and not enough resources for training and monitoring unintended consequences of adopting SAK ETAP. And only one factor is no community or social centered values in entity ABC

Eventhough SAK ETAP (IFRS for SMEs) is the simplicity of PSAK (IFRS) is still too expensive for SMEs, as we know SMEs should focus on going concern, how to keep existing in their business.

SUGGESTIONS FOR NEXT RESEARCH:

Change Research methods from qualitative to quantitative approach, using questionnaires and the respondents are owner of SMEs.

Research on model more simple financial statement than SAK ETAP/IFRS for SMEs.

Research on regulatory policy how to elevate entrepreneurship by publishing more simple model of financial accountability.

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THE CREDITABILITY OF FINANCIAL INFORMATION DATABASES: KOREAN EVIDENCE

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ABSTRACT

The purpose of this study is to investigate whether there are errors in information FIAs produce. Additionally, we examine whether faulty financial data may affect or even mislead decision making by using bankruptcy prediction model suggested by Altman's (1980) based on different data sources. We examined data inaccuracy for 10 variables of 648 publicly listed firms in Korea since 2011, when International Financial Reporting Standards (IFRS) has been enforced. Comparison between data stored in DataGuide, and data provided by TS2000 was quite surprising. 1,194 (5.88%) out of 20,310 observation are revealed discrepancy, found a statistically significant difference in the 5 variables out of 10 variables. The Altman's model not only suggests a different prediction of corporate bankruptcy, but also produces different Z-score for different data sources. Keywords: ICARBSS, Data Quality, Prediction of Bankruptcy, Z score, DataGuide, TS2000

INTRODUCTION

Most finance and accounting empirical studies widely use financial information database such as COMPUSTAT, CRSP, and Value Line etc., so that the quality of financial information database is the important factor to make decisions for scholastic study, investment, and financial analysis. High quality financial information database support rational decision making, while low quality financial information database will distort it. Koziol (2011) finds that incorrect advice of banks based on low quality of financial information database can make financial loss for investors.

Now there are many financial information database providers (herein after FIDP) around the world and new financial information database providers appear in emerging countries, Korea, China, and Taiwan as increasing the importance of emerging stock market and economy. Generally, finance and accounting data operated by financial information database providers considered as reliable and relevant data. However, many previous researches reveal that much error of data exists across financial information database providers. (Rosenberg and Hogle, 1974; Bennin, 1980; Kinney and Swanson, 1992; Yang et al., 2003; Tallapally, Luehlfiging and Motha, 2011).

The purpose of this research is to examine the errors of financial data produced by Korean FIDPs' produce. In Korea, there are two major FIDP; DataGuide provided by FnGuide and TS2000 operated by the Korea Listed Company Association. As these two financial information databases

are the most prestige database, almost empirical researches in Korea use them. Thus, we expect that comparing errors of financial data between DataGuide and TS2000 will be relevant to the main purpose of this research. In order to examine the errors of financial data between two database providers, we employ bankruptcy prediction model suggested by Altman's (1968) based on different data sources. In addition, we measure data concurrence between two database providers using Altman's Z-score.

This study expects to contribute the literature and practice in several ways. First, despite the importance of emerging market, many previous researches on testing error of financial information database focus on U.S. database such as COMPUSTAT and CRSP. Thus, testing error of financial information database has to be expanded to emerging markets due to sustained globalization. Second, Bennin(1980) confirms error of financial information database in COMPUSTAT and CRSP has been decreased by 33 per cent since Rosenberg and Houglet(1974)'s research. This result suggests that the quality of financial database gradually improved. Thus, this research expects to improve financial information database quality in Korea so that more reliable and relevant financial information database might be provided to decision makers.

LITERATURE REVIEW

Quality of decision making depends of quantity, quality, and timeliness of information. Thus, relevant and reliable information should be provided to financial information users, including government to increase decision making. Due to rapid information technology development, most economic transactions, event and information related to the company's activities electronically documented and processed by computer.

The quality of decision making largely depends on quantity, quality and timeliness of information. Thus, relevant and reliable information should be provided to various information users to increase the quality of decision making. However, electronic financial information on the website is generally disclosed by various file types such as TEXT, HTML, or PDF. These various file types have to be converted to Excel file in analyzing firms' financial information. FIDP establishes and provides firms' database as EXCEL file and also huge amount of financial and accounting data across almost firms including private held firms. Thus, most financial information users heavily depend on FIDPs in making decision.

Since 1970, many researches on quality of data among FIDPs have been continued because of data differences. Rosenberg and Houglet (1974) initially investigate the data discrepancy provided by between CRSP and COMPUSTAT during the period 1963-1968. They compare prices relatives of 941 firms. Out of 41,296 observations they find total 1,202 (2.19%) difference. Bennin(1980) supplement Rosenberg and Houglet(1974)'s research extending testing period from 1962 to 1978 using 1295 firms. The results show that total 942 (0.50%) differences occur. San Miguel (1977) examines differences R&D costs of 256 firms between COMPUSTAT and 10-K at 1972. He finds 78 differences out of 256 firms, resulting from 52 coding errors.

According to Kern and Morris (1994), differences results from using different currency among multi-national firms. They use sales and total assets from COMPUSTAT and Value Line during the period 1976-1990 to test differences. 56 differences out of 137 differences from sales occurs different currency as well as 57 errors out of 378 errors from total assets. Yang et al. (2003) suggests that differences between COMPUSTAT and Value Line arise from different policy and coding error. They test the differences of 7 financial variables from 1,497 firms during the period 1976-1981. They find 1,284 errors (12.4%) out of 10,353 observations. They conclude the major

cause of error between COMPUSTAT and Value Line results from coding policy.

As shown in previous research, differences of data provided by FIDPs frequently occur. Major reason of differences or errors of data is coded error. When FIDPs input original data into their own database, coding error arise because of information division and merge or FIDPs' coding policy. The degree of difficulty of coding increases differences of variables. For example, direct variables such as sales, total assets has a lower coding error while tax, R&D cost, and foreign exchange rate require complex coding process brought frequent coding error. Second, approximate value is also a frequent cause of differences. Third cause is data missing and wrong input moving from the original database to FIDPs' database.

In summary, the differences or error among FIDPs is frequently reported in the U.S. Due to globalization, the importance of emerging market is rapidly increasing. Thus, the study of the quality of financial information data has to be extended to emerging markets.

DEVELOPMENT OF RESEARCH QUESTION

As a public and government database, Data Analysis, Retrieval and Transfer System (DART; <http://dart.fss.or.kr>) is controlled and operated by the Korean Financial Supervisory Commission (KFSC), the equivalent to the SEC in Korea. DART is an electronic disclosure system that mandatorily enforces firms to submit their business report (equivalent to the US 10-K) to the Korean Financial Supervisory Commission within 90 days from the fiscal year-end, where it becomes publicly available to investors and other users online. FnGuide and Korea Listed Company Association are Korea's representative financial information database agency and provide corporate financial and ownership information on publicly traded firms as well as privately held firms. They also receive financial and ownership information of Korean firms from the Korea Financial Supervisory Commission and checks the integrity of the data. They provide the most comprehensive database available in Korea.

POLICY OF FIDPS

In the input process of financial data from DART, FIDPs used to divide or merge variables depending on their policy. For example, TS2000 merge intangible asset and goodwill variables as 'intangible asset' when an intangible asset variable is formed. In this case, the intangible variable value will be same both DART and TS2000 when company's goodwill is zero. However, if goodwill is not zero, the intangible variable value could be different between DART and TS2000.

CODING ERROR

Coding error is the most pervasive error. Coding error occurs when FIDPs input original DART data into their own database. In addition, unknown error is also classified into coding error. Accordingly, coding error exists among FIDPs.

Based on these arguments, we can propose four research questions.

Research Question1: Does database between DataGuide and TS2000 correspond?

Research Question2: If differences exist, is error significant or not?

Research Question3: Does the result of Altman's (1968) bankruptcy model correspond with using DataGuide and TS2000?

EMPIRICAL RESULTS

SAMPLE SELECTION

The data in this study are obtained from DataGuide provided by FnGuide and TS2000 provided by the Korea Listed Company Association, respectively. The sample consists of 677 Korean firms listed on the Korean Stock Exchange (KSE) over three-year period from 2011 to 2013. The rationale of selecting sampling period (2011-2013) is due to the mandatory introduction of International Financial Reporting Standards (IFRS) in Korea. The main variables extracted from both DataGuide and TS2000 are ten variables: total assets, current assets, liability, current liability, retained earnings, equity earnings, sales, earnings before income taxes, stock price, and stock volume.

Insolvent firms consist of designated firms under the government supervision, such as suspension of business, bankruptcy, or delisting as of 2013. Data of the sample firm in 2012 extracted from both DataGuide and TS2000, respectively. The validity of the information in insolvent firms was randomly cross-checked by referring to normal firms. The final sample of firms consists of total 28 firms.

DESCRIPTIVE STATISTICS OF TWO DATABASES

Table 1 presents descriptive statistics for 677 sample firms over three years. Observations from DataGuide are from 1,956 to 2,006 while TS2000 provides from 1,998 to 1,616 observations. It means that TS2000 data has more missing data than DataGuide. In addition Mean and Variance of variables are not matched between two databases. This mismatching means that variables from two databases might be not united. The minimum value of two database shows zeroes implies that zero value exists except for missing data.

Table 1: Descriptive Statistics of Two Databases

(Unit: Million)

		Obs	Mean	Std. Dev.	Min	Max
DataGuide	Total Asset	2006	3050000	12500000	8458	214000000
	Current Asset	2006	1180000	5010000	2207	111000000
	Liability	2006	1740000	6950000	565	104000000
	Current Liability	2006	969000	3360000	423	51300000
	Retained Earnings	2006	892000	5630000	-3820000	149000000
	Capital Surplus	1956	204000	577000	-23100	6130000
	Sales	2006	2800000	11500000	4188	229000000
	EBIT	2006	137000	1310000	-4060000	38400000
	Stock Price	2005	48	150	0	1912
	Stock Volume	2005	38500	65300	408	710000

TS2000	Total Asset	1616	3670000	13900000	0	214000000
	Current Asset	1616	1370000	5230000	0	111000000
	Liability	1616	2090000	7650000	0	104000000
	Current Liability	1616	1150000	3680000	0	51300000
	Retained Earnings	1616	1080000	6260000	-3820000	149000000
	Capital Surplus	1616	236000	627000	-23100	6130000
	Sales	1616	3360000	12700000	0	229000000
	EBIT	1616	168000	1460000	-4060000	38400000
	Stock Price	1998	48	150	0	1912
	Stock Volume	1616	44900	87200	0	1450000

RESULTS OF DATA DIFFERENCES BETWEEN DATAGUIDE AND TS2000

Table 2 shows the degree of differences between DataGuide and TS2000. There are 1,196 (5.88%) differences out of 20,310 observations and the range is from 1.67% (Stock Price) ~ 9.91% (EBIT). According to Rosenberg and Houglet (1974)' results, the differences between COMPUSTAT and CRSP almost 2% exists. Thus, the results of this study, above 5% difference between two Korean FIDPs, provide much higher error rate comparing with U.S. FIDPs.

We also develop the scales of differences in order to the degree of differences. We define material differences as five per cent above of variables from financial statement (i.e., $> \text{Total assets} \times 0.05$) or income statement (i.e., $> \text{EBIT} \times 0.05$). According to Table 3, material differences of DataGuide are from 29 (1.43%) to 145 (7.14%) while TS2000's material differences are from 28 (1.38%) to 145 (7.14%).

Table 2: Differences between DataGuide and TS2000

	Mismatching		Missing			Total	Material Differences	
	0	1	2	3	4		6	7
Total Asset	109 (5.37%)	1500 (73.86%)	18 (0.89%)	7 (0.34%)	397 (19.55%)	2031 (100%)	43 (2.12%)	44 (2.17%)
Current Asset	143 (7.04%)	1466 (72.18%)	18 (0.89%)	7 (0.34%)	397 (19.55%)	2031 (100%)	48 (2.36%)	49 (2.41%)
Liability	111 (5.47%)	1498 (73.76%)	18 (0.89%)	7 (0.34%)	397 (19.55%)	2031 (100%)	40 (1.97%)	39 (1.92%)
Current Liability	128 (6.30%)	1481 (72.92%)	18 (0.89%)	7 (0.34%)	397 (19.55%)	2031 (100%)	48 (2.36%)	50 (2.46%)
	119	1490	18	7	397	2031	81	79

Retained Earnings	(5.86%)	(73.36%)	(0.89%)	(0.34%)	(19.55%)	(100%)	(3.99%)	(3.89%)
Capital Surplus	98	1480	37	38	378	2031	43	42
	(4.83%)	(72.87%)	(1.82%)	(1.87%)	(18.61%)	(100%)	(2.12%)	(2.07%)
Sales	182	1427	18	7	397	2031	145	145
	(8.96%)	(70.26%)	(0.89%)	(0.34%)	(19.55%)	(100%)	(7.14%)	(7.14%)
EBIT	201	1408	18	7	397	2031	111	111
	(9.90%)	(69.33%)	(0.89%)	(0.34%)	(19.55%)	(100%)	(5.47%)	(5.47%)
Stock Price	34	1964	26	0	7	2031	29	28
	(1.67%)	(96.70%)	(1.28%)	(0.00%)	(0.34%)	(100%)	(1.43%)	(1.38%)
Stock Volume	69	1542	21	5	394	2031	38	38
	(3.40%)	(75.92%)	(1.03%)	(0.25%)	(19.40%)	(100%)	(1.87%)	(1.87%)
Total	1194	15256	210	92	3558	20310	626	625
	(5.88%)	(75.12%)	(1.03%)	(0.45%)	(17.52%)	(100%)	(3.08%)	(3.08%)

0: Differences of variables between DataGuide and TS2000 > 0, 1: Differences of variables between DataGuide and TS2000=0, 2: Missing data only for DataGuide 3: Missing data only for TS2000, 4: Missing data for both DataGuide and TS2000, 5: Observations including missing data, mismatching, and matching, 6: Material differences for DataGuide, 7: Material differences for TS2000

Table 3 provides the results of two-tailed paired t-test for 10 testable variables from DataGuide and TS2000. We use two-tailed paired t-test to find whether the differences between DataGuide and TS2000 exist or not.

The empirical results for differences between DataGuide and TS2000 provides significant statistical differences for 5 variables, total assets, current assets, liability, current liability, and retained earnings out of 10 testable variables. In financial statement data, 5 variables are statistically significant.

Table 3: Two-tailed paired t-test between DataGuide and TS2000

	Source				Test Value = 0		
	DataGuide		TS2000		t	df	p
	Avg	Var	Avg	Var			
Total Assets	3720482	193904314659	3688098	192972262587	1.96**	1608	0.08
Current Assets	1435564	30930101364	1378383	27457716946	2.40**	1609	0.02
Liability	2126120	59480259814	2098298	58833106671	1.76*	1608	0.08
Current Liability	1180686	13808145750	1158647	13581346480	2.43**	1608	0.02
Retained Earnings	1085655	39347163849	1087623	39353087189	-1.73*	1608	0.04
Capital Surplus	241871	402264273	241708	401394560	0.31	1577	0.17

Sales	3407888	162887139487	3378462	161757486123	1.36	1608	0.17
EBIT	168254	2141039986	168516	2139986207	-0.36	1608	0.72
Stock Price	47972	22506227	47964	22506831	0.74	1997	0.46
Stock Volume	44900	7621587	42793	5069688	1.63	1610	0.10

(Unit: Avg is million KRW; Var is billion KRW; Stock price is KRW)

RESULTS OF DISCRIMINANT PREDICTION FOR INSOLVENT FIRMS

We use Altman (1968)'s bankruptcy prediction model to test insolvent firm. Specifically, we test whether bankruptcy prediction of Altman (1968)'s based on discriminant function analysis has same results using DataGuide and TS2000 or not.

We choose 14 insolvent firms and 14 normal firms in 2012 to predict insolvent firms in 2013 out of the firms supervised by the KFSC. The variables to predict bankruptcy is five financial ratio variables which consist of 1) operating equity/total assets, 2) retained earnings/total assets, 3) EBIT/total assets, 4) stock market value/book value of liability, and 5) sales/total assets, same with variables using Altman (1968)' research, then we come up with a bankruptcy prediction model with weighted 5 variables. Table 4 represents the results of discriminant function analysis using both DataGuide and TS2000, respectively.

Table 4: Results of discriminant function analysis using DataGuide and TS2000

	DataGuide			TS2000		
	Fisher' Standard Function		Canonical Standard Function	Fisher' Standard Function		Canonical Standard Function
	Insolvent Firms	Normal Firms		Insolvent Firms	Normal Firms	
X ₁	-9.26	-8.17	0.65	-7.52	-6.58	0.57
X ₂	13.62	17.00	2.01	18.88	22.52	2.06
X ₃	-22.15	-17.77	2.61	-20.54	-26.39	2.56
X ₄	0.69	0.24	-0.26	0.59	0.23	-0.22
X ₅	14.83	17.10	1.35	20.35	21.82	0.91
constant	-9.67	-11.48	-1.07	-11.57	-14.78	-0.75

X₁: operating equity/total assets, X₂: retained earnings/total assets, X₃: EBIT/total assets, X₄: stock market value/book value of liability, X₅: sales/total assets, two-tailed test

$$Z_{\text{DataGuide}} = -1.07 + 0.65X_1 + 2.01X_2 + 2.61X_3 - 0.26X_4 + 1.35X_5 \dots\dots\dots(\text{Eq.1})$$

$$Z_{\text{TS2000}} = -0.75 + 0.57X_1 + 2.06X_2 + 2.56X_3 - 0.22X_4 + 0.91X_5 \dots\dots\dots(\text{Eq.2})$$

Table 5 shows the results of bankruptcy prediction using discriminant function. In using DataGuide, exact prediction for forecasting insolvent firms is 8 (57.1%) out of 14 insolvent firms and type I error is 6 (42.9%). In using TS2000, 7 firms out of 14 insolvent firms are exactly predicted as a insolvent firm and type I error is 7 (50%). 6 forecasting error for insolvent firms, type I error using DataGuide

Table 5: Discriminant analysis results of insolvent prediction using DataGuide and TS2000

		DataGuide		TS2000	
	Sample Firms	Insolvent Firms	Normal Firms	Insolvent Firms	Normal Firms
Insolvent Firms	14	8(57.1%)	6(42.9%)	7(50%)	7(50%)
Normal Firms	14	0(0%)	14(100%)	0(0%)	14(100%)

Table 6 is the results of Altman(1968)'s Z-score to predict bankruptcy of firms. The value of two-tailed paired t-test using DataGuide and TS2000 is -2.07 and significant at level 0.05 means DataGuide and TS2000 data has significant difference statistically. In addition, three financial ratio variables, X_2 , X_4 , and X_5 , are statistically significant at level 0.00, 0.1, and 0.1, respectively.

Table 6: Difference of Z-score using DataGuide and TS2000

		source				Test Value = 0			
		DataGuide		TS2000		t	df	p	Avg Different
		Avg	Var	Avg	Var				
X ₁		0.1060	0.0405	0.1068	0.0401	-1.40	1602	0.16	0
X ₂		0.3913	0.0651	0.3939	0.0655	-3.09**	1602	0.00	0
X ₃		0.0208	0.0129	0.0206	0.0131	0.60	1602	0.56	0
X ₄		1.5230	6.1023	1.5779	7.2502	-1.95*	1602	0.05	0
X ₅		0.9870	0.3292	0.9906	0.3274	-1.84*	1602	0.07	0
Z-score		1.0141	0.3337	1.0181	0.3313	-2.07**	1602	0.03	0

X_1 : operating equity/total assets, X_2 : retained earnings/total assets, X_3 : EBIT/total assets, X_4 : stock market value/book value of liability

X_5 : sales/total assets, $Z = 0.12X_1 + 0.14X_2 + 0.033X_3 + 0.006X_4 + 0.999X_5$, two-tailed test

CONCLUSION

The study examines the errors and differences of financial data produced by two major Korean FIDPs, Data Guide and TS2000. We analyze the differences of ten variables for the 677 firms listed on the KSE and 20,310 observations over three years (2011-2013). We find 1,194 (5.88%) differences out of 20,310 observations from financial statement, income statement, and stock data provided by DataGuide and TS2000 and also five variables out of ten key variables are statistically significant difference.

We also test insolvent firm forecasting employing Altman (1968)'s bankruptcy prediction model using DataGuide and TS 2000. The empirical results show that 8 (42.9%) insolvent firms are wrongly predicted as normal forms by using DataGuide while TS2000 predicts 7 (50%) insolvent firms as normal firms out of 14 insolvent firms. In addition, comparing Altman (1968) Z-score using DataGuide and TS2000 shows significantly different results statistically.

These differences and errors among FIDPs shown in our empirical results can distort decision making for financial information users, thus decreasing firm value because of erroneous analysis/

This study contributes to the literature and practice in several ways. First, this research supplement previous research gap using emerging market database not U. S. database due to the rapid growth of emerging market. Second, we expect to increase quality of financial information data provided by major FIDPs by comparing FIDPs' database.

There are two limitations in this study. First, using Korean data only, do not necessarily reflect many aspects of emerging markets. Thus, in further research, China, Taiwan, and the Southeast Asian database should be compared. Second, this study does not compare original database; DART with FIDPs' database. Accordingly, the future study of comparing DART and FIDPs' database should be considered.

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MEASURING THE TRANSPARENCY OF THE DISCLOSED INFORMATION IN KURDISTAN PRIVATE BANKS

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ABSTRACT

This paper will measure the transparency of disclosing information in the private banks of the Kurdistan region of Iraq. Calls for transparency of disclosing accounting information have a big importance in the business world. As a result of the absence of transparency, and the weak disclosure in some companies' financial reports, along with collusion with auditors, who have used different means to hide important information and mislead; this has led to the collapse of big companies like Enron and WorldCom, and in Iraq, several banks such as Warka, Basra and Ektisad banks have been put under the central bank guardianship. The transparency of disclosed information is measured by using the t-test in Excel program.

Keywords: Financial Reporting, Transparency and Disclosure, t-test

INTRODUCTION

Financial accounting information is the product of an accounting system that measures and discloses information concerning the financial position and performance of companies. Disclosed financial information and audited financial statements along with supporting disclosures, form the foundation of the company's information provide the base for informed decision making by shareholders, stakeholders and potential investors in relation to capital allocation, corporate transactions and financial performance monitoring (Fung B.2014:1), as well as the regulators (Bush R. and Smith A. 2003:1). Governments in recent decades have employed public disclosure strategies to reduce risks, improve public and private goods and services, and reduce injustice. The importance of transparency and disclosure have been widely recognized by both academics and market regulators, resulting in numerous rules and regulations being introduced over time to ensure timely and reliable disclosure of financial information, creating standards to which companies must adhere (Bush R. and Smith A. 2003:1).

THE RESEARCH AIMS TO:

1. Explain that transparency is not a substitute for disclosure, but rather its content
2. Explain that transparency as a system and disclosure represent the output to the system
3. Explain the degree of compliance with accounting standards concerning disclosure like IFRS 7 and the Iraqi standard 10

Measuring the degree of transparency of disclosed information in the Kurdistan banks, the analysis focuses on annual reports only as this facilitates analysis.

1. To achieve these aims, the following has been followed:
2. Comparing the financial statements and reports for the same bank for several years in order to measure the degree of transparency in the disclosure of the private banks in Kurdistan depending on the banks' financial statements,
3. Measuring the degree of application of Standard & Poor's (S&P) measure in the Kurdish banks as well as a minor use of the CAMELS system as an item added to the other measured items of S&P.
4. Explain the results, and compare the degree of transparency between the Kurdish private banks.

THE RESEARCH PROBLEM

The research problem is concerning how a good application of transparency in the disclosure can clarify the truth of what is going on at the private Kurdistan banks because of the following:

1. Kurdistan banks, as a part of the Iraqi banks, lack transparency in accounting disclosure, especially after a few banks were put under the "guardianship" of the Iraqi Central Bank such as Warka and Basrah Banks.
2. The drop in the classification of the Iraqi private banks according to CAMEL system. Four of these Iraqi banks have been dropped from the degree "Very Good" to "Good", and three other banks to less than "Good".
3. Two gaps have been noticed, the first is between the attainable level of disclosure and the ideal level of disclosure. The second is between the financial information prepared and users.
4. Disclosed information has a big importance to represent the truth of the financial state in the private banks because there is a weakness in the disclosed information as a result of lack of clarity of banks' financial information, the minimum level of compliance with the Iraqi and international standards requirements, utilizing the gap between the Iraqi standards and the international standards for the banks, and the lack of justice in getting the information between the owners and the management, on one hand and the shareholders and the government agencies on the other hand.

LITERATURE REVIEW

The Basle Committee (1998) considers bank transparency to be of the utmost importance. To achieve transparency a bank, in its financial reports and other disclosures to the public, should provide timely information on key factors affecting the market participants' assessment of banks. Transparent and public information on the services that the banking sector provides to deprived communities means that bank transparency is a powerful tool that can ensure the effective targeting of scarce resources to deprived areas. Bushman and Smith (2003) in their paper discuss economics-based research focused primarily on the governance role of financial accounting information. They presented a framework that isolates three channels through which financial accounting information can affect the investments, productivity, and value-added of firms. The UK Treasury (2006) requested to establish the Social Investment Task Force. One of the Task Force's recommendations was that UK banks should follow the US practice of publishing details of their lending in disadvantaged areas. The global transparency initiative has stated in the study on The Model World Bank Policy on Disclosure of Information (2009), transparency is essential to building and maintaining public dialogue and increasing public awareness about a bank's development role and

missions. The more information firms disclose voluntarily, the higher value they have in the eyes of investors (Uyar 2012). Mustafa K. Hassan (2012) found that the extent of governance disclosure is found to be similar across the major economic sectors in the UAE. The lowest disclosures are associated with information about external auditing and non-audit services. The highest disclosures are those dealing with management structure and transparency, which are also found to be significantly different across the sectors in the UAE. The improved transparency frequently associated with IFRS materially increased available information about borrower quality. It would increase the effectiveness of *ex ante* screening by lenders, and hence it would attenuate the demand for all types of covenants, both accounting and non-accounting (Ball & Li 2015). Mitchell Stein (et al., 2015) extended sense making to the macro level, and they show how stakeholders construct meanings of transparency to rationalize events around the crisis. They noticed that while some of the discourses were more ocular related, other discourses sought to rationalize events and the need for future actions. While the financial accounting research literature does share users' assumption of the desirability of transparency in terms of certain market-related outcomes, its narrow informational focus is less successful in discerning how users define transparency, and even more problematic in identifying how users believe that transparency is enhanced or achieved.

HYPOTHESIS HO1

There are two gaps in the disclosure of Kurdistan private banks:

The first gap is between the attainment level and the ideal level of disclosure, which achieves the full disclosure.

The second gap is between the financial statements and reports prepared on the one hand, and the users on the other hand.

The subsidiary hypotheses:

HO1a The disclosure is done with the minimum.

HO1b The lack of observance of international accounting and auditing standards by the banks.

HO1c The decrease in the commitment to the values and morals of the financial reports prepares.

Research limits:

The geographical limits: the accounting environment and especially the private banks in Kurdistan-Iraq. The time limits: the period 2009 – 2013, this period was chosen for the following reasons:

1. Recent international financial reporting standards have been issued such as IFRS 7 Financial Instruments: Disclosures which replaced the international accounting standard IAS 30 during the studied period.
2. During this period, two Iraqi private banks, Basrah and Warka bank experienced a crisis.

RESEARCH CONCEPTUAL FRAMEWORK

Disclosure standards: International accounting standards paid considerable attention to the disclosures, IASC has issued three standards concerning the disclosure methods, as follows:

Presentation of Financial Statements (IAS1). This standard prescribes the basis for the presentation of general purpose financial statements to ensure comparability both with the entity's financial statements of previous periods and with the financial statements of other entities.

Related Party disclosure (IAS 24). The objective of this standard is to ensure that an entity's financial statements contain the disclosures necessary to draw attention to the possibility that its financial position and profit or loss may have been affected by the existence of related parties and by transactions and outstanding balances, including commitments, with such parties.

International Accounting Standards Presentation and Disclosure Checklist (IAS 30). This concerned the disclosure of the banks and financial institutions financial statements. This standard has been replaced with IFRS 7-Financial Instruments: Disclosures. It requires disclosure of information about the significance of financial instruments to an entity, and the nature and extent of risks arising from those financial instruments, both in qualitative and quantitative terms.

TRANSPARENCY OF DISCLOSED INFORMATION

Transparency can be defined as a situation in which business and financial activities are conducted in an open way without secrets, so that people can trust that they are fair and honest. (Cambridge Dictionary). The Business Dictionary defined it as "lack of hidden agendas and conditions, accompanied by the availability of full information required for collaboration, cooperation, and collective decision-making". Transparency is the extent to which investors have ready access to any required financial information about a company such as price levels, market depth and audited financial reports.

Financial reporting is a critical information component for investors in their decision making. Management may fail to provide certain information to many diverse users of financial statements, deliberately misleading them about the company's operations. Without the required information, it is impossible to fully understand a company's financial condition. (Fung B. 2014:74). Transparency is the lack of hidden information, along with all the necessary information to facilitate a collaborative decision making process free of cheating, fraud, or deception. The management reports should fully disclose all the administrative procedures inside the company, and the approach followed to prepare the financial reports. Transparency means faithful, reliable and objective information, while -it does not mean overstatement.

REQUIREMENTS FOR THE TRANSPARENCY OF DISCLOSED INFORMATION, AND THE MEASURING SAMPLE

FIRST: TRANSPARENCY IN THE DISCLOSED INFORMATION REQUIREMENTS:

- Consider the financial and non-financial information according to Standards & Poor organization (Table 1)
- Transition to compulsory disclosure by issuing laws and instructions. However, the transition from optional disclosure to compulsory disclosure became necessary.
- Enhance electronic disclosure to increase the number of users, save time, immediate update,

reduce cost and efforts, and refers to the confidence and fairness of the information.

SECOND: TRANSPARENCY MEASURE, ACCORDING TO STANDARD & POOR'S SAMPLE:

S&P is regarded as a suitable measure of transparency. S&P contains three basic categories, which were chosen accurately with flexibility to add or omit according to the activity's nature. There are 76 items, and each assured disclosed item is given "n" where undisclosed item was given "x". The three main categories are:

1. Ownership structure and investor rights
2. Transparency and disclosure about the financial and non-financial information, including company's trends, accounting policies, related party transactions, information about the auditors, the opportunities and risks, the degree of competition strength, employees' satisfaction. An additional item of CAMEL classification was added to this category.
3. Board and management structure and process

RELATIONSHIP BETWEEN TRANSPARENCY AND DISCLOSURE

The principle of disclosure is formed with transparency as an integrated meaning. Initially, it seems that there is a difficulty to distinguish between the two words because they are correlated in their meanings and aims. Transparency is not a substitute for disclosure, it is rather used to achieve full disclosure, where transparency is ensured in the financial statements through full disclosure.

Are transparency purpose or means? Transparency is a purpose in accounting regulations and standards concerning disclosure, and it is a means to achieve full disclosure and enhance confidence and limit dishonesty in accounting information. Transparency aims to reach the ideal level of disclosure. Transparency and disclosure are correlated concepts, which enhance each other. In the absence of transparency, the accounting information in the disclosure are not reliable, and in the absence of disclosure, the aspect of transparency does not exist. Transparency refers to open behavior rather than hiding any information, and leads to collecting and examining the information by those parties who are interested in the company information.

TRANSPARENCY IN THE DISCLOSURE IS IMPORTANT FOR THE FOLLOWING REASONS:

1. The financial information could be disclosed at the minimum level, and according to the owners' desire to realize the interest of one party against the others. In the bank case, the management and the employees obtain more information of a better quantity and quality, more easily than outside parties.
2. The failure to disclose part of the financial information, such as allowance for doubtful debts or depreciations (Kieso and et al 2010:608) depends on individual judgment. Disclosure is important to explain the source to reach these satisfactions and judgments.
3. Two main limits should be considered:
 - a) Information value, which is the cost of disclosed information subtracted from the benefit gained (Marshal and Steinbart 2010:20). If the cost of preparing the accounting information is counted in the accounting system with little or no transparency, the users need to pay for
 - Speculation costs to obtain the information from the preparers in the bank.
 - Financial analyst cost to explain the complexity of the disclosed information.

- The harmful effect of the unreliable and unfaithful information.
- b) Information materiality, it concerns the impact of inclusion of the information on a company's financial operations, "an item is material if its inclusion or omission would influence or change the judgment of a reasonable person" (Kieso, et.al 48).
- 4. In the existence of a failure to disclose, some accountants were able to exploit a number of accounting practices and policies which lead to presenting unreliable and irrelevant financial statements for more than one accounting period, and as a result, big companies collapsed.

TRANSPARENCY MEASURE

Standard & Poor's examine company annual reports disclosed "attributes" which are broadly divided into three categories:

- Ownership structure and investor rights (description of the share classes, review of the shareholders by type, description of the voting rights)
- Financial transparency and information disclosure (The company's accounting policy, consistency of company accounting with international accounting standards, efficiency indicators)
- Board and management structure and process (list of board members, board committees, list of audit committee members, details of directors' remuneration and performance related pay, related party transactions) (Patel and Dallas 2002:18)

The sample chosen for this paper will rely on the information above to measure the transparency in the disclosed information of Kurdistan banks.

THE PRACTICAL FRAMEWORK

S&P measure will be used to measure the transparency in the Kurdistan bank's disclosed information with a little flexibility to be suitable for private banks in the Kurdistan Region of Iraq environment without affecting the basics or the principles of the measure.

THE MEASURE IS DIVIDED INTO BROAD THREE CATEGORIES AND OTHER SUB-CATEGORIES:

First: Ownership structure and investor rights which include 14 items.

Second: Financial transparency and information disclosure: This includes the part which concerns the purpose of this paper, it includes 41 items: bank perspectives, bank accounting policies, consistency of company accounting with international accounting standards, efficiency indicators, details of directors' remuneration and performance related pay, related party transactions.

Third: Transparency in the board of directors' information: it contains 21 items for each bank. S&P calculation: as a measure used in this research contains 76 items.

METHODOLOGY

To compare the transparency of disclosed the information for two banks in Kurdistan region, the parameter of interest is the difference between the population means. Assuming that,

Alternative Hypothesis: KIB has more transparency of disclosing than Cihan Bank

Null Hypothesis: The difference of means is zero (They have the same transparency)

Using Excel,

- i) The data is collected and organized (Shown in the Table (1)).

- ii) Examined mean, standard deviation, coefficient of variation and standard error in the group wise data (Shown in Tables (2&3))
- iii) Total analysis is shown in the Table 4.
- iv) Plotted bar graph for the disclosed and undisclosed information by year (Shown in table 5).
- v) To compare the transparency of disclosed information for the two banks, the output from the t-test (shown in the table 5).

CONCLUSION

In this paper the following conclusions have been noted:

1. It is important to measure the transparency in disclosure according to Standard & Poor's measure. This measure was applied partially by any Kurdistan private bank as follows:
 - a) Transparency of information about ownership structure and shareholder equity:
For both banks (KIB and Cihan), from 2009- 2013, 11 items were not disclosed, while only 3 items were disclosed.
 - b) Transparency of financial and nonfinancial information:
For KIB, from 2009- 2011, 25 items were not disclosed, while little only 16 items were disclosed, and from 2012- 2013, 24 items were not disclosed, while only 17 items were disclosed
For Cihan Bank, from 2009- 2011, 28 items were not disclosed, while only 13 items were disclosed, and from 2012- 2013, 27 items were not disclosed, while only 14 items were disclosed.
 - c) Transparency of information about the board of directors structure and composition:
For KIB, from 2009- 2013, 11 items were not disclosed, while only 10 items were disclosed.
For Cihan Bank, from 2009- 2011, 14 items were not disclosed, while only 7 items were disclosed, and from 2012- 2013, 13 items were not disclosed, while only 8 items were disclosed.
2. The calculations show,
 - i) disclosure is done at a minimum level.
 - ii) a lack in the observance of international accounting and auditing standards used by the banks. This confirms our hypothesis HO1a and HO1b
 - iii) The study explains that the KIB and Cihan Bank, were in compliance with the local accounting and auditing standards and the government rules. This confirms our hypothesis HO1c.
3. By the statistical tool t-test using Excel, I examined the transparency of disclosing the information on two banks KIB and CIHAN. The results shown in Table 4 that p-value is very small $0.0005 < 0.05$ (5% level of significance), so we reject the null hypothesis. Also, there is overwhelming evidence to infer that the KIB has more transparency of disclosed information than CIHAN bank.

SUMMARY OF STATISTICS

Table 1: The raw data for the transparency in the disclosed information for the sample of 76 items. ('n' – Not Disclosed and 'x' – Disclosed)

Details	Info	2009		2010		2011		2012		2013	
		KIB	Cihan	KIB	Cihan	KIB	Cihan	KIB	Cihan	KIB	Cihan
First Transparency of information about ownership structure and shareholder equity	1. Share classes	n	n	n	n	n	n	n	n	n	n
	2. Shareholders type	n	n	n	n	n	n	n	n	n	n
	3. Number of shares issued	x	x	x	x	x	x	x	x	x	x
	4. Shares par value	n	n	n	n	n	n	n	n	n	n
	5. Shareholders owning big portion of shares	n	n	n	n	n	n	n	n	n	n
	6. Shareholders owning more than 10% of shares	n	n	n	n	n	n	n	n	n	n
	7. Names of cross-ownership	x	x	x	x	x	x	x	x	x	x
	8. Timetable for shareholder meeting	n	n	n	n	n	n	n	n	n	n
	9. Subjects discussed in the shareholder meeting	n	n	n	n	n	n	n	n	n	n
	10. Proposals at shareholder meeting	n	n	n	n	n	n	n	n	n	n
	11. Convene an extraordinary general meeting	n	n	n	n	n	n	n	n	n	n
	12. Election of management board members	n	n	n	n	n	n	n	n	n	n
	13. Compliance with the government rules	x	x	x	x	x	x	x	x	x	x
	14. Increase and decrease in the shares market	n	n	n	n	n	n	n	n	n	n
Second Transparency of financial and nonfinancial information a) Business trends	Count	11	11	11	11	11	11	11	11	11	11
	1. The strategy applied to achieve the goals	x	x	x	x	x	x	x	x	x	x
	2. Stability on the strategy	x	x	x	x	x	x	x	x	x	x
	3. Type of the products or services produced/provide	x	x	x	x	x	x	x	x	x	x
	4. Primary and secondary markets for the products	n	n	n	n	n	n	n	n	n	n
	5. Business portion of the market	n	n	n	n	n	n	n	n	n	n
	6. Basic earnings forecast	n	n	n	n	n	n	n	n	n	n
	7. Products or services forecast	x	x	x	x	x	x	x	x	x	x
	8. Average business's assets useful life	n	n	n	n	n	n	n	n	n	n
	9. Investment plans for the future	x	x	x	x	x	x	x	x	x	x
	10. Details about the investment future plan	x	x	x	x	x	x	x	x	x	x
	11. Financial analysis for the income statement and	x	n	x	n	x	n	x	n	x	n
	12. CAMELS classification	n	n	n	n	n	n	x	x	x	x
	Count	9	9	9	9	9	9	9	9	9	9
b) Accounting policies	1. Quarterly financial information	x	x	x	x	x	x	x	x	x	x
	2. Applied accounting policies	x	x	x	x	x	x	x	x	x	x
	3. Accounting standards uses for its accounts	x	x	x	x	x	x	x	x	x	x
	4. Local accounting standards applied for accounts	n	n	n	n	n	n	n	n	n	n
	5. Methods of assets valuation	n	n	n	n	n	n	n	n	n	n
	6. Methods of inventory valuation	n	n	n	n	n	n	n	n	n	n
	7. Methods of fixed assets depreciation	x	x	x	x	x	x	x	x	x	x
	8. Producing consolidated financial statements	n	n	n	n	n	n	n	n	n	n
c) Related party structure and transactions	Count	4	4	4	4	4	4	4	4	4	4
	1. List of affiliates in holds a minority stake	x	n	x	n	x	n	x	n	x	n
	2. Ownership structure of affiliates	n	n	n	n	n	n	n	n	n	n
	3. List of related party transactions	x	n	x	n	x	n	x	n	x	n
d) Information about auditor	Count	1	1	1	1	1	1	1	1	1	1
	1. Name of its auditor	x	x	x	x	x	x	x	x	x	x
	2. Reproducing the auditors' report	x	x	x	x	x	x	x	x	x	x
	3. Auditors' fees	n	n	n	n	n	n	n	n	n	n
e) Information about opportunities and risks	4. Non-audit fees paid to auditor	n	n	n	n	n	n	n	n	n	n
	Count	2	2	2	2	2	2	2	2	2	2
	1. Nature of opportunities and risks	n	n	n	n	n	n	n	n	n	n
	2. Liquidity risks	n	n	n	n	n	n	n	n	n	n
	3. Internal and external liquidity resources	x	x	x	x	x	x	x	x	x	x
	4. Liquidity risks	n	n	n	n	n	n	n	n	n	n
	5. Decrease in liquidity and the company's treatment	n	n	n	n	n	n	n	n	n	n
	6. Opportunities and risks resulting from participation	n	n	n	n	n	n	n	n	n	n
f) Strength of competition	7. Opportunities and risks resulting from the change	n	n	n	n	n	n	n	n	n	n
	Count	6	6	6	6	6	6	6	6	6	6
	1. Names of the competitors	n	n	n	n	n	n	n	n	n	n
	2. Price response as a result of competition	n	n	n	n	n	n	n	n	n	n
g) Information about employees satisfactory	3. Number of companies outbid on the main	n	n	n	n	n	n	n	n	n	n
	4. Company's characteristics in the competition's	n	n	n	n	n	n	n	n	n	n
	Count	4	4	4	4	4	4	4	4	4	4
	1. Degree of employees participation in strategy	n	n	n	n	n	n	n	n	n	n
Third Transparency of information about the board of directors structure and composition	2. Degree of encouragement for the creation and	n	n	n	n	n	n	n	n	n	n
	3. Financial satisfaction	n	n	n	n	n	n	n	n	n	n
	Count	3	3	3	3	3	3	3	3	3	3
	1. Chairman name	x	x	x	x	x	x	x	x	x	x
	2. Details about the chairman (other than name/	n	n	n	n	n	n	n	n	n	n
	3. List of board members names	x	x	x	x	x	x	x	x	x	x
	4. Details about previous board members	n	n	n	n	n	n	n	n	n	n
	5. Classifies directors as an executive or outside	x	x	x	x	x	x	x	x	x	x
	6. Details about the role of the board directors	x	x	x	x	x	x	x	x	x	x
	7. Board's committees list	x	x	x	x	x	x	x	x	x	x
	8. Board members compensations	x	n	x	n	x	n	x	n	x	n
	9. Compensations for each board member	x	n	x	n	x	n	x	n	x	n
	10. Timetable for board meetings	n	n	n	n	n	n	n	n	n	n
	11. Board's dividend distribution plan	n	n	n	n	n	n	n	n	n	n
	12. Existence of audit committee	x	x	x	x	x	x	x	x	x	x
	13. Names of audit committee members	n	n	n	n	n	n	n	n	n	n
	14. Existence of internal auditor position	x	x	x	x	x	x	x	x	x	x
	15. Providing director training	n	n	n	n	n	n	n	n	n	n
	16. Number of company's shares held by directors	x	n	x	n	x	n	x	n	x	n
	17. Names of senior managers out of board of	n	n	n	n	n	n	n	n	n	n
	18. Number of senior managers in the board of	n	n	n	n	n	n	n	n	n	n
	19. Compensation of the senior managers	n	n	n	n	n	n	n	n	n	n
	20. Number of company's shares held by the	n	n	n	n	n	n	n	n	n	n
	21. Performance-related pay for managers	n	n	n	n	n	n	n	n	n	n
	Count	11	14	11	14	11	14	11	14	11	14

The table was based on Patel and Dallas information (2002:19) and Jajawi & Al Fatahala (2013:7)

Table 2: Number of disclosed information according to P&S measure in three groups.

Number of disclosed information according to P&S measure									
Items according to P&S measure	Year	First		Second		Third		Total	
		Transparency of information about ownership structure and shareholder equity		Transparency of financial and nonfinancial information		Transparency of information about the board of directors structure and composition			
		Not Disclosed	Disclosed	Not Disclosed	Disclosed	Not Disclosed	Disclosed	Not Disclosed	Disclosed
KIB	2009	11	3	25	16	11	10	47	29
	2010	11	3	25	16	11	10	47	29
	2011	11	3	25	16	11	10	47	29
	2012	11	3	24	17	11	10	46	30
	2013	11	3	24	17	11	10	46	30
Cihan	2009	11	3	28	13	14	7	53	23
	2010	11	3	28	13	14	7	53	23
	2011	11	3	28	13	14	7	53	23
	2012	11	3	27	14	13	8	51	25
	2013	11	3	27	14	13	8	51	25

Table 3: Calculations of Statistics for the group wise data

Table 4: Total statistical analysis for five years

Bank	Year	Not Disclosed	Disclosed
KIB	2009	47	29
	2010	47	29
	2011	47	29
	2012	46	30
	2013	46	30

Bank	Year	Not Disclosed	Disclosed
CIHAN	2009	53	23
	2010	53	23
	2011	53	23
	2012	51	25
	2013	51	25

Number N	5	
Mean	46.60	29.40
Standard Deviation	0.55	0.55
Coefficient of Variation (%)	1.18	1.86
Standard Error	0.244948974	0.244948974

Number N	5	
Mean	52.20	23.80
Standard Deviation	1.10	1.10
Coefficient of Variation (%)	2.10	4.60
Standard Error	0.489897949	0.4898979

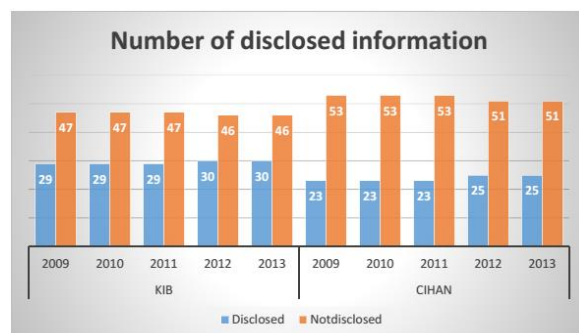
Items according to P&S measure	Year	First		Second		Third	
		Transparency of information about ownership structure and shareholder equity		Transparency of financial and nonfinancial information		Transparency of information about the board of directors structure and composition	
		Not Disclosed	Disclosed	Not Disclosed	Disclosed	Not Disclosed	Disclosed
KIB	2009	11	3	25	16	11	10
	2010	11	3	25	16	11	10
	2011	11	3	25	16	11	10
	2012	11	3	24	17	11	10
	2013	11	3	24	17	11	10

Items according to P&S measure	Year	First		Second		Third	
		Transparency of information about ownership structure and shareholder equity		Transparency of financial and nonfinancial information		Transparency of information about the board of directors structure and composition	
		Not Disclosed	Disclosed	Not Disclosed	Disclosed	Not Disclosed	Disclosed
Cihan Bank	2009	11	3	28	13	14	7
	2010	11	3	28	13	14	7
	2011	11	3	28	13	14	7
	2012	11	3	27	14	13	8
	2013	11	3	27	14	13	8

Mean	11	3	24.6	16.4	11	10
SD	0	0	0.547722558	0.5477226	0	0
Coefficient of Variation (%)	0	0	2.226514461	3.3397717	0	0
Standard Error	0	0	0.244948974	0.244949	0	0

Mean	11	3	27.6	13.4	13.6	7.4
SD	0	0	0.547722558	0.54772256	0.547722558	0.5477226
Coefficient of Variation (%)	0	0	1.98450202	4.08748177	4.027371746	7.4016562
Standard Error	0	0	0.244948974	0.24494897	0.244948974	0.244949

Table 5: Graph and calculations of testing the transparency by t- test.



t-Test: Two-Sample Assuming Unequal Variances		
	KIB	CIHAN
Mean	29.5	24
Variance	0.33333333	1.33333333
Observations	4	4
Hypothesized Mean Difference	0	
df	4	
t Stat	8.52056336	
P(T<=t) one-tail	0.00052046	
t Critical one-tail	2.13184679	
P(T<=t) two-tail	0.00104091	
t Critical two-tail	2.77644511	

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UNDERSTANDING BAI' BITHAMAN AJIL FINANCING: A STUDY OF NORTHERN REGION AGROBANK EMPLOYEES IN MALAYSIA

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ABSTRACT

The purpose of this study is to assess the understanding of *Bai' Bithaman Ajil* (BBA) financing contract between Agrobank employees attached at branches and business center (regional office) in the northern states of Peninsular Malaysia namely Penang, Kedah and Perlis. The research presents primary data collected by self-administered questionnaires involving a sample of 40 respondents who represents executives from the lower - management group with direct involvement in commercial financing-related functions. A multiple regression analysis had been employed in this study. The finding shows that knowledge and commitment are the two significant factors which could affect employees' understanding of BBA financing contract. The empirical evidence of this study highlights the importance of Agrobank to groom a knowledgeable workforce with true commitment in Islamic banking aspects in order to ensure its transformation process would chart another remarkable milestone in spurring the growth of Islamic banking industry in Malaysia.

Keywords: *Bai' Bithaman Ajil* (BBA), Banking and Employees Understanding

INTRODUCTION

Islamic banking (IB) sector in Malaysia has experienced positive growth and tremendous progress over the past three decades since the establishment of Bank Islam Malaysia Berhad (BIMB) as a pioneer full-fledged Islamic bank in 1983. The emergence of IB has changed the Malaysian banking landscape from the sole - dominance of long established and a deep-rooted conventional banking system to a dual-banking system where Islamic banks operate in parallel with their conventional counterparts. Ismail (2010) emphasized that Islamic banking had played a vital role in mobilizing funds from *Rab-al-mal* (surplus units) to *mudharib* (deficit units), as well as prohibiting *riba*-based activities in its operations.

Agrobank is a Government-Linked Company (GLC) under the Malaysian Ministry of Finance Incorporated (MoF Inc.). It has been mandated with a role to provide holistic banking facilities to agriculture and agro-based community, as well as to cater the financial needs of private individuals. The notion, idea of this study was towards the slow progress of the transformation process, lack of understanding and low appreciation in the Islamic banking system among Agrobank employees. The key problem of this study is to examine the importance of having a basic understanding of

Islamic banking aspects among Agrobank's employees as to ensure a smooth transition during and after the transformation process. The underlying importance of this study is also associated with complexities in today's banking transaction, as customers have become more educated and demand for detailed information and explanation of IB products, terminologies and its process flow. Therefore the objective of the study is (i) to assess the understanding of Islamic banking, financing contract of *Bai' Bithaman Ajil* (BBA) among Agrobank's employees in northern regional branches and (ii) to examine the key factors affecting employees' understanding on the Islamic banking financing contract of BBA.

LITERATURE REVIEW

A study presented by Dahlawi (2005) revealed more critical factor, which was on the ignorance among many Islamic bank employees about the true nature of Islamic finance. He included in his study that banks will not be able to actualize their objectives if employees of that institution cannot properly uphold the banks' mission, have little interest to act in accordance to *Shariah* principles, lack of confidence in the Islamic banking system or lack of knowledge in the operation of Islamic banks.

A study by Hassan and Ahmed (2002) conducted at one of Islamic banks in Dhaka, Bangladesh found that understanding of Islamic banking concept and practices among customers and employees were still vague. Another study by Makiyan (2002) on the factors behind Islamic banking performance revealed that inadequate knowledge among employees was one of the key problems faced by Islamic banks. Both studies mentioned before were applied by Zainol, Shaari, and Ali, (2008) in their research paper about bankers' perception towards Islamic banking products and services. Their findings show that employees' knowledge of the fundamental aspects of Islamic banking is very limited – particularly in the areas of establishment objectives of Islamic bank which placed greater emphasis on religion rather than the profitability factor as its main feature.

The phrase *Bai' Bithaman Ajil* can be further break up into the following *lafzhiyah* (word-by-word) translation, to be read as: *Bai'* (sale), *Bithaman* (price or method of payment), *Ajil* (deferment). Hence, BBA is actually a "sale with deferred payment" and therefore is not a "spot sale" (Khir, Gupta, & Bala, 2008). Rosly (1999) in his article to measure the impact of using BBA financing on Islamic banking performance concluded that profits margin of an Islamic bank under his reviewed has declined tremendously during the rising interest rate period in year 1996-1997, in contrary to a profit margin of conventional banks which moved in the opposite direction.

Mohd Azli, Othman, Sahri, Abdul Aris, and Arshad, (2011) addressed in their study regarding the importance of thorough understanding in *Maqasid Al-Shariah* (the objectives of Islamic law) in the context to uphold justice, social welfare and brotherhood. They concluded that the level of understanding of *Maqasid Al-Shariah* among bankers/practitioners who acted as seller in BBA financing contract is also questionable. In addition they commended that the terms and conditions, legal framework and practice of BBA were lack of public interest perseverance, compared to *Musharakah Mutanaqisah* (MM) financing contract used in house financing.

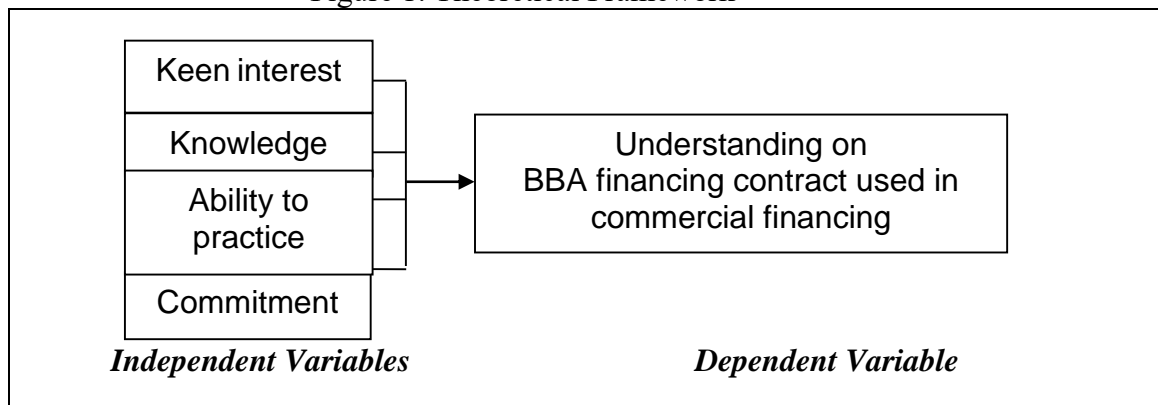
METHODOLOGY

Data collection was done by distributing self-administered questionnaire to 40 respondents at 19 Agrobank branches and 1 Business Centre representing three different states in the northern territory of Malaysia, namely, Penang, Kedah and Perlis. The questionnaire consists of 28 questions designed to examine the strength of respondents' agreement or disagreement with the

statements on the five-point scale, and divided into three parts. The timeframe corresponded to this research is within the year 2014. Descriptive and multiple regression analysis, data analysis techniques have been employed in this study. Descriptive analysis was conducted to determine respondents' demographic frequency of gender, age, marital status, years employed, years of banking experience, as well as level of qualification. This type of analysis has enabled the researcher to gauge the respondents' understanding of Islamic banking aspects with regard to their keen interest, commitment, knowledge and ability to practice *Shariah* aspects. Descriptive analysis was applied in this study to answer the first research objective.

Multiple regression analysis had been used to determine whether independent variables have a significant relationship with the dependent variable. This type of analysis is suitable for research with more than one independent variable (Sekaran & Bougie, 2009). Multiple regression analysis was employed to answer the second objectives. The schematic diagram below is developed to illustrate the relationship between dependent and independent variables.

Figure 1: Theoretical Framework



The regression equation model was applied to analyze the collected data from respondents. The purpose of this equation is to identify significant factors in determining the dependent variable in the study. The below equation has been established thereon:

$$BBA_{it} = \beta_0 + \beta_1 KI_{it} + \beta_2 K_{it} + \beta_3 AP_{it} + \beta_4 C_{it} + \epsilon_{it} \dots\dots\dots (1)$$

Where:

- BBA = Understanding on BBA financing contract used in commercial financing
- KI = Keen interest
- K = Knowledge
- AP = Ability to practice
- C = Commitment

FINDING

The degree of understanding, keen interest, commitment, knowledge and ability to practice proper aspects of the BBA financing contract were measured using the five-point anchors of: strongly disagree, disagree, neither agree nor disagree, agree and strongly agree. Despite the measurement scale employed was merely indicative, it could however, serves the research purpose to assess the understanding among Agrobank's employees on the Islamic banking, financing, contract of BBA by referring to the mean score obtained from the survey as shown in the tables below.

Table 1 revealed that all respondents were aware about the existence and understand the objectives

of BBA, with the mean score of 4.75.

Table 1: Understanding on BBA financing contract

		Frequency	Percent	Mean
Valid	Strongly Disagree	0	0.0	4.75
	Disagree	0	0.0	
	Neither Agree Nor Disagree	0	0.0	
	Agree	10	25.0	
	Strongly Agree	30	75.0	
	Total	40	100.0	

Table 2 presents the findings on respondents' keen interest. The mean score of 3.40 indicates that respondents were 'unsure' about their keenness to understand the BBA financing contract.

Table 2: Keen interest in BBA financing contract

		Frequency	Percent	Mean
Valid	Strongly Disagree	0	0.0	3.40
	Disagree	0	0.0	
	Neither Agree Nor Disagree	25	62.5	
	Agree	14	35.0	
	Strongly Agree	1	2.5	
	Total	40	100.0	

Table 3 shows the findings on respondents' commitment towards BBA with mean score of 3.15. The score shows that the majority of respondents were 'unsure' about their commitment to BBA financing contract. Based on justification given in the Table 5, it can deduce that despite the overall mean for this variable was only standing at 3.15, the respondents were seen as having the required commitment pertaining to their understanding of BBA financing contract.

Table 3: Commitment in BBA financing contract

		Frequency	Percent	Mean
Valid	Strongly Disagree	0	0.0	3.15
	Disagree	3	7.5	
	Neither Agree Nor Disagree	28	70.0	
	Agree	9	22.5	
	Strongly Agree	0	0.0	
	Total	40	100.0	

In terms of knowledge, most respondents were also 'unsure' about their knowledge of BBA financing contract with a mean score of only 3.33. Respondents' knowledge factor is delineated in Table 4.

Table 4: Knowledge in BBA financing contract

		Frequency	Percent	Mean
Valid	Strongly Disagree	0	0.0	3.33
	Disagree	0	0.0	
	Neither Agree Nor Disagree	27	67.5	
	Agree	13	32.5	
	Strongly Agree	0	0.0	
	Total	40	100.0	

Table 5 below depicts respondent's mean score of 3.45 with regard to their ability to practice Shariah aspects in the BBA financing contract. The score implies that respondents were 'unsure' whether they are able to practice Shariah principles governing BBA contract in an orderly manner.

Table 5: Ability to practice proper Shariah aspects in the BBA financing contract

		Frequency	Percent	Mean
Valid	Strongly Disagree	0	0.0	3.45
	Disagree	1	2.5	
	Neither Agree Nor Disagree	20	50.0	
	Agree	19	47.5	
	Strongly Agree	0	0.0	
	Total	40	100.0	

Table 6 shows the summary in assessing the degree of understanding, keen interest, commitment, knowledge and ability to practice proper aspects of BBA financing contract among Agrobank's employees.

Table 6: Summary of understanding, keen interest, commitment, knowledge and the ability to practice BBA among Agrobank's employees.

No.	Item	Mean	Finding
1	Understanding of BBA financing contract	4.75	Respondents were aware about the existence and understand the objectives of BBA.
2	Keen interest in BBA financing contract	3.40	Respondents were 'unsure' about their keenness to understand the BBA financing contract.
3	Commitment in BBA financing contract	3.15	Respondents were 'unsure' about their commitment to BBA financing contract.
4	Knowledge of BBA financing contract	3.33	Respondents were also 'unsure' about their knowledge of BBA financing contract

5	Ability to practice proper Shariah aspects in BBA financing contract	3.45	Respondents were 'unsure' whether they are able to practice <i>Shariah</i> principles governing BBA contract in orderly manner.
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Based on the result in Table 7, the Adjusted R Square for this study was at 0.580. The result implies that independent variables are able to explain up to 58 percent of the variances in the understanding on BBA financing contract among respondents.

Table 7 also shows the degree of coefficients value between the dependent variable of BBA financing contract, and the four independent variables, namely knowledge, commitment, keen interest and ability to practice.

Table 7: Model Summary and Coefficients Statistic Value

Model	Standardized Coefficients	t	Sig.
	Beta		
(Constant)		29.975	.000
Knowledge	.439	3.180**	.003
Commitment	.283	2.050*	.047
Keen interest	.007	0.049	.961
Ability to practice	-.104	-0.755	.455
Total Significant Variables	2		
Adjusted R Square	.580		
Durbin-Watson	2.201		

a. Dependent Variable: BBA

b. Note: ** and * denotes 1 percent and 5 percent level of significant respectively.

It is also noted from the above coefficients table that only two independent variables were having significant relationship with employees' understanding on BBA financing contract, that is, knowledge and commitment; while the other two, namely keen interest and ability to practice *Shariah* aspects were found to be insignificant.

Between the two significant variables, knowledge had higher significant relationship with regard to the understanding on BBA financing contract with $\beta = .439$. This outcome suggests that every 1 percent increase in respondents' knowledge would able to improve their understanding on BBA financing contract by 43.9 percent. Based on Sig. Result of $p = .003 < 0.01$, knowledge is proven to be significant at 0.01 or 1 percent significance level. Meanwhile, t-ratio for knowledge was at 3.180. The result indicates that employees' knowledge and their understanding of the BBA financing contract have a positive relationship. In other word, additional knowledge gained by employees would heighten their know-how in the BBA financing contract.

The above result is consistent with past studies by Dusuki and Abdullah (2007) in which the former had ranked knowledgeable personnel as the most important factor for Malaysian customers to patronize Islamic banks, whilst the latter addressed the importance of training as a key factor to enhance knowledge among bank managers in Malaysia

Commitment also reveals a positive relationship with an employees' understanding of BBA financing contract, but at at least significant level than the knowledge factor, denoted by a t - ratio of only at 2.050. With $\beta = .283$, the result indicates that every 1 percent increase in respondents'

commitment would only contribute 28.3 percent towards their understanding of BBA financing contract. The result shows $p = .047 < 0.05$, thus implies that commitment is only significant at 0.05 or 5 percent significant level. The above finding on commitment suggests that understanding of BBA financing contract will increase in proportion with employees' commitment, but at a slower pace than employees' knowledge.

The result of employees' commitment is also in line with past findings by Al-Omar and Iqbal (1999) highlighted on the importance of having skilled and committed people to lead Islamic banks.

On the other hand, the result of coefficients reveals that employees' keen interest and ability to practice *Shariah* aspects were found to have insignificant relationship with respect to their understanding of BBA financing contract.

Therefore, keen interest and ability to practice *Shariah* aspects in orderly manner may not be a good predictor to gauge employees' understanding on BBA financing contract, as well as in generalizing their appreciation towards the implementation of Islamic banking system by the bank.

CONCLUSION

The first objectives of this study in assessing employees' understanding in Islamic banking aspect with concentration on BBA financing contract can be considered as having achieved its desired aim, since all respondents had shown the required understanding towards the measured concepts. Know-how in the BBA financing contract between employees at northern region branches and Business Centre is due to the facility had been widely offered to business customers, as far as Agrobank is concerned within this context. The preference of Agrobank employees to propose BBA as a financing model to their customers is closely related to the nature of BBA contract itself, in which it is the only contract with deferred payment terms that can be suited to fulfill various financial needs of business customers. Furthermore, those executives involve in financing-related matter is better exposed to the underlying features of this contract.

The subsequent objective of this study is to examine the factors that could influence the understanding of BBA financing contract among Agrobank employees. Based on the result from multiple regression analysis, it shows that knowledge was found to be the paramount factor that could affect the understanding of BBA financing contract among employees, followed by commitment.

The importance of having knowledgeable employees is inevitable for Agrobank in achieving its aspiration to become a fully *Shariah*-compliant bank, since it is the only financial institution in Malaysia with mandated role to nurture agricultural customers to greater heights. Thus, failure to prepare and equip its employees with proper skills and know-how in *Shariah* principles before transformation process come into force will jeopardize the bank's reputation in the long run. The results also indicate that commitment played a measurably important factor within the context of this study because it is a mounting task to fine-tune employees' mindset from long-embedded dual-banking approach to only focus their efforts on *Shariah*-compliant banking transactions within a short timeframe. It is pertinent to note that the understanding of BBA financing contract will be better improved should employees' gradually developed their job commitment over the course of time.

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APPENDIX

Table I: Respondents questions on BBA financing contract.

Q	Statement
1	I am aware about the existence of BBA contract
2	I understand the objectives of BBA contract.

Table II Respondents questions on keen interest in BBA financing contract.

Q	Statement
1	I only heard about the term BBA after joining Agrobank/BPM.
2	I am not hesitating to continue the offering of BBA financing to customer despite much criticism about the contract.
3	I realize that BBA financing contract has undergone several improvisation processes as to ensure its adherence to Shariah principles.
4	I notice that some Islamic banks have discontinued using BBA as financing contract.
5	I am not eager to learn about BBA because it is a replication from conventional banking loan contract.

Table III: Respondents questions on commitment in BBA financing contract.

Q	Statement
1	I am confident to explain about BBA financing contract if being asked by customers.
2	I would still promote BBA financing contract despite knowing that customer runs non-Shariah compliant activities on the land to be offered as collateral to Agrobank.
3	Know-how in BBA financing contract is only vital for frontliners dealing with financing-related matter.
4	I find that Arabic terminology in BBA financing contract is hard to understand and to be explained to customer.
5	I may have to forego business opportunity with customer if the project to be financed is against Shariah principles, which is not eligible to be financed using BBA contract.

Table IV: Respondents questions on knowledge in BBA financing contract.

Q	Statement
1	BBA means sale with cash.
2	BBA is only suitable to finance short-term financing.
3	BBA is sale contract with deferred payment.
4	BBA is the most popular financing contract to finance commercial business at Agrobank.
5	BBA buying price stated in letter of offer represents amount of financing approved to customer.

Table V: Respondent questions on ability to practice BBA financing contract.

Q	Statement
1	The two main documents in BBA contract agreement are Property Purchase Agreement (PPA) and Property Sale Agreement (PSA).
2	Akad* ceremony to solemnize the offer and acceptance between buyer (customer) and seller (Bank) in BBA financing contract can be done at separate occasion.
3	In the rescheduling case of BBA facility, it is sufficient to use original akad* during financing approval, as there is no requirement to solemnize new akad*.
4	There must be an underlying asset in every BBA financing contract.
5	BBA selling price (ceiling price) can be adjusted in the event of rising interest rates in Malaysia.

Akad or Contract Ceremony is a symbol of willingness between the parties that involve.

BALANCE SHEET STRUCTURES, ASSET SIDE PRODUCTS AND SHARIAH FINANCIAL ENGINEERING: RISK RANKING OF ISLAMIC BANKS

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ABSTRACT

Islamic banks are the main players amongst the Islamic financial service institutions. Operational structure can vary depending on the Islamic bank's business and market orientation. Banks can perform various functions. Asset-liability management process in banks is at the heart of risk management in banks and the composition of the balance sheet is one of the key factors that determine the level of risk faced by the financial institution. While conventional banks face the conventional financial risks, Islamic banks are also exposed to some unique risks, including enhanced fiduciary, Shariah compliance and displaced commercial risks. This study has used a survey data from literature along with asset sides of the banks' various balance sheet structures and risks inherent in the Shariah financial products in order to rank the Islamic banks with the help of a multi-criteria decision making technique. Four conventional financial risks have been used as criteria and minmax as the scoring method. The normalized scores of various banks have displayed that the universal bank has the lowest risk which has confirmed the validity of diversification of products hypothesis. The second, third, fourth, fifth and sixth positions, with the next level of the lowest scores, have been secured by the conventional bank with Islamic Window, One-tier Mudarabah bank, Two-tier profit sharing Investment bank, Two-tier profit sharing Commercial bank and Wakala type bank respectively. This may explain that the diversification of Shariah products on the asset side of an Islamic bank's balance sheet as the best option for mitigating the conventional and Islamic financial risks.

Keywords: Banking Risks, Balance Sheet Structures, Multi-criteria Decision Making, Shariah based Financial Engineering, Risk Ranking of Islamic Banks

INTRODUCTION

Islamic banks are the main players amongst the Islamic financial institutions (IFIs) and their operational structure can vary from a full-fledged Islamic bank or an Islamic subsidiary to the Islamic window in conventional banks. Balance-sheet structure lies at the heart of the asset-liability management process in banks and the composition of a bank's balance-sheet assets and liabilities is one of the key factors that determine the level of risk faced by the institution and the typical growth of assets or liabilities affect the risk management process. Banks, in general, face the conventional risks like financial i.e. credit, market and liquidity risks and operational risks. Islamic banks have also their unique risks, including displaced commercial risk because of the unique nature of their liabilities whose composition varies greatly depending on the bank's business and market orientation. The literature is rich regarding studies of individual risks facing

Islamic banks, credit rating and bank rating methodologies or ranking Islamic and conventional banks based on various financial or non financial criteria either through client surveys or expert view points and using Analytical Hierarchy Process (AHP) or even ranking banks based on balance sheet gap analysis and quality of assets and risk adjusted net Murabahah income after the benchmark change. Anjum (2014f) has used AHP in the context of accuracy of portfolio volatility forecasting for backtesting the VaR violations and to potentially reduce the Basel penalties. But no study has used the balance sheet structure and risks of the product exclusively for the ranking of Islamic banks. The current study has defined six types of Islamic banks named Wakala (WAK or Commission Agent), 2-tier PS Commercial (TTC), 2-tier PS Investment (TTI), one-tier Mudarabah (OTM); Islamic Window of Conventional (IWC) and Universal (UNV) banks based on their market orientation, unique balance sheet structures and portfolio of Shariah financial products and their risk features. Besides, by using the survey data from the literature to rank the Islamic banks based on their unique structure of balance sheets and depending on their business orientation, the study has used five risk factors (mentioned above) as criteria, analytical hierarchy process AHP as weighting criteria and minmax as scoring method. Based on this ranking framework, the normalized scores of various banks' balance sheet portfolio are calculated out of percentages for various risks from survey results for various Islamic financial products. The final normalized aggregated scores for various bank types as well as the relative scores of each product in a particular bank type have also been provided. The paper has been organized into six sections named as: 'introduction'; 'banking theories and Islamic bank categories'; 'asset, liabilities and Shariah financial products'; 'balance sheet structures and risk profile of Islamic banks'; 'review of literature, methodology and data' and 'results and conclusion'.

SHARIAH PRODUCTS & TYPES OF ISLAMIC BANKS

Khan (2000) has described five hypothetical banks (banks 1, 2, 3, 4 & 5). Bank 1 does not have a non-principle component and can be thought of Islamic mutual fund which represents the theoretical case of a complete PLS on both sides of the balance sheet. Bank 2 is which, use PLS on the liability side (repriceable) and markup-debt on the asset side as a dominant asset (non-repriceable). Banks (3 & 4) are examples of IFIs where both liability side and assets sides have both PS (repriceable) and markup (non-repriceable) components with varying degrees. Bank 5 uses diverse liability and asset structures, which includes derivative and hedges to keep the gap zero, and is an example of conventional bank with Islamic window (WIB) (Khan, 2000). Iqbal (1998) describes three models of Islamic banks with the simplest one where bank works as a Wakeel (WAK) or agent and managing funds on behalf of clients with a fixed commission and it may resemble the narrow banking as described in Wallace (1996) where banks back demand deposits by safe short term liquid assets. A 100% reserve is required for demand deposits (in contrast to fractional banking) for Islamic banks (Greuning & Iqbal, 2008). No reserve requirement, however, is stipulated for the second window. This model of Iqbal (1998) follows commercial loan theory where banks keep their loans short term and self liquidating in order to match the maturing of deposits. Mirakhor has explained that Islamic banks, worried about bankruptcy, invest in short term mark-up investments to keep losses lower than total capital. Iqbal's second model is a two-tier Mudarabah (TTM) module that replaces interest or fixed income (FI) mode with profit sharing (PS) mode on both, assets and liabilities, sides of the balance sheet. In this model all assets are financed through the PS mode of financing (Mudarabah) and Chapra et. el. (2000) has described this bank as a commercial bank cum investment intermediary. This model is same as the ideal form in Bank1 of Khan (2000) and was also advocated by the PLS theory of Islamic banking, particularly, the model of Khan (1986). Both sides of the balance sheet are independent of the

benchmark. Thus, changes in business prospects will adjust automatically on the two sides of the balance sheet. The third model of Iqbal (1998) is one tier Mudarabah (OTM) with multiple investment tools and has emerged because of the problems of PS mode on the asset side. OTM has opted for fixed income (FI) mode of financing and with a choice of instruments like MUR, installment sale, Bai-muajjal, Istisnah, Salam, and Ijarah (Ahmed, 2002). This model resembles the Bank5 of Khan (2000) and it does face benchmark rate risks as a substantial proportion of its assets are in fact markup-based debts. However, this bank can be fully hedged for these risks by inducting liabilities of similar nature and same amounts. Finally, Ahmed (2002) uses contemporary banking theory to model Islamic bank using both sides of the BS, have analyzed the effects of liability side on composition of assets of banks and have considered risks of the PS mode to understand the nature of the Islamic Bank. The study defines Islamic bank which is a commercial bank with demand and unrestricted PS savings deposits (low risk and liquid) and is also an investment intermediary with restricted investment deposits (higher risk with a higher expected rate of return (ROR)).

ASSETS, LIABILITIES AND SHARIAH FINANCIAL PRODUCTS

Islamic banks are inherently different from conventional banks (Ali; 2000). On the asset side, they provide finance to enterprises through either sharing directly in the net results of their activities or financing their purchases of assets, goods, and services (Al-Jarhi; 2000). Both the assets and liabilities side of an Islamic bank balance sheet are based on Shariah-compatible financial instruments. The assets can be categorized as trading assets, bank's long term ownership or equity investments, fixed assets, intangible assets and other assets and the assets of the Islamic banks also consist of the same types with the inclusion of trade financing, commodity trading, leasing, partnerships, and equity-based partnerships. On the assets side, Islamic banks have more choice of instruments which have different maturities (i.e. Short-term, medium term and long term maturities) and various risk-return profiles (Greuning & Iqbal, 2008). Shariah-compliant financing services can take either the form of asset-based financing involving either sale or purchase with deferred delivery and a profit margin or leasing, or financing on an equity basis through several types of partnership contracts (IRTI, 2007). Trading assets represent the bank's trading books in securities, foreign currencies, equities, and commodities. Besides, many IFIs with WIB are already using various derivative transactions. These can include four debt based certificates (DBC) (e.g. Leasing, Istisnah, installment sale debt and Salam certificates), for sharing-based certificates (SBC) (e.g. MDB, MSK, revenue sharing and declining participation certificates). However, financial figures resulting from derivative transactions are squeezed into the footnotes (Khan, 2000). As debt cannot be sold for debt, it can be treated as a price in a sale transaction. Thus the possibility of an exchange of debt against real assets and usufructs can be added to the debt certificates as an embedded option for the settlement of debts as evident from Zarqa (1998).

Besides, Islamic financing as practiced now does not avoid the benchmark (LIBOR) and floating rate is a periodically revalued rent and fixed rate is the mark-up of Murabahah (MUR). Rents can be re-valued and re-priced, but MUR profits cannot be. Under other assets category comes bank's long-term ownership investments, such as equities held in the bank's long-term investment portfolio, i.e. equity investments in subsidiaries, associates, and other listed and unlisted entities. Investing instruments are vehicles for capital investment in the form of a partnership and may take two forms – MDB (or fund management or principal-agent, partnership or a limited partnership) and MSK (or equity partnerships). MDB can be short, medium, or long term and is a trust-based financing agreement where profits are based on a prearranged, agreed ratio. Mudarabah is used on

both the liabilities and the assets side. MSK can be either medium or long-term, is a hybrid of Shiraka (partnership) and Mudarabah, combining the act of investment and management (Greuning & Iqbal, 2008). In an Islamic economy, debt finance is extended through Istisnah, installment sale, leasing and Salam modes of deferred trading by issuing certificates. The limitation of these certificates is that these are not negotiable" following the conventional procedures. Thus, except for transferring the debt certificates from one obligation to another obligation on the basis of hawala al dayn (par value = face value), these certificates face serious liquidity problem. As a result, assets comprising of these certificates cannot be re-priced to adjust to changes in market conditions, particularly, an increase or a decrease in the market markup price, hence exposing investors to serious price risks (Khan, 2000).

Financial instruments are trade financing instruments, Ijarah (IJR) and Istisnah ((ISN). Intangible assets vary with regard to the predictability of income associated with a particular asset, the existence of markets for such assets, the possibility of selling the assets, and the reliability of the assessments of the asset's useful life. Besides, all these, Islamic banks also provide customized services, guarantees, and underwriting services for a fee. These include Kifalah (guarantee), Joalah (fee-for-service), Amanah (custody), Wakala (representation) are examples of fee-based services and Qard Hasan and Waqf are examples of social welfare (Greuning & Iqbal, 2008). Details of assets on the balance sheets of the three types of Islamic banks (i.e. WAK, TTC and OTM) have been taken from Anjum (2014c). Details of assets on the balance sheets, of three other theoretically defined types of Islamic Banks (i.e. TTI, IWC, UNV), has been added in this study. The asset side of the balance sheet of all six theoretically defined Islamic banks, which will be used in this article, is shown in table 1. Liabilities in the balance sheet of an Islamic bank include demand deposits (Amanah or trust), savings deposits (e.g. Mudarabah-unconstrained), investment accounts or special investment accounts (e.g. Mudarabah- constrained and Musharakah-unconstrained & constrained), total equity (in Mudarabah and Musharakah) and reserves as Amanah (Anjum; 2014c).

BALANCE SHEETS AND RISK PROFILE OF ISLAMIC BANKS

The best way to study the structure, risk profile and to distinguish various forms of Islamic banking is to study it through a balance sheet approach. Balance sheets can be either by individual organization or a business unit, for a business group aggregated for all of its affiliates or it can be an for the banking industry or even banking sector as whole and

Table 1: Assets in the Balance Sheets of Six (Theoretically Defined) Types of Islamic Banks

Categories	OTM Assets	IWC Assets	UNV Assets	WAK Assets	TTC Assets	TTI Assets
Generic	FI	FI, PS, DRV, ATE	FI, PS & ATE	FI & Short term	FI & Short term	Fixed Income (FI)
Priceability	Generally NRP	RP & NRP items	RP & NRP items	Generally NRP	Generally RP	Generally RP
Books	No separate BB/TB	Separate BB/TB	No separate BB/TB	No TB (only BB)	No TB (only BB)	No separate BB/TB
Liquid & ST	Cash	Cash	Cash	Cash	Cash	Cash
	balances with CmB	balances with CmB	balances with CmB	balances with CmB	balances with CmB	balances with CmB
	balances with CtB	balances with CtB	balances with CtB	balances with CtB	balances with CtB	balances with CtB
RCRR	IRR	IRR	IRR	NA	IRR	IRR
	PER	PER	PER	NA	PER	PER
	SIA	SIA	SIA	NA	SIA	SIA

Fee based Services	Kifalah,	Kifalah,	Kifalah,	Kifalah,	Kifalah,	NA
	Joalah	Joalah	Joalah	Joalah	Joalah	Joalah
	Amanah	Amanah	Amanah	Amanah	Amanah	NA
	Wakalah	Wakalah	Wakalah	Wakalah	Wakalah	NA
Financing / ST/Trade	Intl. MUR	Intl. MUR	Intl. MUR	Intl. MUR	NA	NA
	Salam	Salam	Salam	Salam	NA	NA
Financing / MT	Istisnah	Istisnah	Istisnah	NA	NA	NA
	Ijarah	Ijarah	Ijarah	NA	NA	NA
	Commodities MUR	Commodities MUR	Commodities MUR	NA	NA	NA
	Vehicle MUR	Vehicle MUR	Vehicle MUR	NA	Investments - LT	NA
	Installment Sale	Installment Sale	Installment Sale	NA		NA
	Bay-al-Muajjal	Bay-al-Muajjal	Bay-al-Muajjal	NA	Fixed Assets	NA
Financing / LT	Real Estate MUR	Real Estate MUR	Real Estate MUR	NA	NA	NA
Investment / ST	Trading Portfolio	Trading Portfolio	Trading Portfolio	NA	NA	Trading Portfolio
	NA	MDB - UCN	MDB - UCN	NA	MDB	MDB
Investments / MT	NA	NA	MDB - CN	NA	NA	NA
	NA	RS	RS	NA	RS	RS
	Sukuk	Sukuk	Sukuk	NA	NA	NA
Investments / LT	NA	D-MSK	D-MSK	NA	D-MSK	D-MSK
	NA	MSK - UCN	MSK - UCN	NA	NA	MSK - UCN
	NA	NA	MSK - CN	NA	NA	MSK - CN
	Sukuk	Sukuk	Sukuk	NA	NA	NA
Fixed Assets	NA	NA	RE & Property	NA	NA	RE & Property
Derivatives	NA	Use DRV	NA	NA	NA	NA

Notes: OTM = One-tier Mudarabah; IWC = Islamic Window of Conventional (IWC) Bank; ; UNV = Universal bank or full fledge Islamic bank; WAK = Wakala (or Commission Agent), TTC = 2-tier PS Commercial, TTI = 2-tier PS Investment; BB = Banking books; TB = Trading books; MUR = Murahabah; MDB = Mudarabah; MSK = Musharaka; D-MSK = Diminishing (amortizing) MSK; DRV = Derivatives; CmB = Commercial banks; CtB = Central bank; RCRR = Regulatory cash reserve requirement; IRR = Investment Risk Reserves; PER = Profit Equalization Reserves; SIA = Special Investment Account; RE = Real Estate; Short term (ST); MT = Medium term; LT = Long term; RS = Revenue sharing; ; (U)RP = (Un)Re-Priceable; ATE = All Terms; NRP = Non-Repriceable; RP = Repriceable; PS = Profit sharing AR = NA = Not Applicable; FI = Fixed Income
References: Greuning & Iqbal (2008), IRTI (2007), Khan (1999), (2000) (2002) & (2010), Anjum (2014c) and Khan & Ahmed (2000)

When later is combined with the balance sheet of the fiscal authority (the Fed), we get an integrated balance sheet for the economy (Chaudhary & Anjum, 1996). Anjum (2014e) provides the financial risk types and scores for each of the Shariah product types. These scores have been taken from the survey conducted by the study of Khan & Ahmed (2000). The higher the score the more the risk involved is.

In Islamic banking, however, the main risks are based on specific features of the engineered products based on Shariah principles and Fiqah guidelines. Risks that banks face can be divided into three main categories which are financial, business and operational (Khan & Ahmed, 2000). With the wide usage of information and communication technologies, where the banking organizations have tried to grab the competitive edge over rivals in the global banking landscape through internet banking (Shamim and Anjum; 2014), it has also increased the wide array of operational and related financial and business risks. Beig (2009) and Ahmed (2002) have also provided the details of Islamic specific banking risks like equity investment risk, Shariah non-compliance and fiduciary risk. Islamic finance is either asset-backed or equity-based, emphasize

that market risk becomes an important part of the Islamic banking along with credit risks (Ahmed, 2007). Market risks can be systematic arising from macro-sources, or unsystematic that is asset or instrument specific. For equity-based and sale-based financial instruments, both types of market risks are important. Credit risk would take the form of settlement/payment risk arising when one party to a deal pays money (e.g. In a Salam or Istisnah contract) or delivers assets (e.g., in a Murabahah) before receiving its own assets or cash, thereby, exposing it to potential loss. In case of profit-sharing modes of financing (like Mudarabah and Musharakah), credit risk will be non-payment of the share of the bank by the entrepreneur when it is due. This problem arises due to the asymmetric information problem as the banks do not have sufficient information on the actual profit of the firm. The presence of market and credit risks in Islamic modes of financing make the nature of risks more complex as they intermingle and transform from one kind to another at different stages of a transaction. Trade-based contracts (Murabahah, Salam, and Istisnah) and leasing are exposed to both credit and market risks. To manage the risks, there is a need to clearly understand the risks involved in the Islamic instruments (Ahmed, 2007). Islamic instruments comprise both sides of the balance sheets, i.e. assets and liabilities. The risks on the asset side of an Islamic bank's balance sheet are huge because of the variety of products involving equity sharing basis of uses of funds and has been considered in this article. It is not only the adoption of socially beneficial technology, which provides a competitive edge to Islamic financial institutions, but also the efficient management of risks that can make Islamic banks socially fit in an Islamic society. It is this socially beneficial aspect which along with risk weighted ranking of Islamic banks has labeled the low scoring (i.e. lower risk) Islamic bank as a Socially Adopted, Risk Weighted and Analytically Rated (SARWAR) Bank, a term coined by Anjum (2014e).

REVIEW OF LITERATURE, METHODOLOGY AND DATA

Amile et al. (2013) has used fuzzy AHP technique as weighting method and TOPSIS technique to rank banks based on performance using financial and non-financial levels as the affecting criteria investigated after library studies and using experts' viewpoints. Anjum (2014f) has used AHP based risk reduction approach by using AZAM regression for beta estimation in emerging economies. The Čehulić (2012) has compared the Croatian banks using the main categories (and sub-categories) of financial ratios. The study has found that balance sheet ratios, profitability ratios, income statement ratios and market ratios is the descending order of importance of these ratios and Volksbank got the highest score out of fifteen banks. Khan (2000) has ranked the hypothetical banks (banks 1, 2, 3, 4 & 5) on the basis of quality of assets and risk adjusted net Murabahah income (NMI) after the benchmark change. Measurement and management of the IFIs' NMI, its sensitivity with respect to the benchmark and cash flows can be done with gap analysis (Khan, 2000). Given a time frame, gap analysis involves determination of benchmark rate sensitive and non-sensitive assets and liabilities. The difference between net rate sensitive liabilities and assets is identified as the gap. If the gap is zero (positive) [negative], assets are fully hedged [(speculative)] against benchmark rate risk, i.e. any increase in profits, paid to depositors is matched by an equal increase (decrease) [more than equal increase] in the profits earned on the assets. The effect of the benchmark rate increase (decrease) on the NMI will be none, decrease and increase (none, increase and decrease) in dollar terms if the gap is zero, positive and negative respectively.

In order to rank the six alternatives (i.e. Six bank types: WAK, TTC, TTI, OTM, UNV and IWC) based on the risk profile of Shariah products on their balance sheets, we have used a pairwise comparison method to assign weights based on Analytical Hierarchy Process (AHP) and minmax as a scoring technique (see Anjum; 2013b). The AHP is the product of Saaty's effort to create a straightforward procedure to deal with complexity. One of the strengths of the AHP is that it relies

closely on a strategy that humans often use to deal with complexity (Jin & Cheng, 2009). AHP is a type of multi criteria decision making (MCDM) method where judgmental inputs and solution outputs are scalar and fixed point values and which mostly uses mathematical deterministic solution procedures (Wedley, 2001). Application of AHP is not only unique to a ranking of various bank types, rather it has also been innovatively applied to performance of data mining classifiers (Anjum, 2013a) and predictive algorithms (Anjum, 2013b) for the customer churning problem. We have chosen five risk criteria to rank six functions based classified banks and these criteria are DCR, MR, CR, LR and OR. The main data source used here for the pair-wise matrix came from the survey conducted by Khan & Ahmed (2001) where the heads of 15 major Islamic banks have provided the scores for each Islamic financial product category about the Islamic risk pertaining to that Shariah product. The same study has also provided the overall ranks of four main risk categories (i.e. MR, CR, LR and OR) at the industry level. The same study also tells us, based on the survey of seventeen Islamic financial institutions that CDR or withdrawal risk is more serious than traditional risk and these results have provided us the basis for pairwise comparison (PWC) of these results. Using Saaty's 1-9 point scale (Saaty, 1980), risk can be equally important, moderately more important, strongly more important, very strongly more important or extremely more important than risk and thus will receive 1, 3, 5, 7 or 9 score on Saaty's gradation scale respectively. By using the sum method to solve PWC matrix of Saaty scales (Anjum; 2014e), the relative weights have been obtained for the CDR, MR, OR, LR and CR criteria and these are 0.536, 0.230, 0.116, 0.067 and 0.050 respectively. The consistency ratio for our PWC matrix was less than 10%, thus there is no worry of any of three AHP problems cited, i.e. CI problem, the rank-reversal problem or the discriminating-sensitivity problem (Sato, 2001). The alternative bank types have been ranked based on the scores which have come from the same survey (Khan & Ahmed; 2000) and these scores have been organized in Anjum (2014c). The next step in our methodology is to rank these alternatives based on their relative importance. We have done this by assigning a value between 0 and 1. As noted by (Bergh et al. (2000), the features of multi criteria, objectives tend to have different dimensions and thus so called problem of incommensurability (Kramer, 2008).

Table 2: Normalized Final Scores of Various Bank Types

Categories	WAK Bank	TTC Bank	TTI Bank	OTM Bank	UNV Bank	IWC Bank
Intl. MUR	0.450	***	***	0.105	0.066	0.077
Salam	0.550	***	***	0.129	0.080	0.094
Istisnah	***	***	***	0.128	0.080	0.094
Ijarah	***	***	***	0.111	0.069	0.081
Commodities MUR	***	***	***	0.105	0.066	0.077
Vehicle MUR	***	***	***	0.105	0.066	0.077
Installment Sale	***	***	***	0.105	0.066	0.077
Bay-al-Muajjal	***	***	***	0.105	0.066	0.077
Real Estate MUR	***	***	***	0.105	0.066	0.077

MDB - UCN	***	0.307	0.186	***	0.070	0.083
MDB - CN	***	***	0.186	***	0.070	***
D-MSK	***	0.350	0.212	***	0.080	0.094
MSK - UCN	***	0.343	0.208	***	0.079	0.092
MSK - CN	***	***	0.208	***	0.079	***
Grand Relative Ranks	0.045	0.071	0.117	0.193	0.310	0.264

We have used minmax as scoring method to eliminate incommensurability by normalizing the scores between the range of 0 to 1 and the application of this method can also be seen in Anjum (2014b). However, in the balance sheets of the Islamic banks same products can appear on both assets as well as liabilities sides and also many times under various categories. The important point also is that we have factored out the number of occurrences of the same product appearing many times, e.g. for different types of Murahabah by counting these products under different heads in a balance sheet and treating them as different products with the same survey based weights for main product category. Thus the product portfolio is an occurrence weighted which means that more occurrence of a product will earn more weight for that product and thus on the asset sides of the banks' balance sheet. Another important point to mention is that as CDR scores were not provided in the survey data and we have assumed the same weight for all the alternatives. This also means that CDR has not contributed in the ranking because it was same for all the alternatives. By including the scores for this risk may have a significant impact on ranking as CDR is related to ROR and may also bring the ignored picture of returns in the evaluation process. Finally the normalized grand score (NGS) has been obtained for all six alternatives. This NGS assigns grand relative ranks has also been used in Anjum (2014e).

RESULTS AND CONCLUSION

The normalized grand scores of various banks have been shown in Table 2. As is obvious from common sense that the more diversified a bank is, i.e. is offering more products, the better risk diversification, it will have and thus will rank better i.e. will get less relative normalized score. These results confirm this diversification of products hypothesis. The UNV, IWC, OTM, TTI, TTC and WAK alternatives have received first, second, third, fourth, fifth and sixth lowest scores respectively. The second rank for IWC is obvious based on diverse options that this type offer diversified options, but was not engaged in restricted partnership options. However, IWC can even increase its rank if we include all the derivative products in the evaluation because IWC is using diverse hedging options and financial figures resulting from derivative transactions are squeezed into the footnotes (Khan, 2000). The other interestingness of the results is its obvious explanation. The limitation of this analysis is that it has not been tested on the balance sheets of existing various categories of banks and also that the survey data on which this analysis has been based was conducted after the US sub-prime meltdown of 2008 which triggered global financial and banking crisis, though after the Asian financial crisis. A recent survey may reveal that ranking of various risks for the banking industry as well as for Shariah financial products may have changed because of new maturity of Islamic financial institutions. Besides, the analysis ignores correlation effects among the products and their respective risks. But important implication of this analysis can be that Islamic banks should try to diversify both sides of the balance sheet – whether sources or uses

of funds – in order to diversify various risks. This is very important, especially for the newly emerging derivatives products and reaching of Islamic financial institutions in various jurisdictions. However, regarding the use of derivative products, cautions need to be taken and be carefully used for hedging purposes mainly.

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THE EFFECT OF ENTERPRISE RISK MANAGEMENT ADOPTION TO SHAREHOLDERS WEALTH AND FIRM'S RISKINESS

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ABSTRACT

The aim of this study is to examine the effect of enterprise risk management (ERM) adoption on shareholder wealth and firm's leverage among Malaysian listed companies. The study provides evidence on the value relevance of ERM, sustainability and corporate governance, compliance by using the Malaysian Code on Corporate Governance (MCCG) as a proxy for ERM implementation. The result shows that, a leverage ratio is significantly lower after the compliance of MCCG2007 (revised code) in phase 2 of ERM implementation. However, a refined examination reveals that the phase 1 of ERM implementation has a better performance after the first code (MCCG2000) has been complied where non-financial company's firms' value has improved its level of riskiness.

Keywords: Enterprise risk management, Corporate governance, Shareholder wealth, firm's riskiness, Listed companies, Malaysia

INTRODUCTION

The purpose of risk management within an organization is to reduce the possibility of future events harming an organization and control the probability that the results will deviate from the expected (Zech, 2001), to reduce the cost of risks (Baranoff, 2004) and, to enable an organization to progress towards its goals and objectives (Williams, Smith & Young, 1995). Failure to improve the risk management practice can cause severe financial loss and damage to reputation. This will be reflected in stakeholders' confidence and trust.

Implementation of an enterprise risk management (ERM) approach has risen recently due to greater emphasis on the prominence of risk management by corporate governance mechanisms in most of countries, stock exchange regulations, firm's corporate governance structure as well as rating agencies (Sekerci, 2014). Corporate governance is the strongest external pressure and it has been found as one of the primary reasons for companies to adopt ERM (Miccolis, Hively & Merkly, 2001; Kleffner, Lee & McGannon, 2003; Sherris, 2007). It can be a leading indicator of strong internal risk control while risk management is a key component of internal control. Indeed, an effective internal risk control is a key element of sound business performance (Lipworth, 1997). Good corporate governance is an environment where the boards and the top management provide quality management to enhance company's performance in the interest of shareholders (Mobius, 2002). It is the systems and processes that are used to protect shareholders as well as other stakeholders, and risk management is one of the components of corporate governance.

Most of the countries, including Malaysia, have introduced their corporate governance codes and

risk management initiatives. In March 2000, the Malaysian code on corporate governance (MCCG2000) was released. The Code incorporates risk management as part of good corporate governance practices. Later, the Revised Code on Corporate Governance was amended in October 2007 (MCCG2007). The requirement on best practices of the Code is voluntary. The revamped Listing Requirements of Bursa Malaysia was introduced in 2001 to provide a mandatory statement of compliance with the code. The listed companies are required to disclose their risk management, internal control and corporate governance guidelines in the annual report to ensure the transparency in delivering information to their shareholders, stakeholders, and other related bodies. ERM involves managing the risk of a potential loss within an organization (downside) as well as the opportunity (upside) created from a systematic risk. Tillinghast-Towers Perrin (2002) identified that having the ERM framework, chief risk officer (CRO), and ERM Committee are the signs of ERM adoption. For example, Pagach and War (2010) and, Hoyt & Liebenberg (2011) used the CRO appointment as a proxy for ERM implementation. However, some firms might have ERM in place, but have another position with the same responsibilities as a CRO. According to McShane et al. (2011) the reason of the limited research in this field because the lack of effective proxies for ERM implementation. Furthermore, the methods used in some studies to measure ERM are imprecise and fail to measure it accurately due to their inability to capture the complexity of the ERM concept (Sekerici, 2014)..

The ERM underlying concept is that each type of organization whether profit, non-profit, or government agency, provides value for its stakeholders (COSO, 2003). Shareholder value is a financial indicator that has been used as a measurement of reference to the successful implementation of ERM practices. Deloach (2000, p. 38) noted that *ERM “must be ‘measurable’ and the value proposition will assist companies to create competitive advantage, improve business performance and reduce costs”*. By implementing good risk management it enables the organization to increase a higher level of confidence and trust among stakeholders, and that confidence will become an important asset for the organization (Kloman, 2000). This phenomenon will indirectly lead to the increment in shareholder value. However, only little is known about ERM creates value for firms (McShane, Nair & Rustambekov, 2011).

Thus, the aim of this study is to look into an empirical study of whether the listed companies that adopt ERM programs have a better performance in creating value by using a Malaysian code of corporate governance (MCCG2000 and MCCG revised code 2007) as a proxy. This research would provide a better and more comprehensive understanding of the most significant risk management implementation towards value creation and sustainability in an emerging capital market such as Malaysia.

METHODOLOGY

The primary objective of this study is to examine the changes in company's worthiness as a result of adopting ERM. Unfortunately, in Malaysian corporate scenario, companies do not in general, publicly announce the adoption of ERM. Moreover, companies tend to disclose only minimal details of their risk management programs. This view concurs to earlier study by Tufano (1996) and Pagach and Warr (2010). Therefore, this study focuses on introduction of MCCGs by the Securities Commissions (SC) and the Bursa Malaysia as a signal of a firm's adoption of ERM practices. There are good reasons to believe MCCGs should coincide with the decision to adopt an ERM program as MCCGs are strictly governed and enforced by the SC, and the Bourse. There are two periods of ERM implementation, phase 1 (ERM adoption after the introduction of MCCG2000)

and phase 2 (ERM implementation after MCGG revised code 2007).

This study employs the use of random alphabetical listing selection of listed companies in the 2010 Bursa Listed Companies Schedule including financial and insurance regulated companies but tests separately. The primary reason for this is that these companies are said to be compliant to not only compliance to the corporate governance code but also with BASEL Accord accordance. The following table summarizes this study's sample;

Table I: Sample by Sectors

Sector	Number of Company	Percent
Construction	19	5.2
Consumer Product	44	12.0
Hotel	3	0.8
Industrial Product	100	27.2
IPC	3	0.8
Plantation	21	5.7
Properties	47	12.8
Technology	9	2.4
Trading and Services	72	19.6
Finance	50	13.6
TOTAL	368	100.0

The differences in the variables before and after the code implementation are tested using the Independent t - Test and Paired-Sample t-Test. The main reason for comparing these two phases of ERM practices is because a study by Manab, Hussin and Kassim (2013) found that only 47.27 percent of the ERM programs were placed under the risk management department and 40.0 percent of the programs were under the supervision of internal audit department. Hence, the MCGG 2007 compliance is expected to produce better result as to preserve the independence of the internal audit function. The following variables are used in the analysis of this study. The variables are identified based on Pagach and Warr (2010).

Firm's Riskiness/Leverage

This study examines the financial characteristics that relate to the possibilities of the company experiencing a costly outcome. The first financial characteristic is leveraged as companies with higher leverage are prone to experience financial distress. Moreover, excessive leverage may also limit a company's ability to pursue additional profitable investment projects. Pagach and Warr (2010) point out that the impact of ERM adoption on leverage is unclear as companies that were previously at their target leverage level or/and with greater control of operational risks would suggest that the company could increase its debt capacity. In this study leverage is measured as total liabilities to total assets:

Leverage= Total Liabilities/Total Assets (1)

Shareholders Wealth/Return

This study also examines the profitability measure as ERM adoption would produce a better overall management of the company. On the other hand, profitability could suffer, if ERM causes in an increase of operational costs. As with leverage, Pagach and Warr (2010) point out that the effect of ERM adoption on profitability is ambiguous as more coordinated management and loss avoidance may boost profits by reducing avoidable losses. Moreover, greater emphasis on risk management also may lead to a favorable outcome and profitability may also be endogenously determined by ERM adoption. To measure accounting return, this study uses return on equity as shown in the following equation:

$$\text{ROE} = \text{Net Income} / \text{Book Equity (2)}$$

FINDINGS AND DISCUSSIONS

Analysis for this paper starts with overall samples to test whether ERM adoption and implementation after the compliance of MCGG revised code 2007 produces a different effect to that of MCGG 2000 by using the analysis of independent samples t-test. Further analysis is conducted to test the impact of MCGG2000 and MCGG2007 separately by using Paired Samples t-Test. In other words, it is to examine whether both codes produce favorable outcomes. This is because MCGGs have their own ERM properties, with MCGG2007 as a revised version of MCGG2000, each MCGG should provide an improvement in post adoption ratios comparable to pre-adoption ones.

THE EFFECT OF ERM ADOPTION BETWEEN PHASE 1 (MCGG200) AND PHASE 2 (MCGG2007)

In Table II, the test result shows a significant reduction in debt to asset ratio from phase 1 (MCGG2000) to the phase 2 (after the revised code 2007) of ERM implementation. This improvement in ratio suggests that phase 2 of ERM practices has been successfully enhanced ERM and further decrease operational risk amongst local non-financial companies. Moreover, although this may not promote decline in the tendency of bankruptcies as the ratios still in mid-30 percent, nonetheless it does suggest that local companies are relying less on debt for their capital.

Also shown in Table II is that changes in other variables are tested to be insignificantly different. Nonetheless, it should be noted that returns on equity (ROE) does show a substantial improvement (11 percent) and on a whisk away to be tested significant. This welcome sign insinuates that comparing between these two phases, non-financial companies are able to increase investment returns to their shareholders over the period.

Table II: Nonfinancial Companies Independent t-Test
Between Phase 1 and Phase 2 of ERM Adoption

Variables	Mean Post Phase 1	Mean Post Phase 2	Changes	t-statistic
Debt / Asset	.381501	.341983	-0.039518 **	-2.304
Returns on Equity	.133532	.250478	0.116946	1.524

Note:*, ** indicates significance at the 10% and 5% levels respectively.

In Table III, although tested not to be significant, however, shows that financial companies has increase of reliance on debt between these two period. Nonetheless, this is not alarming as Malaysian financial companies are governed strictly by the Central Bank and comply with international standards. Also shown and most noticing is the returns on equity that shown financial companies are providing good returns to their shareholders. Although only moderately tested to be significant at 10% level, it does provide an indication that between the two periods, significant improvement in financial performance has been achieved in the financial sector.

Table III: Financial Companies Independent Samples t-Test
Between Phase 1 and Phase 2 of ERM Adoption

Variables	Mean Post Phase 1	Mean Post Phase 2	Changes	t-statistic
Debt / Asset	0.138115	0.153593	0.015478	0.417
Returns on Equity	0.007312	0.082206	0.074894 *	1.717

Note:*, ** indicates significance at the 10% and 5% levels respectively.

As a whole, ratio performances for both phases of ERM implementation in the two samples suggest that the outcomes are encouraging as nearly all ratios show a justifiable result that can be rationalizes by the ERM practices. Moreover, from the result also suggests that improvement in non-financial companies' performance surpasses its counterparts.

THE EFFECT OF ERM ADOPTION BETWEEN PRE AND POST OF PHASE 1 (MCCG 2000)

Table IV shows that companies recorded a positive significant increase in their value. This suggests the successful of ERM practices in directing companies to sustain their value. As MCCG2000 was only introduced after 1997 financial crisis, its implementation is a longed-for outcome.

Table IV: Non-Financial Companies Paired Samples t-Test
Between Pre and Post of Phase 1

Variables	Mean Pre Phase 1	Mean Post Phase 1	Changes	t-statistic
Debt / Asset	.404959	.394745	-0.010214	-0.482
Returns on Equity	.028138	.111293	0.083155	1.532

Note:*, ** indicates significance at the 10% and 5% levels respectively.

Examining results in Table V, suggest that the ERM adoption in phase 1 do not promote better performances amongst companies in the financial sector. Moreover, apart from that none to the tested variables shows any significant results, company's leverage measured by debt over asset ratios show a slight improvement.

Table V: Financial Companies Paired Samples t-Test
Between Pre and Post of Phase 1

Variables	Mean Pre Phase 1	Mean Post Phase 1	Changes	t-statistic
Debt / Asset	0.179024	0.144886	-0.034138	-1.398
Returns on Equity	0.018994	0.005226	-0.013768	-0.233

Note:*, ** indicates significance at the 10% and 5% levels respectively.

THE EFFECT OF ERM ADOPTION BETWEEN PRE AND POST OF PHASE 2 (MCCG2007)

Table VI shows the difference in outcome from phase 1 (MCCG2000 compliance) and phase 2 of ERM adoption and implementation (MCCG2007 compliance). In Table VI, none of non-financial companies' ratios shows sign of significant improvement or decline from a compliance of MCCG2007 in phase 2. This suggests that the MCCG2007 compliance is indifferent effect from ERM adoption amongst non-financial companies listed in Bursa Malaysia. A justification to this is outcomes are that much of the revises in the MCCG2007 which are more towards the operation and refinement rather than a new policy or code to comply with. Hence the impact is not noticeable.

Table VI: Non-Financial Companies Paired Samples t-Test between
Pre and Post of Phase 2

Variables	Mean Pre Phase 2	Mean Post Phase 2	Changes	t-statistic
Debt / Asset	0.354271	0.344533	-0.009738	-0.801
Returns on Equity	0.203738	0.185560	-0.018178	-0.584

Note:*, ** indicates significance at the 10% and 5% levels respectively.

In Table VII, it is clear that the outcomes of financial companies' performance are similar to the non-financial companies. MCCG2007 being a refinement to MCCG2000 without any distinctive new policy that enhances companies' performances. Moreover, financial companies who are abreast with Central Bank operational directive that is align with BASEL Accord ensure performance volatility does not occurs.

Table VII: Financial Companies Paired Samples t-Test between
Pre and Post of Phase 2

	Mean Pre Phase 2	Mean Post Phase 2	Changes	t-statistic
Debt / Asset	0.175850	0.160015	-0.015835	-0.647
Returns on Equity	0.044078	0.078452	0.034374	0.599

Note:*, ** indicates significance at the 10% and 5% levels respectively.

As a whole, it is found that both MCCGs compliances have somewhat improved ERM practices in Bursa Malaysia listed financial companies although test result from later code reveals that

financial companies firms' value has decline since the introduction of the code. Nonetheless, the reason being as such is contributed by other external financial factor rather than the introduction of the code itself. The finding is similar to Pagach and Warr (2010) where their study also finds little impact of ERM implementation on the tested variables. As a summary, MCCGs has indeed achieved its objectives in embracing/enhancing ERM practices by Bursa Malaysian listed non-financial companies especially during the phase 1 (MCCG2000) implementation.

CONCLUSION

The aim of this paper is to highlight the impact of ERM adoption based on MCCG compliances to companies listed on the Bursa Malaysia where analyses between financial and non-financial companies are divided into different samples. As Phase 1 (MCCG2000) being the first time of such code has been complied by local financial companies, its impact was thought to be lesser than the phase 2 (MCCG2007), a revise version from MCCG2000. At a glance, comparative test result suggests that phase 2 does produce the desired outcome, as leverage ratio is significantly lower after the compliance of MCCG2007. However, further examination reveals that phase 1 produces better result where non-financial company's firms' value has improved its level of risk (leverage) upon the first code is compiled.

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DETERMINANTS OF CORPORATE DEBT: A CROSS COUNTRY STUDY OF MALAYSIA AND INDONESIA

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ABSTRACT

This study investigates the factors affecting the corporate borrowing decisions in Malaysia and Indonesia. Balanced panel data for a sample of 141 Malaysian and 96 Indonesian manufacturing firms from 2005-2012 has been used. Fixed effect regression is used to identify the determinants of corporate debt. Using firm specific and country specific factors, the full sample shows that size, profitability, tangibility, and non-debt tax shields are the common determinants of the debt of manufacturing firms in both countries. However, on a country basis, results show that only liquidity, tangibility, non-debt tax shield and GDP affects the corporate borrowing decisions of manufacturing firms in Malaysia while size, profitability tangibility and non-debt tax shield affects the corporate borrowing decisions in Indonesia. The results also show that macroeconomic variables do not have any impact on corporate borrowing in Indonesia.

Keywords: Capital Structure, Panel Data, Fixed Effect Regression

INTRODUCTION

The exciting debate in the field of corporate financing decisions began with the paper by Modigliani and Miller (1958) which broke the ground for the development of the various theories of capital structure and empirical studies. Modigliani and Miller's irrelevancy propositions argued that firm's financing policy is irrelevant under a restrictive set of conditions in the world of perfect capital markets. Later, relaxing on the assumptions of Modigliani and Miller (1958), a number of empirical studies led the financial managers to conclude that right mix of debt and equity affect the value of the firms, and several theories emerged to describe the firms' financing decisions. These empirical studies mainly focus on the developing countries and stay inconclusive in terms of factors determining the capital structure of the firms. For example Titman and Wessels (1988) find no effect of asset tangibility, income variability, non-debt tax shield, and growth of the firms' debt in the USA; but later Rajan and Zingales (1995) and Fan, Titman, and Twite (2012) find a significant effect of these variables on firms' debt in the USA.

Application and generalizations of the theories developed on the basis of empirical evidences from developed countries need to be investigated in context of developing countries (Deesomsak, Paudyal & Pescetto, 2004). Studies by Booth, Aivazian and Demirguc-Kunt (2001) consider the developing countries, however their results are also inconsistent in terms of factors determining debt levels. Given the inconsistencies in the results and a small number of studies using a limited

number of variables, it is important to investigate the applicability of the capital structure theories in the context of developing countries such as South East Asian countries, particularly Malaysia and Indonesia. As per researchers' knowledge, there is a lack of cross country studies comparing Malaysia and Indonesia that incorporate macroeconomic factors as the determinants of leverage. The choice of these two countries in our study is based on two factors. First, the literature investigating the impact of firm-specific factors and country-specific factors in Malaysia and Indonesia is virtually sparse. Second, the manufacturing companies of both countries contribute to GDP growth comparatively similar proportion and estimated contribution is around 24.3% in 2011 (World Bank, 2011).

This study is aimed at partially filling the gap in area of capital structure by understanding the impact of firm specific factors and country specific factors on firms' capital structure in South East Asian economies. It further investigates the role of firm heterogeneity in determining the debt levels in both countries. This study is expected to help the managers of the manufacturing companies in Malaysia and Indonesia to understand what factors determines the level of debt used in capital structure. It might be useful for the potential investors or business persons who wish to set up a business in Malaysia and Indonesia. Investors in equity and debt capital can also benefit from the evidence provided in this study. This study uses panel data of the manufacturing firms listed on Bursa Malaysia and Bursa Efek Indonesia. Fixed effect regression is used to estimate the model.

Results of this study suggest that size, profitability, tangibility, and non-debt tax shield (NDTS) are the common determinants of the debt of manufacturing firms in both countries. However, on country basis, factors that affect debt financing in Malaysia are liquidity, tangibility, non-debt tax shield and GDP while for Indonesia the factors are size, profitability, tangibility and non-debt tax shield. Results are found to be robust.

This paper is organized as follows. Second section discusses the literatures and the hypotheses. Third section discusses the research methodology, while section four discusses the empirical results. The last section concludes this study.

LITERATURE REVIEW AND HYPOTHESES

Pecking order theory suggests that firms prefer retained earnings to finance their assets and raise external funds once retained earnings are exhausted. Profitable firms are likely to have more retained earnings. Thus, negative relationship is expected between leverage and profitability. Studies that report negative relationship of profitability with leverage are Myers and Majluf (1984), Fama and French (2002) and Sheikh and Wang (2011). However, due to tax deductibility benefit, firms with high profits should use more debt to obtain attractive tax shields because they have high incomes to shield and need greater tax shelters. Some studies such as Frank and Goyal (2003) report positive relationship. Hence, we hypothesize that there is a relationship between profitability and leverage. Earnings before interest and taxes (EBIT) to total assets is used as the measure of the profitability.

The trade-off theory predicts a positive relationship between firm size and leverage. Several empirical studies such as Eriotis, Vasiliou, and Ventoura-Neokosmidi (2007) have reported a significant positive relationship between leverage and firm size while Chen (2004) and Kayo and Kimura (2011) report that the firm size is negatively related to debt. Hence, we hypothesize that there is a relationship between firm size and leverage. Natural logarithm of firms' total assets is used as the measure of size.

Tangibility refers to the availability of tangible assets in the company. Jensen and Meckling (1976)

claims that highly levered firm's shareholders have an incentive to invest sub-optimally to take over wealth from the firm's debt holders. However, debt holders can confine this opportunistic behavior by forcing them to present tangible assets as collateral before issuing loans, hence it establishes the positive relationship of tangibility with leverage. Positive relationship is reported by Rajan and Zingales (1995) and Sheikh and Wang (2011). However, there are some studies such as Booth et al. (2001) and Mazur (2007) that report a negative relationship between tangibility and leverage. Based on the results of the majority of empirical studies, a positive relationship between tangibility of assets and leverage is hypothesized for this study. Ratio of fixed asset to total assets is used as the measure of the tangibility in this study.

DeAngelo and Masulis (1980) argue that non-debt tax shield is the substitute of the tax shield from debt financing. So, firms with larger non-debt tax shields are expected to use less debt in their capital structure. Hence a negative relationship is conceived. Wald (1999) and Viviani (2008) report a significant negative relationship between leverage and non-debt tax shield. Based on the results of the majority of empirical studies, a negative relationship between NDTs and leverage is hypothesized for this study. Ratio of depreciation to total assets is used as the proxy of non debt tax shield.

Another firm specific variable considered in this study is the liquidity. Pecking order theory of capital structure postulates that companies with a huge amount of liquid assets desire to finance with internal funds; hence it establishes the negative relationship. Negative relationship is reported by Mazur (2007) and Viviani (2008). However, the trade-off theory suggests that companies with higher liquidity ratios should borrow more due to their ability to meet contractual obligations on time. Thus, this theory predicts a positive linkage between liquidity and leverage. Shleifer and Vishny (1992) report positive relationship of liquidity with leverage. Based on the prediction of pecking order theory and empirical evidence we hypothesize the negative relationship of liquidity with leverage. Liquidity is measured as the ratio of current assets to current liabilities.

Market timing theory of Baker and Wurgler (2002) suggests that companies issue equity when market value, relative to book value, of the company is very high. So market timing theory predicts negative relationship between share price performance and debt. Based on these findings and predictions of market timing theory a negative relationship is hypothesized between share price performance and debt. The first difference of the logs of annual share prices (matched to the month of the firm's fiscal year end) is used as the proxy of this variable.

This study also uses three country specific variables as the determinants of leverage. First is the GDP. Firm's financing activities reacts simultaneously with the annual GDP growth. For instance, for the period of prosperity, most companies utilize the opportunities and initiate investment activities in order to increase firm value as well as generate a higher amount of profits. Camara (2012) reports that GDP growth has positive and statistically significant influence on capital structure in U.S. However, some researchers also report a negative relationship between GDP growth and firm leverage such as Beck et al. (2002) and Tesfaye and Minga (2012). Based on the results by the majority of empirical studies, a positive relationship between GDP growth and leverage is hypothesized for this study. Yearly change in GDP growth is used as the measure of this variable.

Second country specific variable considered as determinant of corporate debt is inflation. During the period of high inflation, creditors will lend little and allocate capital less effectively. Hence, a negative relationship between inflation and leverage is expected. Beck, Demircug-Kunt and Maksimovic (2002) argue that as inflation increases, it is less likely that firms will obtain external financing, hence the proportion of investments financed by external funding declines. However,

Mokhova and Zinecker (2014) report that there is a positive association between inflation and firm's capital structure. This implies that firms are more likely to have high leverage when high inflation is expected. We hypothesize a negative relationship of inflation with leverage. Change in the monthly consumer price index (matched to the month of the firm's fiscal year end) is used as the proxy of this variable.

Ooi (1999) suggests that companies are more likely to use debt when the cost of borrowing is low. Therefore, if interest rates increase, firms tend to use less debt. Since firms should be more concerned with costs of borrowing, a negative relationship is expected. Eldomiaty (2007) and Antoniou, Guney and Paudyal (2002) reveal a negative coefficient and statistically significant relationship of interest rate with leverage. However, Mokhova and Zinecker (2014) report a positive and statistically significant relationship with both short-term and long-term debt in France and Germany. Based on the results of the majority of empirical studies, a negative relationship between interest rate and firm leverage is hypothesized. Monthly lending rate (matched to the month of the firm's fiscal year end) is used as the measure of this variable.

DATA AND METHODOLOGY

This study investigates and compares capital structure determinants in Malaysian and Indonesian manufacturing firms listed at Bursa Malaysia and Bursa Efek Indonesia respectively. The firm specific data was extracted from the Thomson Financials Datastream. The data of country specific variables like GDP, inflation and interest rate was taken from World Bank's World Development Indicators (WDI). Number of listed manufacturing firms in Bursa Malaysia is 221 and Bursa Efek Indonesia is 121. After dropping the firms with missing data, the final sample comprises of 141 Malaysian firms (1128 firm year observations) and 96 Indonesian firms (768 firm year observations). This study covers the 8 years period from 2005 to 2012. This study employs the balanced panel data. In pooled analysis (full sample) the total number of firm year observations for 237 firms in both countries is 1896. This study uses long term debt to total assets as the dependent variable.

Multiple regression models are estimated using pooled ordinary least square (OLS), fixed effect, and random effect regression estimation techniques. The model is as follows:

$$Llev_{it} = \beta_0 + \beta_1 Prof_{it} + \beta_2 Size_{it} + \beta_3 Tang_{it} + \beta_4 Ndts_{it} + \beta_5 Liq_{it} + \beta_6 Spp_{it} + \beta_7 Gdp_{it} + \beta_8 Inf_{it} + \beta_9 Int_{it} + \varepsilon \quad (1)$$

Where Llev is the long term debt to total assets, Prof is the profitability of the firm, Size represents size of the firm, Ndts is the non-debt tax shield, Liq is the liquidity of the firm, Spp is the share price performance, Gdp is the country's gross domestic product, Inf is the country's inflation, and Int is the interest rate in the country. Equation (1) is first estimated using pooled OLS under the assumption of common intercept for all the firms. Since the firms sampled for this study may not be homogeneous and can have different intercepts (constants) due to different management styles, philosophies, and markets they serve, fixed effect estimation technique is carried out as it considers this heterogeneity and allows for different intercepts for each cross section (firm). Multicollinearity is checked using correlation matrix and variance inflation factor (VIF).

EMPIRICAL RESULTS

DESCRIPTIVE STATISTICS

Table 1 provides a summary of descriptive statistics for the variables employed in this study. The table shows that long term debt used by the Indonesian firms is 13 percent compared to Malaysian debt of 7 percent. This confirms that Malaysian firms are facing less risk compared to Indonesian's. The debt level used by the Malaysian firms is lower than that of G-7 countries reported in Rajan and Zingales (1995). However Indonesian manufacturing firms use more debt than the debt reported by the study. Average profitability of Malaysian manufacturing firms is almost 6 percent while for Indonesian firms it is negative 1 percent. Descriptive statistics points out alarming situation for Indonesia's manufacturing sector where despite of the negative profitability the sector is using high level of debt.

Table1: Descriptive Statistics

Variable	Malaysia				Indonesia			
	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
Llev	0.067	0.086	0.000	0.525	0.131	0.250	0.000	4.582
Size	12.426	1.251	8.742	16.951	20.829	1.609	13.711	25.918
Prof	0.060	0.128	-2.136	0.441	-0.011	4.051	-109.989	21.040
Tang	0.402	0.202	0.000	0.946	0.395	0.221	0.000	0.961
Ndts	0.031	0.021	0.000	0.187	0.038	0.048	0.000	1.203
Liq	3.829	7.158	0.114	96.111	4.027	20.593	0.004	455.049
Spp	-0.278	1.192	-3.324	4.168	6.412	1.771	3.219	13.472
Gdp	4.825	2.509	-1.500	7.400	5.888	0.578	4.600	6.500
Inf	2.650	1.384	0.600	5.400	7.425	3.054	4.300	13.100
Inr	6.370	0.369	5.510	6.720	8.063	2.258	5.750	12.000

The correlation analysis (table 2 and table 3) results suggest that the variables are not highly correlated with each other and hence multicollinearity is not an issue in our data. Multicollinearity has also been checked by calculating variance inflation factor (VIF). The average VIF is 1.86 and 2.60 for Malaysia and Indonesia respectively, which is well below the suggested maximum level of 10 by Gujarati (2006).

Table 2 : Correlation matrix - Malaysia

	Lev	Llev	Size	Prof	Tang	ndts	Liq	Spp	gdp	inf	inr
Lev	1										
Llev	0.019	1									
Size	-0.188	0.058	1								
Prof	-0.067	0.034	0.111	1							
Tang	-0.065	0.201	0.231	0.041	1						
Ndts	0.212	0.074	-0.119	-0.866	0.198	1					
Liq	-0.016	-0.065	-0.116	0.003	-0.009	-0.013	1				
Spp	-0.073	-0.059	0.362	0.052	-0.019	-0.017	-0.055	1			
Gdp	-0.077	-0.006	0.074	-0.021	-0.028	-0.028	0.029	0.12	1		
Inf	-0.021	0.028	-0.124	-0.038	0.051	0.067	0.002	-0.155	-0.199	1	
Inr	-0.018	0.036	-0.137	-0.028	0.058	0.064	-0.003	-0.17	-0.203	0.835	1

Table 3: Correlation matrix - Indonesia

	Lev	llev	size	Prof	Tang	ndts	Liq	Spp	gdp	Inf	inr
Lev	1										
Llev	0.665	1									
Size	0.069	0.196	1								
Prof	-0.201	-0.038	0.267	1							
Tang	0.227	0.344	0.045	0.011	1						
Ndts	0.22	0.115	-0.223	-0.128	0.321	1					
Liq	-0.363	-0.233	-0.011	0	-0.259	-0.261	1				
Spp	-0.276	-0.086	0.634	0.336	-0.054	-0.219	0.194	1			
Gdp	-0.009	-0.022	0.004	0.013	0.041	-0.011	0.003	0.047	1		
Inf	0.027	0.017	-0.023	0.007	-0.003	0.002	-0.02	-0.015	0.351	1	
Inr	0.006	-0.003	0.002	0.004	0.021	-0.006	-0.01	0.044	0.818	0.524	1

DETERMINANTS OF LEVERAGE

Equation (1) is estimated using OLS, random effect and fixed effect. However, results from Hausman test suggest that fixed effect model is more appropriate to use for the interpretation than the random effect model. Fixed effect model is also preferred over OLS as the R-square and adjusted R-square is much higher for fixed effect model confirming the role of firms' heterogeneity in determining the leverage in both countries and full sample. Hence Table 4 shows the estimation results using fixed effect estimation for each country and for the full sample.

Table 4 (model 1) shows that the relationship between firm size and long-term leverage is positive for Malaysia, thus confirms the argument of trade-off theory that large firms should use more debt due to their diversification. However, the relationship is not significant. Size is negatively and significantly related with leverage in Indonesia. These might be due the existence of information asymmetries as suggested by Myers and Majluf (1984) or it may be due to the underdevelopment of bond market and high usage of short-term financing (Yolanda and Soekarno, 2012).

Meanwhile, profitability does not have a significant relationship with debt in Malaysia but shows a positive significant impact in Indonesia. The positive relationship of profitability with leverage is consistent with the trade-off theory, suggesting that higher profitability promotes the use of leverage and provides incentives to companies to benefit from interest payment due to tax shields. This is in line with the findings of Yolanda and Soekarno (2012).

Tangibility appears to affect positively and significantly to debt in Malaysia and Indonesia. The positive relationship gives support to the trade-off theory which postulates that tangible assets act as collateral and provide security to lenders in the event of financial distress. These findings are in line with the studies of Jensen and Meckling (1976), Myers and Majluf (1984), Titman and Wessels (1988), Rajan and Zingales (1995) and Chen (2004).

Table 4 further shows that non debt tax shield has negative significant relationship with leverage for Malaysia and positive significant relationship with leverage in Indonesia.

Table 4: Results for determinants of capital structure in Malaysia and Indonesia

	Malaysia			Indonesia			Combined		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
C	-0.008	0.0423	0.0259	1.4834	1.358	0.0959	0.6582059	0.6329	-0.0161
	-0.93	-0.587	-0.588	(0.000)***	(0.001)***	-0.252	(0.000)***	(0.000)***	-0.748
SIZE	0.0012	0.001		-0.075	-0.0653		-0.0515	-0.0502	
	-0.848	-0.867		(0.000)***	(0.000)***		(0.000)***	(0.000)***	
PROF	0.0093	0.0098		0.0203	0.0208		0.0103	0.0104	
	-0.564	-0.543		(0.002)***	(0.001)***		(0.000)***	(0.000)***	
TAN	0.0731	0.0685		0.1681	0.1394		0.0898	0.0874	
	(0.000)***	(0.000)***		(0.067)**	-0.12		(0.007)***	(0.008)***	
NDTS	-0.4363	-0.4273		1.6206	1.6851		0.66	0.6695	
	(0.000)***	(0.003)***		(0.012)**	(0.008)***		(0.014)***	(0.013)***	
LIQ	-0.0008	-0.0009		0.0001	0.0001		0	0	
	(0.071)**	0.053		-0.88	-0.882		-0.996	-0.991	
SPP	-0.0015	-0.0028		0.0021	0.0112		0.0058	0.0063	
	-0.746	-0.538		-0.87	-0.351		-0.387	-0.331	
GDP	-0.0023		-0.0019	0.0168		0.0003	-0.0006		-0.0012
	(0.043)**		(0.099) *	-0.191		-0.981	-0.689		-0.453
INF	0.0013		0.0012	-0.0015		-0.0006	-0.0005		0.0003
	-0.351		-0.588	-0.714		-0.882	-0.813		-0.904
INT	0.0085		0.0074	-0.0026		0.0047	-0.0005		0.0037
	-0.305		-0.378	-0.656		-0.414	-0.886		-0.249
R ²	0.675	0.6731	0.6642	0.4955	0.4931	0.4581	0.5232	0.523	0.5049
Adj R-square	0.6255	0.6244	0.6154	0.4164	0.4162	0.3788	0.4527	0.4535	0.4338
F-statistics	4.090	5.170	13.610	5.650	6.410	5.770	7.420	7.520	7.100
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Positive relationship is in line with Chen (2004) who depicted that firms with a higher NDTS, have a higher leverage due to a higher level of tangible assets, therefore, more tangible assets with a high non-debt tax shields lead to a higher amount of debt. Negative relationship is supported by the argument of DeAngelo and Masulis (1980) who suggest that NDTS such as a tax deduction for depreciation and investment tax credits are substitutes for the tax benefit of debt financing. Liquidity shows a negative relationship with leverage. This confirms that manufacturing companies in Malaysia use less debt when they have high amount of liquid assets. This is consistent with the predictions of pecking order theory. These results are similar to Mazur (2007) and Viviani (2008). However liquidity does not have any impact on leverage in Indonesia. Share price performance does not have any significant impact on long term debt across all units of analysis in both countries.

GDP has negative significant impact on long term debt for Malaysia. Bokpin (2009) and Tesfaye and Minga (2012) also find the negative relationship of GDP with leverage. This can be based on

the argument that firms make investments in time of good economic conditions; hence such firms grow and growing firms make less use of debt.

As a robustness check of the determinants of the debt in Malaysia and Indonesia, equation 1 is re-estimated with only firm specific variables (Model 2) and with only country specific variables (Model 3). The results in model 2 and 3 are almost similar to that of model 1. The combined sample also confirms our findings that size, profitability, tangibility and NDTs are factors that determine the capital structure in both countries. Results in model 2 and model 3 confirm that our results (model 1) regarding the determinants of debt in Malaysia, Indonesia and full sample are robust and country specific factors (except GDP for Malaysia) do not appear to affect significantly to firm financing decisions.

CONCLUSION

The objectives of this study are to identify the firm and country specific factors affecting firms' financing behavior in manufacturing sector of Malaysia and Indonesia and to understand the role of firms' heterogeneity in financing decisions. This study uses a balanced panel data of 141 Malaysian manufacturing firms listed at Bursa Malaysia and 96 Indonesian manufacturing firms listed at Bursa Efek Indonesia. The data of these firms from 2005 to 2012 is taken from Datastream. WDI of the World Bank is used to extract the data of country specific factors.

For Malaysian firms, the significant determinants of debt are tangibility, non debt tax shield, liquidity, and GDP. In Indonesia the factors significantly affecting debt level are size, profitability, tangibility and non-debt tax shield. Factors determining leverage in full sample are size, profitability, tangibility and non-debt tax shield. Results suggest that country specific factors (inflation and interest rates) are not common in determining leverage across all units of analysis. These determinants are found to be robust, with minor variations, by running the models containing only firm specific variables and macroeconomic variables separately. Use of the firms fixed effect technique enhances the explanatory power of the model suggesting that individual firms' specific factors are at work in determining the debt levels. Future studies on financing behavior may consider broader sample and additional country specific variables such as bond market development and stock market development.

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ASIAN ECONOMIES, COUNTRY RISK BETAS, DATA OUTLIERS AND ESTIMATION STRATEGIES WITH NICHE REGRESSIONS

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ABSTRACT

Beta estimation through regression is the simplest but effective way to assess the systematic risk of an investment or country risk using Capital Asset Pricing Model (CAPM). There are verities of Beta estimation methods and despite the criticism leveled on regression estimation, OLS is still the widely used method. Based on the combined ideas of ranking regressions with multi criteria decision making tool called fuzzy-AHP intelligent zax and using aggregated zoom AHP-mated regression for beta estimation, this article has used the country betas from eight Asian economies in order to compare the estimate of country risk obtained from various niche regressions. It has been shown that alternative regression strategies can be effective, with caution, in order to reduce the effects of artificially exaggerated risk perceptions in the post 2008-financial crisis world. In other words, alternative betas, not only provide a solution to the estimation risk reduction for crisis based volatilities and data outliers, but also help in the moderation of cognitive biases of the investor community and policy designers and thus rationalize the effects of systematic crisis and contagion effects.

Keywords: Linear Regression Beta; Data Outliers; Capital Asset Pricing Model; Estimation Risk Reduction; Fuzzy Multi-Criteria Decision Making; and Country Risk

INTRODUCTION

World of finance is composed of two schools of thoughts i.e. standard theoretical finance and practical behavioral finance. First school assumes the rationality of human beings which was first described in the context of neo-classical economics. This Homo economicus model hypothesizes idealized financial behavior i.e. human beings, in making their decisions, are perfectly rational, motivated by self interest and have full information. All three homo economicus forms i.e. strong, semi-strong or weak assume that humans are economic maximizers and thus their behavior is quantifiable. However there is criticism on these standard finance assumptions stating that human intellect is subservient to human emotion or subjective impulses such as fear, love, hate, pleasure and pain, is a product of philanthropy, charitable, volunteering and even self destructive instincts as well as is not fully informed. The behavioral finance school is based on observed financial behavior and denies that humans are idealized logical creatures. Based on the knowledge from behavioral science, cognitive psychology and science, behavioral and experimental economics and investor psychology, behavioral finance micro looks into irrational behavior of individuals and behavioral finance macro discuss market irregularities. Thus instead of being a rational being, investor's personal beliefs and biases influence their risk tolerance. However, because rationality assumption helps us to generate objective calculations, standard finance is used in most of the

investment calculations based on Miller and Modigliani's arbitrage pricing principles, the Markowitz's portfolio principles, Sharpe's capital asset pricing model, and the Black, Scholes, and Merton's option pricing theory. Shareholders want to participate in asset management companies' alpha generation, not to be exposed to market beta. Thus the main thing is the predictability of returns (Steiner; 2009) which can also be achieved easily with the help of standard finance. In most of the studies, which explore the relationship between macroeconomic factors and equity prices, variable selection and empirical analyses is based on economic rationale, financial theory and investors' intuition.

REVIEW OF LITERATURE: ASSETS' RETURN FORECASTING

Traditional approaches of beta estimation normally apply a linear model and use one of the three approaches to predict premiums. First and the most popular approach tests the predictive power of one single variable, the second approach applies multifactor models and the third least used method is model selection approach (Steiner; 2009). Three types of multi-factor asset return models include macroeconomic factor models, fundamental factor model and statistical factor model (Zivot & Wang; 2005). The general form of multi-factor model is given as $R_{it} = i_f + s_{ki} f_{it} + i_t$ where R_{it} (s_{ki}) [f_{it}] $\{i_t\}$ are simple, real return in excess of risk free returns (factor loading of factor beta for asset I on kith factor) [kith common factor] {asset specific factors}. Assets (I) vary from 1 to N and time periods (t) vary from 1 to T. In equilibrium models, i_f is zero i.e. there are no abnormal returns. In macroeconomic factor models, factors are observable time series of economic and financial variables and betas and residual variances are estimated by ordinary least squares (OLS). The assumptions of these models are that f_t is stationary and there are no multicollinearity and autocorrelation. Factor variance-covariance matrix can be calculated from observed history of factors i.e. from historical data and it can be either constant over time or dynamic with time variation either because of betas Kalman filter technique) or heteroscedastic residual variances (captured by verity of GARCH family models etc.) (Anjum; 2014c).

As an alternative to traditional approaches, using monthly data from Jan. 1989 to March 2007 from US and Swiss, the study (Steiner; 2009) investigates the out-of-sample predictability of the monthly market premium, as well as the monthly size, value, and momentum premiums by evaluating the aggregated results from the 1,024 models. This paper investigates the out-of-sample predictability of the monthly market premium, as well as the monthly size, value, and momentum premiums. We use samples from two markets: the US market is our reference sample and a Swiss sample is used to test the robustness of the US results. We use monthly data between January 1989 and March 2007, which is an important innovation as earlier studies investigate a sample period prior to 1989. Regardless of the approach chosen, the majority of the literature concentrates on predicting the market premium. Literature analyzing the predictability of the size, value, or momentum premiums is rare and focused on the related topic of style rotation. Many studies analyze the size and/or value premiums. However, in contrast to our study, all these papers focus on one or few predictive models only, apply a different methodology, and analyze an earlier sample period. Besides there are various predictive variables for market returns used in different models. Various studies has been quoted either in Hasan & Zafar (2008) or Steiner (2009) regarding the variables used for beat estimation either in stock market or country risk context. Variables fall in the categories of economic rationale, financial theory and investors' intuition. Variables of valuation of financial markets can be either dividend-price ratio, price-equity ratio and book-to-market ratio and the studies which have used these are provided in Table 1. Variables related to the state of the financial markets can be volatility measures, lagged analyzed premium and issuing

activity. Variables related to macroeconomic state of the economy are economic fundamental, macroeconomic variable, short-term interest rates, treasury bill rates, term structure, credit spread, term spread, inflation, consumer price index, consumption, seasonally adjusted GDP, banking and finance index, exports, industrial production, consumption-wealth ratio, oil prices, exchange rates and foreign portfolio investment.

Table 1: Valuation of Financial Markets Category of Predictive Variables

Variable	Studies quoted in Steiner (2009)
Dividend-price ratio	Rozeff (1984), Campbell and Shiller (1988a, 1988b), Fama and French (1989), Pesaran and Timmermann (1995), Jensen et al. (1996), Bossaerts and Hillion (1999), Oertmann (2000), Avramov (2002), Chordia and Shivakumar (2002), Bauer et al. (2004), Rey (2005), Giot and Petitjean (2006), Goyal and Welch (2006), Rapach and Wohar (2006), and others
P/E Ratio	Campbell and Shiller (1988b, 1998), Pesaran and Timmermann (1995), Bossaerts and Hillion (1999), Avramov (2002), Giot and Petitjean (2006), Goyal and Welch (2006), Rapach and Wohar (2006), and others
Book-to-market ratio	Jacobs and Levy (1996), Kothari and Shanken (1997), Pontiff and Schall (1998), Avramov (2002), Goyal and Welch (2006), Rapach and Wohar (2006), and others

Most common approach used to predict stock returns is to use Sharpe's single factor model which is based on balance sheet identity which belongs to the family of macroeconomic factor models which estimates the market beta using various methods. Details of balance sheet identity based theory of beta can be found in (Riedl & George; 2009) and a reader fond of exploring the consolidated balance sheet (CBS) identity can take a look (Chaudhary & Anjum; 1996) for details. The textbook way of estimating beta uses ordinary least squares (OLS) regression and the resulting slope or standard beta is $(= \rho * \sigma_i / \sigma_m)$ or $(Covim / \sigma_i * \sigma_m)$ where ρ (σ) [Cov] are correlation between (standard deviations of) [covariance between] the rate of returns and σ_i / σ_m is relative volatility (Tofallis; 2008). Finance theory also suggests that information risk (i.e. the uncertainty regarding valuation parameters for an underlying asset) is reflected in firms' equity betas. Besides Beta, other measures of information risk include bid-ask spreads, probability of informed trade (PIN), trading volume, dispersion in analysts' forecasts, credit ratings and spreads. The study (Riedl & George; 2009) has defined a measure of information risk relevant to financial institutions based on reporting requirements of U.S. accounting standard setters adopted in Statement of Financial Accounting Standards (SFAS) 157 (Fair Value Measurement), which assess the financial instruments across three levels (level 1, 2, and 3). Financial instruments receive one of the three designations: (a) "Held to maturity" (b) "Available for sale" and (c) "Trading securities". Level 1 inputs are unadjusted quoted market, level 2 inputs are other directly or indirectly observable market data and level 3 inputs are unobservable, firm-supplied ones. The study (Riedl & George; 2009) has hypothesized that if required fair value designations appropriately capture this risk, then we expect that the implied beta is increasing across asset portfolios designated as level 1, 2, and 3

(i.e. firm's beta from the CAPM is a function of its information quality) and it predicted that fair value level 3 instruments will have a higher association with $\rho_{x,m}$ relative to those designated as either level 1 or 2.

A CONCEPTUAL REVIEW OF BETA ANALYSIS

Balance sheet identity based model gives us equation $\beta_E (E/A) = \beta_A FVA - \beta_D \text{Leverage}$; where FVA is the firm's fair value of assets, $\beta_E (E/A)$ is adjusted beta and $\text{Leverage} = D/TA$. The study (Riedl & George; 2009) estimated this equation by using the independent variables of bank's assets decomposed into those reported at level 1 (2) [3] fair values FVA1 (FVA2) [FVA3] (used reported book values as proxies), all other (OA) and debt financing (Leverage), all scaled by the firm's total assets. It also measured equity, debt, and other assets using book values and using identity $A1 + A2 + A3 + \text{OtherAssets} = E + D$. Based on this equation all betas (debt financing beta) are supposed to be positive (negative).

The volatility measures use actual volatility from historical returns. We alternatively use implied volatility to measure σ_i / σ_m , employing 60, 90 and 180 day implied volatilities and results remained unchanged using these alternative measures. The paper has negated the evidence that bank asset structure leads to greater opaqueness, (a justification for regulatory intervention) and proved that level 3 assets have higher systematic risk and lead to higher information asymmetry (Riedl & George; 2009). In order to estimate beta, all we want is to plot a straight line and estimate the slope of the functional relationship between x and y whether by OLS or reverse regression. OLS line is estimated by minimizing all the variation in one direction (gives the upper limit) and the reverse regression minimizes all the variation in the other (gives the lower limit). The slopes of the two least squares regression lines bracket the slope of the estimated functional line. We now have upper and lower limits for the slope but which value shall we settle upon? Various betas has been calculated. The relative volatility (σ_i / σ_m) is the commonly used one. Then comes the estimator defined by (Tofallis; 2008) i.e. $\beta^* [= (\text{sign of } \rho) \sigma_i / \sigma_m]$. The reverse regression slope is given by β / ρ^2 and as ρ lies between -1 and $+1$, it follows that β^* does satisfy the requirement of lying in between the upper and lower range. As ρ lies between -1 and $+1$, it follows that β^* does satisfy the requirement of lying in between. For the usual case of positive correlation between market and the investment, we have the standard beta giving the lowest value and the reverse regression the highest i.e. $\beta_{OLS} \leq \beta^* \leq \beta_{\text{reverse}}$.

Tofallis (2008) has calculated OLS estimator (β) and new estimators of beta (β^*) for 30 companies making up the Dow Jones Industrial Average, have ranked them and calculated the difference in ranks. It also provides that the formula for the variance of our estimator or slope can be approximated by that for the OLS case [i.e. $s^2 = \beta^* (1 - r^2) / (n-2)$], a confidence interval constructed using the Student t distribution (i.e. $= \beta^* \pm t s$), Jolicoeur and Mosimann based confidence interval (i.e. $\beta^* [(B + 1)^{1/2} \pm B^{1/2}]$) where $B = t^2 (1 - r^2) / (n-2)$. As $\beta^* > \beta$ thus alpha values will be revised downwards. Finally, β^* allows for consistency between its standard interpretation (as relative volatility) and the formula used for its calculation. It gives us more logical classification of stocks as being either aggressive or defensive. New estimator of beta (β^*) is also more stable over time. Furthermore, the removal of the correlation from the formula brings clarity to what is being

measured. Besides these estimations, there are varieties of non standard forms of CAPM which incorporate no short sales, no risk less lending or borrowing, risk less lending but no risk free borrowing and inclusion of tax factors, inflation, non-marketable assets, heterogeneous expectations, price affecting behavior of investors as well as multi-period, multi-beta and consumption oriented CAPM.

Ranking of various regressions was first done with the help of fuzzy AHP approach in Anjum (2014b). Another study has used Best Auto Logic AHP-mated (Be-ALAM) based AZAM regression to rank the regressions from various data samples and have assigned the relative (normalized) scores to each estimated regression for beta. Then various regressions have been added using these relative scores to arrive at the aggregated zoom AHP mated (AZAM) regression (Anjum; 2014d). This later regression gives betas from weighted regressions has shown advantage in case of data with outliers. It has followed the approach used by (Anjum; 2013a) and (Anjum; 2014a) in the cases of ranking the data mining algorithms and predictive classifiers and have used the country betas for various developing economies from Nathaphan & Pornchai (2010). The value of AZAM beta is less than the normal OLS beta. And finally if we take the average of all these betas, then it may be the most desirable and we can call it (β^* Average) (Anjum; 2014d). Beta, being a measure of systematic risk, gives volatility when it is multiplied with market volatility and then this product is added to asset specific volatility. Volatility, often used as a measure of risk, is measured by the standard deviation of the rates of return in finance or in case of country risks (see Anjum (2014c) for details). In order to compare the volatility of an investment's rates of return with the volatility of the market rates of return we can simply use the volatility ratio or relative volatility. The same is the case for a country's risk vis-a-vis the rest of the world. The study (Tofallis; 2008) has quoted examples of textbooks which mix beta with relative volatility e.g. statements like "beta measures the volatility of a given asset relative to the volatility of the market" or that "Beta measures how volatile a fund (or a country) has been compared with a relevant benchmark" or that "stocks (countries) with betas greater than one are more volatile than the market (rest of the world) and are known as aggressive stocks (riskier countries) and stocks (countries) with betas less than one are less volatile than the market index (global index) and are known as defensive stocks (or low risk countries)". Standard beta, however, is not the same as relative volatility as former has correlation component involved as well. Hence, the usual classification into aggressive and defensive stocks falls apart if one is using these terms to refer to relative volatility. Therefore, a low beta could actually represent a high relative volatility that is being masked by a low correlation. Investors would then be mistaken in thinking that they had selected an investment whose volatility was low.

A case for an alternative beta estimator, a line fit (let's call it line beta) that treats both variables in the same way, and is more appropriate, easier to understand and to calculate (Tofallis; 2008). The only difference between the calculation of line beta and beta from OLS is that formula for the former does not contain the correlation and since correlation is main contributor to instability in betas, line beta will be more stable over time without it (Tofallis; 2008). There is also a computational advantage as it is easier to calculate the ratio of standard deviations than the OLS

slope. Line beta is a measure of total risk and so it can be applied to all portfolios, whether diversified or not and thus it cannot play a part in splitting up risk into components (market risk and investment-specific risk). Standard beta's claim to measure market risk, however, is highly questionable primarily due to the instability of beta over time as well as the regression technique used to estimate beta has some inherent shortcomings. Although ordinary least square (OLS) continues to be by far the most frequently used method even when it is obviously inappropriate, hundreds if not thousands of regression lines with too-small slopes are being published annually (Riggs et. el.; 1978). If we classify the defensive and aggressive stock market securities based on various beta measures like β_{AZAM} , β_{OLS} , β^* , $\beta_{AZAM-reverse}$, $\beta_{reverse}$ and $\beta^*Average$, and then take these various classifications as scenarios to make judgment for the better scenario in the classification of aggressive or defensive stocks.

Besides, there are six alternative approaches in constructing an optimal portfolio, which use portfolio performance measures, are traditional mean-variance (EV), Adjusted Beta (AB), Resampled Efficient Frontier (REF), Capital Asset Pricing Model (CAPM), Single Index Model (SIM), and Single Index Model incorporating shrinkage Bayesian factor namely, Bayesian Single Index Model (BSIM) (Nathaphan & Pornchai; 2010). Various beta measures has a great contribution in measuring the right beta which can not only give the right estimation of stock returns rather better measure of beta can also influence the estimation of volatility of stock returns. Beta can also be either directly used in performance measures like Treynor and Jensen measures and also indirectly in other portfolio performance measures through it part in the calculation of the volatility.

DATA AND METHODOLOGY DESCRIPTION

The focus of this study is to apply Fuzzy-AHP Intelligent Zax (FAIZ) which uses fuzzy AHP weights in order to get RSTPS (Anjum; 2014b) or Best Auto-logic Equally-mated (B-ALEM) regression (Anjum; 2014c) in order to build an Aggregated Zoom AHP-mated (AZAM) regression which can be used for the estimation of Beta. This AZAM regression with crisp AHP has already been used by (Anjum; 2014d) can provide an alternative to the systematic risk outliers that influence the estimation of beta with OLS. Results for α & β coefficients from three different regressions (alternatives) for selected Asian countries based on three different datasets from (Nathaphan & Pornchai; 2010) and (Anjum; 2014d) have been used in this study as inputs and given in table 2. In this way we get our FAIZ based AZAM regressions. The eight South, East and South East Asian economies covered in this study are China (CH), India (IA), Indonesia (IS), Malaysia (ML), Pakistan (PK), the Philippines (PH), Taiwan (TW) and Thailand (TH).

Table 2: NGTPS for TP, SP1 and SP2 Regressions for eight Asian Economies

Name	TP	SP1	SP2	Name	TP	SP1	SP2
China (CH)	0.42	0.26	0.32	Pakistan (PK)	0.34	0.33	0.33
India (IA)	0.35	0.31	0.34	Philippines (PH)	0.31	0.36	0.33
Indonesia (IS)	0.34	0.29	0.37	Taiwan (TW)	0.30	0.33	0.37
Malaysia (ML)	0.32	0.38	0.31	Thailand (TH)	0.31	0.36	0.33

Fuzzy AHP Intelligent Zax (FAIZ) regression is a framework to rank various regressions based on Relative Grand Total Priority Scores (GTPS). It uses fuzzy Analytical Hierarchy Process (AHP) technique. AHP was first introduced by Saaty (1980) where he introduced pair-wise comparison for multi-criteria in order to get weights to rank various alternatives. AHP has also been used by Anjum (2014e) in order to rank the six hypothetical Islamic banks whose balance sheets were first introduced in Anjum (2014f). FAIZ has used five categories of criteria for ranking regressions. These criteria include assumptions (AS), statistical inference (SI), overall effectiveness (OE), Robustness (RO) and quality considerations (QC). In short, each criteria has been provided a weight obtained with the help of Fuzzy AHP (Anjum; 2014b). Besides minmax based scoring system gives scores to different scales thus eliminating the problem of incommensurability (Anjum; 2013e). These rules will be able to assign separate scores to each alternative. Two parameters in fuzzy reasoning method are fuzzy membership curve (FMC) showing the confidence level of the DM (can be triangular, Gaussian and trapezoidal) and slope of FMC (which represents three different attitudes of the DM i.e. liberal, moderate and strict). Triangular FMC (used in this study) is simple, commonly used, can approximate non-triangular as well and is especially used when DM has least confidence (i.e. is very uncertain) about degree of membership of values to particular class. Liberal attitude has gentle slope and gives wider range of input values as a member of certain class while strict attitude has a steep slope with narrow range of values. Moderate one is in between the two and is considered here.

The Fuzzified pair-wise comparison matrix and the scores for medium attitude have been taken from Anjum (2014b). The normalized weights obtained from fuzzy AHP with moderate attitude for AS, SI, OE, RO, QC are 0.4425, 0.2714, 0.1717, 0.0828 and 0.0316 respectively. The scores attained by each criteria from these rules provide values for each alternative in relative form and has been brought within a range between 0 and 1. These scores are determined for each alternative i.e. for each of three regressions for each country. Rules for AS have been given in detail in (Anjum; 2014b), however, as regressions in Nathaphan & Pornchai (2010) either did not perform (or simply did not provide the results of) tests for assumptions, the score for criteria AS is considered as zero. Finally minmax score of each of five criteria has been multiplied with Fuzzy AHP weights for each criteria to get normalized GTPS (or NGTPS) and an alternative with highest NGTPS is superior to the alternatives with lower NGTPS. The NGTPS obtained by using fuzzy AHP weights and minmax scores scored by each regression for each country has been provided in table 3.

From these NGTPS, we can easily verify which one of the three regressions for each country has received the highest score. The regression with highest NGTPS obtained from AHP (fuzzy AHP) weights for each country is our Be-ALAM (FAIZ) regression. For each of the eight Asian economies, second column of Table 3 shows that which regression (from TP, SP1 and SP2 Regressions) got the highest NGTPS score based on fuzzy AHP weights (FW) and/or crisp AHP weights (AW). Because of data outliers from financial crisis years, the accuracy of regression coefficients (α & β) may be distorted because of the probability of Type I and Type II errors and/or distortions in the relationships and significance tests (Osborne et. al.; 2001). AZAM regression is obtained after taking the weighted average of alternatives (i.e. regressions for TP, SP1 and SP2 for each of 8 countries) where weights for each regression are the NGTPS of the respective regression. In other words, each regression, based on TP, SP1 or SP2, is multiplied with their respective NGTPS and then all these three regressions will be added together and the resulting regression is called Aggregated Zoom AHP-mated (AZAM) regression.

Table 3: Top NGTPS Regressions and α & β for Be-ALAM, FAIZ and AZAM Regressions

	Be-ALAM / FAIZ	α for Be-ALAM / FAIZ	α for FW-AZAM	α for AW-AZAM	β for Be-ALAM / FAIZ	β for FW-AZAM	β for AW-AZAM
CH	TP	0.0078	0.007	0.0073	0.9028	0.9082	0.9067
IA	TP	0.0056	0.005	0.0051	0.7896	0.8007	0.799
IS	SP2	0.0059	0.005	0.0048	0.8155	0.7879	0.7874
PK	TP	0.0036	0.003	0.0033	0.4629	0.4487	0.4486
ML	SP1	0.00279	-2E-04	-2E-04	0.9076	0.6913	0.6875
TW	SP2	0.0115	-0.003	-0.003	0.6949	0.8423	0.8403
PH	SP1	-0.00183	-0.002	-0.002	0.8578	0.6421	0.6409
TH	SP2/ SP1	-0.00248/ -0.00394	-0.004	-0.004	0.8109 / 1.1006	0.9543	0.9535

Note: 1. If two entries in cells are separated by (/) then first entry is for AW and second entry after (/) is for FW. 2. If there is an ampersand (&) between two entries, it means that there was a tie between both entries (i.e. SP1=SP2) and thus both are equally an answer for both AW and FW (e.g. SP1 & SP2). 3. If only one entry is provided, it shows that this one entry is only answer to both AW & FW.

DESCRIPTION OF RESULTS AND CONCLUSION

The AZAM regression obtained from regressions ranked using AHP (fuzzy-AHP) weights is called AW-AZAM (FW-AZAM). Table 3 shows the values of α from FAIZ (F) and/or Be-ALAM (BA) (α -BA/F in third column), FW-AZAM (i.e. α -FW-A in fourth column) and AW-AZAM (i.e. α -AW-A in fifth column) and values of β FAIZ and/or Be-ALAM (sixth column), FW-AZAM (seventh column) and AW-AZAM (eighth column), for each of the eight Asian economies. Table 3 of this study can be compared with table 2 of Anjum (2014d) for the relevant Asian economies. Columns two, three and six have changed a little bit only for Taiwan and Thailand only. For rest of the Asian countries it has remained the same as for equal weighted and crisp AHP weighted based ranking. Columns four and seventh for Asian economies have changed completely because fuzzy AH weighted columns has replaced the equally weight based columns. Empirical results indicate that all Asian markets exhibit nonzero alpha with positive beta coefficient as postulated by theory. When beta is used as a measure of risk, expectation is that higher the beta of countries or of stocks are, the lower the country risk or higher the stock returns will be. The parameter values (slope and intercept) of this fitted line have been used to test the CAPM theory. A famous study by Fama and French (1992) showed that the slope was not significantly different from zero i.e. there was no positive association between return and standard beta. Besides, Fuzzy AHP based results have increased the AZAM beta as is evident from FW-AZAM beta as compared to the AW-AZAM beta. Magnitudes for alphas have not changed and neither is the ranking of Be-ALAM or best FAIZ regressions. The study (Tofallis; 2008) says that for usual case of positive correlation between market and the investment, we have the standard beta giving the lowest value and the reverse regression the highest i.e. $\beta_{OLS} \leq \beta^* \leq \beta_{reverse}$ (Anjum; 2014d). Lowering the β_{OLS} (i.e.

by using β BE-ALAM AZAM instead) will help to pull the average (i.e. β^*) lower. As we may notice that general perception is that after the financial crisis of 2008, the market risk has increased substantially thus based on these perceptions most of the beta estimates are trying to put an exaggeration component into it in order to save the reputation of the financial analysts or quants who estimate such betas. But this at the same time skewed the investment decisions towards conservative one. From the literature of wealth and investment management, we know that an investor can be either risk lover, risk neutral or risk averse and all the financial planners or investment managers know that if you want to make most out of investing then these risk states of investors should not be permanent rather should be adoptive to the markets on dynamic basis. And if the investors attitude is not rational because of either cognitive or emotional biases, then investment managers try to moderate the cognitive biases at least in not so affluent clients.

In the aftermath of financial crisis of 2008 when financial data contains outliers, rational approach is to moderate the perception of higher perceived uncertainty by estimating (and using) the right country betas using techniques which take care of outliers in an efficient way. All this is important in an effort to make sure that investors are assessing the real relative risk, instead of the exaggerated one. The estimation of beta with Fuzzy AHP weighting structure for moderate attitudes of the decision makers has provided a new variant of beta. Like the Be-ALAM AZAM regression, FAIZ AZAM ranking approach can also be used for reverse regression, as with OLS regression which can lower the upper bound (i.e. β_{reverse}) thus lowering the measure of relative risk (i.e. β^*) even further. And the result of this can be a moderation of country betas through the use of estimation techniques which provide some solution to the outliers in the data. Thus following the argument from Tofallis (2008), it can be said that $\beta_{\text{Be-ALAM AZAM}} \leq \beta_{\text{FAIZ AZAM}} \leq \beta_{\text{OLS}} \leq \beta^* \leq \beta_{\text{reverse Be-ALAM AZAM}} \leq \beta_{\text{reverse FAIZ AZAM}} \leq \beta_{\text{reverse}}$. And if estimation results cannot be relied on because of the limitations of the regression technique, especially in the time of systematic risk data outliers, then even taking the average of all these different betas can provide an alternate answer.

Notes:

1. The article was completed in August 2014 and later revised in April 2015.
2. The Views expressed in paper and all errors and emissions are that of the author and in no case reflect those of either LTU or ITB, their staff or management or any other organization to which the client has affiliations with including all of the past affiliations.
3. The article is only meant to extend research ideas and in no way be liable of any policy risks based on this study. Besides, author reserves the right of filing patent against new ideas introduced in his articles.

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CHARACTERISTICS OF REAL BACKDATORS

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ABSTRACT

Recent findings show that CEOs tend to backdate their stock option grants so that a past date on which the stock price was particularly low is picked to be the grant date. Most of the current literature attributes the option backdating behavior entirely to the agency problem, affirming that CEOs manipulate the terms of their option awards at the expense of shareholders. Gao and Mahmudi (2008), however, shows that backdating could be the consequence of efficient contracting that solves executive compensation problems. Using a group of firms that were caught backdating and have been settled, this paper would like to further examine whether or not backdating firms have higher level of operating efficiency, higher level of corporate governance, lower level of bankruptcy risk, more ability to increase shareholder wealth, and lower level of market price risk. This paper also intends to compare the characteristics of backdating firms during pre-SOX period and those during post-SOX period.

Keywords: backdator, agency problem, option backdating, efficient contracting, SOX, characteristics of backdating firms

INTRODUCTION

Stock options are granted to executives so that they have the right to buy stock at a fixed exercise price sometime after the option grant. The initial aim of the grant is to align the executives' interests in the value of the firm with those of shareholders. Stock-option compensation rewards executives for maximizing the difference between the exercise price of the options and the stock price. Once the exercise price of the options is fixed, all price increases enlarge the value of the option and represent gains to the executive. Stock options, therefore, give executives interest in maximizing the long-term stock price.

There is an unintended incentive associated with executive stock options, however, around the time the options are granted. The exercise price of the options is normally fixed at the market price of the stock on the day the options are granted. Since the exercise price of the option is the price at which the executives may purchase the stock, executives have an incentive to temporarily decrease the market price of the stock on the day of the option grant in order to decrease the exercise price.

Executive stock option backdating, picking a past date on which the stock price was particularly low to be the grant date, represents a serious agency problem. Intentional backdating and an accounting report that claims the options to have been issued on those dates as "at the money" rather than "in the money" may be considered fraudulent. There has been an extensive literature that blames backdating and believes this unethical opportunistic act is driven by executives' greed and management's opportunistic behavior (Bernile and Jarrell 2007, Walker 2007, Heron & Lie 2006, 2007). Arthur Levitt, former chairman of the Securities and Exchange Commission (SEC),

states “Backdating is ripping off shareholders in an unconscionable way” (Forelle and Bandler (2006)).

On the other hand, Gao and Mahmudi (2008) demonstrates a contradicting explanation for backdating behavior. They develop a model and show that the optimal strike price for option grants is below the grant date stock price. Backdating could be an effective way to issue options with optimal strike price, simply because directly giving in-the-money option exposes companies to tax and accounting disadvantage. In particular, their theory directly predicts that option backdating helps shareholders reduce the executive compensation cost but, simultaneously, motivate managerial incentive.

Unclear about the impacts of backdating activities, there are two purposes of this paper. First, this paper aims to further argue whether backdating brings more harms (as suggested by most literature) or brings more benefits (as suggested by Gao and Mahmudi (2008)) to a firm. Using various independent variables as proxies, this paper further examines whether backdating firms have higher level of operating efficiency, higher level of corporate governance, lower level of bankruptcy risk, more ability to increase shareholder wealth, and lower level of market price risk. In addition, this paper intends to examine the characteristics and the operation performance of firms which were found to be guilty of intentional backdating. This research will justify the results based on firms’ financial performance before the first backdating scandal was exposed to the public in 2005.

Second, this paper seeks to study the impact of The Sarbanes-Oxley Act of 2002 (SOX) which was implemented as a result of the failure of major firms such as Enron and Worldcom following fraudulent accounting practices and self-dealing of executives. Under the Sarbanes-Oxley Act (SOX) of 2002, option grants to senior management must be reported within two days of the grant date. This aids to eliminate the opportunity for senior management to engage any meaningful options backdating. In particular, the characteristics of backdating firms are compared between pre-SOX period and post-SOX period.

The remainder of this article proceeds as follows. Section 2 introduces the related studies and locate where this paper stands among the existing literature. Section 3 describes the data source, sample selection and methodology. Section 4 presents the results. Finally, Section 5 concludes.

LITERATURE REVIEW

Studies by Yermack (1997), Aboody and Kasznik (2000) and Chauvin and Shenoy (2001) document the systematic, favorable, V-shaped stock-price pattern surrounding option grant dates. They attribute such behavior to “good timing” of information flow¹ (springloading). However, Lie (2005) and Heron and Lie (2007) propose the “backdating hypothesis” as an alternative explanation. Lie (2005) shows that employee stock option (ESO) awards occurred on a date where the stock price had shown negative abnormal returns before the grant date and positive abnormal returns afterwards. The plausible explanation is that option grants were awarded ex-post on a day where the share price, and thereby the grant-date exercise price, was relatively low. The key difference between these studies and mine is that they examine corporate behavior around option grant dates, while my study examines firm characteristics and share price behavior around the announcement of the investigation outcome.

Another group of studies by Narayanan et al. (2006), Heron and Lie (2006, 2007) and Bernile and Jarrell (2007), try to answer the question of what motivate management to involve in backdating and find evidence to indicate that backdating was carried out with the intent of deceiving and

¹ E.g.: releasing bad news prior to the grant dates and releasing good news after the grant dates.

defrauding shareholders to enhance CEOs' compensation. Narayanan et al. (2006) find that for 47 firms implicated or under investigation for backdating, an average market value of \$510 million is lost per firm during the 11-day announcement window.

While most studies focused on management opportunism, Walker (2007) observes that backdating may serve as a method used by management to conceal the actual value of their options in order to justify options on more shares. The paper argues that backdating may have been an excellent method of delivering stealth compensation to executives. If the number of options granted is based on the calculated Black-Scholes' (1973) value of the options, backdating will result in larger and much more valuable option grants.² Hence, backdating may be linked to management's attempts to reduce the apparent value of options. Gau and Mahmudi (2008) use an efficient-contracting framework to argue that backdating is an effective approach to increase managerial incentives and reduce compensation risk for managers that are both under-diversified and risk-averse. By making their options in-the-money backdating achieves this end without losing the accounting and tax benefits of issuing in-the-money options. Wu (2008) finds that firms being investigated for backdating are larger, younger, have lower cash holdings and higher stock volatility. In addition, she finds little evidence to support managerial entrenchment and underperformance. Wu concludes that backdating is rational and cannot totally be attributed to lucky or greedy executives.

No previous literature on option backdating has ever taken real backdating culprits as sample. Most of the past literatures construct their research frameworks based on the activities done by suspected backdaters instead of the activities done by real culprits. Based on the term in law, a defendant remains innocent until it was proved to be guilty. So does a corporation. Using the sample firms that eventually turned out to be irrelevant with backdating involvement could produce biased analysis results.

Moreover, Feltham and Wu (2001) theoretically examine shareholders' relative cost of option versus stock to induce a given level of managerial effort. In their model they treat stocks as options with strike price of zero (the lowest strike price possible). Their paper improves the understanding of strike price policy in executive option grants. They find that if the manager's effort has little impact on firm risk, the number of options for inducing a given level of effort increases as the exercise price increases. Because managers are more risk-averse than shareholders, options with higher strike prices are more costly to equity holders than options with lower strike prices.

Narayanan & Seyhun (2006) document that the Sarbanes-Oxley Act of 2002 (SOX) has not been successful in fully eliminating clandestine backdating or other forms of manipulation such as springloading.

Narayanan & Seyhun (2006) document that the Sarbanes-Oxley Act of 2002 (SOX) has not been successful in fully eliminating clandestine backdating or other forms of manipulation such as springloading.

This paper makes use of the literature on measurement of corporate governance and managerial incentives. Various proxies are used to measure corporate governance based on Gompers et al. (2003), Shleifer and Vishny (1986), Jensen (1993) and Yermack (1996). In measuring CEOs' incentives this paper employs studies such as Jensen and Murphy (1990), Aggarwal and Samwick (2003), Hartzell and Starks (2003) and Yermack (1997).

DATA

Our sample of firms are those that were caught backdating and have been settled from the data

² Walker (2007) develops a model showing how backdating reduces the *apparent* value of an option to a lower *actual* value.

provided by *Risk Metrics Group*³, a non-profit organization who keeps track of most securities class actions. As of July 1, 2011, of the 39 options backdating cases that were filed as securities class actions, 36 have now reached resolution. Of the resolved cases, 8 of those cases have been dismissed and 28 have substantially or completely settled for penalties. So there are 28 samples in my study.

The sample period is from Jan of 2000 to Dec of 2004, covering the five-year period of business practice before the first case of option backdating was brought to lawsuit in 2005. For all the sample firms and matching firms, accounting data are obtained from *Compustat*, executive compensation data in *Execucomp*, board data from *IRRC*, and institutional ownership data from proxy forms of *Thomson Financial*.

HYPOTHESES AND METHODOLOGY

Focusing on the true backdaters only, this paper analyzes the characteristics of the firms that are more likely to involve in backdating behavior. In particular, the following five hypotheses are tested.

- H1: Backdating firms have lower level of operating efficiency. (Proxy: ROE, ROA)
- H2: Backdating firms have lower level of corporate governance. (Proxy: G-Index, Board size⁴, Institution ownership⁵, Percentage of share held by top 10 shareholders)
- H3: Backdating firms have higher level of bankruptcy cost. (Proxy: Leverage)
- H4: Backdating firms have less ability to increase shareholder wealth. (Proxy: Tobin-Q, annual HPR)
- H5: Backdating firms have higher level of price risk. (Proxy: RetStd)

To study the effect of SOX on different proxy, I would further test on the following hypothesis:

- H6: Backdating firms have higher level of operating efficiency after SOX. (Proxy: ROE, ROA)
- H7: Backdating firms have higher level of corporate governance after SOX. (Proxy: G-Index, Board size⁶, Institution ownership⁷, Percentage of share held by top 10 shareholders)
- H8: Backdating firms have lower level of bankruptcy cost after SOX. (Proxy: Leverage)
- H9: Backdating firms have more ability to increase shareholder wealth after SOX. (Proxy: Tobin-Q, annual HPR)
- H10: Backdating firms have lower level of price risk after SOX. (Proxy: RetStd)

³ <http://blog.riskmetrics.com/slw/options-backdating/> is the website for the list of the option backdating cases that were filed as securities action, and that have reached resolutions.

⁴ We use the size of board to measure the board effectiveness. Jensen (1993) finds that the cost of poorer communication and decision-making associated with larger groups will make a larger board less efficient. Yermack (1996) documents a clear inverse relation between firms' market valuation and the sizes of board of directors.

⁵ We use the percentage of share owned by institution shareholders to measure the level of management monitoring. Shleifer & Vishny (1986) and Hartzell & Starks (2003) show that institutional shareholders perform a strong monitoring role on managers. When institution investors have larger amounts at stake in the firm, they tend to have stronger incentives to devote resources to monitoring.

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A matched sample of 28 non-backdating, comparison-group firms is constructed to perform univariate and multivariate comparisons. The matching firms are selected from the same industry first based on four digits SIC code, then based on firm total assets as a proxy for firm size, and finally based on firm annual revenue as a proxy for rank of profitability within industry. The selection criteria's are based on the information obtained in the early of sample period.

Table 1 provides a brief summary for some data descriptions of both sample and matching firms. Total asset is the second criteria of choosing matching firms after considering similar SIC code. The mean difference of total asset between sample firms and matching firms is approximately \$127 million (which is less than 7% of the mean asset). Annual revenue is the last criteria of choosing matching firms after taking into account of SIC code and total asset. So we should not be surprised to see that the mean of annual revenue between both sample and matching firms does vary significantly. The mean annual revenue of sample firm is about \$600 million greater than that of matching firm. Mean market value of sample firm is almost double of that of matching firm.

Table 1: Summary Statistics and Comparison of key variables between Backdating firms and Non-backdating firms

Mean (Million)	Sample	Match
Total Asset	\$ 2,081.92	\$ 1,954.49
Annual Revenue	\$ 1,619.72	\$ 1,020.62
Net Income	\$ (31.97)	\$ (37.23)
Annual Dividend	\$ 2.38	\$ 7.67
Market Value	\$ 4,785.58	\$ 2,613.34

EMPIRICAL RESULTS

Table 2 shows the univariate test results for mean difference on all proxy variables between the backdating firms and the comparison group. The test is conducted on eleven variables over three sample periods, namely full sample period (from 2000 to 2004), pre-SOX period (from 2000 to July 30, 2002) and post-SOX period (from mid-2002 to end of 2004). From Panel A which records full sample data, backdating firms have significant higher market values than matching firms. That is, backdating firms record higher tobin-q ratio and market-to-book ratio. These two variables, however, have no significant difference during pre-SOX period as displayed in Panel B. That means the significant values in full sample period are mainly resulted from the high significant level of mean difference during post-SOX. Surprisingly, both full sample data and post-SOX data suggest that backdating firms performed better over long run.

We assume that the return standard deviation of backdating firms is artificially made higher by management to provide themselves grounds to increase the option value and boost the chance of backdating the stock option. According to Yermack (1997) and Aboody and Kasznik (2000), CEOs manage investors' expectations and impact stock price movements around award dates by delaying good news and rushing forward bad news. We are interested to check whether SOX helps reduce backdating behavior. If the SOX acts do help eliminate backdating activities, we expect to see a significant lower level (or a total insignificance) of price fluctuation during the post-SOX period. The results of the levels of price fluctuation are recorded in Table 2. Panel A shows that, for entire sample period, the stock volatility of true backdaters is significantly higher than that of non-backdating firms. Panel B, which records the pre-SOX data, however shows that there is no

significant difference between the sample group and the matching group. We could then suspect that the significant result displayed in Panel A must be resulted from the impact of post-SOX period, and Panel C confirms our assumption that the true backdaters still conduct option backdating even after SOX was enacted. This result is consistent with the findings of Narayanan & Seyhun (2006) in which SOX 2002 has not been successful in fully eliminating clandestine backdating or other forms of manipulation such as springloading.

Finally, we see that the only common characteristic that significantly existed and remained throughout the entire sample period is that the top 10 shareholders of matching firms significantly own more share than those of backdating firms. That means a less diversified firm could have better control in reducing backdating activity.

Table 3 presents the results of the following logistic regression model:

$$\begin{aligned} \text{Backdate} = & \beta_0 + \beta_1 * \text{DivPayout} + \beta_2 * \text{ROE} + \beta_3 * \text{ROA} + \beta_4 * \text{GIndex} + \beta_5 * \text{Board} \\ & + \beta_6 * \text{InstOwn} + \beta_7 * \text{Top10SH} + \beta_8 * \text{Leverage} + \beta_9 * \text{TobinQ} \\ & + \beta_{10} \text{AnnualHPR} + \beta_{11} \text{RetStd} + \varepsilon \end{aligned} \quad (1)$$

Equation 1 examines the factors differentiating sample group of backdating firms from the comparison group of non-backdating firms. The specification of the logistic regression model, the definition of the variables serving as proxies for each hypothesis, as well as the predicted signs of each variable, are detailed in Table 3. Panel A shows the test results of full sample period. Panel B shows the results of pre-SOX period. And Panel C shows the results of post-SOX period.

Panel A shows that the percentage of share owned by top ten shareholder (Top10SH) is a significant factor that identify a backdating firm from a nonbackdating firm. The estimate

Table 2: Univariate Analysis of Backdating versus Non-backdating Firms

The univariate analysis is based on the sample of 56 backdating firms and non-backdating firms that have received settlement sentences from security class actions.

DivPayout represents dividend payout ratio. ROE is the return on equity. ROA is return on asset. GIndex is the "Governance Index" from Gompers et al. (2003). Board is the number of director in the board of director. InstOwn represents the percentage of share owned by institution investor. Top10SH represents the percentage of share owned by the 10 largest shareholders. Leverage takes the value of total debt over total asset over the 5-year sample period. TobinQ is Tobin's q-ratio. AnnualHPR is the average annual holding period return over the 5-year sample. RetSTD is the mean of 5-year sample period annual stock return volatility.

Panel A: Variable Mean of Full period

Variable	Sample	Match	All	Mean Diff	
ROE	-0.1437	-0.2595	-0.2012	-0.1159	
TobinQ	3.4923	2.3026	2.9018	-1.1896	**
Leverage	0.4012	0.3887	0.3950	-0.0125	
ROA	-0.0726	-0.0341	-0.0535	0.0384	
M/B	3.0911	1.9139	2.5068	-1.1772	**
Annual HPR	0.2839	0.1795	0.2321	-0.1044	
RetSTD	0.2460	0.1902	0.2183	-0.0559	***
Gindex	7.2806	7.3650	7.3225	0.0844	
Board	12.66429	12.0000	12.3321	-0.6643	
InstOwn	52.09414	52.818929	52.4565	0.7248	
Top10SH	35.87357	45.291786	40.5827	9.4182	***

Panel B: Variable Mean of pre-SOX period

Variable	Sample	Match	All	Mean Diff
ROE	-0.0359	0.0354	-0.0002	0.0714
TobinQ	5.1534	3.2609	4.2071	-1.8925
Leverage	0.3604	0.3872	0.3738	0.0268
ROA	-0.0335	-0.0052	-0.0194	0.0283
M/B	4.7929	2.8737	3.8333	-1.9193
Annual HPR	0.2369	0.1673	0.2021	-0.0696
RetSTD	0.2594	0.2156	0.2375	-0.0438
Gindex	7.2500	7.1250	7.1875	-0.1250
Board	12.5893	12.0000	12.2946	-0.5893
InstOwn	51.2877	52.8189	52.0533	1.5313
Top10SH	35.8800	45.2918	40.5859	9.4118 **

Panel C: Variable Mean of post-SOX period

Variable	Sample	Match	All	Mean Diff
ROE	-0.0284	-0.4834	-0.2559	-0.4550
TobinQ	2.5490	1.7399	2.1445	-0.8091 **
Leverage	0.4282	0.3986	0.4134	-0.0296
ROA	-0.0082	-0.0327	-0.0204	-0.0245
M/B	2.1208	1.3414	1.7311	-0.7794 *
Annual HPR	0.4492	0.2772	0.3632	-0.1719
RetSTD	0.1971	0.1410	0.1690	-0.0561 ***
Gindex	7.3571	7.5000	7.4286	0.1429
Board	12.7143	12.0000	12.3571	-0.7143
InstOwn	52.6318	52.8189	52.7254	0.1871
Top10SH	35.8693	45.2918	40.5805	9.4225 **

***, **, and * indicate significance at the one, five, and ten percent level, respectively

Table 3: Logistic Regression Analysis Comparing Matched Sample of Backdating versus Non-Backdating Firms

This table depicts the results from estimating the logistic regression equation for 56 companies (28 backdating firms and 28 matching firms). Individual proxy is tested using its corresponding independent variables. Corresponding standard deviation for each estimator is reported in bracket. Panel A shows the test results of full sample period. Panel B shows the results of pre-SOX period. And Panel C shows the results of post-SOX period. The notation ***, **, and * indicate significance at the one, five, and 10 percent level, respectively.

Backdate is an indicator variable equaling zero for backdating firms and one for matching firms. DivPayout represents dividend payout ratio. ROE is the return on equity. ROA is return on asset. GIndex is the "Governance Index" from Gompers et al. (2003). Board is the number of director in the board of director. InstOwn represents the percentage of share owned by institution investor. Top10SH represents the percentage of share owned by the 10 largest shareholders. Leverage takes the value of total debt over total asset over the 5-year sample period. TobinQ is Tobin's q-ratio. AnnualHPR is the average annual holding period return over the 5-year sample. RetSTD is the mean of 5-year sample period annual stock return volatility.

$$\text{Backdate} = \beta_0 + \beta_1 * \text{DivPayout} + \beta_2 * \text{ROE} + \beta_3 * \text{ROA} + \beta_4 * \text{GIndex} + \beta_5 * \text{Board} + \beta_6 * \text{InstOwn} + \beta_7 * \text{Top10SH} + \beta_8 * \text{Leverage} + \beta_9 * \text{TobinQ} + \beta_{10} \text{AnnualHPR} + \beta_{11} \text{RetStd} + \varepsilon$$

Variable		β_0	β_1	β_2	β_3	β_4	β_5	β_6	β_7	β_8	β_9	β_{10}	β_{11}
Panel A: Full Sample	All	3.1790 (2.6800)	1.0480 (2.6700)	-0.1900 (0.5600)	-0.7350 (2.6400)	-0.0270 (0.1800)	-0.0210 (0.0900)	-0.0210 (0.0200)	0.4400 *** (0.0300)	-1.7800 (1.5200)	-0.1320 (0.1800)	0.5440 (1.7600)	-11.9400 * (6.7600)
	Operating efficiency	0.0510 (0.2800)		-0.2750 (0.4300)	1.9370 (1.8400)								
	Governance	-1.0560 ** (0.5200)				-0.0070 (0.1500)	-0.0050 (0.0700)	-0.0120 (0.1200)	0.0440 ** (0.0200)				
	Bankruptcy risk	0.0300 (0.5200)								-0.0770 (1.1400)			
	Profitability	0.8630 * (0.5000)									-0.1780 (0.1400)	-1.6590 (1.3400)	
	Price risk	1.8940 ** (0.8300)											-8.7600 ** (3.6300)
Panel B: Pre-SOX Period	All	0.8610 (2.6000)	1.7990 (2.1300)	3.5950 (3.3200)	-3.1720 (5.1900)	-0.0880 (0.1900)	-0.0070 (0.0900)	-0.0250 ** (0.0100)	0.0550 *** (0.0200)	-1.0780 (1.4700)	-0.0630 (0.0800)	0.6940 (0.8800)	-2.6660 (3.9700)
	Operating efficiency	-0.0210 (0.2800)		2.0370 (2.5000)	-1.2450 (4.0800)								
	Governance	-0.6460 (1.7800)				-0.0560 (0.1700)	-0.0080 (0.0700)	-0.0110 (0.0100)	0.0430 ** (0.0200)				
	Bankruptcy risk	-0.1640 (0.4900)								0.4390 (1.0900)			
	Profitability	0.2930 (0.3500)									-0.0760 (0.0700)	0.0660 (0.6500)	
	Price risk	0.8050 (0.6400)											-3.4160 (2.4900)
Panel C: Post-SOX Period	All	4.0290 (2.5600)	-0.3950 (3.1300)	-0.1480 (0.5300)	-7.1480 (5.3000)	-0.0740 (0.1700)	-0.0010 (0.0900)	-0.0140 (0.0200)	0.0720 ** (0.0300)	-3.7780 ** (1.9000)	-0.6540 * (0.3500)	0.9540 (1.0500)	-19.5090 ** (7.9700)
	Operating efficiency	-0.0580 (0.2700)		-0.2650 (0.4300)	-0.8360 (2.0500)								
	Governance	-1.2360 (1.5700)				0.0160 (0.1300)	-0.0030 (0.0700)	-0.0120 (0.0100)	0.0450 ** (0.0200)				
	Bankruptcy risk	0.2000 (0.5200)								-0.4840 (1.0900)			
	Profitability	1.2980 ** (0.6500)									-0.5220 * (0.3100)	-0.6480 (0.7400)	
	Price risk	1.5250 ** (0.7200)											-9.2530 ** (4.1400)

records a one-percent significant level when we run model based on Equation 1 and records five-percent significant level when the test was run across the factors of "Governance" Proxy. Over the five-year full sample period, for every one percent increase in the share holding by the major shareholder, there is a probability of 0.44%, based on complete regression model, and of 0.044%, based on partial regression on "Governance" proxy, that a firm would not backdate its stock option. Panel B and Panel C confirm that Top10SH is a time-series invariant identification factor that remains significant throughout from pre-SOX period to post-SOX period. The result also implies that SOX acts do not affect shareholder structure of backdating firms.

β_{11} , the coefficient estimate of price fluctuation, confirms the finding we previously found in Table 2 that the true backdaters still conduct option backdating even after SOX was enacted. Panel A shows that, for entire sample period, the stock volatility of true backdaters is significantly higher than that of non-backdating firms. For every one percent increase in the stock return standard deviation, there is a probability of 11.94%, based on complete regression model, and of 8.76%, based on partial regression on "Price Risk" proxy, that a firm would backdate its stock option. Panel B, which records the pre-SOX results, however shows that there is no significant difference between the sample group and the matching group. And Panel C confirms backdating activities are still prevalent among those true backdaters after SOX was enacted.

SUMMARY AND CONCLUSION

As far as research on option backdating is concerned, there is no previous literature ever applied the sample of real backdating culprits. Past literatures studies usually base on the most likely backdating traits to identify a group of suspected backdaters. Using a group of firms that were caught to have intentionally backdated and that have been settled, this paper, for the first time, studies the characteristics of true backdaters. By using real backdator sample, this research categorizes the variables that identify a backdating firm from non-backdating firms into different proxy tests.

Most literature attribute option backdating as an agency problem that managers manipulate their compensation terms for their own interest at the cost of shareholders. Meanwhile, Gao & Mahmudi (2008) provides a theoretical framework to show that option backdating is an efficient contracting. Their model suggests that backdating is an efficient way to reduce risk in a compensation contract and increase managerial incentive for those risk-averse and under-diversified managers.

This paper intends to justify the findings of Gao & Mahmudi (2008). We examine whether backdating firms have higher level of operating efficiency, higher level of corporate governance, lower level of bankruptcy risk, more ability to increase shareholder wealth, and lower level of market price risk. In particular, We study the characteristics and the operation performance of firms which were found to be guilty of intentional backdating. Besides, we compare the impacts caused by several proxy variables among different sample periods, particularly before and after SOX was enacted.

From the logistic regression of Table 3, we found that backdating firms always have higher price risk (RetStd) than non-backdating firms. To summarize this finding, we suggest two possible explanations: (1) backdating behavior via springloading activity causes higher price volatility and/or (2) higher price volatility encourages backdating behavior. We leave this unknown for future research.

Results from Table 2 and Table 3 show that higher percentage of share owned by the top ten major shareholders reduces the possibility of conducting backdating activities.

In summary, the findings based on based on "Governance" proxy and "Price Risk" proxy give some oblique supports to the proposition made by Gao and Mahmudi (2008) that backdating could be the consequence of efficient contracting that solves executive compensation problems.

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DO FOREIGN INVESTORS IMPROVE EARNINGS QUALITY?

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ABSTRACT

Using panel data, this paper investigates how foreign investors affects earnings quality of firms listed on the Korean Stock Exchange (KSE), one of the highest foreign investor capital markets in the world during the period 2000 to 2012. This paper tests earnings quality using four proxies, proposed by Jonas and Blanchet (2000): 1) persistence, 2) value relevance, 3) conservatism, and 4) accruals quality. This research finds foreign investor is positively associated with only user needs earnings quality; persistence and value relevance. This result shows that the positive impact of foreign investor on earnings quality is evident but limited.

Keywords: Foreign Investors, Foreign Directors, Earnings Quality, Panel Data, Random Effect Estimation, Korea

INTRODUCTION

Due to sustained globalization, foreign investor has been major institutional shareholders around the world. Specifically, in emerging countries, financial globalization and liberalization allow foreign investor to play a key corporate governance role. Many previous literatures on the corporate governance role of foreign investor in emerging countries focus on the significant benefits from foreign participation by effective monitoring the controlling shareholders or family ownership (Aggarwal et al., 2011). Motivated by rapid inflows of foreign investors in Korean capital market, this study examines the association between foreign investor and the earnings quality of Korean firms listed on the Korean Stock Exchange (KSE) during the sample period from 2000 to 2012. The Korean data provides a unique feature which is suited to test the effect of foreign investor on earnings quality as a proxy of financial reporting quality. First, Korea is ranked one of the highest foreign investor countries in the world. For example, as of 2013, foreign investors in the KSE reached by 35 per cent. With rapid increased equity participation of foreign investment, foreign investors demand improvements in financial reporting quality of Korean firms. Thus, the Korean sample provides a good environment for testing the effect of foreign investor on financial reporting quality resulting from foreign investment liberalization and rapid increase of foreign investor. Second, much attention has been given to the impact of foreign investor on financial performance not financial reporting quality. The main purpose of removal of foreign investor limitation of Korea after the Asian Financial Crisis in 1997 is increasing financial reporting quality with their professional knowledge and adept skill on corporate governance. Since most firms in Korea is family firm, corporate governance mechanism has not effectively operated due to controlling family ownership. Firms with large foreign investor expect to improve firm's earnings quality because of sophisticated foreign investors, generally from countries with well-developed corporate governance practices.

This study expects to contribute the literature on foreign investor as participants in the corporate governance mechanism with the necessary incentive and the expertise for monitoring (Sachs and Warner 1995; Kang and Stulz 1997; Grinblatt and Keloharju 2000) by analyzing what impact they exert upon firm's earnings quality when such investors become part of the corporate governance structure. The role of foreign investors as outside monitors of corporate governance activities, it is expected, would be even bigger in most East-Asian countries because of higher foreign investors

holdings. Despite the importance of foreign investor and earnings quality in emerging countries in recent years, empirical studies of the relationship between foreign investor and earnings quality are very limited. This study is able to fill the gap. Accordingly, this study provides important evidence that how rapidly increased foreign investor and participation in the board of directors affect earnings quality. Thus, results of this study are important not only for the Korean context, but will also contribute to understanding of foreign investors and earnings quality in other East Asian countries. Finally, this study extends prior research by comprehensively exploring the effects of foreign investors on four measures of earnings quality: persistence, value-relevance, conservatism, and accruals quality.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

EARNINGS QUALITY

Earnings quality, as a measure of financial reporting quality, is the most primary measure provided in financial statements (Lev 1989) and the most comprehensive measure for financial reporting quality (Balsam et al. 2003). In this study, earnings quality as a proxy of financial reporting quality can be assessed by two types of different approaches: user needs and shareholder/investor protection following Jonas and Blanchet (2000). In the view of user needs, the purpose of financial statements should provide useful information to users in making economic decision, thereby making a difference to their decisions. Schipper and Vincent (2003) propose that earnings persistence and value-relevance are derived from a decision usefulness perspective. Under the category of shareholder/investor protection, financial information should not mislead or confuse financial information users and should be fully and fairly disclosed because information asymmetry occurs between management and financial information users. Ball et al. (2000 and 2003) assert that conservatism captures financial statement transparency. Schipper and Vincent (2003) suggest that accruals quality is consistent with the representational faithfulness perspective. In the context of shareholder/investor protection, earnings quality can be measured by conservatism and accruals quality.

FOREIGN INVESTOR

As a large institutional investor, there are two conflicting view on the foreign investor: active monitoring and transient hypothesis. According to the active monitoring hypothesis, foreign investors play an important role in monitoring management to protect their interests (Sachs and Warner 1995) and to resolve their information asymmetry (Kang and Stulz 1997). He and Shen (2014) investigates the impact of foreign investors on the informational efficiency of share price in Japan firms and find increase in foreign investor improves share price efficiency. In emerging market study, foreign institutional investors in China significantly reduce expropriation by controlling shareholders because foreign investors are less related to political pressure and positively monitor invested firms (Huang and Zhu 2015). After the removal of foreign investor limitation in Taiwan, foreign investors contribute significant growth to Taiwan capital market and increase voluntarily disclosure of Taiwan firms (Lien, Tseng, and Wu 2013). Thus, foreign investors seem to play a valuable monitoring role as a large institutional investor. External monitoring by foreign investors as a large institutional investors can constrain the opportunities for discretionary choices of management in providing financial accounting information, thereby increasing earnings quality.

However, in the view of transient hypothesis, foreign investors are just short-term investors and thus they do not have significant incentives to monitor firm's management (Graves 1988; Kim, Krinsky, and Lee 1997). Grinblatt and Keloharju (2000) report that domestic investors are less sophisticated and take the opposite position to that of more sophisticated foreign investors in the Finnish market. They interpret that foreign investors tend to pursue momentum strategy but domestic investors seem to be contrarian. Dahlquist and Robertsson (2001) argue that the extent of the deviation for foreign investors from holding the market portfolio is mostly similar to institutional investors. They find that foreign portfolio investors underinvest in firms with a dominant owner and more invest large firms, firms paying low dividend, and firms with large cash position on their balance sheet in the Swedish

market. Choe, Kho, and Stulz (2005) find that foreign investors in Korea are more likely to be momentum investors than domestic investors. This result implies that foreign investors are sophisticated investors but transient institutional investors.

TESTABLE HYPOTHESES

In Korea, the potentially positive impact of foreign investors can be understood as a special application of the more general proposition that large outside blockholders can mitigate family managerial opportunism. because foreign investors in Korean firms are less likely to be related to controlling shareholders. In addition, foreign investors have a higher burden of monitoring costs due to greater information asymmetry (Kang and Stulz 1997; Choe et al. 2005). Foreign investors will therefore positively strengthen their monitoring function to resolve information asymmetry. in Korea, active monitoring hypothesis is more fit to foreign investor as large institutional shareholders rather than transient hypothesis. Choi et al. (2011) document that foreign block investors have a preference for firms with enhanced management accountability and take into account in selecting shares for their block investment whether a firm has strong corporate governance practice. In particular, the board seat of foreign directors is one of the major conditions for investment by foreign investment firms. Oxelheim and Randøy (2003) find that firms with foreign outside directors (Anglo-American) have a higher valuation in the Scandinavian markets since appointment of foreign outside directors (Anglo-American) provides positive signal for firms with capital market. Accordingly, foreign outside directors can increase earnings quality through participation in internal governance mechanism.

To the extent that external monitoring by foreign investors is intense and effective, the opportunities for discretionary choices in providing accounting information become more constrained. In order to protect their wealth and to reduce monitoring costs, foreign investors have stronger incentives and expertise to independently monitor firms. Thus, higher proportions of foreign investor induce firms to improve transparency and to decrease opportunistic managerial accounting choices and decisions. Based on these arguments, the following hypotheses for the association between foreign investor and earnings quality are tested:

Hypothesis One: Foreign investor is positively associated to earnings quality in Korean firms.

Hypothesis Two: Foreign directors is positively associated to earnings quality in Korean firms.

RESEARCH METHODOLOGY

SAMPLE SELECTION

This study uses Korean firms listed on the Korean Stock Exchange (KSE) for 13 years (2000-2012). All financial institutions (e.g., commercial banks, insurance firms, security brokerage firms) are excluded because accounting methods and the format of financial statements differ to other industries and are subject to different regulatory requirements. Financial statements data and stock data are obtained from OSIRIS and KIS-VALUE database respectively. Ownership data are all manually collected from business reports of each firm on DART system (<http://dart.fss.or.kr>) provided by the Korean Financial Supervisory Commission (KFSC) the equivalent to the SEC in Korea. The final sample consists of panel data of 489 non-financial Korean firms and a total of 6,357 firm-year observation over the 13 year periods. The sample firms belong to 10 industry groups based on the Korean Standard Industry Classification (SIC).

MEASURE OF EARNINGS QUALITY

Earnings quality as a proxy of financial reporting quality is classified into two categories: 1) user needs and 2) shareholder/investor protection. In the view of user needs, earnings quality is measured as persistence and value-relevance, while earnings quality under the shareholder/investor protection is measured as conservatism and accruals quality. To address the association between earnings quality and foreign investors, earnings quality is set as a dependent variable following Francis, LaFond, Olsson,

and Schipper (2004) methodology.

As earnings quality proxy of user needs, this study measures earnings persistence as the slope-coefficient (β_1) estimates of regression of current earnings on previous earnings. Earnings persistence means how much of current earnings will persist into the future and continue from period to period. In order to measure the value-relevance of accounting information, this study uses Francis et al. (2004) methodology that price as a function of both earnings and book value of equity. The explanatory power of regression (R^2) is used as the metric to measure the value-relevance of earnings and book value. As earnings quality proxy of shareholder/investor protection, This study measures conservatism using Ball and Shivakumar's (2005) accruals-based test of loss recognition model. Conservatism is measured by the incremental coefficient on the association between accruals and negative cash flows. Accruals quality is measured following Dechow and Dichev (2002). Accruals quality for each firm is measured as the absolute value of firm-level residuals ($|\varepsilon_{i,t}|$) from industry level pooled cross-sectional regression of total current accruals on lagged current, and future cash flows plus the change in revenue and gross property, plant, and equipment.

MEASURE OF FOREIGN INVESTOR AND FOREIGN DIRECTOR

Foreign investor (*FOREIGN*) is percentage of equity shares held by all foreign investors as of the end of the year, and calculated as the total number of shares held by foreign investors divided by the total number of shares outstanding. Foreign directors (*FORBOD*) is a dummy variable that indicates the presence (one) or absence (zero) of registered foreign citizens on the board.

a. CONTROL VARIABLES

The following five variables that may affect earnings quality are included to control for potential influences on earnings quality: 1) firm size (*SIZE*), 2) leverage (*LEV*), 3) firm with negative earnings (*LOSS*), 4) growth prospects (*GRW*), and 5) profitability (*ROA*).

b. EMPIRICAL MODEL

The following regression equation is formulated to examine the relationship between foreign investors and earnings quality

$$(EarningsQuality)_{i,t} = \begin{cases} \alpha + \beta_1(FOREIGN)_{i,t} + \beta_2(FORBOD)_{i,t} + \zeta_1(SIZE)_{i,t} + \zeta_2(LEV)_{i,t} + \zeta_3(GRW)_{i,t} \\ + \zeta_4(LOSS)_{i,t} + \zeta_5(ROA)_{i,t} + \sum_{t=1}^{2001-2012} \psi_t(YEAR)_t + \varepsilon_{i,t} \end{cases}$$

The primary estimation method of the regression will be pooled-OLS following Francis et al. (2004). Due to the advantage of panel data set (cross-sectional time-series), there are more reliabilities to estimate regression. The robustness check will be employed with Generalized Least Square (GLS) random-effects estimation.

EMPIRICAL RESULTS

DESCRIPTIVE STATISTICS

Table 1 shows the descriptive statistics for variables. As for earnings quality on the user needs, the mean (median) of persistence in the sample is 0.314 (0.263), and the mean (median) of value-relevance is 0.453 (0.452). Turning to earnings quality on shareholder/investor protection, conservatism has a mean (median) value of 0.193 (0.079), and accruals quality has a mean (median) value of 0.108 (0.017), respectively. Foreign investor (*FOREIGN*) has the mean value of 0.108 and the median value is 0.017. The severe difference between mean and median of foreign investor implies that foreign investor is concentrated in specific firms. This feature of foreign investor supports that foreign investors prefer large manufacturing firms with good accounting performance, lower unsystematic risk, and lower

leverage but underweight smaller and highly leveraged firms (Kang and Stulz 1997).

The large industry groups of foreign investor in this sample are chemical & rubber plastic (64 per cent) and electronics & electric manufacture (39 per cent) while the smalls are construction (4.8 per cent) and textile & footwear (6.9 per cent). This feature of foreign investor supports that foreign investors prefer large manufacturing firms with good accounting performance, lower unsystematic risk, and lower leverage but underweight smaller and highly leveraged firms (Kang and Stulz 1997, Choi et al. 2007). The mean value of outside directors who are foreigners (*FORBOD*) is 0.052. Namely, approximately 5 per cent of Korean firms appoints foreigner as outside directors on board.

Table 1: Description of the samples

Categories	Variables	Mean	Median	Min	Max	Standard Deviation
<i>Earnings Quality</i> (User Needs)	<i>PERSISTENCE</i>	0.314	0.263	-4.634	11.188	0.703
	<i>VALUE RELEVANCE</i>	0.453	0.452	0.003	0.992	0.253
<i>Earnings Quality</i> (Shareholder/Investor Protection)	<i>CONSERVATISM</i>	0.193	0.079	-77.72	54.415	6.436
	<i>ACCRUALS QUALITY</i>	0.076	0.023	1.48E-05	3.362	0.199
<i>Independent Variabls</i> (Foreign Investors)	<i>FOREIGN</i>	0.108	0.017	0.000	0.982	0.145
	<i>FORBOD</i>	0.052	0.000	0.000	1.000	0.216
<i>Control Variables</i>	<i>SIZE</i>	21.230	19.430	12.922	25.890	1.456
	<i>LEV</i>	0.546	0.495	0.017	27.478	0.729
	<i>LOSS</i>	0.229	0.000	0.000	1.000	0.412
	<i>GRW</i>	1.268	0.387	0.0002	288.00	6.912
	<i>ROA</i>	0.014	0.036	-4.724	3.599	0.231

EMPIRICAL RESULTS

Table 2 presents on the results of pooled-OLS estimates of the association between earnings quality in the view of user needs (e.g., persistence and value-relevance) and in the view of shareholder/investor protection (e.g., conservatism and accruals quality) and foreign investors variables, respectively.

Foreign investor (*FOREIGN*) is significantly positive with earnings quality on user needs. The coefficient estimates of *FOREIGN* on persistence are 0.478 at the 0.01 level. The relation between value-relevance and *FOREIGN* also has strong positive coefficient (0.193) at the 0.01 level. In the association with earnings quality on shareholder/investor protection, no positive impact between *FOREIGN* and both on conservatism and accruals quality. *FOREIGN* is not statistically significant for conservatism while the coefficient of *FOREIGN* (0.081) is strongly significant for accruals quality at 0.01 level. The positive impact of foreign investor on earnings quality supports only user needs earnings quality; persistence and value-relevance. Foreign investor does not provide evidence of a positive association with earnings quality on shareholder/investor protection. Thus, the positive effect of foreign investor on earnings quality requires more detailed interpretation. Both conservatism and accruals quality reflect a firm's potential accounting earnings change by management, while earnings persistence and value-relevance can be used to explain firm value. Accordingly, no positive impact of *FOREIGN* on earnings quality in the view of shareholder/investor protection implies that foreign investors may be less likely to actively monitor due to a lack of substantial information on firm's

management. However, the strong positive relationship between foreign investor and earnings quality on user needs might reflect foreign investors' investment preference for financially stable firms. As shown in Table 1, the severe difference between mean and median of foreign investor can indirectly support this result. Thus, the positive impact of foreign investor on earnings quality should be limitedly accepted and carefully interpreted.

Foreign outside directors (*FORBOD*) is negatively related to persistence (-0.227) and value-relevance (-0.025) at 0.01 level and 0.10 level, respectively. Foreign outside directors are expected to have independence and competency, thereby increasing earnings quality. Inconsistent with this expectation, foreign outside directors is negatively related to persistence and value relevance. In the association with earnings quality on shareholder/investor protection, *FORBOD* shows conflicting results. The coefficients of *FORBOD* on both conservatism and accruals quality are 1.078 ($p < 0.05$) and 0.103 ($p < 0.01$), respectively. Namely, foreign outside directors increase conservative accounting practice but decrease accruals quality. This conflicting result can be explained by two ways. First, foreign outside directors do not have much knowledge and information on the firm and its internal information. In addition, foreign outside directors is less likely to actively participate board meeting. For example, the Corporate Governance Service (CGS) in Korea reports that the attendance ratio of foreign outside directors on board meetings in Korean firms is 49.3 per cent as of 2007 which is below average (72 per cent). Therefore, foreign outside directors have a limited monitor influence on a firm's management. Second, foreign investors prefer financially stable firms, thus foreign outside directors also prefer conservative accounting practice to avoid investment risk. Accordingly H_2 is only applied to conservatism.

Several control variables represent significant relation with earnings quality. Firm size (*SIZE*) is significantly positive with value-relevance (0.037) at 0.10 level. In the association with conservatism and accruals quality, *SIZE* is negatively related to conservatism (-0.193) at 0.05 level and has positive values (0.070) with accruals quality at 0.01 level. This means that earnings of large firms have more value-relevance, while their earnings are more inflated or managed by management discretion due to their political power and organizational complexity (Watts and Zimmerman 1990). Leverage (*LEV*) is positively related to persistence (0.031) at 0.10. The positive association between *LEV* and persistence suggest that firms with high leverage are actively operated (Ross 1977), and debt holders of firms positively affect firm's earnings by monitoring firm's management (Choi et al. 2007). Negative earnings (*LOSS*) is positively related to both value-relevance (0.028) and accruals quality (0.042) at 0.05 level and 0.01 level, respectively. The positive association between value-relevance and *LOSS* suggests that stock price more significantly respond to negative earnings. Negative earnings increases estimated errors of accruals, thereby decreasing firm's accruals quality. The positive value of the coefficient of *LOSS* on accruals is consistent with this expectation. The coefficients of a firm's accounting profitability (*ROA*) on persistence and value-relevance have positive values (0.114 and 0.039) at 0.10 level. This association shows that high accounting profitability increases persistence

Table 2: Pooled-OLS Results

$$(EarningsQuality)_{i,t} = \begin{cases} \alpha + \beta_1(FOREIGN)_{i,t} + \beta_2(FORBOD)_{i,t} + \zeta_1(SIZE)_{i,t} + \zeta_2(LEV)_{i,t} + \zeta_3(GRW)_{i,t} \\ + \zeta_4(LOSS)_{i,t} + \zeta_5(ROA)_{i,t} + \sum_{t=1}^{2001-2012} \psi_t(YEAR)_t + \varepsilon_{i,t} \end{cases}$$

Subscripts i denotes individual firms, t time period. The dependent variable *Earnings Quality* is four measures of earnings quality: 1) Persistence, 2) Value-Relevance, 3) Conservatism, and 4) Accruals Quality. *FOREIGN* is the percentage of equity shares held by foreign investors. *FOR* is a dummy variable that indicates the presence (one) or absence (zero) of registered foreign citizens on the board. Firm size (*SIZE*) is the natural log of the total assets. Leverage (*LEV*) is total debt scaled by total assets. Growth prospects (*GRW*) is market to book ratio of equity. Firm with negative earnings (*LOSS*) is a dummy variable that takes the value of one if firm's pervious year's net income was negative, and zero otherwise. Profitability (*ROA*) is return on assets. *YEAR* is a time dummy.

Superscripts *, **, and *** indicate statistical significance at 10%, 5%, and 1% levels, respectively. (t -statistics)

		User Needs		Shareholde/Investor Protection	
Variables		Persistence	Value-Relevance	Conservatism	Accruals Quality
<i>Independent Variables</i>	FOREIGN	0.478*** (4.469)	0.193*** (4.952)	0.541 (0.543)	0.081** (2.394)
	FORBOD	-0.227*** (-3.588)	-0.025* (-1.991)	1.078** (2.208)	0.103*** (4.742)
<i>Control Variables</i>	SIZE	0.008 (0.082)	0.037* (1.475)	-0.193** (-2.096)	0.070*** (20.289)
	LEV	0.031* (1.648)	0.006 (0.949)	-0.214 (-1.226)	0.011* (1.813)
	GRW	-0.011 (-0.392)	-0.010 (-0.965)	0.269 (1.064)	-0.028** (-1.978)
	LOSS	-0.075** (-2.167)	0.028** (2.223)	-0.353** (-2.091)	0.042*** (3.477)
	ROA	0.114* (1.680)	0.039* (1.956)	-0.271 (-0.410)	-0.032 (-1.188)
<i>Constant</i>		0.391** (2.044)	0.433*** (6.185)	3.978** (2.232)	-1.312*** (-19.912)
<i>Model Fits</i>	<i>Adj R²</i>	0.021***	0.038***	0.014**	0.214***
	<i>F-Statistics</i>	5.274	9.981	3.083	100.371

As this study utilizes panel data, panel study methodology should be considered. According to Himmelberg et al. (1999), the choice of ownership structure depends on unobserved firm characteristics such as contractual, regulatory, or informational environment. With panel data, one common treatment of this unobserved time-constant effect is to use fixed-effect (FE) regression, known as least square dummy variable (LSDV) analysis (Wooldridge 2002; Baltagi 2005). Himmelberg et al. (1999) suggest that firm fixed effects estimators should be used in examination of the relationship between ownership and firm performance because the cross-sectional variation in ownership explained by unobserved firm heterogeneity is a firm fixed effect. However, Zhou (2001) argues that the firm fixed effect model in panel data is not appropriate in this setting because ownership typically changes slowly from year to year within a firm. Namely, the ownership-firm value relationship is likely to be a cross-sectional phenomenon.

Extending Zhou's (2001) argument, FE estimation is not suitable for this thesis for three reasons. First of all, FE estimation requires significant within panel (firm) variations of the variable values to produce consistent and efficient estimates. The inclusion of firm fixed effects essentially removes most cross-sectional variations of the dependent variable, thus the effect of other explanatory variables (e.g., *SIZE*, *GRW* etc.) may not be observed unless ownership and board composition measures exhibit substantial time-series variations. Thus, the FE estimates would be imprecise. Second, FE estimates may aggravate the problem of multicollinearity due to using so many dummies known as LSDV (Baltagi 2005 p.13). Third, when panel data set (observations on 489 firms over 13 years in this study) consists

of large ‘N’ (489 firms) and fixed small ‘T’ (13 years), FE estimation is inconsistent (Baltagi 2005, p.13). Moreover, for large N, FE estimation would lead to an enormous loss of degrees of freedom (Baltagi 2005, p.14). Fourth, when the sample was extracted from a large population (listed firms on the KSE in this study), individual specific constant terms regarded as randomly distributed across cross-sectional firms (Green 2000). Finally, the general way choosing between fixed and random effect is a Hausman (1978) test. However, a Hausman test is not to provide which approach is good but just to provide what they are different (Black et al. 2009). In addition, Green (2000) suggests that a Hausman test becomes problematic when use unbalanced panels, as the case in this study. Thus, this study employs random-effect regression (RE) to test robustness.

Table 3: Random Effect Estimation Results

$(EarningsQuality)_{i,t} = \begin{cases} \alpha + \beta_1(FOREIGN)_{i,t} + \beta_2(FORBOD)_{i,t} + \zeta_1(SIZE)_{i,t} + \zeta_2(LEV)_{i,t} + \zeta_3(GRW)_{i,t} \\ + \zeta_4(LOSS)_{i,t} + \zeta_5(ROA)_{i,t} + \sum_{t=1}^{2001-2012} \psi_t(YEAR)_t + \varepsilon_{i,t} \end{cases}$					
<p>Subscripts <i>i</i> denotes individual firms, <i>t</i> time period. The dependent variable <i>Earnings Quality</i> is four measures of earnings quality: 1) Persistence, 2) Value-Relevance, 3) Conservatism, and 4) Accruals Quality. <i>FOREIGN</i> is the percentage of equity shares held by foreign investors. <i>FORBOD</i> is a dummy variable that indicates the presence (one) or absence (zero) of registered foreign citizens on the board. Firm size (<i>SIZE</i>) is the natural log of the total assets. Leverage (<i>LEV</i>) is total debt scaled by total assets. Growth prospects (<i>GRW</i>) is market to book ratio of equity. Firm with negative earnings (<i>LOSS</i>) is a dummy variable that takes the value of one if firm’s pervious year’s net income was negative, and zero otherwise. Profitability (<i>ROA</i>) is return on assets. <i>YEAR</i> is a time dummy.</p> <p>Superscripts *, **, and *** indicate statistical significance at 10%, 5%, and 1% levels, respectively. (<i>t</i>-statistics)</p>					
		User Needs		Shareholde/Investor Protection	
Variables		Persistence	Value-Relevance	Conservatism	Accruals Quality
Independent Variables	FOREIGN	0.334*** (2.596)	0.205*** (5.246)	1.034 (1.071)	0.052* (1.825)
	FORBOD	-0.172** (-2.159)	-0.125** (-2.194)	1.881* (1.098)	0.119*** (4.141)
Control Variables	SIZE	0.011 (0.771)	0.005 (0.707)	-0.187* (-1.776)	0.067*** (13.228)
	LEV	0.049*** (2.663)	0.016*** (3.251)	0.146 (1.182)	0.007 (0.958)
	GRW	-0.015 (-0.637)	-0.007 (-1.182)	0.128 (0.813)	-0.126* (-1.945)
	LOSS	-0.027 (-0.828)	0.009 (1.074)	0.105 (0.478)	0.021* (1.859)
	ROA	0.154** (2.389)	0.043** (2.421)	-0.303 (-0.716)	-0.035 (-1.390)
Constants		0.172 (0.614)	0.427*** (3.720)	3.469 (1.175)	-1.233*** (-12.712)
Model Fits	Adj R ²	0.016***	0.094***	0.011*	0.104***
	F-Statistics	4.148	25.759	1.991	24.670

Table 3 represents the GLS random effect estimation. *FOREIGN* is still significantly positive with both persistence (0.334, $p < 0.01$) and value-relevance (0.205, $p < 0.01$) following the pooled-OLS. In accordance with the result of pooled-OLS, in which *FOREIGN* has positive sign with accruals quality, the coefficients of *FOREIGN* on accruals quality is significantly positive (0.052) at 0.10 level in GLS. As discussed in Pooled-OLS, the positive effect of foreign investor on earnings quality (H_1) should be carefully accepted due to no findings of the positive association with earnings quality on shareholder/investor protection (conservatism and accruals quality). The result of GLS supports this interpretation on foreign investor. The findings of *FORBOD* on earnings quality remain the same as with the result of pooled-OLS. *FORBOD* negatively affects earnings quality on user needs: persistence (-0.172 $p < 0.05$) and value-relevance (-0.125, $p < 0.05$). In the association of earnings quality on shareholder/investor protection, *FORBOD* is positive with conservatism (1.881, $p < 0.10$) and with accruals quality (0.119, $p < 0.01$). In contrast to Oxelheim and Randøy's (2003) finding for Swedish firms, foreign investors' participation on the board in Korean firms very limitedly improve earnings quality.

Overall, the major findings of the GLS random effect estimation are consistent with the results of pooled-OLS.

CONCLUSION

This study investigates the association between foreign investors and earnings quality. Four key characteristics of earnings quality are identified in two different types of approaches for assessing financial reporting quality: user needs and shareholder/investor protection. The positive impact of foreign investor on earnings quality is evident. Specifically, foreign investor is strongly significant and positively related to earnings quality on user needs perspective (persistence and value-relevance). This result suggests that as institutional investors (outside blockholders), foreign investors play an important role in monitoring management to supplement domestic institutional investor in an emerging market, consistent to Sachs and Warner (1995) and Khanna and Palepu (2000). Accordingly, the active monitoring hypothesis of foreign investors is supported in Korea. However, there is conflicting evidence of foreign investor impacting on earning quality on shareholder/investor protection (conservatism and accruals quality) and the negative effect on accruals quality in GLS. Therefore careful acceptance of active monitoring hypothesis is required. In contrast to the positive impact of foreign investors on earnings quality, foreign outside directors negatively affects earnings quality except for conservatism suggesting their insufficient knowledge of firm and firm's management and perhaps neglects of responsibilities.

In advance, there are two potential limitations related to future research. First, financial reporting quality may differ depending on the legal/judicial regime of foreign investor. Differences between common-law and code-law regimes affect the financial reporting quality and corporate governance system (Ball 2001). Thus, more efforts could also have been made to explain who foreign owners were and from where they came. Second, four proxies of earnings quality in this study do not necessarily reflect all aspects of earnings quality. In this study, the results between foreign investors and earnings quality are mixed, based on the four proxies used. Thus, the results based on the association between corporate governance and earnings quality could depend on how earnings quality is defined.

Overall, this study contributes to the literature providing important evidence that foreign investors as an outside monitor in emerging market affect earnings quality by focusing on the impact on earnings quality exerted by the foreign investors' participation in the board of directors and by major institutional shareholders.

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POLITICAL CONNECTIONS AND CONTROLLING SHAREHOLDER ON INDONESIA CONGLOMERATES

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ABSTRACT

The paper aims to explain literature review and phenomenon about relationship between of political connection and controlling shareholders with conglomerates performance listed at Indonesia Stock Exchange. This paper classifies the variables into three variables type, namely: political connection, controlling shareholders (family, institutional and state controlling) and conglomerates performance. Based on literature study and phenomenon, this paper result a model about the relationship of political connection and controlling shareholders with conglomerates performance.

Keywords : Political Connection, Controlling Shareholders, Conglomerates Performance.

INTRODUCTION

Conglomerates or multi-industry company (unrelated diversification), is a company which consists of businesses that do not have a relationship with each other (Kerr and Darroch, 2004: 21). Conglomerates position in developing countries is very strong, this is due to the concentration of economic power in the hands of a small group of large conglomerates (Claessens et al., 1999). The same conditions occurred in Indonesia, where the company's contribution to GDP Indonesian conglomerate is huge. With a small number (only 0.01%) of the total companies in Indonesia, conglomerates contributed enormously to the GDP of Indonesia at 44.4% (BPS, 2009). In fact, of the total 483 companies listed on the Stock Exchange in 2013, there were 127 companies conglomerate in the Indonesia Stock Exchange that controls more than 80% of the total market capitalization of the Stock Exchange (Data processed: IDX, 2013).

In 2005, from 339 listed companies on the Indonesia Stock Exchange there are 85 conglomerates which controls 66.27% of the total market capitalization. In 2006-2013 conglomerates dominate the market capitalization consecutively amounted to 66.27%, 61.07%, 66.77%, 64.37%, 70.16%, 73.84%, 69.17%, 65, 70% and 88.35%. In 2008, the total market capitalization and conglomerate capitalization in Indonesia decreased very significantly, as a result of the global crisis (sub-prime mortgages) which also have an impact on the Indonesian economy in particular sectors of finance (capital markets). The market capitalization conglomerate dropped from Rp 1327.7 trillion in 2007 to Rp 692.9 trillion in 2008, down by 47.8% (data processed: IDX, 2013). The phenomenon of declining capitalization of the company in 2008 when the global crisis reinforces the findings of Claessens et al. (2001) in which when a crisis occurs, diversified company has a poor performance.

In 2009, the conglomerate capitalization increase double over into 1416.7 trillion, or increased 104.46%. The increment of conglomerate capitalization in 2009 is attributed to the economic recovery after the global crisis and also supposed caused by the legislative and presidential elections in

Indonesia. The phenomenon of the increasing value of the company's shares strengthened by PT Rukun Raharja Tbk (RAJA) which is one of the conglomerate in Indonesia. RAJA increased share price almost tripled from an average of IDR 625 to 1,700 in the end of 2014. The significant increase of RAJA shares did not escape from the political connections. Commissioner RAJA in the first quarter of 2014 was Hapsoro 'Happy' Sukmonohadi (Lapkeu BEI, 2014). Hapsoro 'Happy' Sukmonohadi is the husband of the Coordinating Minister for Human Development and Culture, namely Puan Maharani and son-in-law of PDIP Chairman, Megawati Soekarnoputri. RAJA is said has political connection as affiliated with one political party in Indonesia, PDIP, where PDIP won legislative elections and the presidential election in 2014.

Entrepreneurs and corporate leaders in developing countries such as Indonesia with the level of corruption is still high, it is believed that the political connections provide lubrication to achieve the objectives of the company, so they do significant efforts to foster political connections in order to achieve the company's growth, they realized that the connection politics is a valuable resource for the company (Fisman, 2001; Li et al., 2012).

Indonesia and President Soeharto has become popular in the development political connections literature. There is strong evidence that Soeharto sought to protect companies that have political connection with the regime, especially the conglomerates. Fisman (2001) showed that at the end of the Soeharto government and bad news about the health of President Soeharto hit the Indonesian stock market, and companies are close to Soeharto suffered a negative return. As well as the performance of the company is closely connected to Soeharto experiencing deteriorating performance during the financial crisis (Leuz and Gee, 2006).

This condition is supported by the structure of corporate ownership in Indonesia, where the ownership structure of companies in Indonesia are concentrated and controlled by the family and these conditions were not escape from companies conglomerate. La Porta et al., 1999; Claessens et al., 2000; Lukviarman, 2004; Kim, 2006; and Siregar, 2006, proving that companies in Indonesia have concentrated ownership structure in the family, this is different from the ownership structure of the company in Europe and America, where the company ownership structure in America and Britain more dispersed to various ownership, but in the others well developed countries and especially developing countries are still largely controlled by the family (La Porta et al., 1999). Claessens et al., (2000) documented that Indonesia's stock market capitalization amounted to 16.6% controlled by one family, and half of the market capitalization in Indonesia is dominated by ten largest family in Indonesia.

Strong political connections and the role of the family controlling the conglomerate in Indonesia become an indication to poor corporate governance, so it is no wonder if many people have attributed the crisis in Indonesia and several other Asian countries in 1997 with poor corporate governance (Johnson et al., 2000). The global financial crisis is beginning to be felt in the US in the summer of 2007 and the impact spread to other countries in the world in mid-2008 (sub-prime mortgage crisis), also touted as evidence of disruption of the stability of the financial system as a result of weak implementation of corporate governance (Kirkpatrick, 2009).

THEORETICAL STUDY

CONGLOMERATE PERFORMANCE

According to Weston and Mansinghka (1971: 921), conglomerate are companies that perform broadly diversified program which achieved more by external mergers and acquisitions as compared to the internal development of the Company. While Kerr & Darroch (2004: 21) defined conglomerates or a multi-industry company (unrelated diversification), as a company which consists of businesses that does not have a relationship with each other.

Various studies and opinions on the conglomerates still continues to be debated, whether the conglomerate can increase firm value or actually reduce it. On the one hand, a lot of empirical research, starting with the research Reid (1968), a breakthrough Rumelt (1974) is a breakthrough learning (ground-breaking study), strategy, structure and economic performance, Melicher and Rush, 1973;

Ferris et al., 2003; Walker, 2003; Yan, 2006; as well as including several studies that followed up, more commonly found poor performance and conglomerate value. But, on the other hand a number of multi-industry companies, such as General Electric and 3M, are often used as examples of the best company management in the world (Kerr & Darroch, 2004). Weston and Mansinghka (1971) proves that not all the conglomerates have a poor performance, the results of the research indicate that companies are called conglomerate is an efficient and rational organization. This is supported by Keister (1998) which documented that the group affiliation in China linked to performance and better productivity in the latest of 1980s, other evidence supported by Hoshi et al. (1991) and Kerr & Darroch (2004). Kerr and Darroch find a group of companies that are clearly identified indicating superior performance in medians, means, measurements of upper quartile, and the average market-to-book ratio.

Performance of conglomerates in this paper uses a market-based approach (market performance) and profit-based approach (accounting performance) (Niessen & Ruenzi, 2007; Deng et al., 2012). Accounting performance is a calculation of the effectiveness and efficiency of a company within a certain time to achieve optimal results. If the performance is good, then the company has to run its operations effectively and efficiently, while market performance indicators reflect the company's expectations and the manifestation of long-term performance (Siegel & Shim, 1987; Deng et al., 2012). Market performance indicators (market performance) in proxy by Tobin's Q, and profit-based approach (accounting performance) proxied by Return on Assets (Niessen & Ruenzi, 2007; Deng et al., 2012).

POLITICAL CONNECTION

The company has political connection if one of the shareholders or the top management of the company is a member of parliament, ministers or heads of state, or who have a close relationship of them as political party officials (Faccio, 2006: 370). In countries with weak legal system and the high level of corruption, political connections are very valuable to the company, even political connections did not escape from the country that has a strong legal system such as in the USA (Goldman et al., 2009). Goldman et al. found that political connections have a broad effect on the value of the firm in the United States Presidential election of 2000 and a parliament member who won by Republican party. Faccio (2006) supports the findings of Goldman et al. (2009), using a sample of 47 countries, Faccio documented that political connections are very common in countries with high levels of perceived corruption, even companies in Indonesia ranks first as a sample that has the largest political connections with members of parliament (DPR), minister, president, and relations relatives. Strengthening results of Faccio (2006), Transparency International Institute survey documented that Indonesia is one of the 15 most corrupt countries in the 146 countries that are ranked in 2004 through Perception Corruption Index (CPI). In 2007, Indonesia ranked number increased to 145 out of 180 countries, ranked 110 out of 178 countries in 2010, ranked 100 out of 183 countries in 2011, ranking 118 out of 176 countries in 2012, and ranks 114 out of 177 in the year 2013.

The findings of the Global Corruption Barometer 2013 (GCB, 2013) puts the parliament and political parties as corrupt institution in the perception and experience of the peoples. Parliament was ranked the second most corrupt (after Police department) of 12 public institutions are assessed, while political parties is ranked 4th most corrupt. The phenomenon of political connections that occur in Indonesia at this time due to the political reform that occurred in 1998. After the reform, the number of parties increasing of the three political parties in the elections of 1997 (PPP, Golkar and PDI) to be 48 political parties at the time of the 1999 elections, 24 political parties in the elections of 2004, 38 national political parties and 6 local parties in 2009, and 12 political parties in 2014 (Indonesia Election Commission, 2014). The increasing of the number of political parties have led to a vacancy to fill the position of party leader/official. The increasing need for political figures in political parties and the absence of a ban for members of parliament (DPR/DPRD) concurrent positions as directors, commissioners and shareholders of the company (Law No. 32/2004 and Law No. 27/2009) resulted in many employers and top management companies compete to go into the politics. The businessmen still believe that political connections are still considered as a way to enable them to obtain the

privileges of the executive, legislative, and judicial.

CONTROLLING SHAREHOLDERS

Some researches showed that the conflicts occurred in companies that are in emerging markets, especially Indonesia, mostly related to the controlling shareholder and non-controlling shareholder or majority and minority shareholders (La Porta et al., 1999; Claessens et al., 2000 ; Arifin, 2003; Kim, 2006; Siregar, 2006). The number of shareholders has the most significance in monitoring the behavior of managers in the company (Shleifer and Vishny, 1986).

According to Indonesia GAAP No. 4 (revised 2009), the definition of the controlling interest in the company is the power to govern the financial and operating policies of an entity to obtain benefits from the entity. In Indonesia GAAP No. 4 (revised 2009), also stated that the control is presumed to exist when the parent owns, directly or indirectly through subsidiaries, more than half the voting power of an entity, except in rare circumstances can be clearly demonstrated that such ownership does not constitute control.

While La Porta et al. (1999) classify the company into two parts, namely companies with broad ownership and companies with the ultimate ownership. Company with extensive holdings are companies that do not have a controlling shareholder in a certain cutoff control rights. Companies with ultimate ownership is a company that has a controlling shareholder in a certain cutoff control rights. La Porta et al. (1999) classified into five controlling shareholders, namely the family, governments, financial institutions with extensive holdings, a company with extensive holdings, and the other controlling shareholders.

Claessens et al. (1999) showed that the main control of the corporate sector is in the hands of a small number of families in most countries, including Indonesia. This can be further demonstrated by a number of companies and the market value at the end of 1996 of the total assets controlled by the largest family group in each countries, 6 largest conglomerates in Indonesia, for example, is a group which is mainly controlled by Soedono Salim, but also most of which are controlled by the Soeharto family. Due to the Soeharto family has a number of other holdings. Of all the companies in the sample, the family members throughout Soeharto assets collectively controlling assets worth US \$ 24 billion. The involvement of controlling shareholder in management could be supposed to control the company's resources for personal gain and to sacrifice the interests of minority shareholders. This condition is supported by Lukviarman (2004), which examined the effect of controlling shareholders on the performance of companies on the Jakarta Stock Exchange (now Indonesia Stock Exchange) with a sample of 161 companies during the period 1994 to 2000, found about 80% of companies experiencing interference in a good family and position management commissioner or director and controlling shareholder involvement in management can not increase the value of the firm. Lukviarman (2004) concluded that the agency is an important issue in Indonesia is the agency problem between strong controlling shareholders with a weak non-controlling shareholders.

CONTROL VARIABLE

Control variables are variables that are used to support research but not hypothesized, the function of this variable is to increase the level of accuracy of the research to be conducted. In this paper, will be used as control variables are firm size, growth and firm age. Firm size is one of the forces that affect the company's ownership structure. This view is based on the fact that the size of the company is generally related to the resources used in the operation of the company. The larger the company the greater the company's capital resources and greater market value (Demsetz and Lehn, 1985). Investors saw that sales growth is a sign that the company has increased profits, it can attract investors to invest in the company and enhance shareholder value. Firm age showed that the company survive and compete, as well as take advantage of business opportunities in an economy. By knowing the age of the company, it will note the extent to which the company can survive in the business world. The longer or older the company, the more experience the company's business and the company know more the

challenges and conditions of the real business world, so any policies implemented by the company would be more optimal and by itself can improve the performance or value of the firm.

RESEARCH PROPOSITIONS

THE EFFECT OF POLITICAL CONNECTIONS TO CONGLOMERATE PERFORMANCE

Political connections proved capable of providing preferential treatment and services in a variety of access, namely: access to funding (Khawaja and Mian, 2005; Leuz and Gee, 2006; Faccio, 2006; Claessens et al., 2006; Yeh et al., 2010; Boubakri et al., 2012; Tian & Cheung, 2013), access to government procurement contracts (Goldman et al., 2009), public policy (Bunkanwanicha and Wiwattanakantang, 2009), trade Licensing (Mobarraq & Purbasari; 2005), as well as access to the company's IPO (Francis et al., 2009). The literature also showed that political connections affect the performance and value of firms (Faccio, 2006; Leuz and Gee, 2006; Fisman, 2001; Goldman et al. ; 2006; Boubakri et al., 2008; Fan and Wong, 2007; Wong, 2010; Do et al., 2013; Ang et al., 2013).

Political connections would be more valuable in conditions of high levels of corruption and weak regulation, both small companies and large companies (Faccio, 2006; Do et al., 2013). Wong (2010) proved that the company experienced an increase in ROE and MBV ratio after joining the Election Committee. This means that political connections were able to improve the company's performance as measured by ROE and MBV Ratio. Do et al. (2013) supports research Wong (2010), where political connections were able to increase the value of the firm at the state level.

Deng et al. (2012) examined the effect of diversification in the companies that have political connection and its influence on companies in China. Deng et al. (2012) found that political connections have a positive and significant impact on the performance of the company. The influence of political connections on conglomerate (unrelated diversification) is stronger than the related diversification. But conglomerate (unrelated diversification) connected politics will have a negative impact on the performance of the company in the future (long-term) that can damage the company. The company which has a market value of political connection tend to diversify in unrelated field (unrelated diversification).

Reinforce the findings of Deng et al. (2012), Ang et al. (2013) examined the companies connected to politics in Singapore. Ang et al. found that within three years after the IPO, mostly found companies that are independent of political connections. But after the sample is broken down into several categories of industry, found the director of the company which has political connection and positive and significant impact on the value of the firm.

Based on literature review and previous researches, which found more positive influence of political connections on firm value (Johnson and Mitton, 2003; Faccio, 2006; Goldman et al. ; 2006; Boubakri et al., 2007; Wong, 2010; Cooper et al. , 2010; Ang et al., 2013; Do et al., 2013). Supported by the results of Li et al. (2012) which showed a strong positive correlation between political connections and the company diversification. Political connections can be more valuable for the company diversified in unrelated fields (conglomerate). Deng et al. (2012) supports the findings of Li et al. (2012), where the performance of conglomerate (unrelated diversification) which has political connection is greater than the performance of the company which has political connection with related diversification. These results indicated that political connections to the conglomerate are more valuable than non-conglomerate. Based on empirical explanation of the foregoing, it can be made Proposition 1 as follows:

“The more political connection of the company then the higher performance of conglomerate”.

THE EFFECT OF CONTROLLING SHAREHOLDERS TO CONGLOMERATE PERFORMANCE

Claessens et al., (2000), Arifin (2003) and Siregar (2006) showed that the structure of ownership in Indonesia is concentrated with the main owner of the family. Wiwattanakantang (2001) examined the effect of controlling shareholders on the performance of companies in Thailand and proved the

existence of a controlling shareholder positive effect on the performance of the company, and companies controlled by the family provide higher performance than the other controlling shareholders. But, when the controlling shareholder involved in the management actually have a negative impact on the performance of the company.

Their involvement in the management of a controlling shareholder is supposed to control the company's resources for personal gain and sacrifice the interests of minority shareholders. This condition is supported by Lukviarman (2004), in which the controlling shareholder involvement in management can not increase the value of the firm. This phenomenon will certainly be detrimental to the interests of minority shareholders. This is in accordance with mentioned by La Porta et al. (2000), where the companies with concentrated ownership, insider is management, but in the companies with concentrated ownership the Management is no longer as insider but as a controlling shareholder. Controlling shareholder can effectively determine the policy that is run by the management. The expropriation of the controlling shareholders to minority believed to be strong in affiliated group or conglomerate structure that actively use the internal capital market compared to external capital markets (Rajan et al., 2000; Walker, 2003).

Claessens et al. (2000) mentioned that the controlling shareholder in Indonesia is controlled by the family, the state and financial institutions. Siregar (2006) supported the findings of Claessens et al. that in the cut-off 10% - 50% concentration of ownership in Indonesia respectively of 99.09%, 95.36%, 89.95%, 79.83%, and 68.04%. Family as a controlling shareholder is not only found in developing countries, but in developed countries even though there are still many companies that are controlled by the family (Faccio et al., 2001).

Arifin (2003) and Siregar (2006) also proved that the controlling shareholder of a public company majority controlled by the family of Indonesia. Arifin (2003) stated that the family is the primary owner of a public company in Indonesia. These findings are consistent with La Porta et al. (1999), and Claessens et al. (2000) which stated that the family dominates ownership of public companies.

Highly concentrated ownership structure could cause interference owners have a profound effect on the management of the company. Claessens et al. (2002) stated that 84.6% of companies in Indonesia managers appointed by the final controlling shareholder in this case is the family. Faccio et al. (2001) stated that if there is a controlling shareholder of a group of companies, the loan can be done through an affiliated company in the group of the Bank which is also included in the group (conglomeration), then debt can be a facility for the expropriation of minority shareholders.

Based on the above explanation, the role of the controlling shareholder in a company remains a puzzle, whether the role of the controlling shareholder of the effect is good, bad or even no effect on the performance of the company (Villalonga & Amit, 2006; Jiang & Peng, 2011). Some researchers said that the concentrated ownership can function as a corporate governance mechanism to monitor better management and effective that would reduce the agency conflict (Shleiver & Vishny, 1986; Grossman & Hart, 1988; Anderson & Reeb, 2003; Konijn et al., 2013), so that the controlling shareholder of a positive impact on the value of the company (Wiwattanakantang, 2001). But on the other hand, the controlling shareholder in the company and their involvement in management could be supposed to control the company's resources for personal interests and sacrifice the interests of minority shareholders, so that the controlling shareholder has no effect on the value of the firm (Lukviarman, 2004). Thus, empirically number of studies that provide no conclusive results.

Based on a literature review and previous researches regarding the controlling shareholder, especially in Indonesia, the authors formulate the following proposition 2:

“The higher proportion of family ownership, institutional ownership and state ownership, then the better performance of conglomerate”.

CONTROLLING SHAREHOLDER STRENGTHEN INFLUENCE POLITICAL CONNECTIONS TO CONGLOMERATES PERFORMANCE

The ownership structure of the company has a contribution in determining the political connections, this is evidenced by Boubakri et al. (2007), which examined 245 companies were privatized in 27 developing countries and 14 developed countries for the period 1980-2002. The results showed that political connections in the company is positively related to the rest of government ownership, and negatively related to foreign ownership.

Tian and Cheung (2013) documented the different results, where political connections in China can increase the value of firms controlled by the family, but the political connections did not significantly affect the value of firms controlled by the government. Political connections of the company controlled by the family have better access to bank loans, tax rebates and subsidies granted by the government compared to companies controlled by the government (Tian and Cheung, 2013). When the controlling shareholder is as family which has political connection, are likely to dominate the board of directors so that they can make a deal with government officials and enjoy exclusive benefits among them (Chen et al., 2011).

Based on a literature review and previous researches on the role of the controlling shareholder in a strong political connections already stated above, according to the author's knowledge that there is still little research that examines the role of the focus controlling shareholder (family, institution and country) moderating influence of political connections on the performance or value conglomerate, based on empirical explanation mentioned above and see the phenomenon of the ownership structure in Indonesia, then Proposition 3 can be made as follows:

“Political connections at the family-controlled company has more affect on the conglomerate performance than institutional or state controlled”.

RESEARCH MODEL

Based on literature studies, phenomenon and propositions are built on, it can be made a research model as follows:

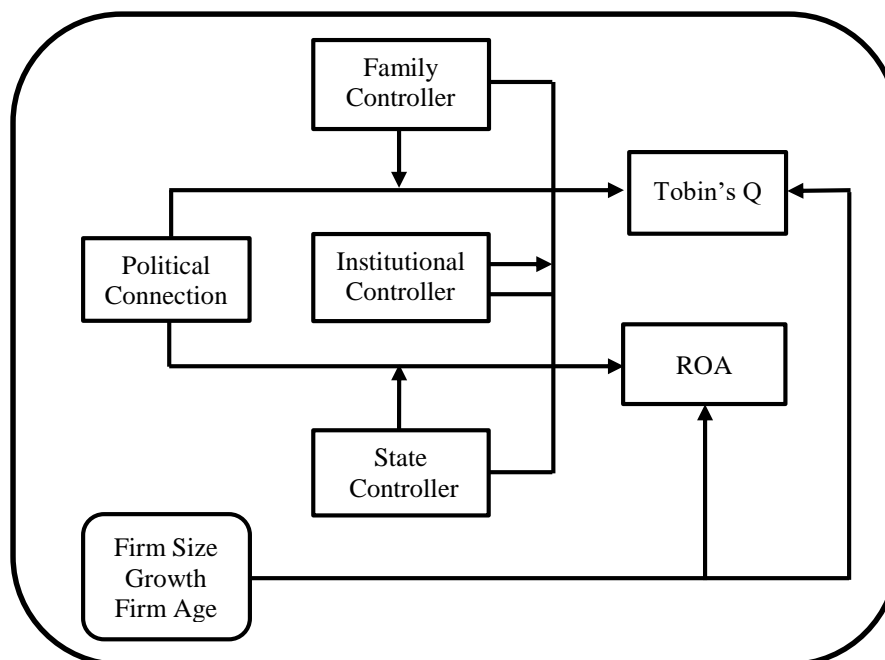


Figure 1. Research Model

Source: Based on the Theoretical Concept Development

Based on the model of the research and development of a conceptual model of the above proposition, then proposed some research hypothesis in this paper. The filing of this hypothesis used as a basis in preparing the empirical model of research based on the results of research conducted by previous researchers.

H₁ : Political connections affect positively to the conglomerates performance

H₂ : The family controlling shareholders, the institutions and the state controlling shareholders affect the conglomerate performance.

H₃ : Political connections at the family controlled has more affect on the conglomerates performance than institutional or state controlled.

To test the hypotheses of the study, we used regression model as follows:

$$Tobin's\ Q = \alpha_1 + \beta_1 Pol + \beta_2 Fam + \beta_3 Inst + \beta_4 State + \beta_5 Pol * Fam + \beta_6 Pol * Inst + \beta_7 Pol * State + \beta_8 Size + \beta_9 Growth + \beta_{10} Age + \varepsilon \dots (1)$$

$$ROA = \alpha_2 + \beta_1 Pol^2 + \beta_2 Fam^2 + \beta_3 Inst^2 + \beta_4 State^2 + \beta_5 Pol * Fam + \beta_6 Pol * Inst^2 + \beta_7 Pol * State^2 + \beta_8 Size^2 + \beta_9 Growth^2 + \beta_{10} Age^2 + \varepsilon \dots (2)$$

CONCLUSION

Conglomerates in developing countries is very strong, this is due to the concentration of economic power in the hands of a small group of large conglomerates (Claessens et al., 1999). The same condition also occurs in Indonesia, where the company's contribution to GDP Indonesian conglomerate is huge. In fact, of the total 483 companies listed on the Indonesia Stock Exchange in 2013, there were 127 conglomerates in the Indonesia Stock Exchange that controls more than 80% of the total market capitalization of Indonesia capital market (Data processed: IDX, 2013). The rise in stock prices in the conglomerate that is affiliated with a political party the winner of the election, indicating that political connections provide benefits to the company. Entrepreneurs and corporate leaders in developing countries such as Indonesia with the level of corruption is still high, it is believed that the political connections provide lubrication to achieve the objectives of the company, so they do significant efforts to foster political connections in order to achieve the company's growth, they realized that the connection politics is a valuable resource for the company (Fisman, 2001; Li et al., 2012).

This condition is supported by the structure of corporate ownership in Indonesia, where the ownership structure of companies in Indonesia are concentrated and controlled by the family and these conditions were not spared from conglomerate (La Porta et al., 1999; Claessens et al., 2000; Lukviarman, 2004; Kim, 2006; and Siregar, 2006). Strong political connections and the role of the family controlling the conglomerate in Indonesia become an indication of poor corporate governance. Based on literature studies and phenomenon, we would built propositions, research model and hypotheses.

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MACROECONOMIC FUNDAMENTAL FACTOR AGAINST PREDICTION FINANCIAL DISTRESS

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ABSTRACT

This study aims to examine the influence of macroeconomic fundamentals of the financial distress prediction. This study puts inflation would mediate the relationship between macroeconomic fundamentals, with the value of the company which will determine the company's financial distress. The main problem in this research is how to model the influence of macroeconomic fundamentals, and the value of companies in financial distress predicting the company. To answer the main problem in this research, developed several questions problems (research questions), among others: Is macroeconomic variables such as inflation affects financial distress, Is the company's value is measured by the level of leverage influence financial distress. Based on the key issues and problems question was made to determine the effect of tiered models these variables against financial distress
Keywords: Financial Distress, Macro Economics (Inflation), Corporate Value

INTRODUCTION

Competition in the world business increasingly stringent so as to make companies, especially manufacturing companies always keep trying to improve the value of the company. The increasing value of the company is preferable by shareholders due to the increased value of the company will increase the prosperity of ownership or shareholders. The existence of shareholders and management is very important role in determining the amount of benefits to be obtained. Management is very important in winning the competition, a decision taken in an expenditure managers should be considered carefully the nature and cost of the sources of funds that will be chosen, because each of these funding sources have different financial consequences. Because whatever the result of the management policies greatly affect the results of the company, while each shareholder is very much dependent on the value of the company, the decision to invest or not in the company depending on the value of the company. The higher the value the company more investors entrust their money to the company, otherwise diminishing the value of the company who attended the difficulties in implementing the obligations financialnya company, the more investors will leave Integration. The existence of shareholders and management are very important role in determining the profits that will be obtained. This means that every manufacturing company is required to be able to cope with the situation so that it can perform management functions with good management in order to be ahead of the competition (Noegler, 2006). The existence of a condition in which the company faced financial difficulties, which led to the company unable to meet its obligations, especially in terms of repayment (Ross et al, 1999), referred to financial distress. Analysis of the financial statements can be one of the tools for predicting financial difficulties (Rayenda, 2007). Through the financial statements of financial

ratios can predict whether or not the financial distress. Factors that led to the bankruptcy of the company, in principle, can be classified into 2 (two), namely internal and external factors. Internal factors are the causes which arise from within the company include financial and non-financial factors. As for the causes in detail regarding the financial field, namely: a) the debt is so large that the burden remains heavy for the company; b) for short-term liabilities over current assets is too large; c) the slow collection of accounts receivable or the number of bad-debt. ; d) errors in dividend policy; e) insufficient funds shrinkage. While non-financial are: a) an error on the founders, among other errors in the selection of managers conducted by the owner of the company or board of directors of the company, the error in the determination of the resulting product, errors in determining the amount of the company; b) the organizational structure of the company is not good; c) errors in the election of the leadership of the company. ; d) the existence of managerial incompetence, that is a mistake in implementing operational policies, excessive expansion. External factors are factors that are beyond the control of the company and outside the company, among others, the intense competition, reduced demand for the products produced, the lower the price changes in the macro economy as well as inflation, SBI interest rate and balance of payments. Companies need to analyze internal and external. Dun & Brodsteet (1991) describes the factors that cause business failure in the form of financial factors, factors of experience, negligence, disasters, fraud, corporate governance and macroeconomic factors. external factors that influence the occurrence of financial distress, namely macro-economic factors. Many companies that experience performance degradation caused by macroeconomic conditions. Subprime mortgage crisis (2008) in the United States, cause a rise in interest rates SBI impact on the increase in deposits, which in turn resulted in high interest rate credit, so investing in the company to decrease. Domestic investment decreased resulting in increased reliance on domestic businesses overseas investors, which means that an increase in the current flow of dollars into the country. The decline of the rupiah against the US dollar will trigger inflation, rising inflation is a relatively negative signal for investors, high inflation caused a decline in the profitability of a company that will reduce the distribution of dividends and the cause of public confidence to invest will be reduced, this condition will have an impact on funding activities of the company which will eventually occur financial distress and ended in bankruptcy company.

On the other hand, different results shown by Alifiah et al., (2012), in a study stating that the leverage ratio measured by using the debt ratio actually has a negative coefficient, which is contradicted by other studies such as Platt and Platt (2002) which indicates that the leverage ratio (notes payable / total assets) positive and significant impact on financial distress and Kritijadi Almilia (2003), while White and Sondhy (2003) examined the symptoms of financial distress by analyzing the company's financial fundamentals in the form of the company's financial statements through ratios financial ratio because the ratio of the financial statements is a picture of the performance achieved by the company within a certain time, because to identify the strengths and weaknesses of the company can be seen through analysis of the company's fundamental performance. According to Foster, (1968) There are four things that drive financial statement analysis conducted with the financial model form; (1) to control the effect of the difference between the amount of time, (2) To make the data meet the statistical assumptions used, (3) To investigate theories related, (4) To examine the empirical relationship between variables or certain predictions (such as bankruptcy or financial distress).

FINANCIAL DISTRESS

Financial distress or bankruptcy, Olson (1980), in her research to develop logit model (multiple logistic regression) to build a model to predict the probability of bankruptcy in bankruptcy Financial difficulties or financial distress is a condition of the company experiencing cash flow problems that resulted in a delay in payment of obligations, and on going.

Initially research was carried out by the financial distress Ramser and Foster (1931), Fitzpatrick (1932) in his research using financial ratio analysis as an indication of the failure of the company. Using univariate analysis of 13 financial ratios, results showed that there is a relationship between financial

ratios and failure of the company., Winakor and Smith (1935), Merwin (1942) which focuses on the comparison between the ratio of failed financial companies and companies that do not fail and concluded that the company's financial ratios failure is worse than companies that do not fail. The other main initiators associated with bankruptcy research firm (financial distress) is Beaver (1968) which presents a single variable approach (univariate) of discriminant analysis is then expanded to approach multiple variables (multivariate) by Altman (1968), using discriminant analysis. Model separates research group bankrupt company and group companies that are not bankrupt to predict business failure. Research results show that the model of Multiple Discriminant Analysis (MDA) using financial ratios 5 (working capital to total assets, retained earnings to total assets, earnings before interest and taxes to total assets, market value of equity to book value of total debt, and sales to total assets) has an accuracy rate of 95% one year prior to the bankruptcy. Altman, Haldeman and Narayan (1977) used Altman's model

For two decades Springate Garden (1978) using discriminant analysis in predicting financial distress bankruptcy of the company, until late 1980s appears the use of a new method of prediction is logarithmic regression that its use began to be emphasized for prediction. Ohlson in his research claims that his research is a very important discovery model. This important discovery is shown from the research models that take into account the viewpoint of when companies issue financial reports to the public. It aims to control whether the company went bankrupt before or after the date of issuance of the financial statements. Ohlson claimed that the previous model did not explicitly consider the timing issue financial statements. This model uses the data cross action financial ratio, therefore this is the logit model ignores the dynamic character of the financial ratios. Logit models belong to the class of static models. Static model is a model class that requires all companies that fail within a certain period the same process. Zmijewski (1984); LAW (1987) using ratio analysis that measures the performance leverage, profitability and liquidity of an enterprise to model predictions. Zmijewski using probit analysis applied to 40 companies that have gone bankrupt and the 800 companies that still survive at the time. The model is successfully developed, namely X-Score values obtained are divided into two categories, namely if the X-score is negative, then the company is in a healthy condition, otherwise if X-score is positive, the company is in unhealthy condition or likely to lead to bankruptcy.

Furthermore, in the following year 1993, Altman to revise the model is not only for the company went public, but also for companies that have not or do not go public. Altman revise specific model for the company that does not yet go public with 4 variables predictive model Z-score. Through this revision, the model Altman significantly expand the ability of prediction models as a simple model for companies that do not go public. Altman's model is very popular and widely used researchers in analyzing the condition of the Company using multivariate normal assumption of multivariate discriminant analysis model (MDA) popularized by Altman (1968), which still has some weaknesses that are at risk, first weakness is a predictor factors used in the multivariate normal distribution model should make the level of significance that would be bias and error in the estimated level, the model is a logit model. Logit model using cross section data of financial ratios, since it is this logit model ignores the dynamic character of financial ratios. Logit model belongs to the class of static models. Static model is a model class that requires all companies that fail within a certain period the same process. However, Shumway (2001) found a weakness of static modes namely forecasting results become biased and unkonstisten. This is because, static models assume all of the Company have the same financial distress. It is ignoring the company during a period before forecasting company that is not classified into distress when the actual circumstances of the company is in a state of distress toward, or company during a period before forecasting company classified into distress, whereas in the real situation, the company is there is the recovery period of financial distress and gradually become a healthy company. Shumway (2001) introduced the financial distress prediction model, which is free of the weaknesses that exist in the static models (including MDA and logit models). Model introduced by Shumway is Hazard Model. Hazard model is a bankruptcy prediction model that uses time varying covariates or explanatory variables that change in time, so as this model is also called the discrete-time

hazard models. Hazard models are created to take samples from the two populations are identical, using a panel of financial reporting data, and makes it possible to capture the impact of macroeconomic conditions on the financial distress of the company.

FACTORS MACROECONOMIC

As in the previously described factors that led to the bankruptcy of the company, in principle, can be classified into 2 (two), namely internal and external factors (Factor macro fundamentals). Macro fundamental factors from outside the company, such as; economic factors, environmental, political, legal, social, cultural, security, education, etc. These factors can not be controlled by the company, but its influence is very large if there is a change. Analysts and market participants generally emphasize the macro fundamental factor analysis on macroeconomic fundamentals, due to macroeconomic factors and more scalable touched directly, through the indicator of inflation, interest rates, exchange rates and economic growth. This macro conditions very helpful for market participants as investors in their investment decision. The growth of investment is determined by the volatility in inflation, interest rates, and exchange rates as well as the prospects for future economic growth. Economic theory states that, the movement of inflation, interest rates, exchange rates and economic growth has the potential to increase or decrease the investment in the real sector, and the effect this will have an impact on the performance of the capital markets, where investment in capital markets become more risk if high volatility movement. Although each company experienced a different impact on the movement of inflation, interest rates, exchange rates and economic growth, but in general, every company will feel it. Jogiyanto, (2003) says that the risk posed by the macro fundamental factor called systematic risk (systematic risk) or market risk. As a measure of systematic risk (systematic risk) is used Beta (β) market, namely beta of a security relative to market risk. The use of beta as a measure of market risk caused because beta used to measure the response of the securities on market movements, so that the statistical fluctuations of securities returns to follow the fluctuations of the market return and market characteristics determine the value of beta. If Beta greater than 1 classified as high-risk enterprise, because the market changed very little return, then return the shares will change greater. Given that it is basically investors are afraid to risk, investors will consider to invest in companies whose stocks have beta less than 1. The result was to be expected, that the market price of the company's stock will decline.

Many studies conducted to look at the performance of companies using external variables (macroeconomic fundamentals) such as; research conducted by Claude, et al (1996), Eduardus (1997) found that the negative effect on GDP and inflation but not significant, and the interest rate is not significant positive effect on the risk systematically., Suryanto (1998) found that the US dollar exchange rate and Japanese Yen significant effect on stock prices (JCI), Gudono (1999) who conducted research on the Jakarta Stock Exchange found that inflation does not significantly influence the stock price., Shin and Stulz (2000) found that changes in systematic risk associated q positively with the changes, the changes unsystematic risk is negatively related to q , and changes in total risk is negatively related to the q ., Syahib (2000) found that the index beta (systematic risk) positive and significant effect on stock prices, Hutchinson (2001), Goddess (2001) find that inflation is positive and significant effect on stock prices., Sudjono (2002) found that the exchange rate (exchange rate) and the interest rate negatively affect the stock price., Anuchitworawong (2004) in his research found that good after the (2000) as well as before the crisis (1996), business risk and significant negative effect on the performance of the company (ROA), while financial risk but not significant negative effect on corporate performance (ROA), Ritter (2004) in his research found that the per capita income growth associated negative with equity returns, and economic growth in the future is irrelevant to predicting future returns equity, Coles, et al (2004) conducted a study on the economic risk (including foreign exchange) to developing countries and developed countries found that in the capital markets of developing countries, namely emerging capital markets (emerging market), economic risk was not found significant effect on stock returns. However, the capital markets in developed countries

economic risk was found significantly positively related to stock return, Siti (2004) found that the negative effect of inflation and exchange rate but no significant effect on beta stocks, Nieuwerburgh, et al (2005) in his research found that there is a relationship between developments capital markets with economic growth, stock market capitalization move GDP growth but do not be so strong., Robiatul and Ardi (2006) found that the rate and GDP significantly and negatively related to the stock beta and Dedi and Riyatno (2007) found that the rate of positive influence and significantly to the systematic risk, and interest rate negative effect but not significant to systematic risk. In this paper uses macroeconomic analysis of inflation as a proxy In economic theory, inflation would cause the interest rate is high, meaning that if the inflation rate is high, then the interest rate is also high. Inflation is too high will cause the domestic exchange rate, so if the inflation rate is high, it will trigger the movement of the exchange rate at a higher level, and this means lowering the value of the rupiah against foreign currencies, particularly the US dollar.

INFLATION

Inflation is a factor of the macro fundamental macroeconomic indicators that describe the economic conditions that are less healthy, because the prices of goods in general increased thereby weakening the purchasing power of people. The price of goods will always experience a change, usually a rise. However, if the increase was only happens on one or two items alone is not inflation. Changes in the form of increase in the prices of goods in general and continues, in economic terms by inflation (Sadono, 2000).

If we talk about inflation, then the note is not a change in the prices of various goods, but the average change in force. Where the value or the rate of inflation describe, in one particular period (annual, monthly) on the average rise in prices in the economy (Sadono, 2000). Therefore, the higher inflation the average increase in prices of goods higher, and these conditions will lowering the investment activity. Increasing prices high will cause high inflation, these conditions will affect the increase in production costs. High production costs would lead to the selling price of goods production rose, and this will lower purchasing power because the real income of the community also declined. The reduced purchasing power resulting in reduced sales, and declining sales of the company will reduce the company's profits. If the company's profit decreases, it can be said that the performance of the company also decreased. So, as a result of which occur with high inflation is a decrease in performance of the company, because the real sector is not growing, investment to be slow, and layoffs happening everywhere, because the company is no longer able to pay the cost of labor as a result of the decline in sales, so there was a lot of unemployment. Declining corporate profits may affect stock prices, as investors will choose the investments that can provide higher returns. Consequently, if the stock price declines, the value of the company also decreased. Stock price declines occurred in accordance with the law of demand in economic theory, the fewer the number of items requested, the lower the price. Investors and prospective investors are reluctant to buy shares of the company, because the expected return is low due to reduced corporate profits This may result in the company's stock price to decline. Several studies have been done about inflation, among others, research conducted by Eduardus (1997), Gudono (1999), Sundari (2001), and Siti (2004). Eduardus (1997), found that the negative effect of inflation but not significant to systematic risk. Gudono (1999), found that inflation is not a significant influence on stock prices. Goddess (2001), found that inflasi positive and significant impact on Stock Price Index property sector. While Siti (2004), found that inflation is negative but not significant effect on beta stocks.

$$\text{Inflasi} = a_1 + \beta_i \text{SR}_i + \varepsilon$$

Where:

$$\beta_i = \text{Beta Inflation}$$

SR_i = Stock return of each company

ε = The value of errors found using $e = \sqrt{1 - R^2}$

RATE

The interest rate is the most important macroeconomic variables in between other macroeconomic variables. Its essence, is that the interest rate is the price that connects the present and the future (Mankiw, 2003), and the interest rate is the price that occurred in the money market and capital market (Nopirin, 1992). The interest rate is said to be the driving economic activity, it can be seen from the relationship between interest rates, investment and national income. The relationship is negative or opposite relationship, where when interest rates are high, then the rank of low investment, and the other way around. While the increase in investment will increase the aggregate economy and national income. The rate of interest from the standpoint of investors is income from invested funds, so that if the interest rate rises, investors prefer funds deposited in the form of deposits, as a result of investment activities in the real sector decreased. Meanwhile, from the standpoint of the company is the concept of costs due to the use of funds for the company's operation, so if the loan interest rates rise, the cost of capital is high, consequently decreasing the company's operations.

In this study, the interest rate is measured by the SBI interest rate which is the benchmark of interest rate common to both deposit rates and lending rates. to determine the interest rate of the respective companies use the approach sensitivity (Priest, 2002), which is calculated by meregres level of interest rates with stock returns over the study period to get the value of Beta (b) If its interest rate paid by banks to the public and people depositing money in the bank as the nominal interest rate, then an increase in purchasing power as the real interest rate, thus formulated into an equation called the equation Fisher (1867-1947), Fisher equation $i = r + \pi$.

Where :

i = nominal interest rate

r = real interest rates

π = inflation

EXCHANGE RATE

Mudrajat, 1996 defines the exchange rate as the price of foreign exchange is assessed with dollars Foreign exchange (forex) in this case could be US dollar, the dollar Singapore ringgit Malaysia, Britain Pouterling RCC Yuan, Japanese Yen etc. are assessed with dollars. The theory of purchasing power parity (Purchasing Power Parity), formulated the inflation rate is due to a difference abroad and within the country. If inflation abroad is higher than inflation in the country, then the exchange rate will go up or strengthened against the local currency, and vice versa. Domestic firms or local foreign trade transactions must use an international currency or currency of the country in which the export-import transactions carried out. Whereas internal economic conditions of each country is different, so the value of the different uangnyapun. To equalize the value of the different currencies, the exchange rate system applied to a transaction so that both parties get the same transaction value.

In this study the rate measured by the real value of the currency spot rate of the rupiah against US dollar (\$).

ECONOMIC GROWTH

According to Mankiw (2003), economic growth illustrates the material standard of life is increasing all the time (one year) for the life of the people in a country that is derived from the increase in revenues, thus allowing people people consume the amount of goods and services that are more numerous and diverse, Gross domestic product (GDP) is often regarded by economists as the best measure of the performance of the economy, economic growth using GDP on the basis of price kostan

or real GDP, as real GDP provides a measure of prosperity better economy than nominal GDP (Mankiw, 2003). Real GDP can be calculated mathematically through statistical equation as follows:

$$\text{GDP Rill} = (\text{Nominal GDP}) / (\text{GDP deflator})$$

Nominal GDP measures the current dollar value of the input economy. Real GDP measures output valued at constant prices. GDP deflator or the GDP deflator measures the price of output relative to its price in the base year (Mankiw, 2003). Still according to Mankiw (2003), product gross domestic product (GDP) in the national income accounts, the statistical equation is:

$$Y = C + I + G + NX.$$

Where :

C = Consumption

I = Investment

G = Government Purchase

NX = Net Exports

THE VALUE OF THE COMPANY

Modigliani and Miller (1963), explains that the company's value is the total sum of the market value of the debt to the market value of the stock. Given that the elements of the value of the company consists of the market value of debt and stock market value, then the macro fundamentals, especially macroeconomic fundamentals will determine the value of the company. The movement of stock prices will not be separated from the factor of inflation, interest rates, exchange rates and economic growth. The logic of economic theory says that the rise in inflation, interest rates and the exchange rate will reduce the rate of economic growth, increase systematic risk and lower stock prices. This is due to rising inflation, interest rates and the exchange rate is the driving force of investment. The government uses these instruments through monetary and fiscal policies to stabilize prices of essential goods and the public, and spur economic growth. Therefore, stock price movements will be influenced by changes in macroeconomic fundamentals firm value measurement in this study proxy by Tobin's Q, where elements of the calculation of Tobin's Q is the market value of common stocks and financial liabilities. As we know that the value of the company is the total value of assets owned by the company, which consists of the market value of equity and debt market value. Tobin's Q as one measure of corporate performance assessment tool has been widely used in research to determine the value of the company. Some researchers are using Tobin's Q, among others, performed by Ammihud and Lev (1981), examines the strategies of diversification and ownership structure; Mork, et al (1988), examines the managerial stock ownership; McConnell and Servaes (1990), examines the institutional ownership; Lang and Stulz (1994), examines the diversification strategy; Yermack (1996), examined the composition of the board; Khanna and Palepu (1999), examines the concentration of ownership; Shin and Stulz (2000), examines the systematic risk, non-systematic risk and total risk; Tri (2003), examines the ownership structure and diversification strategy; Villalonga and Amit (2004), examines the leverage, capital expenditure and market risk (beta); Aivazian, et al (2005), examines the investment Al Farouque, et al (2005), examines the leverage and investment; and Uchida (2006), examines the ROA and debt. Tobin, s Q as indicator measuring the value of the company has experienced many developments. Various models of computation have been developed, as proposed by Lindenberg and Ross (1981), Chung and Pruitt (1994), Shin and Stulz (2000), Clay (2001). Lindenberg and Ross (1981), formulate;

$$q = (\text{MVS} + \text{D}) / \text{TA},$$

where:

MVS = Market value of all outstanding shares, ie the firm's Stock Price *
Outstanding Shares;

TA = firm's assets, ie cash, receivables, inventory and plant book value;

D = debt, defined as:

$$D = (AVCL - AVCA) + AVLTD,$$

Where:

AVCL = Accounting value of the firm's current liabilities = Short Term Debt + Taxes Payable;

AVCA = accounting value of the firm's current assets = Cash + Receivables + Inventories;

AVLTD = accounting value of the firm's long-term debt = Long term Debt.

Chung and Pruitt (1994), formulate Tobin's Q is the ratio between the value market of the company's assets and replacement value. Q Tobin's mathematically calculated with the following formula;

$$q = (MVS + MVD) / RVA$$

Where:

MVS = Market value of all out standing stock.

MVD = Market value of all debt.

RVA = replacement value of all production capacity.

Wolfe and Sauaia (2003) said Companies with high Tobin's Q or $q > 1.00$ indicates that better investment opportunities, has a high growth potential, and indicates management is considered good with assets under management while Shin and Stulz (2000), formulate Tobin's Q is the market value of its own capital divided by assets. Thus, $q = (E + D) / A$, where: E = market value of equity; D = debt; and A = assets. Clay, while DG (2001), formulated with Tobin's Q calculating the total market value of the firm with the replacement cost of assets.

As described above, Tobin's Q as a measure of the value of the company thus illustrate that the higher Tobin's Q higher the value of the company, so that investors are increasingly attractive in the eyes of the company. Given that the data replacement cost / value is not available, this study uses the concept of the value of the company that developed by Lindenberg and Ross (1981), namely; $q = (MVS + D) / TA$.

DISCUSSION PROBLEMS

In this paper to get the results that by using analysis Macroeconomic using proxy inflation, Rate, Exchang rate, Economic growth, and the value of the company using the market value of the importance of the following equation.

$$\ln FD / (1-FD) = \beta_0 + \beta_1 Inf + \beta_2 i + \beta_3 ER + \beta_4 Y + \beta_5 VC + \varepsilon$$

Description:

$\ln FD / (1-FD)$: financial distress dummy variable (categories 1 to financial distress and 0 for non financial distress)

β_0 : Constants

β_{Inf} : Inflation

$\beta_2 i$: Rate

$\beta_3 ER$: Exchang rate

$\beta_4 Y$: Economic growth

$\beta_5 VC$: Company Value

ε : error term.

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CARE 1.0 : A CONCEPTUAL MODEL FOR INFORMATION VISUALIZATION IN ELECTRONIC HEALTH RECORDS

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ABSTRACT

Information Visualization (IV) provides visual understanding for Electronic Health Records (EHR). Doctors, Database Administrators and Visual designers are the three key stakeholders that interact with IV applications to visualize the patient's history. Existing IV solutions are derived on the basis of physician's functional requirements while no or lesser attention is given to the knowledge, skills, and assessment and future perspectives within the stakeholders. Absence of a conceptual workflow model in IV for regulating stakeholder's knowledge, skills, assessment and future perspective results in poor navigation and complex patient data exploration. This paper proposes a conceptual model that highlights evaluation of the IV applications in EHR. The proposed model CARE 1.0 provides the newer constructs for existing information seeking techniques using classification of visualization based on ethnographic and evaluation input using survey based approach from IV stakeholders in EHR. The proposed model is based on four major groups of closely related information and work flow factors such as knowledge, skills, assessment and future perspective. The proposed model for CARE 1.0 provides an initial bench mark for occluding the lesser significant details with the minimized color coding and grouping of distinct attributes with the help of asymmetric cues for highlighting. There are five hypothesis concluded based on the knowledge, skills, assessment and future perspective. The results show all the hypotheses are correct and none is rejected. This paper presents the statistical analysis of survey based questionnaire study conducted for all three stakeholders and also enlightens the inter-factors relational linkage explicitly and implicitly the association of groups with reference of its

stakeholders. This proves the relational integration of mapping of importance of different factors with preference approach for each stakeholder and helps in outlining the bench mark for future IV applications in EHR.

Keywords: Information Visualization and EHR, information visualization Model, Visualization occlusion areas, CARE 1.0, Multiple Patients data visualization.

INTRODUCTION

Information Visualization (IV) provides visual analytical support to understand discrete and continuous categorical data to its end users. IV applications help in visual analytic processes and play significant role in decision support systems. Visual interaction of data in the form of relevant information and closely related facts implies the importance of various events and distribution of significant data variables for its end users. IV uses visual languages that provide semiotics of graphics either in the form of symbols, equations, images or in mathematical notations for representation of contextual claims in any given dataset [1]. IV utilizes the high bandwidth capabilities of human preceptory system to reveal the data pattern that are occluded mostly in conventional non-visual analytic applications [1-2]. One of the primary objectives of the visual elements is to enhance and distinct the important data elements associated with significant numerical values. High value cognitive work are exposed to generate novelty in analytical means of understanding the data by simplified and fast learning visual objects. This saves the completion of task with reference to per unit to time with associated stakeholders within IV utilization domains such as social sciences disciplines and engineering fields.

Electronic Health Records (EHR) are patient

history details pertaining to demographical information, symptoms, diagnosis, treatments applied, test reports and doctor's comments with many other details [3-5]. North American health units mostly use EHR as patient data terms while European hospitals refer it as Electronic Medical Records (EMR) or patient records. EHR refers to both numerical and categorical form of patient data such as patient visits, admission dates, time of medication and blood pressure, heartbeats and pulse rate. To understand and analyse such complex and complicated information, graphical and visualization applications are used in order to facilitate physicians and associated para medical staff [6-8]. There are three different types of stakeholders named as Physicians (Primary users), Database administrators and Visual designers (Secondary users) directly involved in handling EHR dataset in hospitals and public medical facilities [9-10].

There are different medical data handling procedures and varied patient data operational procedures implemented across the different continents of the world due to socio economic factors and provision of IT versus staff resources. Some provinces in some countries provide central data repository facilities and some are still confined to hospital based localized data facility and in some cases only chronic disease related patient details are centrally registered such as in Asian countries health ministries. This results in non-uniformity and complex data formats for database administration that leads to generated different IV applications for the same patient dataset anomalies. Physicians are the first point of contact for any patient data observation across any medical database, for making any decision support policies or driving any future health policy origination based on the continuous events if observed and reported such as outbreak of AIDS, infection of some food or in case of any weather allergies alerts [7-9]. DBA and Visual Designers aid in developing visualizations acting as technical core of IT team in this process. Based on different IV applications in use by doctors, the level of knowledge set about IV, skills set to retrieve patient information, assessment of visualizations for any deficiencies and improvement areas identification and future scope recognition also varies from hospital to

hospital and country to country [3][6][8][10]. This leads to complex interpretation of same patient data in any given visualization and thus results either in wrong perception or frustration for use of such tools that are future demand based on increasing number of patients and complexity variation in disease with the passage of time. Although there are different IV tools available at the moment such as Prefuse [13], Amalga [11], TimeLines [12], EventFlow [9], CareFlow & OutFlow[14] but still the problem is still provision of simple and less expensive solution to government hospitals in third world and developing countries in a unified basis. These solutions are mostly adapted either at smaller research level or a high cost utilizing based medical health care units. Second issue is with the complex graphical user interface (GUI) and difficulty in learnability of such systems due to focus more on particular disease based or event based situation only that still create problem for the freshly endorsed or lesser IT knowledge having medical professionals working at different regions in the world. Frequent requirement analysis in conjunction with simuland raises the need of conceptual model that further requires testing for transformation into an executable model [15].

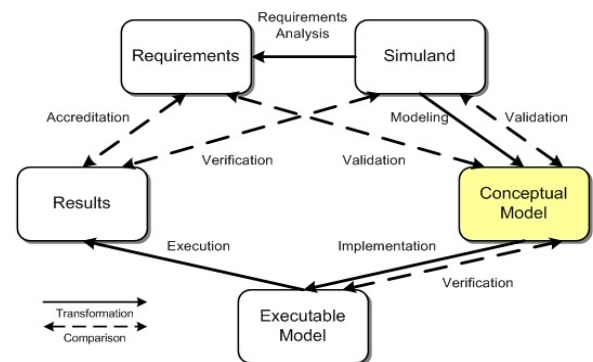


Figure 1: Modelling and Simulation Fundamentals- Theoretical Underpinning and Practical Domains [15]

Based on above discussion there is a gap for making an alignment to create a bridge between knowledge set, skills set, assessment and future perspective understanding of IT tools for all the stakeholders. Existing IV applications and tools lack the provision of easy understanding of patient information, and frequent handling of IV tools due to lack of knowledge, incomplete skills,

poor assessment abilities for faults identification and limitations for future perspectives. Our work focus on the proposed model in Figure 2 based on hypothesis as explained in next section. We have divided the survey form into four sections based on the closely related factors grouped in these four categories i.e. knowledge set, skill set, assessment and future perspective with their results have been individually determined in the related past work [5-6].

PROPOSED MODEL AND HYPOTHESIS DEVELOPMENT

In this section, a conceptual model is proposed in order to develop the relationship between four different groups of factors associated with IV stakeholders to make a liaison. Knowledge set, skills set, assessment and future perspective are associated with all three IV stakeholders as mentioned in Figure 2 of CARE1.0 as a proposed model. The details are discussed below;

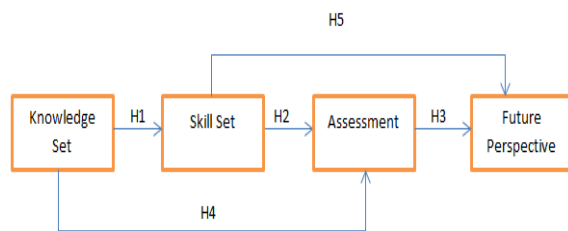


Figure 2: Proposed Conceptual Model CARE 1.0

H1: An IV knowledge set positively influences his/her IV skills set related to EHR visualization.

Richer Knowledge: Knowledge provision about patient details, disease information, recommended medicines and past laboratory test reports with physicians comments always provide better understanding. But lesser knowledge provision create problem for understanding single and multiple patient in IV. Increase in basic set of information about IV tools and its components will positively influence the skills to retrieve patient data both numerical and categorical [9][13].

H2: An IV system skill set positively influences his/her assessment of IV tools related to EHR

visualization.

Improved IV skills: Frequent use of data retrieval and execution of visual queries for analytical decisions influence positively in validating and evaluating the IV applications [15-17]. Higher the level of IV data exploration skills increase in the abilities of assessing the errors and limitations of the IV applications by its stakeholders.

H3: An IV assessment positively influences his/her individual and future perspective about IV applications related to EHR visualization.

Increased scope of use: Individual and future perspective of any IV application largely depends upon the future requirements and current deficiencies identification. So increase in assessment directly impacts the future perspectives of the IV application in EHR based on different IV queries and variation in categorical data [3][6][9].

H4: An IV knowledge set positively influences his/her IV assessment related to EHR visualization.

Positive assessment: Assessment of IV applications relates positively with actions associated with the EHR stakeholder's knowledge domain and the processes involve in increasing its quality of information [19-20]. Increase in density of aligned and filtered information as per physician request in a simplified and visually mapped metaphors will result in evolution of better future IV applications. When information is not as desired or is complex enough to provide the desired multiple patients information, it will result in poor GUI understanding leading to divert attention of the physicians and provokes frustration of its IV use [18]. Increase in information knowledge will decrease the un necessary information by occluding the visual boundaries similar as used in Knowledge Value Added (KVA) adapted for knowledge management [23]. Positive assessment arises for demand of filtered visual information based on physicians understanding about the system. As demand increases for more

complex patient information, thus will raise the positive assessment for frequent use. Lesser the use of IV tools, lesser knowledge and will lead poor assessment.

H5: An IV Skill set positively influences his/her individual and future perspective set about IV applications related to EHR visualization.

Increase of future awareness: Future perspective is referred as "detailed insight leads to re representation of target data into a changed format based on user requirements in order to aid better analysis as a future need" [21-22]. There is always newer versions of current tools come into existence on the requirement of more aligned information, spatially visualized geom for user mind mapping and to facilitate object displays with glyphs for better perception. No IV application will encompass all the needs of physicians as primary stakeholders. Newer versions, better visualization schemas and simple to use applications will always have space for future [6][22]. But this all depends once the current IV applications are being used and lead to raise the needs of latest requirements and identification of flaws and in discrepancies that will come with the skills. So use of IV applications directly relates with the utilization of tools and that directly impacts on future awareness and increase in scope.

RELATED WORK FOR EHR VISUALIZATION

A conceptual model is actually a process output from requirements, simulant that are also yield to an output to result phase and also going to be represented in above modelling process. Validation, verification, implementation and execution are four interlinked processes that are also shown in the Figure 1[15]. Leading to integrated conceptual model in EHR using IV provokes the concept of archetypes for representing workflows. Archetypes help in transformation of micro level information transformation in linear format for its end users as associated with GUI such as physicians and database such as DBA as mentioned in Figure 3[24-25]. This type of model is adapted in Denmark at a localized hospital using Domain

Object Model (DOM). But basic drawback is only oriented to a localized kind of patient history oriented environment due to variation in the procedures in different other countries.

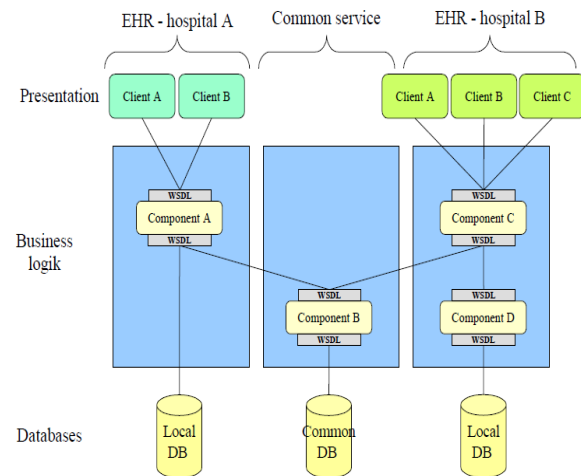


Figure 3: Three layer EHR Architecture and a component based Middle layer [25]

IV applications in EHR more focus in patient related information either based on disease, date of entry or exit and status such as dead, alive or hospitalized termed as events, sequences and some researchers termed it as dataset of information and knowledge [7][9][12]. Knowledge and skills are inter-linked with perspective users for IV systems in the EHR based on smaller clinic level to higher medical facilities hospitals so the ratio of use and proficiency varies. As smaller clinics have lesser number of patients with lesser complexities as compared to teaching hospitals where emergency units and doctors need better IV solutions for EHR provided by Microsoft and IBM or any other enterprise vendor [11][14]. But complex GUI, sophisticated operational procedures and distributed information flow from different databases make these systems viable other than their operating costs non-implacable for government teaching hospitals. This affects not only the cost budgets but also the time spent on trainings and sophistication of their use for fresh graduates having more medical knowledge and lesser IT interaction abilities.

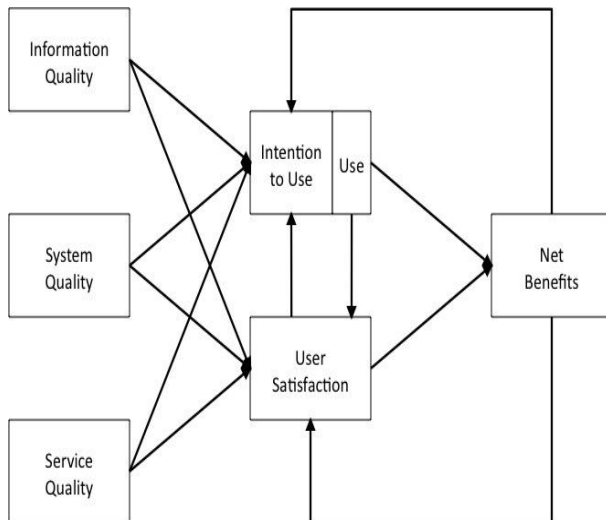


Figure 4: Updated Delone and Mclean IS Model [26]

Updated Delone and Mclean model commonly used in IS (Information Systems) process and entities flow as base line. Work flow and process flow are proposed in similar format in our model for CARE 1.0 but with knowledge, skills, assessment and future perspective with reference of IV that is slightly different domain as depicted in Figure 4 [5][8][26]. Due to absence of inter connection of requirements analysis and functional inter dependencies knowledge between different stakeholders even the above mentioned model fail to address a particular domain such as EHR visualizations.

Information Aesthetic model is another approach to connect information, interaction, data in a triangular format together to represent different features coverage in a resulting visualization but missing the future perspective [27]. Model highlights the features of its components as data, mapping techniques (involving creator and query algorithm) and the resulting visualization that are directly associated with each other as metioned in Figure 5. Similar terms are nominated in our model as knowledge instead of data, algorithm with creator as skills set , visualization focus with user as assessment. The difference is the future perspective that is incorporated for future updates as mentioned in this model.

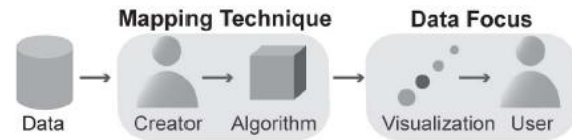


Figure 5: Information Aesthetic Model [26]

Although the same term is presented in IV Transformation Conceptual Model (TCM) [28]]. IV TCM more focus on transformation of derived data into enriched, visualized abstract form of rendering objects. Knowledge is represented by concept map using objects displays and glyphs, skills by using form, applications, design and texture while assessment and perspective with the help of data analysis and perception [3]. Different IV applications such as TimeLine [12], Prefuse [13], ProtoViz [9], Event Flow [9] and LifeFlow [22] focus more on knowledge presentation in the form of patient information with lesser intention on simplicity attributed in using skills of physicians. This generates complexity in understanding and frequent operation of IV applications in EHR and also limits these tools to only case based studies. Above mentioned tools mostly focus on knowledge orientation and visual objects mapping despite of data flow control between all stake holders [12-14][18][24].

Using Survey based approach to understand the adaption of EHR in home based and hospital based situation have been conducted in the past and possess positive and significant results by physicians [31-32]. As survey based instrument is only being used on physicians in such studies and ignoring the flow of information control with other associate stakeholders so it requires a stronger evidence to go for the similar approach with other stakeholders such as DBA and Designers on same grounds. $P < 0.04$ reported with EHR domain knowledge scores are 4.8-5 for the physicians and for the associated medical staff the perceived usefulness $P < 0.03$ reported with 3.7-4.6 [32]. Thus it shows an increase and positive co relation of EHR systems assessment by physicians but no or lesser highlights were focused on secondary stakeholders and their interaction for visual queries.

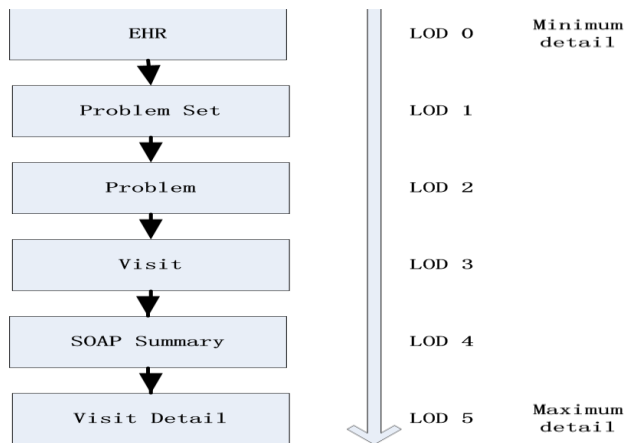


Figure 6: LOD Navigation Model of EHR [33]

EventFlow, LifeLines and LifeFlow are different EHR visualization tools for mapping patients records based on visual queries and Ben Schneiderman's mantra "Overview first, zoom and filter, then details-on-demand" [9][22][31]. Latest versions evolved with aligning the information based on events, sequences and filter on demand set to organize the patient information for doctor's knowledge but it also generated a complexity in operation and absence of significant information reported as temporal comparisons of doctor's comments. Thus requires a model representing the relationship between knowledge and assessment of IV constituent components as represented in Figure 6 such as SOAP (Subject, Object, Assessment and Plan) used in LOD (Level of Detail) navigation model for EHR [33].

With reference to above details related to past work, it is obvious to design single model that can address the four core areas such as knowledge, skills, assessment and future perspective together for IV stakeholders. Although the absence of International Disease Code (ICD) 9 and ICD 10 naming conventions to fully operational mode in health units create ambiguity such as creation of heterogeneous formats and dis oriented visualizations for single or multiple patients. But the original representation of data by zooming, filtering, aligning, details on demand and occluding the non-significant temporal events and sequences will help to simplify the visualization layout for EHR knowledge. Different Health Service providing ministries such as (NHS) UK tried to highlight the need of aligning the gaps with knowledge, skills,

assessment and future needs of EHR visualization in interacting stakeholders [14][28][34].

The model CARE 1.0 as proposed in the previous section is actually tormented with reference to previous on-going work using questionnaire based survey feedback analysis. The work focuses in IV for multiple EHR based on four groups such as knowledge, skills, assessment and future perspective related to its primary stakeholders i.e doctors and secondary stakeholders such as DBA and Visual Designers [5][6][8].

MOTIVATION FOR THE STUDY

This proposed model is an outcome of our three studies conducted on all three stakeholders such as stake holders such as Doctors, DBA and Visual Designers. The main aim behind all these three studies within three stakeholders is to find the relationship between four major constituent groups factors that are knowledge, skills, assessment and future perspective in IV applications for EHR.

This paper primarily presents the linkage relationship between interlinked areas of IV by providing a conceptual model CARE1.0 by taking feedback involving all three stakeholders [6-8]. This work relates the direct and indirect effects of knowledge with skills and assessment, skills with assessment and future perspective and assessment to future perspective of IV in EHR.

Although different GUI based applications and past proposed IV models related to EHR tried to focus on stakeholders use with the EHR knowledge and visualization skills but lesser or no attention was highlighted towards their relationship with the assessment and future perspective[3][29]. Based on discussion in the previous section, it is observed that most of the tools focused on grouped queries of IV systems based on the particular scenerios or relational effect of knowledge as data and skills as mapping versus system operations. But this leads to orient a gap of line between linkage with other two major components interlinked with all three stakeholders. One more thing that is significantly missing was involvement of secondary stakeholder's feedback that is addressed within this work to support our proposed model CARE

1.0.

METHODOLOGY FOR STUDY DETAILS

Three similar questionnaire based survey studies as QUIS were conducted among three IV stakeholders i.e. Doctors, DBA and VD, comprising of 31 different questions related to associated IV factors in EHR [5-6][8][35]. The number of participants was 138 as stratified random sample working closely with IV applications in working population of EHR based teaching hospital units with distribution of 18 doctors, 20 DBAs and 100 Visual designers. Average demographic experience of 60% participants was more than 2-3 years in IV domain of EHR. There were four major groups of questions as factors for statistical and visual analysis of gathered research data from these participants. These questions are grouped as knowledge set, skills set, assessment and individual/future perspective based on similar ranking and closer relation with each other functionally and unbiased feedback from different experts and considering past literature [8][36]. The interaction was face to face at work location between researchers and participants as to introduce about the project and assurance of their personal data security and feedback anonymity.

A sample portion of our survey is presented in Table 1 as being used for different stakeholders. Likert scale from 1-5, where 1 is representing poor or no understanding while 5 is for the expert level in that area of factor. The outcome from three studies was presented in past work [5-6][8] that mentioned the importance and relation of different factors using Excel sheets visual analysis. Although demographic information about participants were added within the survey but that was not related to scope of this research work.

Table 1. Sample Questionnaire for Stakeholders

Statement	Rating				
	5	4	3	2	1
Section : Basic knowledge about Information Visualization (IV) and tools					
How much do you know about IV tools and applications?					

How much expert are you in any existing IV tool(s) use in health care or any other similar domain?					
How much do you know about representation of data of any type in an IV tool or application?					

Knowledge, skills, assessment and future perspective are represented as broader groups and factors related to each group are accumulated as shown in Table 2. SPSS 20.0 is used for statistical analysis of data. Chronbach alpha is 0.931 to 0.977 in intergroup (calculated to measure the reliability of questions) for three sample questionnaires. Descriptive statistical tests have been conducted in addition to regression analysis for proving hypothesis H1 to H5 as mentioned in previous sections. Each IV component of model is aliased with S1, S2, S3 and S4 to better understand the analytical results. While the number of variables are marked against each factor (individual question of questionnaire) from v6-v37 as also being proposed in conventional statistical approach to handle complex data sets [37-38].

Table 2. Sample Questionnaire for Stakeholders

Variable Name	IV Model Components	Associated Factors
S1	Knowledge	<ul style="list-style-type: none"> ➤ Knowledge about tools ➤ Importance in future ➤ Features knowledge ➤ Types of EHR visualization ➤ IV data ➤ Comparison of patients data ➤ Interface understanding ➤ Cognitive skills effectiveness ➤ Icons understandability ➤ Application limitation
S2	Skills	<ul style="list-style-type: none"> ➤ Patient history visualization ➤ Data gathering and updation ➤ Multiple Visualization ➤ Information Filtering ➤ Data administration ➤ Visualization convenience ➤ Patient satisfaction

		➤ Infrastructure support
S3	Assessment	➤ Knowledge sharing ➤ Weakness of operation ➤ Analysis of data ➤ Results interpretation ➤ User friendliness
S4	Individual and Future Perspective	➤ Extra information availability ➤ Complex temporal data ➤ Level of information ➤ Ease in information sharing ➤ Friendly GUI ➤ Database limitations

Table 3. Component-wise overall Distribution (percentage) of the respondents.

Sr.	Description	dba (n=20)					doctor (n=18)					vd (n=100)				
		5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
S.2	Section II: Knowledge Set	30.0	30.0	25.0	10.0	5.0	11.1	16.7	33.3	33.3	5.6	33.0	22.0	23.0	14.0	8.0
S.3	Section III: Skills Set	30.0	35.0	20.0	15.0	0.0	11.1	22.2	16.7	38.9	11.1	19.0	23.0	30.0	28.0	0.0
S.4	Section IV: Assessment	25.0	30.0	25.0	20.0	0.0	5.6	11.1	22.2	44.4	16.7	36.0	23.0	17.0	24.0	0.0
S.5	Section V: Individual and Future Perspective	40.0	30.0	20.0	10.0	0.0	0.0	11.1	22.2	44.4	22.2	11.0	24.0	25.0	30.0	10.0

Table4. Frequency of All Participant Stakeholders for each component

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid dba	20	14.5	14.5	14.5
doctor	18	13.0	13.0	27.5
vd	100	72.5	72.5	100.0
Total	138	100.0	100.0	

Table 5. Frequency vs Knowledge Set

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Don't know	10	7.2	7.2	7.2
Not confident	22	15.9	15.9	23.2
Neutral	34	24.6	24.6	47.8
Less confident	31	22.5	22.5	70.3
More confident	41	29.7	29.7	100.0
Total	138	100.0	100.0	

Table 6. Frequency vs Skills Set

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Don't know	2	1.4	1.4	1.4
Not confident	38	27.5	27.5	29.0
Neutral	37	26.8	26.8	55.8
Less confident	34	24.6	24.6	80.4
More confident	27	19.6	19.6	100.0
Total	138	100.0	100.0	

Table 7. Frequency vs Assessment

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Don't know	3	2.2	2.2	2.2
Not confident	36	26.1	26.1	28.3
Neutral	26	18.8	18.8	47.1
Less confident	31	22.5	22.5	69.6
More confident	42	30.4	30.4	100.0
Total	138	100.0	100.0	

Table 8. Frequency vs Individual and Future Perspective

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Don't know	14	10.1	10.1	10.1
Not confident	40	29.0	29.0	39.1
Neutral	33	23.9	23.9	63.0
Less confident	32	23.2	23.2	86.2
More confident	19	13.8	13.8	100.0
Total	138	100.0	100.0	

RESULTS AND DISCUSSION

RESPONSE DISTRIBUTION OF STAKEHOLDERS TO MODEL COMPONENTS

To provide an insight of response distribution of each IV stakeholder with their number and percentage against each component of mode. There is a division made against each likert scales against each section such as knowledge, Skills, assessment and Future Perspective as percentage with valid percent, Frequency against individual variable as well as each individual components for all the components as mentioned in Table 3- Table 8.

Stakeholders vs Overall Model Distribution:

Highest value observed is by DBA against maximum confidence level 40 is reported against S5 while lowest value is 5 against knowledge set with lesser or no information. Doctors responses show only 11.1 against maximum confidence level in S2 and highest population falls in poor range with value of 44.4 for S4 and S5. In case of VD, highest value reported 36 fall in S4 but lowest value reported as 8 in S1 with poor knowledge (Table 3 & Table 4).

Frequency vs Knowledge Set

This study represents overall distribution of DBA, Doctors, and VD responses with level of confidence for using IV against knowledge (Table 5). Results clearly represent that highest

value is 29.7% reported for confident level in using IV with all stakeholders while 7.2 is the minimum value w.r.t to the sample does not know about the IV use (Table 5).

Frequency vs Skills Set:

Table 6 represents the evaluation of stakeholders response against all 1-5 levels distribution with minimum valid percent value 1.4 with scale 1 while maximum value reported against scale 27.5. With scale 5 the sample for valid percent fall at value of 19.5.

Frequency vs Assessment:

2.2 is the minimum value reported in the analysis of participant stakeholders with scale 1 while highest value falls 30.4 with more confidence level at scale 5. Average fall of population of stakeholders range from scale 2 and 4 with 26.1 and 22.5 as mentioned in Table 7.

Frequency vs Individual and Future Perspective:

Frequency values are representing the response rate for participants against Individual and Future perspective for visualization of multiple EHR. Table 8 is representing the valid percent for highest value against 29.0 against scale 2 and 10.1 against scale 1 with reference to participant's response evaluation. This is also representing that 13.8 valid percent of sample falls against confidence level of scale 5.

RELIABILITY ANALYSIS OF GROUPED AND INDIVIDUAL COMPONENT IN INSTRUMENT

Cronbach's Alpha " α " is used to measure the reliability and internal consistency for the questionnaire in the conducted survey. Standard values for Cronbach's Alpha value range should be 0.7 or above and above 0.9 is considered excellent for High-Stakes testing [37-38]. Current value is for all for components S1 to S4 (including factors) together and 31 variables are taken as factors as mentioned in previous section that is represented by N of Items in Figure 7.

Cronbach's Alpha	N of Items
.912	31

Figure 7: Chronbach's Alpha for model

31 Factors that are divided into four main components of the model as Knowledge, Skills, Assessment and Future Perspective are analysed for their reliability. Each factor has been analysed separately as well with its co relation to the other group as well. As mentioned in Table 9 there are four values for α being found against each factor comprising inside those groups. As each group is also representing the total number of questions being asked with reference to factors involved simultaneously related to knowledge, skills, assessment and Future Perspective range of values .91 to .95 is representing the reliability of questions as factors within the instrument. As knowledge and skills are considered dependant variables as with reference to hypothesis context so results show a dependency test reliability for measuring correlation between them as well.

Table 9. Alpha Reliability Analysis of Model Components

Model Components	Number of Factors	Cronbach's Alpha if Item Deleted
Section II: Knowledge Set	10	.933
Section III: Skill Set	10	.914
Section IV: Assessment	5	.953
Section V: Individual and Future Perspective	6	.946

HYPOTHESIS TESTING

The following section of this study will present the analysis of the results. Regression analysis has been used to analyze the relationship between several variables based within Knowledge, Skills, Assessment and Future perspective. Before presenting the results, it is important to present the interpretation for various correlation and regression coefficients, based on which the strength, direction and impact of a relationship can be determined. Values of R, R² and P (significance) value have been used to analyse the results.

Value of R shows the strength of the relationship.

It ranges from +1 to -1. A value of R which is closer to '+1' shows the strength of the correlation relationship, whereas a value of R closer to '0' shows a weaker or no correlation relationship, at the same time a value of R below '0' shows a negative correlation relationship. The positive or negative signs with the value show the direction of the relationship. For example a positive sign shows that if one increases the other also increases. The value of R^2 indicates the percentage of variance in dependent variable

caused by independent variable. At the same time value of P shows the significance of the relationship. If p-value is less than 0.05, then we can say that the relationship is significant [38-39].

Table 10. Model Summary

Model	R	R Square	Adjusted R Square
1	.948 ^a	.898	.896

Table 11. Coefficients of Skills, Assessment and Future Perspective

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.033	.114		.293	.770
1 Section III: Skill Set	.233	.083	.206	2.825	.005
Section IV: Assessment	.569	.066	.553	8.568	.020
Section V: Individual and Future Perspective	.231	.071	.222	3.244	.001

a. Dependent Variable: Section II: Knowledge Set

Table 12. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.926 ^a	.858	.855	.427

a. Predictors: (Constant), Section V: Individual and Future Perspective, Section IV: Assessment

Table 13. Coefficients of Assessment and Future Perspective

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.493	.111		4.460	.000
1 Section IV: Assessment	.388	.061	.427	6.411	.016

Section V: Individual and Future Perspective	.488	.061	.530	7.961	.045
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a. Dependent Variable: Section III: Skill Set

Table 14. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.873 ^a	.762	.760	.604

a. Predictors: (Constant), Section V: Individual and Future Perspective

Table 15. Coefficients of Future Perspective

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.870	.137		6.324	.000
Section V: Individual and Future Perspective	.882	.042	.873	20.855	.020

a. Dependent Variable: Section IV: Assessment

Knowledge Set vs. Skill set, Assessment and Future Perspective:

Table 10-11 are representing the results in as dependent and independent set of variables are Skills, Assessment and Future Perspectives. R value of knowledge set in Table 10 is 0.948 is representing stronger relationship with other variables i.e skills, assessment and future perspectives. Another important result is variance in knowledge with other components that is .898 that means 89.80% variance is observed by Skills, Assessment and Future perspective. Table 11 represents the skill β value as .206 and P(Sig) value as 0.005 that is lesser than 0.05 so it shows a direct relationship between knowledge and skills. 0.553 and 0.020 are observed values as in case of assessment and that is also representing a relationship with knowledge. While in case of future perspective values are 0.222 and 0.001 so it shows that there is also a relationship existing for knowledge with future perspective.

Skills vs. Assessment and Individual & Future Perspective:

Table 12-13 are representing the results in as dependent and independent set of variables are Skills, Assessment and Future Perspectives. R value of knowledge set in Table 12 is 0.926 is representing stronger relationship with other variables assessment and future perspectives. Another important result Table 13 is variance in knowledge with other components that is .858 that means 85.80% variance is observed by Assessment and Future perspective. Table 13 represents the skill β value as .427 and P(Sig) value as 0.016 that is lesser than 0.05 so it shows a direct relationship between skills and assessment. 0.530 and 0.045 for beta and P (Sig) are observed values as in case of with skills and Future perspective.

ASSESSMENT AND FUTURE PERSPECTIVE

Table 14-15 are representing the results in as dependent and independent between Assessment and Future Perspectives. R value of knowledge

set in Table 13 is 0.873 is representing stronger relationship between assessment and future perspectives. Another important result Table 15 is variance in knowledge with other components that is .762 that means 76.20% variance is observed by Assessment and Future perspective. Table 15 represents the skill β value as .873 and P(Sig) value as 0.020 that is lesser than 0.05 so it shows a direct relationship between assessment and Future perspective.

With the above mentioned details, it is proved that hypothesis H1 to H5 are proved with the assumptions as;

H1: Increase in IV knowledge is directly related with stakeholders skills and it helps in its improvement.

H2: More skills in IV will affect positively in contribution of Assessment of visualization EHR systems.

H3: Improved and higher level of assessment positively influences stakeholder's individual and future perspective about IV visualization.

H4: Increase in knowledge set contributes positively in IV assessment related to EHR visualization.

H5: Improved IV Skill set positively influences IV stakeholder's individual and future perspective set about EHR visualization as mentioned in Figure 2 in a previous section.

CONCLUSION & FUTURE WORK

This research work proves statistically that the entire five hypotheses are validated and implacable in IV related to single and multiple EHR w.r.t Doctor, DBA and Visual Designers. Knowledge and skills are directly associated with each other related to patient information and other allied details as depicted using visual objects. For higher level of information, more intricate skills are required with stakeholders that are rationally associated with details on demand. The research study conducted on three of the stakeholders proved the presented five hypotheses. Results also proved the direct relational impact of knowledge on skills and evaluation of IV tools while skills effect directly on evaluation as well as individual and future perspective in similar domain. This concludes that increase of knowledge and skills will help the

stakeholders to better evaluate and improved versions orientation for future IV applications. CARE1.0 can also be inferred that increase of IV use in EHR is directly associated with the familiarity of knowledge, skills, evaluation and future perspective among its stakeholders.

Further verification and validation of this model in future decision support applications in other temporal and categorical domains such as weather, stock market etc. is still a wider area of future research gaps. The inter relationship of stakeholder's knowledge, skills, evaluation and future perspective is also another area of research. Our model CARE 1.0 also needs to be evaluated in IV systems related to multiple format EHR systems that are currently prevailing in different regions of the world thus give a better line of future research highlights. Due to limitation of time from skilled resources, increase input from doctors will help to stimulate a categorical form of each constituent component in future IV applications for EHR.

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SEXTING AND ADOLESCENTS: A QUALITATIVE RESEARCH

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ABSTRACT

The objective of this paper is to propose a qualitative research on sexting phenomenon over Internet via social media. This study potrays the sexting phenomenon according to the adolescents' perspectives. The research obtains the reasons why phenomenon arised and solutions based on adolescents' observations and experiences. Utilizing the grounded theory approach, open-ended interviews were performed in various schools and women shelter in the state of Perlis on adolescents aged between 13 and 19 years. NVivo 10 software has been used to analyse all the collected data. The significance of this study is to reveal the new phenomenon in Malaysian context and the solutions taken by informants. The understandings of the phenomenon and its solutions will help all parties for instances adolescents, parents, teachers, handlers and other related parties to minimize sexting behavior.

Keywords: Sexting, Adolescences, Social media, Grounded theory

INTRODUCTION

Qualitative strategies share collective features as each of it would sanction for numerous elucidation of data, clarify how people in certain contexts come to appreciate, justify, carry out and administer their routine circumstances, and seek to encapsulate data within the society (Miles and Huberman, 1994). The researcher determines to adopt Grounded Theory methodology using Strauss and Corbin version. Graham and Thomas (2008) mentioned that the Straussian version procedures' of coding, earlier knowledge, usage of literature and sampling able to attain reliability and rigour in analysis. The Straussian version has more systematic approach where three phases are utilizing; Open coding, Axial coding and Selective coding processes have been explained thoroughly. The research questions may properly assist the researchers as the first interview questions from five to ten detailed questions on numerous aspects of the study issue (DiCicco-Bloom & Crabtree, 2006). Research questions tend to be outlined as open-ended responses that will gain discovery of new information (Hoepfl, 1997).

DESCRIPTIONS OF SEXTING

The definitions of sexting are coherent from researcher to researcher. As clarified by Temple, Paul, Van den Berg, Le, McElhany, & Temple (2013), sexting is a combination between the words of sex and texting, using electronic devices to create, send, and receive sexually explicit images or messages. The definition has been supported by Houck, Barker, Rizzo, Hancock, Norton, & Brown (2013), Peskin, Markham, Addy, Shegog, Thiel, & Tortolero (2013) and others. Sexting is a part of communication, vaguely defined, yet considered a social phenomenon that generally refers to transmission of sexually explicit images or messages through a cell phone (Augustina & Gomez-Duran, 2012; Mitchell, Finkelhor, & Wolak, 2012).

METHOD

Thirty seven informants ($n = 37$), fifteen male informants and twenty two female informants were picked from women shelter and three high schools participated in this study. Data were collected over a period of six months, and these were done before and after examinations periods, important school activities and school holidays. All informants were introduced by counselling teachers or handlers. Some informants recommended other students who have involved in sexting activities.

Grounded theory procedures using in this research follows the coding processes in Strauss and Corbin (1990, 1998). A standard grounded theory research will encompass 20-30 interviews that collectively the categories that develop during data analysis (Creswell, 1998). This paper shows the open coding process by using NVivo 10 Software. In open coding researcher accept and analyse word by word from the informants. Interviews were based on open ended responses to the following questions:

- (1) Are there any situations when you are most likely to sext? Are there any situations when you are most likely to be sexted?
- (2) How do you cope when you being sexted?

This paper will focus on reasons of phenomenon arised and present the solutions taken by informants in order to mitigate the sexting activities. The questions are coherent with Strauss and Corbin procedures (1998). Follow-up probe questions were include giving better understanding what research are all about. Therefore, informants will share their observations and experiences in the interview sessions.

- (1) Explain a situation and condition which influence you to sext or sexted?
- (2) Give reasons why you sext or sexted? In constructive or destructive behavior?
- (3) How do you cope or stop from being sexted?
- (4) Do you cope with active or aggressive behavior?

FINDINGS

All informants have their own account of social media such as Facebook, Twitter and other smartphones applications. They use social media as a mediator to connect with relatives, friends and new people they just met online. They make new friends with strangers which they consider as online friends without seeing face to face. The purpose of this paper is to present the motives of sexting activities and their solutions to cope with such activities. All the information reported are from the perspectives of adolescents. The researcher tends to accept all the words from informants without change to ensure that the data are genuine. According to Breckenridge, Jones, Elliot & Nicol (2012), grounded theory aims for a conceptual

understanding of social behavior. Data are accepted word by word by researcher to present actual and true adolescents' perspectives.

REASONS

The findings disclosed that there are few reasons why adolescents involved in sexting activities. The reasons are to get acquainted (M=40%, F=60%), couple affection (M=25%, F=75%), ever had sex with one or more individuals (M=67%, F=33%) and for fun (M=55%, F=45%). The informants revealed that the motives they had been sexted or the situations they are most likely to sext.

(1) To get acquainted

A woman sent her pornographic image to me. At first she said "Hye! May I know you"? After that she said "If you acquainted with me, I will send you my naked pictures". (Informant 16)

A guy from Arab country invites me to sexchat in weChat. He said "Hye! I want to know you", after that he asked me what am I doing. Suddenly, he sent naked woman photo to me. (Informant 18)

In Facebook there is a woman want to get acquainted, and then she invite to chat bad things and sent me indecent photos. (Informant 33)

(2) Couple affection

After we couple for quite a long time, he asked me to send my nude picture, he said "If you refuse, I sulked". At first I don't want but I gave him afterward. This is because I love him so much. I gave him my topless picture. Then he gave his bottom picture. (Informant 8)

My ex boyfriend sent me his nude pictures. I asked him why he sent and he replied "let it happened, we will get married one day, I love you". (Informant 9)

(3) Ever had sex

I'm not sure how my friend know this girl, she sent her nude pictures to my friend. She gave her topless and her bottom picture. My friend told me that this girl ever had sex with her ex boyfriend. She willing to do that. That's why she easily gave her nude pictures. (Informant 6)
In this school also have, where people called them 'belen'. Meaning that girls don't have virgin anymore. They easily pass on their nude pictures. (Informant 11)

(4) For fun

I received a lot of naked pictures in Whatsapp. They post in group. They just send, I think it's for fun. (Informant 4)
My male friend from this school asked my naked picture, my topless. When I asked why, he put smile emoticon, I know he ask for fun. He never asked face to face. (Informant 14)

SOLUTIONS

The informants shared how they cope when they want to minimize sexting activities. The solutions are to delete (M=57%, F=43%), to block (M=30%, F=70%) and to ignore (M=59%, 41%).

(1) Delete

I have ever received indecent photos in Twitter, don't know who. After that I deleted. (Informant 10)
I received nude photos in the Whatsapp group and they comment about the photos. I deleted. (Informant 32)

(2) Block

There is a lesbian want to add me in Facebook. At first she invite to sexchat after that she said "I like you, I want to know you". I was so angry and I block her. (Informant 12)
I know one person from other school, he invite me to sexchat in Facebook, but I block him. After that he not disturbs me anymore. (Informant 34)

(3) Ignore

I received many indecent photos in Facebook, but I just ignored. Received a lot from strangers (Informant 5)
Stranger gave me nude pictures, real picture in Facebook. Then he wrote something which I'm not sure, after that I just keep silence and ignore. (Informant 10)

SOLUTIONS

The informants shared how they cope when they want to minimize sexting activities. The solutions are to delete (M=57%, F=43%), to block (M=30%, F=70%) and to ignore (M=59%, 41%).

(4) Delete

I have ever received indecent photos in Twitter, don't know who. After that I deleted. (Informant 10)

I received nude photos in the Whatsapp group and they comment about the photos. I deleted. (Informant 32)

(5) Block

There is a lesbian want to add me in Facebook. At first she invite to sexchat after that she said "I like you, I want to know you".

I was so angry and I block her. (Informant 12)

I know one person from other school, he invite me to sexchat in Facebook, but I block him. After that he not disturbs me anymore. (Informant 34)

(6) Ignore

I received many indecent photos in Facebook, but I just ignored.

Received a lot from strangers (Informant 5)

Stranger gave me nude pictures, real picture in Facebook. Then he wrote something which I'm not sure, after that I just keep silence and ignore. (Informant 10)

CONCLUSION

Adolescents who have sex interest are more prone to choose media with sexual matter and use media as a chance to discover about sex (Collins, Martino, & Shaw, 2011). As findings show that adolescents use social media to interact and communicate about sex with friends or person they just met online. They share their sex interest more in online media but not in real situation. Informant reported that the person they know never ask when they meet face to face.

Other reports have found that adolescents who appear to create, receive, or are asked to send in media with sexual images feel upset, embarrassed, or bothered (Mitchell et al., 2012). Based on the findings, the recipient or person who had been sexted show negative emotions toward the sexting activities. This indicates that they are not comfortable and lead to anger emotions. In the respond of the negative feelings, they tend to delete, block and ignore the online sexual invitation.

This study denotes that sexting is widespread among adolescents and occurs in Malaysian context. The association with sexting, gender and emotional health are needed to be explored in order to understand more about the phenomenon and consequences.

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IMPACT OF FUEL PRICES ON PADDY FARMER'S EXPENDITURE ALLOCATION IN MALAYSIA

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ABSTRACT

The international price increase in fuel and food has direct impact on production cost and domestic prices. Fuel and fertilizers are agricultural inputs in paddy production. Fuel is needed for operating paddy machineries such as tractors and harvesters, while fertilizers are important for keeping the soil for paddy crop fertile. Increment in fuel prices will affect paddy productivity and farmer's expenditure. Farmer's expenditure includes fuel (petrol and diesel), input (fertilizer, pesticides and seed) and labour cost. (i) What is the current behaviour of paddy expenditure in 1990 to 2015? (ii) What is the future trend of farmer's expenditure under the fuel price change in 2016 to 2030? (iii) How the farmer's will decide to allocate their expenditure on inputs under the different world fuel price rate? The situation requires one to seek a methodology that could explain the complexity of the system and to establish an insight on the interrelation of the key variables. The system dynamics model provides a framework for understanding the impact of fuel price change on farmer's expenditure. Simulation result show domestic fuel price will follow world's crude oil price trend with the increasing by 40% in 2030 with the average of 3.8% per year. Meanwhile, expenditure of paddy increase by 3.8. However, the share of fuel and fertilizer is about 45% of the total expenditure as fuel price could indirectly affect the price of fertilizer. Indirect effect is greater than direct effect on farmer's expenditure.

Keywords: ICARBSS, Farmer's expenditure, Paddy production, Fuel price, System dynamics, Production cost.

INTRODUCTION

The farmer's expenditure is directly influenced by the price variation and usage level. A change in expenditure pattern is based on income behaviour, while the expenditure is

influenced by the subsidies by the government. Fuel and fertilizers are agricultural inputs in paddy production. Government decisions are treated as exogenous policy and government is not permitted to engage in any deficit spending except as an explicit policy. Desired expenditure is a function of expenditure for production which consists of input, machinery and other expenditure. Other expenditure consist labour cost and tax. While, non-production expenditure is a function of economic and living cost such as education, food, festivals and others. Expenditure for non paddy production is 30% of total income (Rashid & Dainuri, 2013). The general objective of the study is to develop a system dynamics model of the impact of fuel prices on farmer's expenditure allocation in Malaysia.

Specific objectives are:

- (i) Create a system dynamics model that is able to capture the relationship between key elements in the system; and
- (ii) Simulate a number of scenarios under the world crude oil price change.

PRODUCTION COST

Analysis on production cost in the 1970s showed an increase during the years due to higher input costs of fertilizer, urea and compound. Fertilizer subsidy scheme was introduced in 1979 where farmers have to pay only about 17 to 21% of the input material and 79 - 83% of the labor cost. After the implementation of the fertilizer subsidy scheme and direct seeding practices, the use of inputs such as fertilizer, urea, compound and amorphous showed a decrease from 20 to 4%. The use of pesticides and seeds also increased by 55% and 15% respectively since 1970, together with increment in the seeds cost (Robiah, 2003). Labor utilization is high as most planting methods are done manually, especially in land preparation and planting. If planters are tenants, they incur an additional 33 to 37% for land rental cost. Nevertheless, the percentage of labor and land rent costs continued to rise. In the 1990s, farmers had to adopt to direct seeding because it was deemed as time and cost saving. Furthermore, local labor was becoming scarce while the number of laborers from Thailand was decreasing. (Robiah, 2003).

Table 1. Production cost (RM/ha) between granary area in Malaysia (2006)

Granary Area	Items (RM/ha)				Production Cost (RM/ha)	
	Input cost	Operation cost	Land tax	Land rental	Owner	Tenant
MADA	820.59	910.84	37.98	1,106.35	1,769.41	2,837.78
KADA	529.40	1,269.40	10.00	295.45	1,808.80	2,094.25
IADA KSM	838.00	876.00	15.00	378.00	1,729.00	2,092.00
IADA PBLs	1,429.88	1,061.91	9.00	1,250.00	2,500.79	3,741.79
IADA P.P	1,635.00	1,400.00	20.00	700.00	3,055.00	3,735.00
IADA S.P	750.00	840.00	-	800.00	1,590.00	2,390.00
IADA KETARA	983.00	1,140.00	-	350.00	2,123.00	2,473.00

IADA K.S	1,079.50	1,114.38	5.00	150.00	2,198.88	2,343.88
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Source : MoA (2012a)

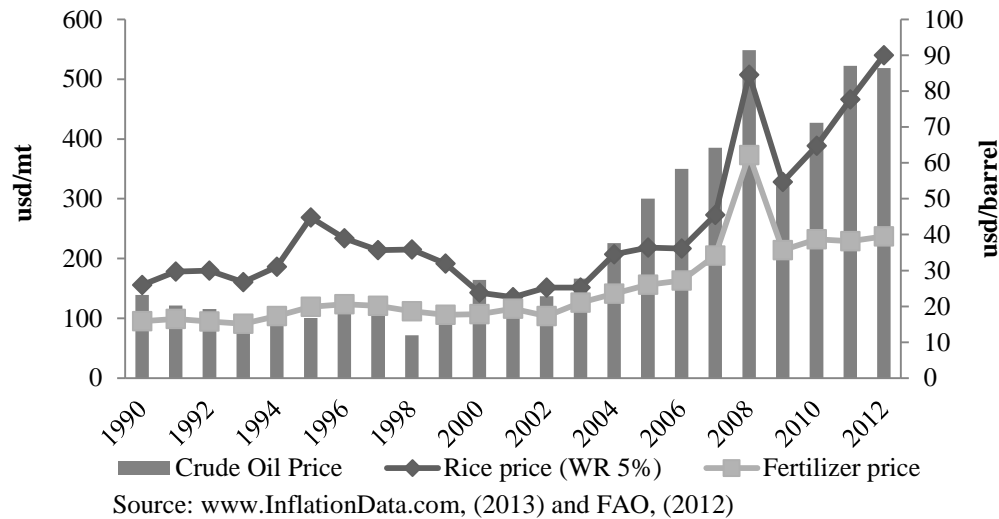
Table 1 shows a comparison between the production costs of paddy per ha by granary area for the season 2/2006. There are two production costs categories; namely paddy fields ownership and paddy fields tenancy. Production costs in IADA P.P and IADA BLS were at RM 3,055 and RM 2,500 per ha for land owners and RM 3,735 and RM3741 per ha for land tenants. Production costs in the MADA areas are among the lowest compared to other granary areas with RM 1,769 per ha for owners and RM 2,837 per ha for tenants. The average production cost in the owner category was RM 1,681 per ha while RM 3,075 per ha was recorded for the rental category.

Land rental represent the highest production cost components, ie 46.5%, followed by machinery costs (32.7%), input cost (13.7%) and labor cost (7%). Meanwhile, for owner category, machinery cost represent highest cost, ie 60.4% compared to input cost (25.3%) and labot cost (13%). In 2012, the average production cost in the owner category was RM 3,442 per ha while RM 6,322 per ha was recorded for the rental category in MADA compared to production cost in non-granary area at RM 4,259 per ha for owner category (MADA, 2012a).

The ranges of production cost to produce one kilogram of paddy is between RM0.28 and RM0.40. The share of expenditure component of paddy are; input cost (42.2%); operation and labour cost (57.8%) of total cost. The operation cost including land preparation (11.8%), seed preparation (1.9%), manuring (6.5%), pest and disease control (7.8%) and harvesting and transportation (29.5%) (Nordiana & Low, 2010). Machinery cost are devided by two cost, namely fuel cost for machinery and transportation and non-fuel cost for machine rental and machine driver which accounted 60% of total expenditure.

Increase in world crude oil prices affected petroleum based products such as diesel and petrol in the country. Prices of oil and petroleum products were determined by the world market and were beyond Malaysia control. OPEC played a crucial role in determining the world oil production level and affected the market price. Although Malaysia produced and exported oil, it is neither a member of OPEC nor a large oil producing country because Malaysia is a marginal net exporter (total imports almost equal to the total exports). In the case of high oil prices in the world market, the high price could affect the price of petroleum products such as diesel and petrol in the country (ECM, 2011).

Fig. 1: Price of crude oil (USD/barrel), fertilizer and rice (USD/MT) in world market (1990-2012)



Fuel cost is influenced by fuel price and hectareage usage level. Fuel cost consists 15% of machinery cost (own survey, 2012). A change in fuel price is based on world crude oil price behaviour and fuel subsidy. Fraction of fuel subsidy is equal to 0 to 1. If zero means no subsidy and 1 is full subsidy. A fraction of petrol is 28% while diesel at 32% with the average of fuel subsidy is 30% of total fuel use (APEREC, 2012). Increase in world fuel and food price, has direct impact on production cost and domestic prices (Fig. 1).

Table 2. Fuel price (RM/L) in ASEAN (2005-2013)

Country	Petrol RON95 (RM/L)			Diesel (RM/L)		
	2005	2012	2013	2005	2012	2013
Thailand	2.29	4.84	4.74	1.82	3	3.06
Singapore	3.76	5.26	5.56	2.36	3.97	4.32
Indonesia	1.7	2.91	3.05	0.86	2.77	3.43
Philippines	2.07	-	5.44	1.78	-	4.32
Malaysia	1.6	1.9	2.1	1.28	1.8	2.0

Source: EPU (2005) and EPU (2013)

Based on the comparison in Table 2, the oil price in Malaysia was cheaper than most of the ASEAN countries. In fact, it was among the lowest in the world. However, the diesel price differences between the countries were very tangible. As a comparison, RON 95 petrol and diesel in Malaysia were priced at RM2.10 and RM2.00 respectively, whereas the petrol and diesel in Thailand were RM4.74 and RM3.06, Singapore (RM5.56 and RM4.32), Indonesia (RM3.05 and RM3.43) and the Philippines (RM5.44 and RM4.32) for every liter petrol and diesel. Malaysia was ranked as the 26th world's oil producers (EIA 2013). Meanwhile, the fuel price in Malaysia was the eighth lowest in the world with RM23.7 billion in fuel subsidy

in 2012. The government subsidized RM0.83 for every liter of RON95 petrol and RM1.00 for every liter of diesel, which would cost the government RM24.8 billion in 2013 (“Malaysian fuel price 8th lowest in world”, 2013).

Table 3. Retail price (RM/L) of petrol RON95 in Malaysia (2005-2013)

Cost (RM/L)	2005	2009	2013
(+) Production cost	1.64	1.24	2.83
(+) Alpha parameter (buffer)	0.05	0.05	0.05
(+) Operation cost	0.09	0.09	0.09
(+) Margins for oil producers	0.04	0.05	0.05
(+) Margins for oil dealers	0.08	0.12	0.12
Actual price	2.48	2.14	2.93
(-) Sales taxes	0.58	0.58	0.58
(-) Subsidy	0.24	0	0.25
Retail price	1.62	1.56	2.1

Source: EPU (2013)

Table 3 shows the calculation of retail prices for RON95 petrol in Malaysia. Diesel and petrol are subject to a sales tax of 19.64 cents/L for diesel and 58.62 cents/L for petrol. The price setting mechanism for petroleum products was established in 1983. The formula used to calculate the fuel price is called the Automatic Pricing Mechanism (APM) and its function is to stabilize the price of petrol and diesel in the country via a variable amount sales tax and subsidy. As a result, the retail price only has to be changed if the price difference exceeds the threshold of the tax and subsidy at the discretion of the government.

The Government ensured low prices for petroleum products by providing sales tax exemption and subsidies for all petroleum products. Sales tax was introduced in 1983 is one of the sources for government’s revenue as well as a price stabilizer for petroleum products. Therefore, to reduce the retail price of petroleum products, the first step taken by the government was to provide a sales tax exemption on the product that caused a loss of revenue to the government. In recent years, the amount of tax exemption had increased. For example, in 1993, revenue loss was RM190.8 million but increased to RM2.6 billion in 1999 and further increased to RM7.9 billion in 2005. Sales tax exemptions on diesel began in October 1999 following the increasing price of diesel and petrol since June of 2004 (EPU, 2005).

METHODOLOGY

We propose to apply system dynamics methodology developed by Forrester (1950) starting from problem articulation over the design of a dynamic hypothesis, formulation, and testing to evaluation essentially applying the best practices of system dynamics modelling (Martinez-Moyano and Richardson, 2013). System dynamics is a computer-aided approach to policy analysis and design. It applies to dynamic problems arising in complex social,

managerial, economic, literally any dynamic systems characterized by interdependence, mutual interaction, information feedback, and circular causality.

In system dynamics, a system is represented by feedback loops which simulate the dynamic behaviour of the system. The problem or system is first represented as a stock and flow diagram in this study. The system dynamics modelling is conducted in two phases: model building and model testing. The best way to undertake the system dynamics modelling is considered and consists of four stages: (1) problem identification and definition, (2) system conceptualization, (3) model formulation, (4) model testing and evaluation.

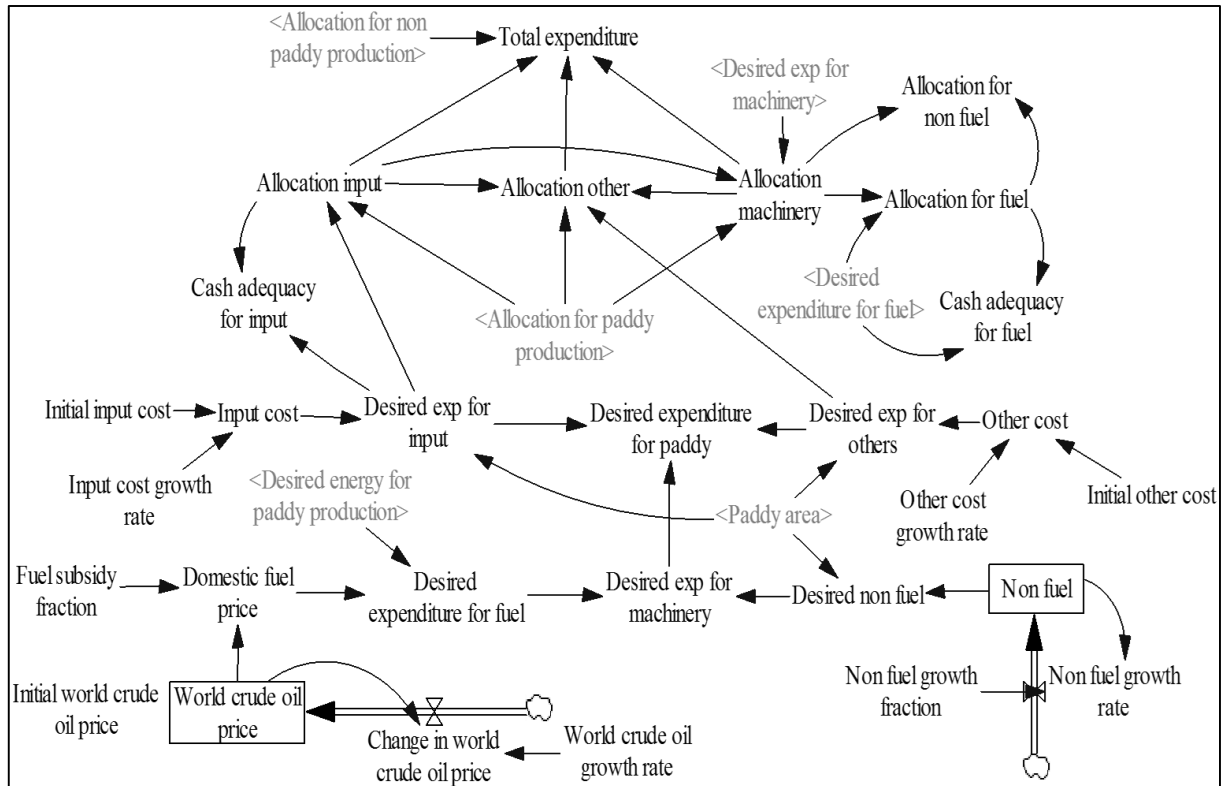
Dynamic systems consist of interconnected feedback loops and the feedback loops simulate dynamic behavior of the systems. There two fundamental types of variable elements within each loop which are the building blocks of a system dynamics model. These building blocks are stock and flow. The stock is a state variable and it represents the state or condition of the system at any time t . The flow shows how the stock changes with time. The flow diagram shows how stocks and flows are interconnected to produce the feedback loops and how the feedback loops interlink to create the system. Figure 2 shows the stock-flow diagram of the farmer's expenditure in Malaysia. The relationships represented in the flow diagram are expressed in terms of integral and algebraic equations and these equations are solved numerically to simulate the dynamic behavior.

These processes are usually done by using specific software like a Stella, Vensim and others. Once stock and flow is finished, equations among variables are set. A stock is a term refers to variables that accumulates or depletes over time. Inflow or outflow is the indicator of change in a stock. The simulation of the model begins as the equations are written, and comparison of the simulation results of the model to the real behavior of the system are done. The model and parameters are summarized in Fig. 2 and Table 4.

Table 4. List of parameters for farmer's expenditure

No	Variables	Unit	Value	Source
1	Fuel subsidy fraction	Dmnl	0.3	IISD (2013)
2	Initial input cost	RM/ha/Year	429.9	MADA (2012a)
3	Initial other cost	RM/ha/Year	9.36.2	MADA (2012a)
4	Initial world crude oil price	RM/liter	0.46	Indexmundi (2014)
5	Input cost growth rate	Dmnl	0.032	Estimated
6	Non energy machinery cost growth fraction	Dmnl	0.032	Estimated
7	Other cost growth rate	Dmnl	0.032	Estimated
8	World crude oil growth rate	1/Year	0.06	Estimated

Fig. 2: Stock and flow diagram of farmer's expenditure



MODEL VALIDATION

Initial values and the parameters were estimated from the primary and secondary data collected from different research reports, statistical year books of Malaysia and field visits. Tests were also conducted to build up confidence in the model. To build up confidence in the predictions of the model, various ways of validating a model such as model structures, comparing the model predictions with historic data, checking whether the model generates plausible behaviour and checking the quality of the parameter values were considered. In the behaviour validity tests, emphasis should be on the behavioural patterns rather than on point prediction (Barlas, 1996).

Fig. 3: Simulated and historical patterns of paddy productivity in Malaysia (1990-2012)

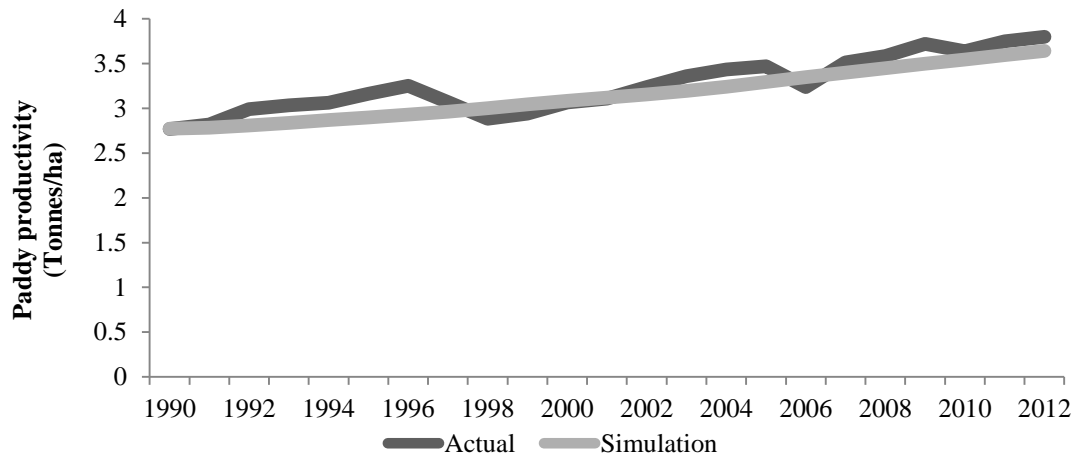


Fig. 4: Simulated and historical patterns of domestic fuel price in Malaysia (1990-2012)

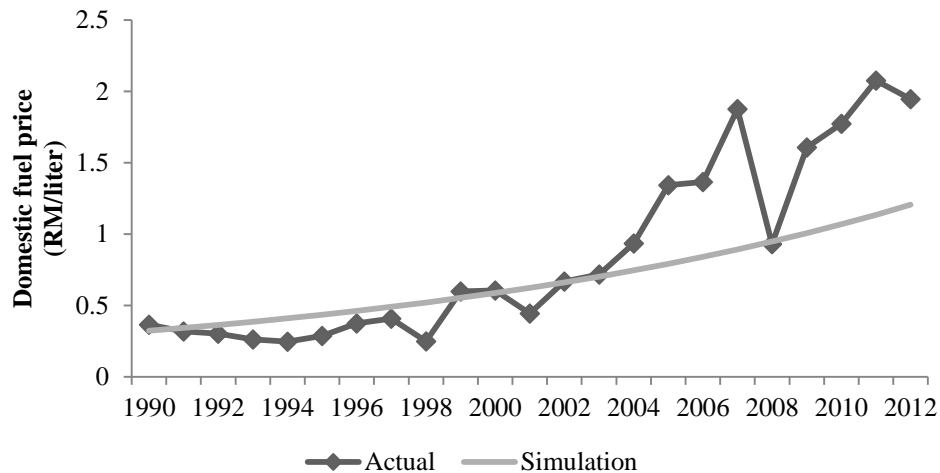


Figure 3 and 4 shows the comparison of simulated behaviours of paddy productivity and domestic fuel price with the historical data. Simulated behaviours are numerically sensitive to parameters and shapes of the table functions. However, the basic patterns of the historical and simulated behaviours agree adequately and model predictions represent reality.

POLICY ANALYSIS

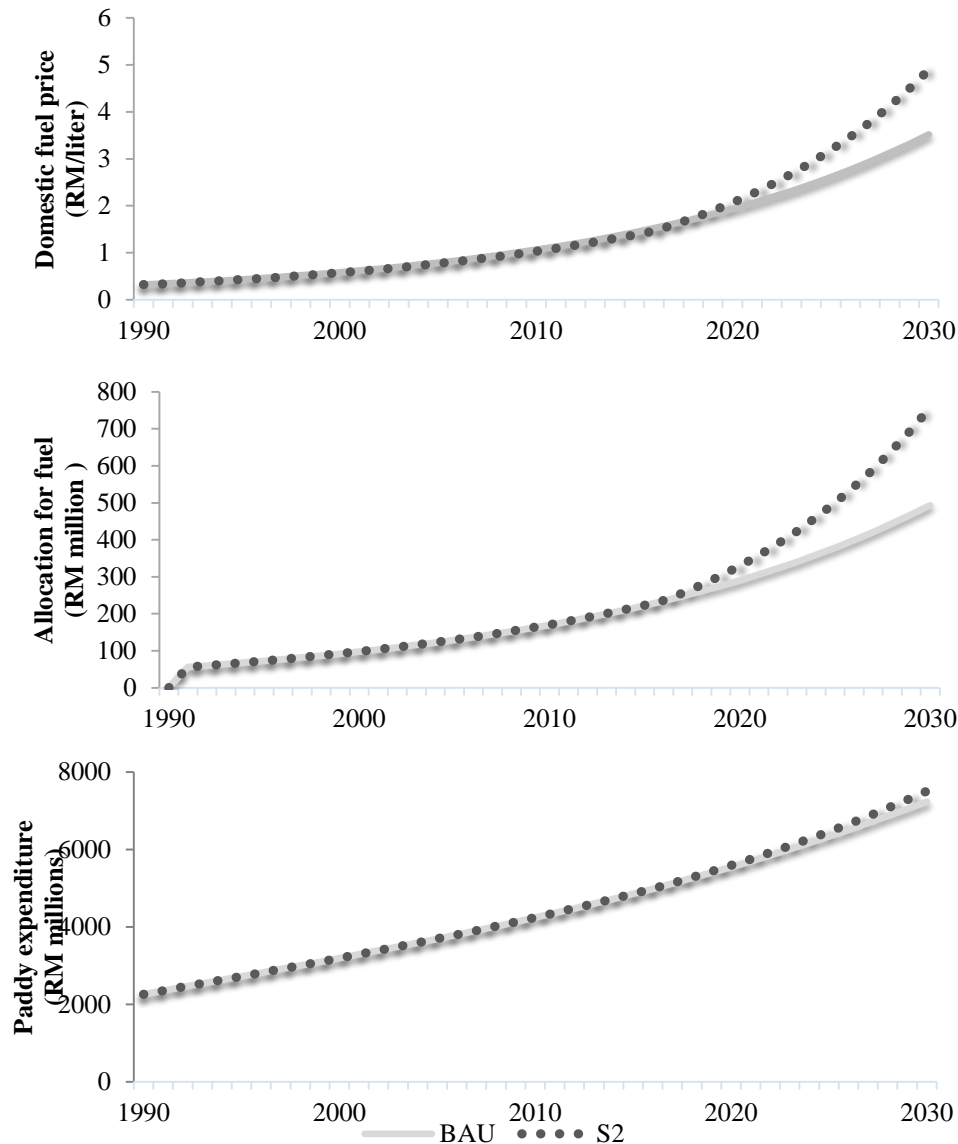
Given the rising global energy demand and economic growth, contribution from the oil and gas industry is expected to increase further by approximately 20% over the next 5 years (DOS, 2014). Naturally, the world crude oil price is expected to increase by 50% in 2016 until 2030.

Table 5. Simulation results for domestic fuel price, allocation for fuel price and paddy expenditure under the crude oil price increase

Time	Domestic fuel price			Allocation for fuel			Paddy expenditure		
	BAU	S2	%	BAU	S2	%	BAU	S2	%

2015	1.44	1.38	-3.70	222346320	223581264	0.56	4849715200	4854893056	0.11
2016	1.52	1.46	-3.84	234558112	235917280	0.58	4981175808	4986827776	0.11
2017	1.62	1.60	-1.27	247421216	256494784	3.67	5115979776	5129707520	0.27
2018	1.72	1.74	1.37	260971664	278847552	6.85	5254259200	5277161472	0.44
2019	1.82	1.90	4.08	275247232	303142272	10.13	5396143104	5429466112	0.62
2020	1.93	2.07	6.87	290287904	329521504	13.52	5541767168	5586827264	0.81
2021	2.05	2.25	9.73	306135616	358193952	17.00	5691267072	5749580288	1.02
2022	2.18	2.46	12.66	322834656	389327648	20.60	5844783104	5917957632	1.25
2023	2.31	2.68	15.68	340431616	423169248	24.30	6002458624	6092335616	1.50
2024	2.46	2.92	18.77	358975648	459917120	28.12	6164436992	6272974848	1.76
2025	2.61	3.18	21.95	378518368	499862112	32.06	6330869760	6460299776	2.04
2026	2.77	3.47	25.21	399114336	543238528	36.11	6501909504	6654607872	2.35
2027	2.94	3.78	28.56	420821024	590389888	40.29	6677715456	6856382464	2.68
2028	3.12	4.12	32.00	443699040	641592768	44.60	6858449408	7065963008	3.03
2029	3.31	4.49	35.53	467812160	697252864	49.05	7044278272	7283899392	3.40
2030	3.52	4.90	39.16	493227456	757696448	53.62	7235376128	7510582272	3.80

Fig. 5: Simulated domestic fuel price, allocation for fuel and expenditure on paddy
(Increasing crude oil price by 50%)



Since no policy is implemented under the extreme tests, domestic fuel price will follow world's crude oil price trend which is increasing by 40% in 2030 with an average of 3.8% per year (Figure 5 and Table 5). Meanwhile, expenditure on paddy increases by 3.8%. Fuel prices also indirectly affect the price of fertilizer. A 1% increase in world crude oil price will increase the fertilizer price by 3.4%. Indirect effect is greater than direct effect on productivity. Therefore, rising fuel prices will increase the price of fertilizer and ultimately affect farmers' expenses by 45%.

CONCLUSION

In this paper, the impact of fuel price change on paddy farmers' expenditure allocation in Malaysia is studied using a system dynamics approach. An attempt has been made to develop a

generic model, representing the essence of the dynamic theory that emerged from the survey. Model analysis reveals that an increase in fuel prices will increase the price of fertilizer, eventually it leads to an increase in farmers' expenditure. It is also observed that, the range of production costs to produce one kilogram of paddy is between RM 0.28 and RM 0.40.

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CORRUPTION, FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH: EVIDENCE FROM ASEAN-5 PERSPECTIVE

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ABSTRACT

The regional cooperation such as ASEAN is highly essential for its member countries to remain strong and competitive in the global market. In this regards, foreign direct investment (FDI) plays a vital role in promoting the economic growth via the transfer of technology and expertise from advanced countries. With regional network, an access to a bigger market size can helps the countries to exploit economies of scale. However, the absorption of the productivity effects may not reach the optimal level if there exist low regional qualities such as corruption and national competitiveness. Empirically, studies on FDI, growth and regional qualities is very scarce and deemed very important as it enables the communities to receive full benefits from the wealth of the countries. In-line with the World Bank's projections, the corruption can cost up to five percent of the combined values of Gross Domestic Product (GDP) for all ASEAN countries. Hence, as the Chairman of the ASEAN communities in 2015, it is vital for the Malaysian government to lead the process of becoming better, cleaner and competitive regional block. Drawing upon the endogeneous growth theory, this study intends to investigate the impacts of corruption on the FDI-growth nexus particularly in ASEAN-5 economies. Panel data analysis will be used to derive the findings. Based on the final outcomes, the decision whether to develop a regional anti-corruption programme can be made by the Malaysian government depending on the intensity of the corruption.

Keywords: Foreign Direct Investment, Economic Growth, Corruption, Regional Quality, ASEAN-5, Panel Data.

INTRODUCTION

The Road Map for an ASEAN Community which need to be implemented within 2009 to 2015 focused on three ASEAN pillars namely political security, economic and socio-culture (BERNAMA, 2014). Since Malaysia was appointed as the Chairman of the ASEAN communities in 2015, it is vital for the Malaysian government to lead the process of becoming a better regional block, akin to the European Union (EU) and the North American Free Trade Agreement (NAFTA).

To be a communities' driver towards a better regional block is not an easy task. Issues such as combating the transnational crime and establishing the ASEAN Peacekeeping Batallion need to be addressed clearly (Transparency International Malaysia, 2015). Those were among the concerns raised during the 26th ASEAN Summit that was held on 26 and 27 April 2015

at the Kuala Lumpur Convention Centre (KLCC). However, the agenda during the summit did not cover the anti-corruption programme across the region. Fundamentally, corruption is a serious matter that can hinder the economic development of a nation. Supposedly, the economic development does not just merely about the growth of the economy. It shall consist of broader aspects such as alleviating income disparities through productivity and investments on technological inventions as the macroeconomic drivers. As estimated by the World Bank, the corruption can cost up to five percent of the country's Gross Domestic Product (GDP). Given that the Malaysia's GDP was RM1070 billion in 2014, it can be estimated that the cost of corruption in Malaysia would be up to RM53.5 billion. If the estimate by the World Bank is correct, it shows huge losses for Malaysia. The losses can be even more if we combine all corruption costs in other ASEAN countries.

From the perspective of the corruption ranking, Transparency International has developed a Corruption Perception Index (CPI) which can be used to rank the level of corruption across countries (Transparency International, 2014). The score varies from 0 (highly corrupt) to 100 (very clean). In 2014, it was so surprise to see only two ASEAN countries earned more than 50 scores; namely Singapore (84) and Malaysia (52). The rest of the ASEAN countries were fall under 50; starting with Philippines and Thailand (38), Indonesia (34), Vietnam (31), Laos (25) as well as Cambodia and Myanmar (21). From such index, it shows that the level corruption in ASEAN communities is quite high.

By learning from other unions such as G20, their leaders have agreed on fighting the corruption by developing a two-year anti-corruption plan in November 2014. In fact, the corruption issues for them are among the priorities since the cost of corruption can distort the level of economic growth of its member nations. When looking at the members of G20, it comprises of world's largest advanced and emerging countries such as the United States, the United Kingdom, China, Japan, European Union, India, Brazil and others. According to the Transparency International, the lowest score among G20 members in 2014 was 27, belongs to Russia; while the highest score was 81, belongs to Canada. 11 countries listed within G20 received scores lower than 50 (Transparency International, 2014). Consequently, when comparing between G20 and ASEAN members, both unions have mix members that are corrupted and clean. If G20 can implement the anti-corruption plan, the ASEAN unity can also implement it in order to boost the regional economic growth.

Past researches have suggested that the perception of the foreign investors can easily be tarnished if a country is said to be a corrupted country (Delgado, Mccloud, & Kumbhakar, 2014; Ulman & Bujancă, 2014; Ulman, 2014a). This is due to their perception on the quality of the investment as well as the political and economic stability of that country. Given that ASEAN wants to be a single community alike European Union, the combined values of GDP can reach trillions dollars. The communities can gain significant positive impacts but they might experience huge losses if the level of corruption is not being taken care of. Hence, it is highly critical to study the intensity level of the corruption on the economic growth of the ASEAN communities, particularly ASEAN-5 countries.

LITERATURE REVIEW

By definition, foreign direct investment (FDI) is a kind of long-term investment in which it is conducted by entities from a country and located in another country; namely the 'host country'. Developing countries can gain huge benefits from FDI via the access of advanced

technologies, expertise, innovation, research and development as well as management practices. Those are among the key elements that are needed for the purpose of economic transformation from the status of developing to developed countries. These elements, which are almost unavailable in the host developing countries, can be very crucial to stimulate economic growth. The absorption of the productivity effects from the FDI may vary between countries. It depends on their openness level, development of financial markets, the quality of human capital, trade policies, infrastructure as well as the level of inflation (McCloud & Kumbhakar, 2012). Empirically, it has been proven that both FDI and growth are interrelated (Choong, Liew, Chan, & Ch, 2011; Delgado et al., 2014; McCloud & Kumbhakar, 2012). However, the impacts of FDI on the economic growth may not reach the optimal level if there exist low institutional qualities such as corruption.

Corruption can also be called as a social waste since it distorts the effects of FDI on the growth. Besides, it may lead to an increase in income inequality and poverty among citizens. From the economic perspective, corruption can be defined as an abuse of public resources by individuals or companies for their personal interest (Ulman & Bujancă, 2014). It may happen in a country if public officials who abuse their political power in an exchange of cash or material goods permit it. In this context, the confidence on public institutions and government can be undermined. Consequently, lesser confidence may result to a decline in the level of investment among domestic and foreign investors.

ENDOGENOUS GROWTH THEORY

The endogenous growth theory stresses on the roles of FDI in promoting the economic growth via technology diffusion and human capital. In this regards, the vehicle of the FDI is the multinational corporation that ensure the success of the development activities in the host country. This is consistent with the basic production function of an economy in which it can be written as below (Ahmed, 2012).

$$GDP = f(K, L)$$

The above production function illustrates that the economic growth of a nation can be contributed from the availability of factor inputs such as capital (K) and labor (L). However, for developing countries, the reliance on FDI is highly essential to ensure the inflows of capital, technology and expertise from advanced economies.

Past researches that have been conducted in analyzing the FDI-growth nexus found that there exist two-way linkage between the inflows of FDI and the economic growth in certain economies such as Tunisia, Morocco and Egypt during 1985 to 2011 (Omri & Sassi-Tmar, 2015). Similar finding can be found from Malaysia's perspective due to the contribution from factor inputs available through FDI (Ahmed, 2012). In other words, both FDI and economic growth are regarded as endogenous parameters in which the model development can be tackled by using simultaneous equations. By adapting the Generalized Method of Moments (GMM), these linkages give positive signals to the prospective investors that the FDI in those economies are profitable.

CORRUPTION AND MACROECONOMIC ENVIRONMENT

Previous studies have shown that corruption can affect the macroeconomic environment for

certain countries. Based on the country's grouping in The Global Competitiveness Report 2013-2014, 106 countries were chosen as samples of analyses in order to prove the macroeconomic efficiency of those economies based on their level of corruption (Ulman & Bujancă, 2014). These countries were then grouped into three stages of development namely factor driven economies, efficiency driven economies and innovative driven economies. It was found that highly developed economies were perceived to be less corrupted as compared to developing and less developed countries. Besides, high corruption demerits the level of investment, productivity and economic growth.

Theoretically, the connection between the corruption and macroeconomic environment can be explained by the sanding-the-wheels and greasing-the-wheels hypotheses. Since it is truly confirmed that the free flow of resources can help in facilitating the optimal level of economic growth, the sanding-the-wheels hypothesis claimed that the corruption is one of the determinants that can prove otherwise (Delgado et al., 2014). When a country let the resources to move freely, they can achieve the optimal combinations of output by doing so. In accordant to the FDI-growth nexus, multiplier effects on the economic growth can be generated when there is high inflow of FDI; either positive or negative. It also can be neutral. However, the impacts did not include the corruption as mediator. For certain countries that are proven to have significant positive relationship between FDI and growth, the mediating effect of corruption may dampen the country's growth even with high inflow of FDI. Based on the above hypotheses, developing countries that are corrupted may not be able to absorb the positive impacts of FDI such as expertise and new technological transfer. Similarly, a sector that is highly dependent on FDI may become unproductive due to bribery, as part of the corruption examples. The foreign workers are less likely to work in the domestic firms due to bribery issue, bureaucratic regulations and lower payoffs received. As a result, the effects of FDI on growth are weakening due to less diffusion of technology and expertise from the multinational corporations.

CORRUPTION AND FOREIGN DIRECT INVESTMENT (FDI)

To remain viable, strong and competitive in the global market is a challenging task. The regional cooperation is highly essential to address such issue. Due to external risks such as world economic condition, total dependency on domestic market may not be sufficient to ensure the sustainability of the economic growth and development. As such, regional cooperation is vital to remain competitive and attractive in the eyes of other countries. As reported by Schwab (2014), twelve pillars are needed to drive productivity and competitiveness namely (1) institutional environment, (2) extensive and efficient infrastructure, (3) sound and stable macroeconomic environment, (4) health and primary education, (5) higher education and training, (6) goods market efficiency, (7) labor market efficiency, (8) financial market development, (9) technological readiness, (10) market size, (11) business sophistication, as well as (12) innovation (Schwab, 2014). With regards to the developing countries, the technological readiness as the ninth pillar is highly essential to remain competitive. In this regards, FDI plays an essential role in bringing the advanced technologies and expertise to these countries. With regional and global networks, an access to a bigger market size (the 10th pillar) can help the country to exploit economies of scale based on the availability of resources, technology and expertise that they have. Apart from that, the technological transfer via FDI may also promote innovation; the last pillar. By

learning from history, it shows that all industrial revolutions were started from innovation. It does not just transform the ways on how people think, but it also creates new possibilities and values to certain things which may be impossible at first. In line with the neo-classical growth theory, the inflow of FDI allows higher rates of economic growth through an increase in the stock of capital, expertise and technology in the host countries (Freckleton, 2012).

Previous empirical researches have found that there is strong connection between corruption and the level of competitiveness of a country (Ulman, 2014b). By using various measures to value the national competitiveness such as productivity, employment rate and standard of living, a less competitive country is perceived to be corrupted relative to more competitive countries. However, the level of corruption may diminish when there exist positive economic outcomes from the government policies. The effects of having corruption on countries which are less competitive may varied depending on the level of corruption that they faced. Less competitive countries with high corruption have a tendency to experience high fiscal deficit but lower level of national savings (Ulman, 2014a). Such problems might lead to another serious macroeconomic issue that hinders the economic growth and development, called as inflation. The corruption transmit its adverse effects via an increased in the cost of production (Freckleton, 2012). An inflationary condition would then resulted to poverty and higher level of inequality. In return to that, the country's credit ratings that demonstrate the investors' confidence may fall. Indirectly, the level of national competitiveness may further decline. Even though there exist inflows of FDI, the productivity of the investments and projects are questionable.

In contrast to the findings by Kolstad and Wiig (2013), an increase in the level of corruption brings more FDI to 81 countries from the period of 1996 to 2009, particularly in the extractive sector such as mining, quarrying and petroleum (Kolstad & Wiig, 2013). Similar result was found in the economies such as China, Indonesia, Thailand and Korea that support the greasing-the-wheels hypothesis (Rock & Bonnett, 2004). It might be due to the facts that the corruption makes it easier for the foreign investors to play with public officials in securing contracts or licenses. The illegal payments are needed to fasten certain matters that have to be addressed via bureaucracy (Freckleton, 2012). By using fixed effect model (FEM), the results remain as it was until it reached a stage in which the corruption level was too high. When it happens, the corruption acts as a tax to the system that demerit the growth. The investments within those sectors were regarded as less profitable.

RESEARCH METHODOLOGY

Since the current FDI-growth model has neglected the influence of regional qualities, the methodology used in this research must be able to capture the economic growth of the ASEAN-5 countries by integrating the elements of macroeconomic environment (FDI, exchange rate and inflation rate) as well as corruption index. The inclusion of new parameters leads to an assumption that the coefficients for both parameters are unknown to accommodate the complexity of the generalized model. It ensures unbiased estimator. Besides, to investigate the moderating effects between FDI and corruption on the ASEAN-5 economic growth, the model of the study also includes an interaction term called as FDIC (an interaction term between FDI and corruption). Therefore, the proposed model for this study

is represented as follows:

$$\ln \text{GDP}_{it} = f(\ln \text{FDIC}_{it}, \ln \text{INF}_{it}, \ln \text{EXC}_{it}) \quad i = 1, \dots, n \quad t = 1, \dots, n$$

where GDP_{it} = Real Gross Domestic Product (GDP) at country i , time t .

FDIC_{it} = Interaction term between FDI and corruption at country i , time t .

INF_{it} = Inflation rate at country i , time t .

EXC_{it} = Exchange rate at country i , time t .

All variables were transformed into natural logarithm form (\ln).

All macroeconomic data were derived from The World Bank while the data for corruption perception index (CPI) was derived from The Transparency International. The time span covers from period of 2005 to 2014. The sample of this research covers ASEAN-5 countries only; namely Malaysia, Indonesia, Thailand, Singapore and Philippines. Out of ten ASEAN countries, these countries were chosen since they were regarded as the five largest economies in South-East Asia. Therefore, this research excludes the remaining of the ASEAN countries namely Myanmar, Vietnam, Brunei, Cambodia and Laos. In answering the research objectives, panel data analysis was used.

To begin with the empirical analysis, the panel unit root test was employed in order to check the existence of unit root in the series. This test is crucial to prevent any spurious regressions between variables in the panel data analysis. In this paper, panel unit root test that was developed by Levin, Liu and Chu (LLC) was employed.

LEVIN, LIU AND CHU (LLC) UNIT ROOT TEST

The null hypothesis of such test is each individual time series contains a unit root. In the study conducted by Levin, Lin and Chu (2002), the model used by LLC in performing the test is shown as follows:

$$\Delta y_{it} = \rho y_{it-1} + \sum_{L=1}^{pi} \theta_{iL} \Delta y_{it-L} + \alpha_{mi} d_{mt} + \varepsilon_{it}$$

where

$m = 1, 2, 3$

d_{mt} = vector of deterministic variables

α = corresponding vector of coefficients for a particular model

$m=1,2,3$

In ensuring the regression is not spurious, it is essential to ensure that all series are stationary at the same level. Once it is confirmed that the series are stationary at the same level, the type of regression can be decided either pooled in panel data estimators (RE / FE) or pooled ordinary least square (POLS) regression.

POLS, REM OR FEM

Two hypotheses have to be tested in order to determine the best regression model; either Pooled Ordinary Least Square (POLS), Random Effect (RE) or Fixed Effect (FE). The hypotheses are as follows:

H1: POLS is more appropriate as compared to the RE

H2: RE is more appropriate as compared to FE

In deriving the answer for the first hypothesis, Breusch and Pagan Langragian Multiplier test can be conducted. If it is concluded the POLS is the best regression model, there is no need to test for the second hypothesis. However, if the first hypothesis is rejected, the other test called Hausman test have to be conducted to decide on the second hypothesis.

To further understand the difference between these two models in this research, FEM explores the relationship between GDP of ASEAN-5 countries with its variables. In this case, each country has different characteristics of GDP that might influence its variables. Nevertheless, REM can be used when the GDP variation across the countries is random and not correlated with the independent variables.

FINDINGS AND ANALYSES

Since the panel data analysis performs both time series and cross section analysis together, it is necessary to ensure that the variables are stationary in order to prevent spurious regressions. By using LLC to test for stationarity status for all variables, the results are shown in Table 1.

Table 1: The Results of Panel Unit Root Test using LLC

Variables	Constant without trend	Constant with trend
lnGDP	-5.36191** [0.0000]	-4.56901** [0.0000]
lnFDIC	-2.47383** [0.0067]	-4.12572** [0.0000]
lnINF	-2.58068** [0.0049]	-9.40146** [0.0000]
lnEXCH	-3.46166** [0.0003]	-3.22603** [0.0006]

Note: The values in parantheses represent the probability values.

** The null hypothesis of accepting that series have unit root is rejected.

The LLC panel unit root test as shown in the above table was conducted based on the automatic selection of lag length by Modified Schwarz Criteria and Bartlett kernel. Since all the probability values for all variables are less than the critical value of 0.05, the null hypothesis of accepting that the series are having unit root is rejected. In other words, all variables are stationary at level. Once it is proven that the series are integrated at the same order, the regression result may not be spurious. Therefore, the regression results can be generated without having a problem of spurious regression.

By conducting the Breusch and Pagan Langragian Multiplier test, it was found that the POLS is not the most appropriate regression model since the first null hypothesis is rejected. This is due to the fact that the probability of the chi2 is less than the critical value of 0.05. Therefore, it is a signal that the most appropriate model can be either fixed effect or random effect model. To answer the second hypothesis, the Hausman test was conducted. The results

are illustrated in table 2.

Table 2: Hausman Test

	Coefficients		(b-B) Difference	Standard Error
	(b) Fixed	(B) Random		
lnFDIC	0.2786	0.0786	0.1999	0.0723
lnEXC	0.6894	0.0037	0.6857	0.7075
lnINF	0.0978	0.3230	-0.2251	0.0534
chi2(3)	7.63			
Prob. chi2	0.0543			

By referring to the above table, the null hypothesis that the RE is more appropriate than FE can be accepted since the probability value of the chi2 is more than 0.05. Therefore, it can be concluded that the most appropriate regression model is Random Effect (RE) Model. In this regards, this model illustrates that the variation of the GDP across all ASEAN-5 countries is random and not correlated with the level of inflation, exchange rate and the interaction term between FDI and corruption. The regression results for RE is as per tabulated in table 3.

Table 3: Random Effects GLS Regression

	Coefficient	Standard Error	z-Statistics	Prob. of z- statistics
lnFDIC	0.07869	0.03882	2.03	0.043**
lnEXC	0.00378	0.01145	0.33	0.741
lnINF	-0.32302	0.08087	-3.99	0.000**
C	-0.54620	0.89718	-0.61	0.543
R-sq (within)	0.2552			
R-sq (between)	0.1585			
R-sq (overall)	0.2236			
Prob > chi2	0.0000			

Table 3 illustrates that the exchange rate does not give any significant impact in changing the values of real GDP in ASEAN-5 countries. An appreciation or depreciation of the exchange

rate in member countries would not give direct impact to the ASEAN-5's economic growth. However, there are two variables that are significant in explaining the real GDP in ASEAN-5 countries; namely the inflation rate (LINF) and the interaction term between FDI and corruption. This conclusion is derived based on the probability values of the z-statistics for both variables which are less than 0.05. An increase in the inflation rate in ASEAN-5 countries would distort the level of economic growth due to the negative coefficient for that variable. This is consistent with the economic theory which regards inflation as a distortionary series that has an influence in reducing the purchasing power of the member nations. Lack of purchasing power will then translate into low level of economic growth.

In opposite, the interaction term between FDI and corruption has a positive significant impact in changing the level of economic growth in ASEAN-5 countries. Based on the above findings, the FDI that is moderated by the corruption level does have significant positive impact in changing the level of real GDP in the selected countries. In other words, high corruption can give significant positive influence in the FDI-growth relationship. In this case, the corruption is acting as a mediator in explaining the FDI-growth nexus. This is consistent with the findings made by previous researchers that claimed the corruption helps in attracting more FDI in certain countries such as China, Indonesia and Thailand (Freckleton, 2012; Kolstad & Wiig, 2013; Rock & Bonnett, 2004). In relation to the ASEAN-5 countries, the foreign investors might feel easier to secure contracts and licenses from the public officials when they involved themselves with bribery and corruption. However, this finding is totally based on the public perception on the corruption level in ASEAN-5 countries since the data for corruption was derived from the corruption perception index (CPI). Nevertheless, the overall impact on the real GDP only accounts for 25% variation of the three series stated in the model. The remaining 75% of the variation can be explained by other variables that are not included in the above model. Even though the independent variables did not explained much on the real GDP in ASEAN-5 countries, the whole model is significant since the probability value of the chi2 is less than 0.05.

The regression result can be considered as non-spurious regression due to the fact that all variables are integrated at the same order. Apart from that, the diagnostic test in checking the multicollinearity problem shows that all independent variables are not correlated to each other.

Table 4: Diagnostic Test: Multicollinearity Test

Variable	VIF	1/VIF
lnFDIC	1.25	0.800427
lnEXC	1.70	0.588726
lnINF	1.50	0.665682
Mean VIF	1.48	

By using Variance Inflation Factor (VIF) as a tool to check for any multicollinearity problem, the VIF values for all three independent variables are small (less than 10). Consistent with the mean VIF, it can be concluded that all independent variables are not suffered from

multicollinearity problem. Hence, the regression result is not spurious and can be accepted.

CONCLUSION AND RECOMMENDATION

Theoretically, there are four main factors that can influence the level of GDP in any countries or group of economies; namely private consumption (C), investment (I), government expenditure (G) and net export (NX). By ignoring three of these factors (C, G and NX), this research is meant to investigate the impact of corruption on the FDI-growth relationship in ASEAN-5 countries. Other macroeconomic variables that represent the domestic and foreign stability are included in the model; namely inflation rate and exchange rate. By using random effect model, the findings show that the exchange rate in ASEAN-5 does not give any significant impact in changing the level of real GDP in this group of economies. The opposite findings can be found for inflation rate and the interaction term between FDI and corruption. For sure, inflation has a distortionary impact in changing the level of economic growth through the lower purchasing power of the member nations. Therefore, in striving high level of economic growth and development, the ASEAN-5 communities need to ensure that the level of inflation is controlled and manageable. Fiscal and monetary policies can be conducted in ensuring the level of economic stability in the region.

From the perspective of the corruption as a mediator for FDI-growth nexus, it has positive significant relationship in appreciating the level of economic growth in ASEAN-5 countries. Indirectly, it means that the corruption may boost the level of FDI in ASEAN-5 countries, which would then significantly impact the level of economic growth in a positive direction. Some foreign investors would be interested in investing in ASEAN-5 countries due to the easier process of getting licenses, permits and contracts from the public officials via corrupted mediums such as bribery. Even though it has positive impact on the economic growth, it is necessary for the ASEAN-5 communities to control and curb the corruption level since it may distort the level of economic growth if the values are high enough. Corruption creates less competitive environment, which would then impact the economic growth and development in a long-term basis. Before it is too late, certain measures need to be taken in curbing such activities. This is consistent with the Transparency International Malaysia (2015) that asked for the ASEAN communities to develop an anti-corruption programme across member nations.

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ASYMMETRIC INFORMATION IN THAI COMMERCIAL SEX MARKET IN THE ERA OF HIV

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ABSTRACT

This paper looks at the behavior of venue-based female sex workers (FSW) and their male clients in the commercial sex market under conditions of asymmetric information. We adopt a game-theoretical model to the situation in which a sex worker does not know whether the client is HIV-free or HIV infected. The Nash equilibrium solution informs us that the sex worker's dominant strategy is safe sex or sex with condom, while risky sex or sex without condom is still possible if the client offers significantly higher incentives usually in the form of a tip. Lastly, using data collected from a field survey of both sex workers and clients conducted in Thailand by the authors in late-2014, the paper finds that there is a small probability that FSW may accept unprotected sex when offered tips of Baht 5,000 or above. Overall the results from the survey suggest that the probability of sex without condom (NCD) in Thai's venue-based commercial sex establishments is about 9.5%.

Keywords: Asymmetric Information, Commercial Sex, Nash Equilibrium, AIDS/HIV, Condom Use

INTRODUCTION

Asymmetric information is one type of market failure that leads to inefficient outcomes. The problem commonly appears in contractual or agency relationships when one party (i.e. the principal) establishes the conditions of a contract but has less than perfect information vis-à-vis another party (i.e. the agent or agents).¹ Arkelof's landmark 1970 paper *The Market for 'Lemons'*, which looked at the market for second-hand cars, transformed the way economists approach markets where there are differences between the transacting agents regarding their information set.² There is huge potential for asymmetric information in the commercial sex market where people face the risk of HIV infection and people do not reveal their health status to potential sexual partners. In this paper, we treat specifically the case in which the male client knows his HIV status (i.e. HIV-free or HIV infected), but the female sex worker (FSW) does not know the health status of her client. Both the sex worker and her client decide on whether to have safe or protected sex (use a condom, CD) or risky sex (sex without condom, NCD).

Under conditions of asymmetric information, the FSW and her client have potential to play a critical role in the HIV/AIDS epidemic depending on their decision. Also of interest to us in this paper is the possibility of signaling (i.e. a signal in the market) indicating either high

or low risk of HIV infection. A rational client would choose safe sex if signals were weak or unreliable. In Thailand, the higher-end, venue-based commercial sex establishments such as massage parlors and A Go-Go bars usually require sex workers to test for HIV every three months or so and sex workers have to provide test results in exchange for their salaries. If the sex worker is HIV-positive, she will be asked to leave the establishment. Arguably, the probability of venue-based sex workers to be HIV-free would be relatively higher compared to sex workers that are not obliged to undergo regular testing (e.g. as in non venue-based commercial sex establishments). In this sense, such HIV-testing policy at venue-based commercial sex establishments may be considered a kind of signal in the Thai commercial sex market. We find however that enforcement has been rather weak and as such the signal is somewhat unreliable.

In this paper, we investigate the behavior of female sex workers (FSW) and their male clients in Thai venue-based commercial sex market where HIV testing policy is adopted under an asymmetric information setting by using a game-theoretical sequential model. We then use results from a field survey conducted in Thailand in late-2014 to calculate probabilities of interest in the theoretical model. Understanding the behavior of sex workers and their clients is important in developing further policy to reduce the spread of the virus.

LITERATURE REVIEW

A number of papers have discussed asymmetric information particularly when the client does not know the health information of the sex worker, and how this affects HIV transmission in the commercial sex market (Ahlburg and Jensen (1998), Edlund and Korn (2002), Rao, Gupta, Lokshin, and Jana (2003), Gertler, Shah, and Bertozzi (2005), and Robinson and Yeh (2011). Interestingly, contrary to common belief knowledge of one's HIV status may not help prevent the spread of HIV. Morris, Pramualratana, Podhisita, and Wawer (1995) for example observe that condom use in Thailand not only can be interpreted by a client as a signal of disease and mistrust, but can also reduce sex worker's reputation and income. As such, sex workers tend to prefer not to offer the use of a condom.

Worth mentioning is the paper by Andersen and Bech (2011) which presents the theoretical relationship between HIV testing and transmission risk in the commercial sex market. Their paper is the only paper (to our knowledge) that recognizes "double-sided" asymmetric information, i.e. the case where both sellers and buyers in the commercial sex market may know their HIV status but this information is not disclosed to the partner. Our case is a modified version of their study in which the highly probable HIV-free sex worker does not know the HIV status of her client. In their study, Andersen and Bech (2011) suggests that HIV testing could reduce HIV transmission risks since a person who know his/her status would choose protected sex especially if found to be HIV-positive. Adopting a game-theoretical framework with perfect Bayesian equilibrium they find however that HIV testing does not always help reduce the spread of HIV infection in the commercial sex market. On the contrary, testing can increase risky sex behavior especially in poor countries as sex workers who are HIV-positive tend to engage in unprotected sex (when preferred by her clients) in order to increase her income as much as possible before they are unable to work at the outset of full-blown AIDS. Similarly Muñoz, Adedimeji, and Alawode (2010) find that poorly educated and lacking knowledge about HIV, many sex workers in Nigeria believe that

they can “handle” the spread of the virus on their own as well as with medication. Moreover, female sex workers who were tested HIV-positive tended to engaged in risky sex so as to earn as much money for her family before becoming too sick for work. In this sense, asymmetric information in the market had helped the sex worker hide her health information from clients. Besides, offering condom was considered a signal of HIV infection, in an already highly infected sex market.

As with regards empirical studies, there are no studies (to our knowledge) directly looking at the commercial sex market under the condition of asymmetric information. However, there were a few that focused on HIV awareness and behavioral change in general. Boozer and Philipson (2000) for example using a survey to study the behavior of people after knowing their HIV status in San Francisco found that for those who unexpectedly tested HIV-free tended to increase their risky behavior, while those who unexpectedly tested HIV-positive reduced their risky behavior. Moreover, majority of those that had tested HIV-positive believing that they were infected for some considerable time before actual testing, did not change their behavior after the HIV test. Similarly, Thornton (2008) found that in Malawi those who were tested HIV-positive did not significantly increase condom purchases and only used condoms with their regular sexual partner (husband or wife).

ECONOMIC MODEL

Considering health information in the commercial sex market, in general, on the demand side we have the possibility of HIV-free and HIV-positive clients, while on the supply side we have HIV-free and HIV-positive sex workers. A “matching game” between client and sex worker suggests four possibilities which depend on the probabilities that a client is HIV-free, q_c , or HIV-positive ($1 - q_c$) and the probabilities that a sex worker is HIV-free, q_{sw} , or HIV-positive ($1 - q_{sw}$). After a client and a sex worker are “matched”, negotiation and agreement for either sex with condom, CD, sex without condom, NCD, or no sex may be reached. The combination of these three outcomes and four possibilities of matching with the probabilities q_c and q_{sw} affect both client’s and sex worker’s health.

The probabilities of HIV-free (q_c and q_{sw}) are often difficult to know because one’s HIV status is usually kept secret. Under conditions of asymmetric information, a strong signal could represent low HIV risk. As mentioned before, with HIV testing policy in high-end, venue-based commercial sex markets acting as signal of HIV-free sex workers, q_{sw} could be assumed nearer to 1; q_{sw} will be generally unknown or difficult to know in various commercial sex markets that do not have HIV testing requirements. Be as it may, condom use has no effect if the health status of both clients and sex workers are matched. On the other hand, if HIV status differs, then HIV transmission can affect the health status of either sex worker or client.

More formally, we assume N clients each with different taste parameter, ϕ , assumed to be a continuous random variable with values 0 to 1. A client with ϕ closer to 1 has high preference for commercial sex; ϕ near zero denotes no preference for commercial sex. In addition, we assume that a risk-averse client prefers CD (sex with condom) to NCD (sex without condom), i.e. $0 < \phi^{NCD} < \phi^{CD} \leq 1$; while for a risk-lover, we have $0 < \phi^{CD} < \phi^{NCD} \leq 1$. We may depict a client’s utility function by $\pi(s, c)$, where s is utility from commercial sex and c is exogenous consumption. We assume that s is a numeraire measured by $s = \phi\mathcal{W}$, that is,

client's utility is proportional to his preference for commercial sex captured by ϕ , the "quality" of commercial sex service, γ , and a constant V representing the client's maximum willingness to pay for commercial sex. The "quality" of commercial sex, γ , captures sex with or without HIV transmission from infected to HIV-free person. γ is discrete taking value either 0 or 1. A client who is HIV-free, if infected through commercial sex with an infected sex worker makes $\gamma = 0$. On the other hand, $\gamma = 1$ if there is no transmission of HIV with commercial sex or when both sex worker and client are already HIV-positive. Furthermore, we assume that for an HIV-infected client however, sex worker's HIV status does not affect his utility; hence $\gamma = 1$. The utility of the client is maximum when $\phi = 1$ and $\gamma = 1$. Lastly, c is exogenous consumption which also serves as a numeraire. We assume exogenous consumption equals clients income (I) less the price (P) and tip (t) that the client pays for commercial sex, i.e. $c = I - P - t$. To summarize:

Client's utility function: $\pi(s, c) = \pi(\phi^j \gamma V, I - P - t)$ (1)

$\pi(s(\phi^j, \gamma), c(I, P, t))$

with j representing CD (using condom) or NCD (not using condom).

We assume that the portion of money received from clients by sex workers, w , and any tips, t , affect positively sex worker's utility. Sex workers in venue-based establishments in Thailand do not receive all the money paid by clients ($P > w$) as usually the establishment owner retains some amount. Note that a non venue-based sex worker (e.g. freelancer) has $P = w$, as all payment by clients go directly to the sex worker. For our purposes, we assume that sex workers have no other benefit from commercial sex apart from the money received. Rather sex workers lose utility from exerting effort, e_i^j , where i is per client per day and j is sex either with condom or without condom; therefore we have effort e_i^{CD} or e_i^{NCD} , respectively. Sex workers can have more than one time commercial sex per day, and since clients are not homogeneous, each client results in different disutility ($e_i \neq e_{-i}$). We make no presumption about the risk attitude of sex workers whether risk-averse (prefers CD) or are risk-lovers (or is indifferent between CD and NCD). However, we make the assumption that a sex workers (whether risk-lover or risk-averse) prefer NCD to CD and may engage in risky sex only if offered a higher incentive or tip (t') by her client. Suppose $U(w, t, e)$ represents the utility function of a sex worker from one time provision of service, then:

Sex worker's utility function: $U^{SW}(w, t, e_i^j) = u(w, t) - v(e_i^j)$, per client

where i is the number of clients per day and j is either CD or NCD for a specific client.

It is important to note that a sex worker has two sources of income, namely, salary, w , and tips, t . For our short run utility function, the sex worker receives utility from w , which is salary per day paid by owner of sex work establishment³ and from t received directly from a client. With $v(e_i^j)$ representing disutility of providing services by a sex worker to one client, a HIV-free sex worker has greater disutility from NCD than CD because the former increases the expected loss from HIV infection, h , and the expected loss from losing one's job, l .⁴ However, if the sex worker is HIV-positive, then l and h do not enter her utility function. Equations 2 and 3 represent the indirect utility functions of a sex worker when providing safe

sex (CD) and risky sex (NCD), respectively.

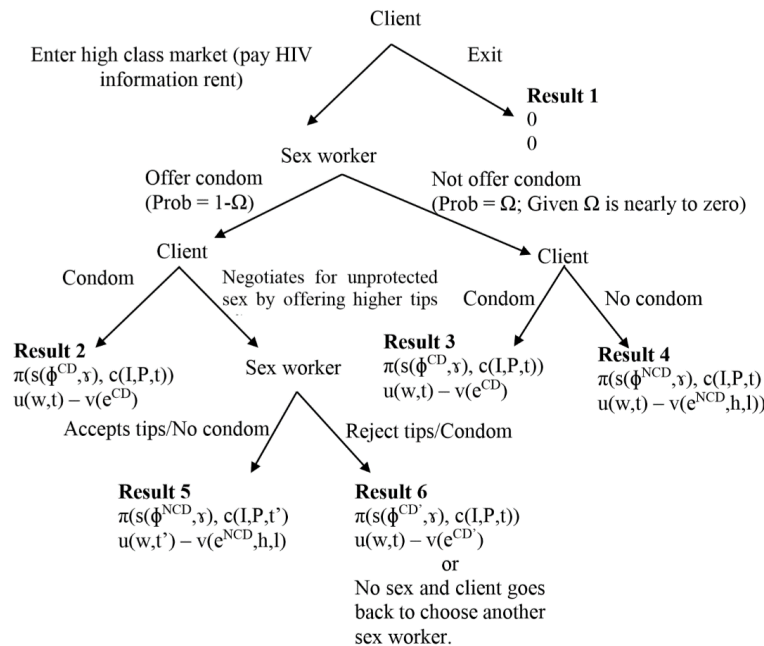
$$U^{SW}(w, t, e_i^{CD}) = u(w, t) - v(e_i^{CD}) \quad (2)$$

$$U^{SW}(w, t, e_i^{NCD}) = u(w, t) - v(e_i^{NCD}, h, l) \quad (3)$$

$$\text{where, } v(e_i^{NCD}, h, l) > v(e_i^{CD})$$

We now represent the game structure in a sequential game (Fig.1) which shows how both the male client and FSW make their decision on condom use under asymmetric information. Before going through with the equilibrium analysis, we need additional assumptions. First, we assume that both male client and FSW know their own health status but not the health status of their partner. Another assumption is that we rule out any ethical considerations in our analysis, and we assume that individuals focus mainly on maximizing his or her own utility without concern for the other's wellbeing. To keep the model simple, we further assume there is no threat or use of physical violence. If the client prefers unprotected sex, he has the option of offering higher incentive or tip. Lastly, we assume that the client and FSW meet for the first time (and only one time). This rules out the possibility of a close relationship in which trust could affect decisions on condom use, which violates our first assumption.

Fig.1: Sequential game in venue-based sex market with HIV testing policy



Referring to Fig.1, the client goes first by choosing to enter a high-end, venue-based commercial sex establishment, thereby eliminating **Result 1**, where he chooses a sex worker by paying money to the sex work establishment owner.⁵ This payment is usually higher than in other sex market transactions and can be considered as some kind of “information rent” signaling a HIV-free establishment.⁶ The sex worker goes next usually offering condom use with probability $1-\Omega$. In Thailand, thanks to the “100% condom” policy, in most commercial sex establishments, sex workers will offer the use of condom, hence, Ω is near zero⁷ (UNAIDS & Health, 2000). This eliminates **Result 3** and **4**. The client can agree then with CD thereby establishing **Result 2** or he may try to negotiate for unprotected sex by offering

a higher tip (t'). Hence they could end up at **Result 5** if the payoffs of the sex worker are higher when accepting the higher tip with NCD than the risk she faces. More specifically, when the tip, t' , offered to the sex worker is high enough to compensate her disutility of becoming HIV infected, h , and losing her job, l , as shown in Eqn. 4 (or in the case when a client meets a HIV-positive sex worker). That is given $t' > t$, we have

$$\begin{aligned} U^{SW}(w, t', e_i^{NCD}) &> U^{SW}(w, t, e_i^{CD}) \\ u(w, t') - v(e_i^{NCD}, h, l) &> u(w, t) - v(e_i^{CD}) \\ u(w, t') - u(w, t) &> v(e^{NCD}, h, l) - v(e^{CD}) \end{aligned} \quad (4)$$

Of course, if the sex worker does not accept the client's offer for NCD, they could end up at **Result 6**, where the higher tip is rejected and they resume to CD at the "normal" rate. Alternatively, if the client insists on unprotected sex, he may go back to choose another sex worker and the sequential game is repeated.

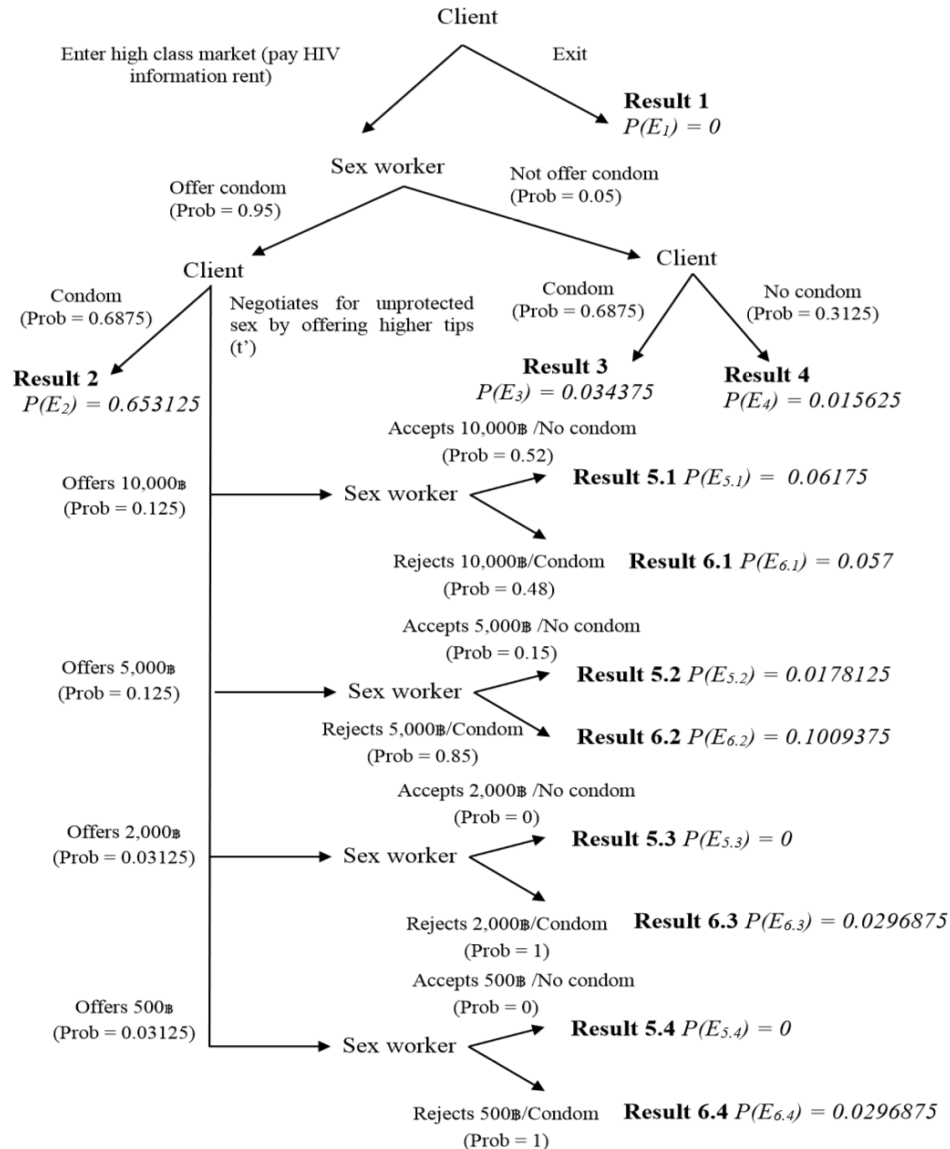
EMPIRICAL RESULTS

In this part, we use results from a field survey conducted in Thailand in late-2014 to calculate probabilities of interest suggested by our game-theoretical model. The survey conducted employed an experimental questionnaire completed by 32 male clients and 80 female sex workers (FSW) working in venue-based commercial sex establishments that adopted a HIV testing policy. The experimental questionnaire was designed to imitate the sequential game in our theoretical model testing sex worker's and client's decision in the commercial sex market. In particular, sex workers depending on randomly assigned questionnaire were offered various tips (Baht 500, 2000, 5000, or 10000) for risky sex. Based on the responses of the survey, Fig.2 shows the probabilities calculated for each possible outcome.

With the HIV testing policy in the high-end, venue-based commercial sex establishments, we could assume FSW to be HIV-free with a high probability, q_{sw} near 1. According to the survey responses, we calculate the probability that a FSW will offer condom use is 0.95 (i.e. 95 percent of venue-based FSW indicated that they would always offer a condom to the client). After condom use is suggested by the sex worker, the probability a client will accept condom use or CD is 0.6875, again this is from the responses by male clients we surveyed. Hence we calculate the probability of safe sex at $P(E_2) = 0.653125$. This suggests that there is still, a disturbingly high, 0.3125 probability that the client will offer a higher tip and end up with unprotected sex (NCD). The FSW will of course decide whether to accept the tip offer or not. In our experimental questionnaire, we randomly assigned to different FSWs a tip of either Baht 500, 2000, 5000, or 10000. We found that some accepted the offer for NCD when the offer was more or equal than Baht 5000. More specifically, the probability for commercial sex without condom when Baht 10000 tip was offered turned out to be $P(E_{5.1}) = 0.06175$ and when Baht 5000 was offered $P(E_{5.2}) = 0.0178125$. Be as it may, after calculating the various probabilities, we found that according to our survey, the probability for sex without condom

(NCD) was about 0.095 or 9.5%.

Fig.2: Results from survey in Thai commercial sex establishments with HIV testing policy



The HIV testing policy adopted by many high-end, venue-based commercial sex establishments however is only a weak signal as there is no guarantee that all FSW are tested frequently or consistently. When we asked about the last time of HIV testing, we found that only 37.5% of FSW in venue-based commercial sex establishments, where HIV testing policy was said to be adopted, tested for HIV in the past 3 months.

CONCLUSION

In this paper, we have presented a game-theoretical model under conditions of asymmetric

information to analyze the behavior of female sex workers (FSW) and their male clients in Thai high-end, venue-based commercial sex markets where HIV testing policy is adopted. We treat specifically the case in which the male client may know his HIV status, but the FSW does not know the health status of her client. Needless to say, the decisions of FSW and her client either to engage in protected sex (sex with condom, CD) or unprotected sex (sex without condom, NCD) have critical implication for the spread of HIV. We look specifically at the high-end, venue-based commercial sex markets where HIV testing policy is adopted, because we are interest to learn if signaling (indicating either high or low risk of HIV infection) is possible and if so, the implications to the HIV/AIDS epidemic. Furthermore, we use results from a survey conducted in Thailand in late-2014 to calculate probabilities suggested by our theoretical model. Understanding the behavior of FSW and their clients is important in developing appropriate policy to reduce the spread of the virus.

Thanks to the “100% condom” policy, we found that high-end, venue-based commercial sex establishments in Thailand instructed FSW to always offer condom use. According to our survey, 95 percent of FSWs always offered a condom to their clients first and none were willing to accept unprotected sex for tips less than Baht 5000. We learn that the HIV testing policy adopted by many high-end, venue-based commercial sex establishments is only a weak signal as there is no guarantee that all FSW are tested frequently or consistently. Hence, we suggest the use of condom in commercial sex market all the time i.e. “100% condom use”. Besides, although we have assumed HIV-free FSW, i.e. q_{sw} nears 1, there is still a possibility that a HIV-positive sex worker would be working in a commercial sex establishment before the test results are out, due to a testing time-lag.

END-NOTES

1. See for example Macho-Stadler and Pérez-Castrillo (2001)
2. George Arkelof won the 2001 Nobel Memorial Prize in Economic Sciences for his work on asymmetric information (shared with Michael Spence and Joseph E. Stiglitz).
3. Salary is usually paid at the end of the month, but we can easily calculate from this the daily pay.
4. The disutility function of becoming infected, h , depends on many socio-economic factors such as sexual preference, knowledge of HIV, education, the expected probability of a client being HIV, and so on.
5. The total price, P , includes the room rate, sometimes food and drinks, and the service price, w , which the sex worker receives from the owner. In addition, the client can give a tip, t , directly to the sex worker.
6. With the HIV testing policy in high-end, venue-based commercial sex establishments, the sex worker may be assumed to have a high probability to be HIV-free, i.e., q_{sw} nears 1.
7. UNAIDS and Health (2000) evaluated the 100% Condom Use Programme in Thailand in 2000, and reported that 97% and 93% of 2,000 sex workers always used condoms with irregular clients and regular clients, respectively.

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A STUDY ON TEACHERS' PREPARATION POLICIES AND EXECUTION FOR VOCATIONAL HIGH SCHOOL IN INDONESIA: A REFLECTIVE PERSPECTIVE OF IN-DEPTH QUALITATIVE INQUIRY

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ABSTRACT

This study investigates teachers' preparation policies and the policy execution in vocational high school in Indonesia. Using a qualitative method, the researcher selected university members who have been involved in teacher preparation programs and or policy-making in Indonesia as the participants. The data collection and analysis were undertaken according to research questions focused on the governmental policies and the implementation of teachers' preparation. This result shows that teacher preparation policies in Indonesia were enacted based on the teacher and lecturer law in 2005. Afterward, in 2007, the minister of education upgraded a policy through two regulations, the teacher's qualification and competencies, and teacher certification. To get teacher certificate and incentives from the government, vocational high school teachers should make portfolios and join series of training. This, certainly, effectively encourages many youngsters to become a teacher. The policy of teacher certification was updated and upgraded again by the government through teacher education program through either in-service or pre-service. The teacher preparation policies are conducted by Indonesian government through teacher certification, that focuses on the quantity of certified teachers based on the national standard. Consequently, teachers will face difficulty in creating graduates with high competency standards and high competitiveness in the global market. Teacher quality improvement should be done clearly with the orientation on international standard

Keywords: Teachers' Preparation, Policies, Execution, Vocational High School, Teacher Certification, Indonesia

INTRODUCTION

Teachers are professional educators with the primary task of learning, teaching, guiding, training, assessing and evaluating learner at all level of educations (Teacher and lecturer Law, 2005). The quality of teachers can determine the success of the school, and it can improve educational outcomes (Smith, 2008; AITSL, 2011). Vocational high school teachers also play important roles in creating graduates with high competency standards and high

competitiveness in the global market (Slamet, 2013). Therefore, teachers are supposed to be competent in teaching proficiency (Ministry of Education, 2010a).

One of the components comprising qualified teachers is teachers' learning, the practice of teaching, and students' learning (Kang, Cha, & Ha, 2013). According to teacher certification regulation (2007), professional teacher has four competencies: pedagogical, social, personal, and professional competencies. AITSL (2011) explained national professional standard of teachers consisted of professional knowledge, professional practice and professional engagement. Whereas, Training and Development Agency (2007) stated that teacher's professional attributes were professional knowledge and understanding, and professional skills. Professional knowledge of vocational high school teachers is reflected on their knowledge and research concept to respond the needs of their students, to know their students well, to know the content of their subjects and its curriculum, to understand effective endeavors and strategies in their learning and teaching programs, as well as to use their knowledge to make their students understand the content better (AITSL, 2011).

Therefore, teachers' preparation program should provide appropriate policies and practice to achieve its professional goals. In fact, Indonesian teachers have gained an increase of competence through education and training programs as well as through non-educational training programs (BPSPDM & PMP, 2011). In addition, since 2007, the government also has been conducting quality improvement programs through professional training and education to improve the teaching and learning qualities of teachers (Ministry of Education, 2010a & 2010b).

Meanwhile, the crucial problem in teacher evaluation is that the evaluation is only carried out during the preparation for school accreditation process. The schools conducted it merely based on the project. Consequently, the evaluation made by the schools was less effective and not deep enough. Eventually, it could not be used to evaluate teachers' preparation. Based on this issue, this research was conducted to investigate teacher s' preparation policies and its execution in vocational high schools in Indonesia. The hope is to improve the teacher policies and to increase the teacher qualities effectively.

LITERATURE REVIEW

DEVELOPMENTAL HISTORY OF VOCATIONAL HIGH SCHOOL IN INDONESIA

The mission of education according to the Ministry of Education (2014b) consists of five missions: increasing the availability of educational services, expanding the affordability of education services, enhancing the service quality and the relevance of education, achieving equity in obtaining educational services, and ensuring the award for education. The Directorate of coaching for vocational high school explains it in six missions: (1) improving and expanding equitable access to quality school, (2) improving quality through contextual-based Information and Communication Technologies (ICT), (3) empowering graduates through entrepreneurial and competence development expertise, (4) creating graduates adaptable to changes in technology and business environment at national and international levels, (5) strengthening governance through the implementation of CMS-based quality management system, and (6) creating schools with good brand image through various

communications media (Directorate of coaching for vocational high school, 2014).

In 2014, major programs of vocational high school were established based on an evaluation carried out three years before. The programs planned by the Directorate of coaching for vocational high school consisted of nine things: (1) application of good moral and character education; (2) development of schools through a creative human spirit, innovation, sportsmanship, and self-employment; (3) improvement on evaluation system, accreditation, and certification; (4) improvement on the quality and capacity of the infrastructure according to the national standards; (5) improvement and expansion of the use of ICT in the school field; (6) provision of e-books; (7) empowerment of communities and businesses; (8) coordination among ministries and or institutions of central and local government, as well as (9) alignment between education and the needs of the business and industrial world (Ministry of Education, 2014b).

According to Directorate General of Secondary Education (2015), the development trends of vocational high school have been increasing from 1995 to 2015. This had been evidenced by the increasing number of schools from 3,700 to 12,828 and by the increasing number of students from 1,570,000 to 4,303,201. Mustapha (2013) also explained that the development of school in Indonesia was seen on the increasing number of private vocational high schools, from 3,000 schools in 1995 to 8,701 in 2010.

To develop vocational high school system in the effort to increase students' competency standards, the government has allocated large operational funds. One of the ways is dual-system education between schools and the industry partners to apply the concept of link and match (Djojonegoro, 1998). School and teacher qualities were also improved by the government. Based on data from the Ministry of Education (2014b), the percentage of accredited vocational high school has increased until 30% in 2014. From 2009 until 2014, the percentage of schools with ISO 9001: 2008 certificate has been reaching 100%. Meanwhile, the percentage of teacher with bachelor qualification has increased from 85.5% to 98%, and the percentage of authorized teachers has increased from 32% to 90%.

Meanwhile, the current of problems of vocational high schools were the number of students and unbalanced distribution of study programs, the quality of teachers, the quality of graduates, infrastructure, competence standard, management, and finance (Directorate of coaching for vocational high school, 2014). Mukhidin and Handayani (2014) described one solution, which is through the improvement of teacher preparation in teacher education. Lim and Pannen (2012) also explained that teacher's preparation in educational competencies was essential to build the capacity through development of ICT usage in teaching and learning process. Then, the quality of teachers will improve in facing global challenges (Jusuf, 2005). In summary, major programs of vocational high school were established based on an evaluation carried out three years before. Whilst, the developing trends of schools have occurred from year to year, in terms of the increasing number of both students and schools. The government has allocated fund to develop school system and increased student competency standards through dual system education. Meanwhile, the current problems of vocational high schools are the number of students and the distribution of study programs, quality of teachers, quality of graduates, infrastructure, as well as competency standards, management, and finance. One way to solve the problem was improving teacher's

preparation in teacher education and building the teacher's ICT.

VOCATIONAL HIGH SCHOOL TEACHERS IN INDONESIA

Teachers play important roles in creating graduates with high competency and competitiveness (Slamet, 2013; Nurhadi, 2015). Therefore, teacher's competency in vocational high schools should be improved to support the pioneering of international standard schools in Indonesia. Competencies needed by professional teachers are the expertise particular field, competence in organizing and implementing learning according to the characteristics of the students, competence in teaching according to the needs of students and according to the existing condition, capability in developing student's potential, mastery at basic principle of learning based-competency, competence in developing curriculum based-competency to encourage the involvement of students in learning, competence in designing and implementing learning based-competency, and competence in assessing the process and the result of learning to refer to the whole educational purposes.

Meanwhile, some governmental policies related to implementation of teacher preparation for vocational high school are the policy of the national education system, teacher and lecturer policy, standards of national education, academic policy on standard qualification and teacher competencies, policy of teacher certification, and policy of educational program for professional teachers. They are taken to improve the quality of teachers (Ministry of Education, 2012).

In Indonesia, the initial education for vocational high school teacher is conducted by educational universities, such as Educational University of Indonesian, State University of Jakarta, State University of Yogyakarta, State University of Surabaya, State University of Malang, State University of Semarang, and other universities (Ministry of Education, 2012a; Directorate General of Higher Education, 2015). Graduates of teacher education should have the capability to understand the characteristics and potential of learners, to facilitate sustainable development, to communicate knowledge, skills, and attitudes of students, to master the theories, principles, and procedures in designing learning programs. In addition, they also need to manage learning in classes and schools to develop the processes and learning outcomes of students as well as to carry out assessments to improve the processes and learning outcomes of students to develop their potential and to foster an attitude. On the other hand, they need to use approaches and methods of action research to improve learning and to publish ideas and research results related to the field of education (Educational University of Indonesia, 2014).

Since 2007, the government has been implementing certification program as an effort to improve the quality of teachers. The program was expected to improve the quality of learning and the quality of education in Indonesia. One of the requirements to register for certification in 2014 was teacher competency test. It was done based on the evaluation of the certification implementation. Certification requirements for vocational high school teachers were divided into two, general and specific. General requirement is for teachers who have not been certified, active in teaching in school, and have academic qualification from accredited study program. Specific requirement was for teachers who were appointed as overseers for education units, have magister or doctoral degree from accredited university in the relevant field of education (Ministry of Education, 2014a).

In summary, vocational high school teachers have the crucial roles in creating learner with

high competency and competitiveness. Several policies related to the improvement on the quality of teachers were issued by government; they are policies of academic qualification and teacher competencies, teacher education, and teacher certification.

METHODOLOGY

This research uses qualitative method with a case study and ethnographic strategy. The researcher selected seven university members who have been involved in teacher preparation programs and/or policy-making in Indonesia as participants. The researcher used interview questions focusing on teacher preparation policies and its execution in vocational high schools in Indonesia. Then, the research data were classified into two groups: teacher preparation policies and policy execution.

The data of this study was investigated deeply to understand the professional perspectives of experience, activity, will, etc. The observation deals with the understanding on teacher preparation policies and its execution for vocational high school. The researcher uses an iterative process to the question phenomena and proposes explanations until he get a complete narrative description. Furthermore, the qualitative data were scored and analyzed theoretically.

The data analysis was used to manage the research findings and to uncover the implications of this study. The researcher presents the data authentically by directly quoting the on-site observation notes from the informants. Reconstruction was conducted systematically by meaningful interpretations and implications through comparison on the data collected from the in-depth investigations, so the best internal reliability can be reached. Furthermore, subjective and skewed interpretation was avoided by keeping constant reflection and objectively referring the data resources and the background of when and where they were documented.

DISCUSSION

TEACHER PREPARATION POLICIES

The governmental policies of teacher preparation are certainly so essential due to the teachers constituted the person who provides learning both directly and indirectly to learners (Corrigan, Alessandro, & Brown, 2013). Several policies for Indonesian teachers were laws, government regulations, and regulations of ministry of national education. They were issued as the legal basis of the execution in the field. These policies were expected to give welfare to teachers, so they can develop their teaching and learning and create graduates with competency appropriate with the current need of stakeholders or industries (Slamet, 2013). Khasawneh, Olimat, Qablan, and Abu-Tineh (2013) explained that teacher constituted human-resource education, which determined the standard for vocational students.

The government issued the laws regarding national educational system and teacher in 2003. According to the laws, teachers are a professional educator who builds planning, implementation, and assessment for the teaching process. Furthermore, the laws also explain the rights and obligations of teacher, and the educational qualification of the teacher. The rights of the teacher include income and welfare, award according their performance, career improvement, as well as facilities to conduct their jobs. More specifically, in 2005, according to teacher and lecturer laws, teachers of vocational high schools must have bachelor degree or four-years equivalent degree, teaching competencies (pedagogical, social, personal, and

professional), and have the certificate of professional teacher. The certification of professional teachers is conducted because professional teachers affect the skill of labor force to compete in the global market (Adamson, 2012).

In 2007, the regulation of professional teachers regarding the qualification standard of the teacher academics and the teacher certification in detail was issued by the government. According to these policies, teachers' academic qualification for vocational high school can be reached through formal education or a test of feasibility and equality. The minimum academic requirement is bachelor degree or four-year equivalent degree of the relevant subjects from accredited college. While, the feasibility and equality test can be obtained from authorized colleges, namely Education University of Indonesia, State University of Jakarta, State University of Yogyakarta, State University of Surabaya, State University of Malang, State University of Padang and other universities with the authority to implement them, either public or private (Directorate General of Higher Education, 2015).

According to governmental policies, four competencies of qualified teacher are the pedagogical competency, social competency, personal competency, and professional competency. Pedagogy competency is the ability to manage learning including understanding toward learners, design, and implementation, evaluation of learning, and the development of learners to actualize its potential range. The personal competency is the ability to have a steady, mature, wise, adult and authoritative attitude, to be the model for learners, and to have noble character. Social competency is the ability to communicate effectively with students, fellow educators, educational personnel, parents, learners and the surrounding communities. Professional competency is the ability to master the learning material widely and deeply, which allows teachers to guide the learners meeting the standards of competence (Teacher and lecturer laws, 2005; Regulation of academic qualification and teacher's competencies, 2007).

This policy was issued by the minister of education to implement teacher certification program nationally, conducted by universities that have teacher preparation program. This certification is carried out through the competency test, so the teacher participating in the program can acquire educator certificate. In one hand, it is conducted for certification process, to set the necessary requirements for joining teacher certification, as well as to organize institutional of teacher certification. On the other hand, it is also to improve educational qualifications, competences, and the performances of their teaching, as well as to develop a system of incentives and promotion or teachers' career increase reflecting increased competence and performance of teachers.

The certified teacher will get incentive as a professional teacher based on the governmental policy of 2009. It is done to improve the welfare of teachers, so they are motivated to improve the quality of their teaching and learning as well as to fulfill the minimum national standard of professional teachers. The incentive is given monthly with the value of equal to one time salary (Teacher's incentive regulation, 2007).

THE EXECUTION OF THE TEACHER'S PREPARATION POLICIES

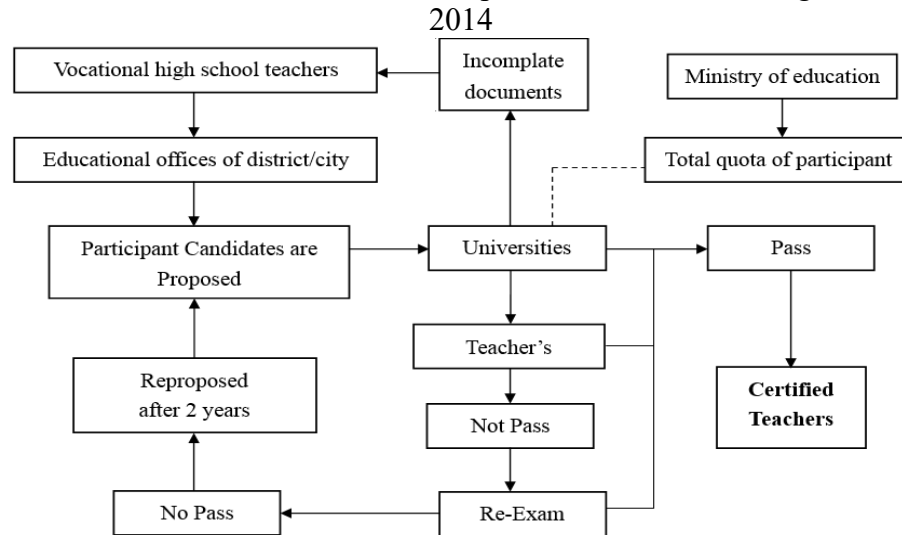
Teacher preparation policies are executed by the central government, the government of regency/city/province, minister of national education, and college. The central government is responsible to allocate budget for the implementation cost of teacher preparation and incentive for certified teachers. It also determines the number of teachers joining the

certification program each year. According to the Ministry of education (2014a), regional government and district/city/provincial educational offices have the task to check the administration of teachers who will join the certification in every year. The minister of national education has the responsibility of implementing all activities regarding teacher's certification and determines the quota of teacher certification. Universities are the authorized institutions carrying out teacher's certification (Teacher and lecturer laws, 2005).

Based on teacher certification regulation (2007), the certification is based on teacher's portfolio and teacher-training program starting in 2007. First, the teachers should arrange their portfolio if they register for teacher certification program at the regional level. Hereinafter, the educational office at the district or city will do corrections and selection on teacher's certification documents. This is undertaken to check whether all documents are complete according to the requirements of teacher's certification. This is done before the documents are sent to the universities, the institutions responsible for the teacher certification (Ministry of National Education, 2007).

As the executor of teacher certification, the universities must have been accredited nationally. They will verify the documents sent by the regional government. The documents will be selected and sorted based on the result of their scores. It is done to determine participant teachers who will follow the certification. The participant's information will be announced online on the universities' website or at educational offices on each district or city. The central government determines the quota of the certification. Fig. 1 describes the mechanism of certification for vocational high school teachers in 2007 - 2014.

Fig. 1: The mechanism of teacher certification process for vocational high school in 2007–



Start from 2015, based on teacher education regulation (2010), the government implements different system of certification process. The certification is conducted through in-service and pre-service teacher education. The executor's institution remains the same with the previous system. To become a participant, the teachers of vocational high school must pass teacher competency examination held by quality assurance agencies in Indonesia. After the participants pass the exam, they can enlist themselves to the university that effectuates in-service teacher educational program. The program has four stages: (1) recognizing past learning; (2) implementing workshop or training; (3) strengthening teaching ability within the school for six months; and (4) executing final exam held in the school (Ministry of Education, 2014a). Fig. 3 illustrates the mechanism of certification for vocational high school teachers in Indonesia in 2015.

Bales (2006) explained that teacher education program must be carried out professionally and accountably by the state for each region under the responsibility of the policy maker. Bell and Youngs (2011) also described that programs, program size and structure, and participants' beliefs about professional practice in teacher education needed to get crucial attention.

CONCLUSION

The results of this study show that Indonesian government has issued some policies to improve the quality and the welfare of teachers. Those policies are the national educational system, teacher and lecturer laws, qualification for teacher academics and teacher competencies, teacher certification, as well as teacher incentive. These are conducted to be the measure of professional teachers, so they can increase their quality of teaching and learning based on the need of the learner and competency standards, which must be received by the learner based on national educational standard.

The execution of teacher preparation policies is also conducted by central government, the government of regency/city/province, minister of national education, and universities that have the authority to conduct the teacher educational programs and that they have been accredited nationally. During 2007-2014, the teacher certification had been undertaken

through teacher portfolio and teacher training. The teachers who have passed the process will be given the certificate informing their status as professional teachers. In its development, this certification uses a new system, which is through in-service teacher education in 2013. Generally, the execution of teacher preparation policies is still oriented on the quantity of certified teachers based on the national standard. Consequently, the certified teachers will be difficult to create graduates with high competency and competitiveness in the global market. For teacher quality improvement, future policies should focus on the process of qualities and clear competency standard for vocational teachers orienting on international standard.

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THE EXPERIENTIAL LEARNING EFFECTIVENESS TOWARDS TECHNICAL STUDENTS' COGNITIVE ENHANCEMENT: A REVIEW

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ABSTRACT

A technical student performance usually would be disclosed by cognitive enhancement towards their treatment that shows result by learning development. However, these technical students are facing with challenges due to inconsistent learning method, that cause them being demotivated. According to previous studies, experiential learning as one of learning method are seen compatible for technical student that need experience in learning to gain their knowledge. Nevertheless the effectiveness of this learning is still in query for student cognition. Thus, this paper presents a review on the effectiveness of experiential learning towards technical student's cognitive enhancement. This review also highlights the effectiveness cognitive enhancement towards their performance. In summary, it is important to understand the cognitive enhancement in technical students through experiential learning to improve their excellence to create competitive future engineers in society.

Keywords: Cognitive enhancement, effectiveness of experiential learning, academic performance, andragogy, information processing, technical and vocational education

INTRODUCTION

Nowadays there are many of learning method used in higher educational institution for students to growth their performance especially in academic. More than 100 years, the development of learning techniques have been made by psychologists and yet, still many lecturers do not learn about the effectiveness of learning methods and the students however too do not use them as there are evidence shows the techniques could give them benefits towards their achievement (Dunlosky, Rawson, Marsh, Nathan & Willingham, 2013). Meanwhile the inconsistency of learning method has been said that become one of contributors to the weaknesses of student performance (Bakri, Abd Razak, Ab Rahman & Ahmad Khalid, 2005). Not only for several education institutions, this been similar with technical and vocational institution which standing up with variety of learning methods to enhance their students' performance in skill and competency. This matter however has plunged the students into confusion in which learning technique they should be followed. As consequence, the students could not improve their cognitive skills that will cause them tend to be passive, which applies due their brain and mind could not develop properly (Reighluth, 2012). Thus, by helping students in choose an appropriate learning method that they should have is the most important thing to be done.

EXPERIENTIAL LEARNING TOWARDS TECHNICAL STUDENT

With changing the new requirement of the sake of employment seeking, there is a need of how the learners should know the learning methods they must be chose. As variety of learning method which been approached to technical and vocational students, experiential learning is a part of them who give the learner through experience came out by some activities during lectures and method (Brakenreg, 2004; Benecke & Bezuidenhout, 2011) and it is engaging directly with learner's study phenomenon in classroom (Cantor, 1995). Kolb (2015) has explained that experiential learning often on direct sense as primary source learning as for thinking, analyzing and knowledge. Experiential learning however be meant as learning by doing where it is happens in classroom through playing with tools and interaction with teamwork instead of only can be took place outside the classroom (Moore, 2004; Rosenstein, 2012). When this approach applied in learners, it is usually being associated with certain theories and practices dependently on the concrete experience reflectivity (Fenwick, 2001). When experiential learning occurred, it means that learner has engaged in an activity and strengthen their comprehension delivered by analyzing and behavior of changing according to the result (Pfeiffer & Ballew, 1988). Thus it can be said that, the experiential learning is one of learning method where the learners participated directly during classroom activities that result on their behavior (Arnold, Warner & Osborne, 2006).

In meantime, this experience learning was one of learning technique process where the outcome of new skills and concept has been developed (Fenwick, 2001). Consequently, with the changes of new skill, the learner would be able to solve the problem by using meaningful experience that can deliver for their benefit (Simpson, 1966). Similarly to Fenwick (2001), he explained that those learners who learned from their experiences, it is referred to any of kinesthetic with directed learning in classroom activities through movements during action taken. Besides, it is also useful for them where the theory need to be applied into the practice to increase their comprehension (Brackenreg, 2004). Apart from that, Kemp (2010) stressed the experiential learning is an active learning which leaving the traditional method customarily used in learning and they actively participated on any of activities in classroom. However Mohammadzadeh (2012) argues the knowledge of experiential learning is does not come from "doing" in activities. Based on his finding, it is been identified that learners preferred to watch rather than do by themselves in terms of gathering the information given and find the solution for the problems they had faced. But Lalley (2007), proves in her study that learners would have seventy percent in contents of what they learned when practice of what they learned, instead of only thirty percent of contents that they had when they see a demonstration during learning. Hence it is can be integrated, by involving oneself in classroom activities with actively, the learners would have a lot of knowledge grabbed during the movement they have done (Maskulka, Stout, & Massad, 2011). Instead of that, this approach was also promoted the learners with new skills and new behaviors according to their experience through up (Healy, Taran, & Betts, 2011) as they had a great confidence in lesson they been learned by active involvement rather they been a passive learners (Joshi, Davis, Kathuri & Weidner, 2005).

Meanwhile, in rapid technology developments nowadays, there are lot of vital professional matter are being certified where mostly country build for technical academies (Lynch & Russell, 2009). Hence, the role of experience has given a great attention to engineering learner, where technical and vocational learners specifically. For these technical learners, the experiential learning approach is usually occurred with experience such as playing with

tools and equipment (Pfeiffer & Ballew, 1988). Additionally, this treatment allows students to interact with their equipment when it is used. Thus their learning comprehension through experience of interaction will be gained indirectly. Through this learning approach too, their remembrance of what they have learned can be promoted as the “doing” and “practices” pace them with material or tools they enrolled in classroom (Tan & Gillet, 2005).

Besides, through learning in laboratory as one of experiential learning approach helps these learners to integrate the practical and theoretical elements in course which is necessary to strength their comprehension (Cantor, 1995). This learning method also can be comprised such as hands on (Pugsley & Clayton, 2003) where the learner learn directly and having an interaction with the tools too. A revealed by John Dewey as an American educational philosopher where he believed that the experience gained is the result of how the learner overcome with a problem in a situation given to them and how the process of interaction (Rizk, 2011). Furthermore, Rizk also stressed in experiential learning, the learner supposedly should be able to cope of new experience to what they have been known before in order to test out the lessons developed in them.

Therefore, it can be said that, by offering the learners with some activities as they learn from experience, this approach can be used to give them a good opportunities to earn meaningful knowledge and improve their behavior, skills and way of thinking even they had the experience in classroom.

COGNITIVE ENHANCEMENT THROUGH EXPERIENTIAL LEARNING

Sophistication of technologies nowadays are coming from enhancement of cognitive, showed on how it produced by experts. Cognitive enhancement may refer to strength of mind core capacities through reinforcement of information processing system (Bostrom & Sandberg, 2009). There is more effort to enhance the cognition. However it takes several of method such as education and training where the goal is not only for certain skills or information, but to enhance the concentration, memories and critical thought. For (Miettinen, 2000; Santoni de Sio, Faulmüller, & Vincent, 2014) they stressed out that cognitive enhancement as to enhance the mental performance where people eventually would change their duties, as the cognitive enhancement is resulted of their performance, choice and action as what they have been going through by practicing (Mordacci, 2014). It is also may give an impact to moral of society and usual norm. Thus, the cognitive enhancement also might be referred as enhancement of thinking process that succeed by interference in learning component (Claus, Nissen & Fucas, 2012). Previous study are frequently have analyzed enhancement cognitive research in medical field, nevertheless it is also can be look in wider perspective which not particularly in healthy (Mordacci, 2014); related to personal change including the students change through their learning as well. For student, it is necessarily for them to overcome complex issue and challenge with society (Eyler, 2002).

Sio, Robichaud, & Vincent (2014) argued that, cognitive enhancement should be divide in two cases, and one of them is activities in practices-oriented. As students of engineering for example, they need a tool to enhance their learning (Siddiqui, Khan, & Akhtar, 2008) such as hands on approach as one of activities in classroom. This learning tool collaborated with educational has gained the students' cognitive based on their learning experience (Bonk & Cunningham, 1995). Furthermore, when the learning is about to grow the experiential, thus the “doing” through activities in class should be focus on. When mentioning about “doing”

it leads to how tools make sense in the lessons context towards the students (Wankel & Blessinger, 2012). Their finding was also explained by using learning tools, it could support student motivation. However Ernst (2013) a west country researcher concluded in his finding that the involvement of learner in experiential learning approach has extent their opportunities contribution to cognitive competency enhancement. Additionally, this approach also gives some opportunities to learners as they become more enjoyable, real-world exposure and a range of future for their future implementation. Muscat & Mollicone (2012) as a lecturer in a university found from their teaching experience, through this enrolling with equipment as learning tools, they became a benefit to learners where they could learn on their own initiative and validate the theories that they have learned through the practical as hands on experience. This experience actually adds a lot of learning process as they gained a wealth of experience in dealing with an operation that uses equipment. Eventually, learners who very good to develop of what they have learnt and adapt it in environment to get things done in better way would be fulfilled the characteristic required in become a professional engineer.

CONCLUSION

Experiential learning therefore has a potential as a better learning approach to learners as they not only gained knowledge but also a meaning experience. It is also a necessary to engineering lecturers in transmitting information through “doing” experiences rather than make them as a passive learner. They also need to deliver learners how to learn so that the learner would be ready to become a professional engineer. With cognitive enhancement, the learning outcomes are then indicated that it can be increased as well as explained through Efstratia's (2014) finding. This learning approach also would become an enjoyment to learners and it then trigger the cooperation among them that who one might not have worked together before. It is also fits well with the need to engineering learner specifically in order to reinforce the critical mental works.

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TERTIARY STUDENTS' PERSPECTIVES OF THE MDAB PRE-DIPLOMA ENGLISH LANGUAGE COURSE

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ABSTRACT

There is no denying that English Language is fast becoming an international language for knowledge, communication and commerce. Hence, English Language courses with a focus on communication at the workplace are often offered as compulsory credit courses in all Malaysian institutions of higher learning. Obtaining feedback from the students is an effective means of getting useful information on the quality for course improvement. Therefore, the main aim of this paper is to explore tertiary students' perspectives of a pre-diploma English Language course offered to underprivileged students under the Mengubah Destinasi Anak Bangsa (MDAB) Programme. The study involved students under the MDAB Programme from three branch campuses in Peninsular Malaysia involving a total of 376 students. Data was collected using a questionnaire and focus group interviews. The findings revealed that students generally held positive perceptions of the course and were satisfied with the course objectives and instructors. Students also expressed satisfaction with regards to the teaching and learning of grammar, listening and reading skills. Nevertheless, they voiced concern with regards to assessment and the teaching and learning of speaking and writing skills. They also felt that support from administrators and institution left much to be desired. They hoped for a more holistic language course that would enable them to function more effectively at the workplace.

Keywords: Students' Perspectives, English Language, Feedback, Course Evaluation.

INTRODUCTION

Even though English language is the third most widely spoken language in the world after Mandarin and Spanish, it is fast becoming an international language for knowledge, communication and commerce (Marginson and Van der Wende, 2007). It is also a dominant second language in a large number of countries including Malaysia where English is a compulsory second language in all public schools and tertiary institutions.

There is no denying that learning and acquiring English language as a second language is undeniably challenging. Researchers such as Ellis (1994) and Brown (2001) highlighted that

classroom input alone is not one of the best ways to acquire a second language. This is so because classroom instruction comprises mainly of teacher talk, textbooks and peer speech. More importantly, in such a classroom scenario, students' language proficiency is often determined by standardized English multi-choice examination and grammar rules with little concern for learning the language for meaningful purpose and communication (Brown, 2001). Hence, classroom language learning instruction can restrict the learners' opportunities to use English for real-life purposes. A similar view was also put forward by Littlewood (2002) who suggested that often second language learners are not aware on the importance and the need of English language as they regularly use the language for external rather than internal communication. He further explained that most of the ESL (English as a Second Language) users have no idea on the purpose of English language because of their little contact with the language speakers.

Since classroom language learning and instruction are often determined by curriculum developers and lecturers, it is therefore pertinent to obtain the views of the end user – i.e. the learner. This paper puts forward the students' perspectives of a pre-diploma English Language course under the MDAB (Mengubah Destini Anak Bangsa) Programme. The MDAB is a programme that was initiated by the Vice Chancellor of Universiti Teknologi MARA (UiTM, hereafter) in July 2010. The main aim of the programme is to provide a second chance to pursue tertiary education for qualified but poor indigenous students who fail to gain entry into existing pre-university courses in Malaysian public universities. All students under the MDAB Programme have to take the compulsory Pre-Diploma English Language (PDEL, hereafter) Course. Under the MDAB, English is viewed as an essential 21st century skill for today's globalised economies. The primary focus of the PDEL course is on reading and listening with appropriate consideration given to speaking and writing. It also incorporates lessons on grammar which are taught incidentally through listening, reading, speaking and writing tasks.

The PDEL course has been in effect for close to five years now and to date several amendments have been made to the course. Nevertheless, most of the feedback obtained has been from the lecturers teaching the course with little or no empirical data that has looked into the perspectives of the students. Therefore, this paper will look into the students' perspectives of the PDEL course.

According to Keane and Labhrainn (2005), course evaluation is important as it helps to enhance course curriculum and delivery system for future students making it more relevant to changing demands. Hattie (2008) further reiterated that holistic evaluation requires feedback from all stakeholders including students as it has an important influence on their achievement. Scott-Webber (2012) further stressed that getting students' perspectives is critical today due to massive changes in ICT that are reshaping learner needs. She highlighted that instructors who see themselves as content experts and providers are redundant in today's learning environments. This is so because students can locate the 'what' of learning anywhere and at any time. So, by providing feedback, students get a better perspective of the course and they learn how to improve their learning. Harper (2000) further added that listening to students gives them the opportunity to influence not only classroom activities but also curriculum and education policies. Student perspectives on course evaluation should hence be viewed as a primary means of anonymous feedback on the quality of a course in terms of teaching, learning and assessment. Furthermore, course evaluation can help instructors gain

a better insight into student learning experiences and highlight teaching strengths and weaknesses. Such a move can help improve teaching performance and student learning. This was also articulated by Yorke (2002) who stressed that feedback can help improve a student's confidence, self-awareness and enthusiasm for learning. More importantly, getting effective feedback in students' first year in tertiary institutions can help in the transition to higher education and this may not only help reduce attrition rates but also support student retention. To this, Cashin (1990) emphasises that instructors need to keep in mind that "student ratings are the start of the instructor's journey toward improvement, not the end" because effective student rating items "do not provide answers; they provide questions" (p.1)

Therefore, the main purpose of this study was to explore students' perspectives on the implementation of the PDEL course. This paper will only address a section of a holistic study that was conducted to evaluate the effectiveness of the PDEL course.

THE STUDY

This study was conducted in Universiti Teknologi MARA (UiTM, a public university located in Malaysia. It has branch campuses in all the 14 states of Malaysia. The medium of instruction in UiTM is English and all students are required to pass their English Language course for graduation. The PDEL course is offered to all students under the MDAB programme. For this study, three UiTM branch campuses (i.e. Melaka, Seremban and Kelantan) comprising of 341 MDAB students were randomly selected for the study. Data were collecting using a questionnaire and focus group interviews. All 341 respondents responded to the questionnaire and they were coded based on gender and locality – e.g. RF2S referred to Respondent Female 2 from Seremban. A total of three focus group interviews were conducted at each branch campuses. Each focus group comprised between eight to ten respondents and were formed based on their English language proficiency – i.e. Group A (high proficiency), Group B (average proficiency) and Group C (limited proficiency). Hence, a total of nine focus groups interviews were conducted. The quantitative data was analysed using descriptive and inferential statistics whilst the qualitative data was analysed using both deductive and inductive analyses. Given below in Table 1 is the demographic profile of the respondents.

Table 1: Demographic profile of respondents

Characteristics	Frequency	Percentage (%)
Gender		
Male	103	30.2
Female	238	69.8
Locality		
Melaka	147	43.1
Seremban	75	22.0
Kelantan	119	34.9

RESULTS AND DISCUSSION

One of the main aspects investigated was students' perspectives on the implementation of the PDEL course. Given below in Table 2 are the students' responses. The findings revealed

that students generally held rather positive views regarding the implementation of the PDEL course (M=4.32).

Table 2: Perceptions on the implementation of the PDEL course (n=341)

Items	Mean	Std. Deviation
Course Objectives	4.54	.620
Course Module	4.59	.620
Lecturer Preparation	4.29	.755
Language Use in Class	4.39	.696
Lesson Presentation	4.19	.578
Classroom Management	4.16	.672
Classroom Atmosphere	4.18	.712
Use of Technology	4.22	.847
Total	4.32	.688

Scale: 1=strongly disagree, 2=disagree, 3=almost agree, 4=agree, 5=strongly agree

The students were happy with the course objectives (M=4.54, SD=.620) and the course module used for the PDEL course (M=4.59, SD=.620). Interview sessions collaborated these findings. Majority of the respondents felt the course was good and they expressed satisfaction with the course objectives. For instance, Respondent RF-A7 from Melaka said:

'I am content with what this course offers. This course improves my English skills and from this course I can now communicate in English with my friends. . . although I still make mistakes.' (translated version)

Nevertheless, responses towards the course modules were mixed. Some students felt the module was too restrictive. For example, Respondents (RM-A1 and RF-B5) from Kelantan felt they preferred the teacher to use materials that were current and felt learning from a module was rather 'boring' whilst Respondent RF-A2 from Melaka felt that using a module was 'like using a textbook and I feel it is like been back to school'. On the other hand Respondents (RF-A8, RM-B5) from Seremban and Melaka (RF-B2, RF-B9) stressed they liked learning from a module as it helped them prepare for the next class and the module was always 'handy and useful during exam revision time'.

Students also expressed positive views with regards to lecturer preparation (M=4.29), language used in the classroom (M=4.39) and lesson presentation (M=4.19). Students also felt that their lecturers were able to maintain good classroom management and the learning environment exhibited a warm and open classroom atmosphere. Almost all students interview agreed that their lecturers were 'very nice', 'approachable' and very motivating as they often encouraged them to 'speak in English.' For instance, respondents from Seremban (RF-A2 and RM-B5) and Kelantan (RF-A1, RF-B3 & RF- C1) highlighted that their lecturers took time to attend to their needs and often coached them on a one-to-one basis. Respondent RF-B7- Melaka further reiterated that, "my lecturer uses interesting books and she uses a clear approach when she teaches us. She also always motivates us. This makes our English language classes fun and interesting." Nevertheless, some respondents from Seremban and Melaka highlighted that most of their lecturers were 'rather young' and 'some students were not serious in class ... and interrupted classroom learning." These respondents felt that young

lecturers lacked classroom management skills and voiced preference for more senior lecturers so that 'all students will be serious and pay attention' so that more 'effective learning could take place' (RF-A3- Seremban).

With regards to language use, almost all respondents agreed that their lecturers often code-switched from English to Bahasa Malaysia (official language in Malaysia). Majority agreed that they liked this as it helped facilitate the learning of English. The use of code switching was a norm in almost all their classrooms. For instance, Respondent RM-B5 from Seremban pointed out that:

'In our English class almost all students like to mix English and Malay. Even though our lecturers often remind us to use English we are more comfortable using mixed languages. . . Some lecturers are very strict. . . they only use English . . . we do not like that as it is very difficult for us to understand all English. . . . we prefer if lecturers explain the difficult words in Bahasa Malaysia. Then, we understand better.'

All the above articulation by student voice concurs with literature on effective instruction and reflects what Ellis (2008) cited in Rahman & Alhaisoni (2013) highlights that current English language teaching methodologies should focus on the significance of providing learners with ample opportunities to communicate and activities that engage and encourage student participation.

Students also expressed satisfaction with regards to on-line learning (M=4.22). Interview sessions further pointed out that students were required to do some self-learning via- online modules. This was welcomed by many though some saw it as a 'burden' due to poor internet connectivity.

In this study, students were also asked to rate their satisfaction level on a number of components and aspects in the PDEL course. The findings displayed in Table 3 below revealed that students expressed the highest satisfaction levels for course duration (M=4.58, SD=.620) which is for a year or two semesters. Likewise, a high satisfaction level was also articulated in terms of getting help and guidance from lecturers. As mentioned above, the respondents in this study were generally happy with their course instructors (M=4.22, SD=.872) as they were willing to help them improve their English language. For example, Respondent RM-A9- from Seremban pointed out that he was happy with the course because the lecturer emphasized two-way communication. He added:

*'I think the way lecturer conducts this course is really good.
She teaches all components and indirectly includes grammar in her class.
She also emphasizes two-way communication. . . I like that.'*

Moderate satisfaction levels were also verbalised with regards to the course components (M=3.33, SD= .755) and on-line learning activities (M=3.32). Respondents also communicated moderate satisfaction with the teaching and learning of a number of language skills. They felt that the course provided sufficient practice for listening (M=3.26), reading (M=3.68), grammar (M=3.12) and literature (M=3.28) activities. Nevertheless, respondents expressed dissatisfaction with the productive skills activities provided for the speaking (M=2.15) and writing (M=2.12) skills.

Table 3: Students' satisfaction level with the PDEL Course (n=341)

Items	Mean	Std. Deviation
Course Duration	4.58	.620
Course Components	3.33	.653
Listening Activities	3.29	.755
Speaking Activities	2.15	.211
Reading Activities	3.68	.358
Writing Activities	2.12	.549
Grammar Activities	3.12	.623
Literature in the Language Classroom	3.28	.652
Classrooms assessment activities	2.13	.369
Final Examination / Quizzes	3.23	.459
Co-curricular activities in English	2.26	.723
On-line language learning facilities	3.32	.623
Help and guidance from administrators	2.28	.563
Help & guidance from lecturers	4.22	.872
Institutional facilities	2.56	.723
Total	4.20	.545

Scale: 1=very dissatisfied, 2=dissatisfied 3=moderately satisfied 4=satisfied 5=very satisfied

These findings were also highlighted by a few respondents during the interview sessions. Respondents felt that this course had actually improved their listening skills. For instance, Respondents (RF-A2, RM-A9, RMB1) from Seremban and Respondents (RF-A4, RF-A6, RM-C1) from Melaka pointed out that the PDEL course focussed on listening and speaking skills in Semester One. These students further elaborated that they liked the listening activities very much as the activities were varied, 'interesting' and 'fun'. Respondent RF-A1 from Seremban highlighted that in school her 'teachers did not do many listening activities' so she truly appreciated the time her lecturers took 'to prepare interesting activities for listening.' On the other hand, respondents voiced their concern for a lack of emphasis given to speaking and writing skills. Respondent RM-A1 from Kelantan felt he would have liked if the lecturers 'spend more time on teaching writing' as he was weak in writing. Likewise, Respondents RFA7 from Seremban and Respondents RF-A9, RM-B4, RF-C1 from Seremban declared they were not given ample opportunities to practice their speaking skills. Respondents from all three branch campuses also emphasised that their lecturers provided them with many interesting classroom activities with regards to the four language skills. The following are some excerpts taken from the respondents:

"My friends and I like learning English here as we can practice and do many activities together. The English activities are fun and the lecturers are all very kind and understanding." (RF-A8- Seremban)

'Lecturers sometimes give us some interesting activities . . . such as role play. We can write our own dialogue in that role play. Thus, we enjoy doing it.' (RF- B3-Melaka)

'During our listening classes. . . we have learnt to listen to the audio and answer question. My lecturer . . . pronounce the words and we have to write the spelling correctly.' (RF – B7-Kelantan)

'I like dictation activities . . . we have to listen and write, (RF-B3- Seremban)

Low satisfaction levels were also expressed by respondents with regards to classroom assessment activities ($M=2.13$). This was also corroborated by respondents during the focus group interviews. A large majority of the respondents felt that the course had too many quizzes and assignments leaving little time for effective learning to take place. This was succinctly put across by Respondent RF-A4 from Seremban. She said that,

“after the first few weeks we had to prepare for so many different types of quizzes and presentations. . . I think all our semester was spent doing assignments. . . we would have liked if our lecturers teach us more”

Low satisfaction ratings were also given to institutional facilities ($M= 2.56$) and getting help from administrators. ($M=2.28$). Interview sessions further verified these findings. A majority of the respondents confirmed that institutional facilities left much to be desired. Among the main grouses were centred around accommodation, leisure activities and eateries. They expressed discontentment with the lack of social facilities and hoped that the physical environment could be improved. A few others complained about internet connectivity whilst others highlighted that more variety of food should be prepared at college eateries. There was also a call for more monitoring of cleanliness in eateries and hostels provided by their respective colleges. A few voiced concern that if effective monitoring was not conducted students could succumb to illness and other diseases such as dengue fever, diarrhoea and food poisoning. Students also felt that their grouses often fell on deaf ears as administrators ‘did not bother complaints made by students’ (RF-B9- Seremban). Hence, a majority felt they could do with more help and guidance from administrators at their respective institutions.

Students were also asked to highlight one issue that they would like addressed. A large majority claimed that their main concern was their limited language proficiency. They admitted they possessed limited vocabulary and needed much help in grammar for language accuracy. Almost all of them confessed that they possessed a positive attitude towards the study of English as they knew the importance of English. Nevertheless, they felt they had rather limited exposure to the language. Henceforth, they called for an increase in the contact hours for the teaching and learning of English. Given below are excerpts from two students:

‘This course is really good. But the syllabus needs to be improved because I think this course is really compact and the contact hour is too short.’ (RM- B3- Melaka)]

‘This course helps me a lot but due to the short contact hour with my lecturer, I can’t learn as much as I should be. So, the duration should be added. I want to improve my grammar, speaking and writing skills’ (RF-A5- Seremban)

CONCLUSION

Dumaniga, David and Symaco (2012) highlight that good communication skills at the workplace are expected by all stakeholders. Therefore, tertiary institutions have to ensure that students are well equipped with both oral and written communication skills so that they can compete for jobs at the global level. Likewise, respondents in the PDEL course articulated they are all aware of the importance of English. They held rather favourable and positive opinions of the course and expressed satisfaction with their course objectives and components. Nevertheless, they stressed they would like more emphasis given to the productive skills of speaking and writing and hoped the contact hours for the course could be

increased. They also felt assessments should be decreased so that more time could be allocated for the teaching and learning of English. They expressed satisfaction with their lecturers whilst some called for more senior lecturers so that better classroom management could be enforced. Speaking in English is often encouraged in their classrooms though code-switching is a common practice as the respondents are all from a homogeneous group. Respondents also highlighted that their lecturers provided them with interesting and fun activities.

This paper has provided some insights into students' perspectives into the MDAB Pre-Diploma English Language course. It is hoped that the relevant authorities would take into consideration students' views to further enhance the course curriculum and delivery system. Both course developers and implementers need to reflect on their goals and objectives and target on areas to work on to enhance student learning and achievement. Lodge (2008) highlighted though educational institutions have long been involved in getting student feedback on a number of issues such as accommodation, and facilities but student feedback on the teaching and learning has been rather limited. As educators, we have to realise that student feedback helps teachers grow and involving students in the dialogue about their own learning can also help them become better learners. Therefore, students need to be equipped with the right skills so that they can be empowered to take responsibility of their own learning by providing constructive feedback (Sidhu, 2009).

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INVESTIGATING ESL STUDENTS' WRITING PERFORMANCE IN THE PRE-DIPLOMA ENGLISH LANGUAGE PREPARATORY COURSE

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ABSTRACT

The pre-diploma English language preparatory course is offered in Universiti Teknologi MARA (UiTM) under the Mengubah Destini Anak Bangsa (MDAB) Programme. It caters for students who are at risk of educational failure. The course aims to improve the English proficiency levels of Malay and Bumiputera students who were not able to continue their tertiary education after completing secondary school. Besides, bridging to help them further their studies at diploma level, the course also aims to equip them with literacy skills necessary for the 21st century. Literacy skills, particularly writing skills, are essential for academic success for students pursuing their university education. This paper investigates ESL students' writing performance in the Pre-Diploma English Language course. The study involved a total of 261 students from three UiTM branch campuses. ESL students sat for a validated and reliable Diagnostic English Language Writing Test to assess their writing performance. Results show that close to 80 per cent of the students failed the test i.e. they obtained grade bands of 'C-' and below. In addition, the findings revealed that there is no significant difference in students' performance based on their gender. However, there is a significant difference in their performance based on academic discipline, language proficiency levels, and locality. This means that these students have poor English language writing skills and need intensive support so that they can master writing skills necessary for academic success.

Keywords: English as a Second Language (ESL), writing performance, English language preparatory course

INTRODUCTION

Sun et al. (2010) posit that a firm foundation in literacy is a key factor for academic success. What this means is that good reading and writing skills are needed for students to achieve academic success. This is further corroborated by McNaught and Hoyne (2012) who assert that, "writing skills underpin academic success in any tertiary course, irrespective of the

discipline” (p.1). Other researchers such as Goldfinch and Hughes (2007) and Tuan (2010) claim that the ability to write in English is considered fundamental for students to be successful in college and their future careers. This is particularly crucial for students taking English as a second language (ESL) who are pursuing tertiary studies. According to Hyland (2013) English language skills are “becoming less a language than a basic academic requirement for many users around the world” (p. 54). Therefore, it is not surprising that university students are expected to achieve high levels of language skills (Knoch et al. 2015). According to Goldfinch and Hughes (2007) few university students are adequately equipped with writing skills necessary for academic success at tertiary levels although many were under the illusion that the writing skills that they possess before gaining entry to university will be adequate. The lack of essential skills particularly in writing often is the cause of students’ failure to cope with normal course work (Lau, 2003). The eventual result is that students withdraw from tertiary education due to their lack of academic literacy skills, particularly in writing (Goldfinch & Hughes, 2007). This underlines the importance of writing skill in tertiary education, in particular for ESL writers.

Of all the English language skills, Richard and Renandya (2002) postulate that writing is the most difficult skill to acquire. There are many factors that affect and shape second language (L2) writing and researchers have looked into L2 writer’s characteristics, the writing process, feedback, L2 writing instruction and L2 writer’s texts (Zhang, 2008). These studies provide insights into how best to approach L2 teaching and help improve L2 writing (Matsuda & Silva 2005).

Besides the factors stated above, there are other factors that affect L2 writing. According to Cummins (2000), “academic proficiency transfers across languages such that students who have developed literacy in their first language will tend to make stronger progress in acquiring literacy in their second language” (p. 173). The transferability of skills across languages has been reported in L2 reading research (Carrel, 1991; Koda, 2007). However, the results remain inconclusive for L2 writing research (Fukuda, 2011). Nonetheless, Grabe (2001) suggests that the transferability of L2 writing skills could be determined by the L2 threshold level.

The Mengubah Destini Anak Bangsa Programme (MDAB) programme was initiated in 2010 by the Vice-Chancellor of Universiti Teknologi MARA (UiTM). This programme is aimed at providing opportunities to pursue pre-university education for Bumiputra and indigenous students who failed to gain entry into tertiary institutions. Under the MDAB programme, the students are required to take the Pre-Diploma English Language (PDEL, hereafter) course. It is a compulsory six credit English language preparatory course with a weekly contact of six hours. The aim of the course is to upgrade the English language proficiency of pre-diploma students. The course content includes the skills of reading, writing, speaking and listening. Grammar is also taught incidentally through the teaching of the four skills. The idea is to help students cope with copious amounts of reading and writing in the English language when they continue their university education.

To date, the PDEL course has been running for five years but so far no study has been carried out to investigate the writing performance of these students. Many university lecturers have been worried about the declining writing standard of the students but had no empirical data to support such a claim. Hence this study aims to examine the writing performance of pre-diploma students at the end of their PDEL course.

It is particularly pertinent in this study as the MDAB programme is aimed at providing a second chance for students to pursue their tertiary education. The aim will not be realised if these at risk Bumiputra and indigenous students who enrolled in the MDAB programme with limited English language proficiency withdraw from tertiary studies due to poor literacy skills especially writing skills. Given the important role that writing plays in determining university students' academic success, it is pertinent to ask if the PDEL course has improved students' writing performance. Research on development in L2 writing shows that after three to six months of instruction, students generally improve their writing scores (Hu, 2007). Even after undergoing only eight to twelve weeks of instruction there is improvement in students' L2 writing (Elder & O'Loughlin).

Hence, the main objective of this study was to investigate students' writing performance in the PDEL course. This paper addresses a section of a holistic study that was conducted to evaluate the effectiveness of the PDEL course. Four hypotheses have been crafted for this study:

- H₀₁: There is no significant difference in students' writing performance by gender.
- H₀₂: There is no significant difference in students' writing performance by discipline.
- H₀₃: There is no significant difference in students' writing performance by language proficiency
- H₀₄: There is no significant difference in students' writing performance by campus locality

THE STUDY

This study was carried out in UiTM which has 14 branch campuses in Malaysia. The pre-diploma students were required to take the PDEL under the MDAB programme. English is used as the medium of instruction for the programme. It is compulsory for students to pass the English language course in order to graduate. Three UiTM branch campuses (Melaka, Seremban and Kelantan) were randomly selected for this study. A total of 272 students comprising 52.7% (144) from Melaka, 24.5% (67) from Seremban and 22.3% (61) from Kelantan participated in this study. The subjects comprised 70.7% (193) female students and 28.6% (78) male students. About seventy-one per cent of the students were from non-science stream while 26.7% were from Science. All the students sat for an English language diagnostic writing test. The test was validated by a panel of three experienced lecturers teaching ESL at the university. Students were required to write a 250 word essay titled, "Should pre-university students have part-time jobs? Discuss". Table 1 below illustrates the demographic profile of the subjects in terms of their locality, gender and their course discipline.

Table 1: Students' demographic profile

Characteristics		Frequency	Percent
Campus	Melaka	144	52.7
	Seremban	67	24.5
	Kelantan	61	22.3
Gender	Male	78	28.6
	Female	193	70.7

Course	Science	73	26.7
	Non-Science	195	71.4

RESULTS AND DISCUSSION

Although all students from the three branch campuses (Melaka, Seremban and Kelantan) sat for the writing test, there were some who did not complete their essays. As such those scripts were not used for analysis. A total of 261 scripts were used for analysis.

In this study, the English language proficiency of the subjects was determined by their results in the Secondary Five SPM (Sijil Peperiksaan Malaysia) English Language examination. Based on the data, 3.7% had high language proficiency (Distinction A), 20.5% were of average proficiency (credits B, C and D) whilst the remaining 75.8% had limited proficiency. The findings section first presents the students' overall writing performance followed by their performance based on the demographic factors which include gender, course discipline, language proficiency and locality.

OVERALL WRITING PERFORMANCE

Table 2 below shows the overall mean score obtained by the students from the three branch campuses. The mean score obtained by the students was 37.98. From the 261 students, the maximum score obtained was 88 while the minimum score was 0.

Table 2: Mean score for students overall writing performance

	N	Minimum	Maximum	Mean	Std. Deviation
Writing	261	.00	88.00	37.98	16.93

Figure 1 below shows students' overall writing performance by grade bands. Based on the findings, most of the students obtained grade 'F' (30.4%), followed by grade E (19.0%). On the other hand, only 1.1% obtained grades 'A', 'A-' and 'B' respectively. A close examination of the data shows that the majority of the students failed the writing test with approximately 78% of the students obtaining grade bands of 'C-' and below. This clearly suggests that the majority of the students have weak writing skills.

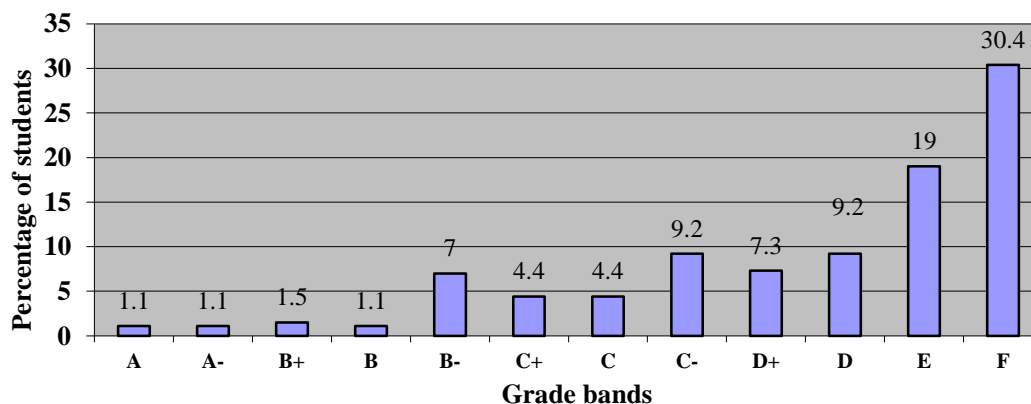


Figure 1: Students' overall reading performance by grade bands

STUDENTS' WRITING PERFORMANCE BY GENDER

H₀₁: There is no significant difference in students' writing performance by gender.

The independent t-test analysis in Table 3 shows that there is no significant difference in students' mean scores for writing by gender [$t(260) = -.28$, $p\text{-value} > .05$]. This was reflected in the mean writing scores obtained by male students ($M = 9.61$, $SD = 4.38$) that was not significantly different from the mean writing scores obtained by female students ($M = 9.45$, $SD = 4.19$). The total score for the writing test is 25 marks. Thus, the null hypothesis is accepted. This means that the writing performance of both male and female students is similar. The Levene's test for equality of variances has confirmed that the different number of male and female students did not affect the means to be compared in the independent sample t-test. Nevertheless, the results indicate that both male and female students did not even get the minimum score (12.5) to pass the writing test.

Table 3 - T-Test analysis of students' overall writing performance by gender (n=260)

Gender	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Male	74	9.61	4.38	.509	.28	.78
Female	186	9.45	4.19	.307		

Levene's Test for Equality of Variances : $F = .33$, $p > .05$

STUDENTS' WRITING PERFORMANCE BY DISCIPLINE

H₀₂: There is no significant difference in students' writing performance by discipline.

The results from an independent t- test analysis in Table 4 emphasizes that there is a significant difference in students' mean writing scores between course disciplines [$t(257)=4.35$, $p\text{-value} < .01$]. This was based on the average reading scores obtained by Science students ($M=11.29$, $SD = 3.67$) that was significantly different from the average reading scores obtained by Non-Science students ($M= 8.83$, $SD = 4.23$). Thus, the null hypothesis is rejected. This suggests that the writing performance of science students was significantly different from non-science students. The Levene Test ($F=2.76$, $p > .05$) for equality of variances has confirmed that there is a homogeneity of variance, different number of male and female students did not affect the means to be compared in the independent sample t-test. The results again indicate that both groups of science and non-science students did not even get the minimum score (12.5) to pass the writing test.

Table 4: Students' overall writing performance by course discipline (n=257)

Course	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Science	73	11.29	3.67	.429	4.35	.000
Non-Science	184	8.83	4.23	.312		

Levene's Test for Equality of Variances : $F = 2.76$, $p > .05$

STUDENTS' OVERALL WRITING PERFORMANCE BY LANGUAGE PROFICIENCY

H₀₃: There is no significant difference in students' writing performance by language proficiency

Table 5 shows students' overall writing performance based on their language proficiency as determined by their SPM English language grades. The results show that the highest mean score (in percentage) was obtained by students with grade 'A' (M=62.86, SD=17.39). Conversely, the lowest mean score was obtained by students with grade 'E' (M=26.06, SD=13.01). This descriptive analysis of grade and test score suggests that students' overall writing performance results matched their language proficiency levels which means that students with high language proficiency did well, average students performed moderately and weak students performed poorly.

Table 5 - Students' overall writing performance by language proficiency

Students' language proficiency (SPM English)	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
A+	3	44.00	40.59	23.44	.00	80.00
A	7	62.86	17.39	6.57	40.00	88.00
A-	2	56.00	5.66	4.00	52.00	60.00
B+	19	46.11	20.80	4.77	.00	80.00
B	30	41.80	18.03	3.29	.00	72.00
B-	3	46.67	4.62	2.67	44.00	52.00
C+	31	47.23	12.24	2.19	24.00	72.00
C	33	37.94	12.78	2.23	.00	64.00
C-	4	27.00	6.83	3.42	20.00	36.00
D	94	33.89	14.79	1.53	.00	68.00
E	33	26.06	13.01	2.26	.00	52.00
Missing Value	2	44.00	.00	.00	44.00	44.00
Total	261	37.98	16.93	1.05	.00	88.00

A one-way analysis of variance (ANOVA) in Table 6, further revealed that there was a significant difference in students' mean writing scores (percentage) based on their language proficiency level (as determined by their SPM grades), [F(11, 249) = 6.43, p <.01]. Hence, the null hypothesis is rejected.

Table 6: One-way analysis of variance of students' overall writing performance by language proficiency

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16471.64	11	1497.42	6.43	.000
Within Groups	58012.23	249	232.98		
Total	74483.86	260			

STUDENTS' OVERALL WRITING PERFORMANCE BY CAMPUS LOCALITY

H₀₄: There is no significant difference in students' writing performance by campus locality

The following table shows students' writing performance based on the three campus locality i.e. Melaka, Seremban and Kelantan. Among the three campuses, the highest mean score (percentage) was achieved by students in Seremban (M=45.37, SD=14.91), whilst the second highest mean score was attained by students from Melaka (M=35.79, SD=17.25). The lowest mean score was obtained by students in Kelantan (M=34.6, SD=16.07). Despite the difference in the results by locality, the results show that the majority of the students from all three campuses failed their writing test (pass mark=50%). This suggests that on the whole students from all the three branch campuses have very weak writing skills.

Table 7: Students' overall writing performance by campus locality (n=261)

Campus locality	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Melaka	134	35.79	17.25	1.49	.00	88.00
Seremban	67	45.37	14.91	1.82	.00	80.00
Kelantan	60	34.60	16.07	2.07	.00	68.00
Total	261	37.98	16.93	1.05	.00	88.00

A one-way analysis of variance (ANOVA) revealed that there was a significant difference in students' writing marks based on their campus locality, [F(2, 258)=9.26, p< .01]. Hence, the null hypothesis of no differences is rejected. This means that campus locality has an effect on students' writing performance. However, the mean scores for all the branch campuses were below the minimum pass mark (50 per cent).

Table 8: One-way analysis of variance of students' overall writing performance by campus locality

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4989.64	2	2494.82	9.26	.000
Within Groups	69494.22	258	269.36		
Total	74483.86	260			

CONCLUSION

It is indisputable that writing is an important skill which is crucial for academic success especially for tertiary education (Goldfinch & Hughes, 2007; McNaught & Hoyne, 2012; Tuan, 2010). However, writing is also acknowledged to be the most difficult skill to acquire (Richard & Renandya, 2002). This means that tertiary students, who are inadequately equipped with writing skills necessary for academic success, face the high risk of withdrawing from tertiary education (Goldfinch & Hughes, 2007; Lau, 2003). This particularly rings true for English as a second language (ESL) learners who not only have to adjust to tertiary education but also to manage the copious amount of academic writing that tertiary education demands.

The findings in this study show that on the whole, students in the PDEL course have very weak writing skills. Although there were a few students who scored 'A' and 'A-' for the diagnostic writing test, close to 78 per cent failed to obtain the minimum grade 'C' (50 marks) to pass. To further compound the problem, out of these failures about 30 per cent obtained a grade 'F' which means that they obtained a score of between 0-29 marks. The results are particularly disconcerting as these students have been studying English for the past 11 years and yet they have limited writing skills. This suggests that they have very weak L2 writing skills. Results also show that there was a significant difference in students' L2 writing performance with regards to course discipline, language proficiency and campus locality. However, there was no significant difference with regard to gender.

Science students performed better in their writing test as compared to the non-science students. Nevertheless, both groups of students did not manage to obtain a minimum mean score of 12.5 (out of a total maximum score of 25 marks). What this suggests is that both sets of students need a lot of support and assistance to improve their writing skills. It is particularly worrying considering that they have just completed their SPM English ('O' level equivalent) which means that they should have been able to write a 250 word essay with ease which they failed to do. This shows the extent of their weakness in writing skills. Eisterhold (1997) posits that adult students have developed literacy skills in their L1. This means that adult ESL learners have developed reading and writing skills in their L1 which should help them in their L2 reading and writing. However, based on the results of the diagnostic writing test, the pre-diploma students have not reached the L2 threshold level necessary for transferability of skills across languages (Grabe, 2001); which is writing skills in this case. An important implication for PDEL developers is that, not only do they have to prepare these pre-diploma students with writing skills appropriate for tertiary education, but they also have to address the problem of weak writing skills that these students came in with before they started the PDEL cours.

Another finding in the study shows that there is a significant difference in students' writing performance with regard to campus locality. Of the three branch campuses, students from Seremban obtained the highest mean score (in terms of percentage), followed by Melaka and Kelantan. Although there was a significant difference, the scores from all three branch campuses were below the minimum pass of 50 per cent. Both the Seremban and Melaka campuses are located in urban areas whereas the Kelantan campus is located in a rural area. It is unclear as to whether students from these branches were from their respective states or they were recruited from all over Malaysia. Therefore, there is no evidence to suggest that the urban rural divide played a role in students' L2 writing performance. However, what is worrying is the fact that the mean scores of the students in all three branch campuses showed that they failed in their writing test. This underscores the idea that these students are extremely weak and need a lot of assistance to help them attain adequate writing skills for tertiary education.

Findings in this study also reveal that pre-diploma students' English language proficiency also plays a significant role in their writing performance. This means that students' writing performance correlate with their language proficiency i.e. those who were proficient did well and those who were weak did poorly. Zhang (2008) states that writers with different language proficiency use different strategies in their writing which include planning, translation, restructuring and backtracking. What this means is that it is advisable for L2 writing

instructors to incorporate language learning strategies explicitly in their L2 writing classes. It will prove particularly helpful for at risk learners like the MDAB students.

This paper hopes to provide some insights into MDAB students' writing performance in the Pre-Diploma English Language course. It is hoped that the paper can help L2 writing instructors to help at risk students improve their L2 writing which would help them not only in their tertiary education but also necessary for them to function adequately in the 21st century.

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LEGAL ISSUES OF LAND ACQUISITION IN ZANZIBAR

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ABSTRACT

The Constitution of Zanzibar 1984, the Land Tenure Act 1992 and the Land Acquisition Decree 1909 introduces conflicting concepts of ‘acquisition’ and ‘termination’. As there is a law on acquisition and another for termination, the land acquisition officers are faced with difficulties in selecting the right approach, not to mention that the law on termination does not have provisions in guiding the termination process e.g. notice and inquiry. The land acquisition institutions also seems not to be taking orders from a single authority, rather than the whole government and the local government having command in acquiring land rights and interests. The practicalities of the land acquisition which are enlighten in this paper, have identified the use of force in acquiring private lands for private investment. Other issues include discrepancies in paying compensation, deficiencies in the inquiry and notice and lack of court’s approval prior to acquiring private land rights. The authors use different approaches to reveal significant issues in the land acquisition process in Zanzibar. These methods include an analysis of case laws and legislative instruments. The interviews conducted with the land officers and deprived land holders early 2015 are also referred. This paper concludes with recommendations for the Zanzibar Government to consider, such as amendment of laws and backing up the land acquisition process with principles of transparency, accountability and public participation.

Keywords: Zanzibar, land, acquisition, issues, law, rights.

INTRODUCTION

Land acquisition involves taking of private land rights or interests by the government to attain the need of the public, e.g. infrastructure and social services such as hospitals and schools. This paper commences with an explanation on the conflict of land acquisition laws and overlapping powers of land acquisition institutions. Next is on the practicalities of the land

acquisition process in regard to compensation, inquiry and notice, lack of court's approval prior to acquiring private land rights; which are, in their entirety, significant issues discussed in this paper. It concludes with findings and suggestions including, recommendations for amendments to be made to the land acquisitions laws.

CONFLICT OF THE CONSTITUTION AND LAND ACQUISITION LAWS

There are different laws in the arena of land acquisition in Zanzibar. The main laws include the Constitution of Zanzibar 1984, the Land Tenure Act 1992, the Land Acquisition Decree 1909, the Acquisition of Land (Assessment of Compensation) Decree 1949 and the Town and Country Planning Decree 1955. The Constitution of Zanzibar 1984 (article 17) declares that the government shall not acquire any private property, which in this sense includes immovable properties, unless that the acquisition is of 'utmost importance' and 'absolutely important' to legalise acquisition of a person's property.

The law in place to provide a fair and adequate compensation in matters of land acquisition is the Land Tenure Act 1992. However, the concept of 'acquisition' is not found in the Land Tenure Act 1992 rather than being dominated with the concept of termination of a right of occupancy. Property rights, under the Land Tenure Act 1992, can be terminated only in exclusive cases with the reason being the need for national interest or the right of occupying the land contradicts the covenant.

The noted norm of section 56 of the Land Tenure Act 1992 definitely seems to stipulate a rule of acquisition and not the termination of property rights in general. Instead, section 56 creates a relationship of government and holder of a right of occupancy being brought to an end through termination. As land ownership in Zanzibar vests solely on the President, people are given a right to use land and they are termed under the Land Tenure Act 1992 as a 'holder' and not owners. Hence, 'holder' is used in this paper with a similar reference to an 'owner'. The Land Acquisition Decree 1909 is a British adopted law which is applicable in accordance with the Interpretation of Laws and General Provisions Act 1984. Section 7 of the Act states that laws in existence before 1964, including the Land Acquisition Decree 1909, shall continue in force and shall be applied with such modifications, adaptations, qualifications and exceptions as may be necessary to bring them into conformity with the present circumstances until such time when they are repealed or amended. As no law or provision of the law can be referred to specifically state that the Land Acquisition Decree has been repealed or amended, it is opined here that the law is still valid although it is difficult to put into practice.

If one holds the opinion that the Land Acquisition Decree 1909 is not active, then there exists no comprehensive land acquisition law in Zanzibar. The present Land Tenure Act 1992 is based on the termination policy and does not exhaustively outline the procedures for acquiring private land. For example, no guidance or regulation is available in the Land Tenure Act 1992 in regard to inquiry, award, notice, taking possession, marking out, survey, valuation, just to mention a few.

The Town and Country Planning Decree 1955, in section 25, on the other hand gives the government power to expropriate and to acquire land for development and 'other purposes'. The expropriation is to be made after a planning scheme has been put in place in the planning area. No compensation is to be paid when the area is required for construction, diverting or widening a road or street as described in the planning scheme. However, when hardship will

be caused to the owner or holder of the land, compensation will be paid by the planning authority. The amount lies under the discretion of the Minister. In addition, not more than one-fifth part of the area may be expropriated.

The wordings ‘other purposes’ are too wide and could be a ground for abuse in the expropriation. This could mean any purpose deemed fit by the land planning authorities and not by the public. The statement that no compensation is to be paid when the area is required for construction, diverting or widening road is absolutely against the 1984 Constitutional provisions. The Constitution of Zanzibar 1984 (article 17) expressly and clearly states that compensation should be paid when a person is deprived of his property, including lands.

OVERLAPS OF LAND ACQUISITION INSTITUTIONS

The Land Tenure Act 1992 and the Land Acquisition Decree 1909 confer powers of land acquisition upon three institutions; the whole of the government, the Minister of Lands and the District Commissioner.

The Land Tenure Act 1992 (section 2) generally describes the ‘government’ as the one responsible for terminating a right of occupancy. The right of occupancy is akin to ownership which results in proprietary rights. These include, for instance, the right to use, control and transfer either by sale, inheritance or gift (section 8).

Any Ministry or government office within the meaning of the ‘Revolutionary Government of Zanzibar’ as per section 56 of the Land Tenure Act 1992 can therefore terminate a right of occupancy on grounds of national interest. Though administration of the Land Tenure Act 1992 is upon the Minister of Lands, no specific power is given to the Ministry of Lands in regard to termination for national interest; rather, this is given to the whole government. It would be proper for the Ministry of Lands to take lead, and where any other Ministry needs to terminate a right of occupancy on grounds of national interest, it is worth to get the recommendation of the Ministry of Lands prior to a final termination order.

With regard to the Land Acquisition Decree 1909, it establishes two key agencies for land it establishes two key agencies for land acquisition: the Minister responsible for land affairs and the District Commissioner for which the area is being acquired. Under section 5, 8 and 11 of the Land Acquisition Decree 1909, the District Commissioner is duly bound to give a final decision on compensation for damages arising out of due to entry of an officer on the needed land, cause the land to be marked out, launch an inquiry, just to mention a few. These are without doubt, duties of a land professional and it is therefore important for these powers to be performed by land administrators. The District Commissioner could (for recommendation) be allowed to wear two hats, the other being a land administrator. It is therefore proper for the Land Tenure Act 1992 to recognize the District Commissioner in the matters of acquisition which involve national interest.

It could however, be useful, if the District Commissioner will be conferred powers of a land administrator under the Land Tenure Act 1992.

LAND ACQUISITION FOR PRIVATE COMPANY OR INVESTMENT

The Land Acquisition Decree 1909 (section 32) confers the Minister broad powers to receive the application, scrutinize and approve the acquisition for the ‘purposes of a company’. The wording in section 33 of the Land Acquisition Decree 1909 on requiring a report to be submitted for acquiring land for a company is written in a way to favor the company: ‘such

work is likely to prove useful to the public’.

Taking the Zanzibar Investment Promotion and Protection Act 2004 as our sample law on the acquisition for investment; the Act establishes the Zanzibar Investment Promotion and Protection Authority (ZIPA) as a government focal point for the promotion and facilitation of investment in Zanzibar. Under the Zanzibar Investment Promotion and Protection 2004 (section 19), ZIPA is responsible for promoting and protecting investment in Zanzibar and is also given enforcement to acquire private land, through the Ministry of Lands.

Investment can be a ground for acquiring land and the same is transferred to an investor. Where no area is available at the designated land in Freeport Economic Zones, and where an investment having a certificate requires an acquisition of land, the investment authority can request to the Ministry of Lands to acquire a suitable land, on behalf of the investor.

Section 19 of the Zanzibar Investment Promotion and Protection 2004 requires the Minister of Lands to take into concern the acquisition by granting a lease with terms and conditions. Rent to be paid during the construction period is waived for the investor. Compensation is to be paid by the investor in full and promptly as per the Land Tenure Act 1992.

The land acquisition laws in Zanzibar as they stand today would likely promote an outcome that reinforces existing positions of social inequality. A private company or an investment enterprise can acquire land through the government and yet taken as being for the purpose of development. The beneficiaries, in acquisition for a company or investment, would likely be “those citizens with disproportionate influence and power in the political process, including large corporations and development firms. As for the victims, the government now has license to transfer property from those with fewer resources to those with more” (Joseph & Rao, 2012).

Sometimes the government is even prepared to acquire private lands for investment by force. In the case of *Mpongwe Juma Simba and 8 Others v. Dadi Faki Dadi and Head of Department of Lands and Registration*, the Tribunal proved that the acquisition of *shambas* (farms) to an Israel investor in Pemba were held to be surrounded with coercion and undue influence. Hence, the Tribunal decided to reallocate the land to the deprived and also order the government to remove their hands from the said *shambas*. Also noteworthy is that the Regional Commissioner took the lead in the acquisition instead of ZIPA.

DISCREPANCIES IN PAYING COMPENSATION

The Constitution of Zanzibar 1984 (article 17) states that, when private lands are acquired for public interest, then a holder has to be compensated fairly and adequately. However, there exists no interpretation on what constitutes fair and adequate compensation. The Land Tenure Act 1992 (section 56) declares that a holder would be compensated according to the market value and unexhausted improvements. Where a right of occupancy is of a grant from the Minister, then an alternative land would be given to the deprived land holder. In the case of *Attorney General v. Lohay Akonaay and Joseph*, the Court of Appeal of Tanzania declared that fair compensation is to be paid on unexhausted improvement and value of land.

In other irregular acquisition, the government only pays what it sees necessary. Hence, denying the need to take into concern fair and adequate provision. For example, in the central district of Unguja, the area of Pangatupu has been acquired for the Zanzibar Volunteer Squad – KVZ camps. The area is a plantation and has been cultivated by the deprived ancestors for ages. They have been ordered to vacate the area and when they demanded their due

compensation, they were paid what the government thought necessary, i.e. very little. The deprived (personal communication, February 18, 2015) never dared to take the matter further as they are not in a position force or fight with the government - they just had to accept it. Some deprived (personal communication, February 26, 2015) are paid their due only when arguments and several follow-ups have been made. In the matter of land acquisition at Weleni for a water tower, the deprived (personal communication, January 29, 2015) was paid \$15,600 in the first phase. As the amount was unsatisfactory, she claimed for more compensation and was paid an additional of \$2,600 in the second phase. Hence, the deprived received a total of \$18,200.

In some cases, payments of compensation do not reach the deprived people and valuation was not done. For example, the hotel project in 2009-2010 between the area of Muyuni and Kizimkazi (Assistant Director of ZIPA, personal communication, February 6, 2015).

There is a system of acquiring land in which the deprived remains with 40% of the land while the government takes 60%. This happened in Chukwani in which the land was surveyed for residential plots. The people objected and the President of Zanzibar ordered that the land be reallocated where 60% was for residents and 40% was for the government. This incidence happened back in 1992. The whole *shamba* was acquired in this way for land allocation. Though this is not what the laws states, this method has been practiced from early 1990s and until today (Heads of Land Departments, personal communication, February 2, 2015).

Making things worse, there are situations in which the government has acquired private lands without paying a cent to the deprived. The following are some of the acquisition:

1. The Zanzibar Volunteer Squad (KVZ) acquired a land near the beach in the South district back in 2012. It was a *shamba* (farm) area and no compensation was paid. They were informed that they would be given another area for cultivation. The deprived identified Bungi as an alternative land but was told it was government land. The deprived eventually died and received no compensation whatsoever (Zanzibar Law Society, personal communication, February 7, 2015).
2. The local government acquiring private lands for the construction of hospitals, schools, playing yards and other public use, which usually initiates problems. It mainly happens when a deprived is promised another alternative land, but nothing is paid. For example, the acquisition at Chunga and Fuoni Kitongani – Schools were built in both areas and private land acquired around 2012. However, no compensation of land has been paid to date (District Commissioner, personal communication, February 19, 2015).
3. Private lands at Makangale were acquired for investment purposes. An example is the one acquired for Mpapini Holiday and Diving Company. Unfortunately since 2007 the Company failed to pay its rent amounting to \$9,230 a year. The people were promised to be paid \$81,610.50 in 2005 but to date no compensation has been paid. The people demanded their land to be returned to them in vain (Zanzibar House of Representatives, 2013).
4. In the areas of Ngezi, the land was acquired for forest reservation. The holders filed a case and compensation was ordered to be paid. To date no compensation has been paid. The case was before a judge of the High Court of Zanzibar, namely, Hon. Mshibe. No appeal has been made. The Government never wanted to pay

compensation for the acquired land. Instead, the land was declared a reserve area. The land is situated at Vumbe Wimbi Makangale Pemba (District Magistrate, personal communication, February 2, 2015).

5. The government has acquired private lands occupied by individual persons, surveyed it and distributed to others for residential purposes 'without payment of compensation' (Tanzania Human Rights Report 2008). Mr Kombo Simai Kombo was granted a three acre plot at Chukwani near Zanzibar International Airport. His land was surveyed by the land officials and plots were distributed to different persons including the former West Urban Regional Commissioner Mr. Abdalla Rashid. The then Director of Lands Mr. Othman Simba admitted that the land belonged to Mr. Kombo and that he deserved to be compensated. He instituted a case before the Zanzibar Land Tribunal without success (Tanzania Human Rights Report 2008).

DEFICIENCIES IN THE INQUIRY AND NOTICE

The Land Acquisition Decree 1909 requires an inquiry to be held pursuant to section 11. The District Commissioner, instead of the land administrators, is required to make an inquiry into the situation of the land, names of holders, amount of damages and particulars of claims.

The inquiry is also held contrary to the Land Acquisition Decree 1909 and in other instances it is not held at all. Deprived land holders at Kinyasini (personal communication, February 4, 2015) claimed that they only knew that their land will be acquired for the Wete-Konde road construction through idle talk and this concluded to be true when their houses were labeled with an X, meaning for demolition. The same happened to the deprived in Pangatupu (personal communication, February 18, 2015), who were forcefully told to vacate the area for the Zanzibar Volunteer Squad (KVZ) without an inquiry by the District Commissioner.

In the acquisition for the renovation of Abdalla Mzee Hospital, a meeting between the deprived and the District Commissioner was conducted on July 16, 2013. The meeting failed to take into concern the situation of the land, amount of damages and particulars of claims as required by the Land Acquisition Decree 1909. In the case of *Said Mohamed Saad & Family v. Ministry of Health of Zanzibar*, the plaintiffs raised claims that the government did not consider the area and architecture of the acquired building. In order to amicably reach a solution, and perhaps the government agreeing with the allegations, the case was finally settled out of court on March 26, 2015 before a judge of the High Court of Zanzibar, namely, Hon. Kayange by paying the plaintiffs full compensation as requested.

In the acquisition of plantation for the Zanzibar Broadcasting Corporation (ZBC) radio tower construction, a meeting with the deprived illustrated that an inquiry was not done and by the time the plantations were waiting for another second valuation, the whole plantation area was destroyed. It is not clear on what plantation rates the second valuation took into account (personal communication, February 24, 2015).

With regard to notices, the District Commissioner is required to serve the notice on the intention of the government that the land is likely needed for public purpose. The Minister, on the other hand, is obliged to publish a notice that certain land will be acquired either for the public or a company.

The manner of servicing notices is described under section 35(1) of the Land Acquisition Decree 1909 that it should be served to the person addressed. The provision does not state that the person is to be the registered holder, and therefore any 'person' so interested can be

served. This approach may miss to inform the legal occupier that the land will be acquired. The notice could be directed by the District Commissioner to be sent by post in a registered letter. Where electronic means are reliable, it could be relevant to make use of them in publishing the notices.

However, acquisition of private lands has been done without a notice from both the District Commissioner and Ministry concerned. In the matter of acquiring private lands for the Wete-Konde road construction, the deprived people only came to acknowledge that their land will be acquired on the day the valuer was visiting the area to undertake a valuation for the purpose of compensation (Private valuer, personal communication, January 31, 2015).

A search at the Government Press also revealed nothing on the publication of notices by the Ministry for the acquisitions of lands in order to renovate the Abdalla Mzee Hospital, expansion of the Zanzibar International Airport – Terminal II and Wete-Konde road construction. In the expansion of the Zanzibar International Airport, the deprived (personal communication, February 11, 2015) knew that their land would be acquired through Zanzibar Aviation Authority (ZAA) who informed them orally in meetings between ZAA, the deprived and *Sheha* (area administrator).

The manner of acquiring private land without publishing notices in the Government Gazette is worse than the British and the early revolutionary governments. Apart from correspondences being well documented under the British rule, the British Resident used to publish notices prior to the acquisition. For example, acquisitions of land against Sheikh Seif bin Suleiman Miskiry of Matangatwani, Wete for an agricultural station in Pemba; the Chief Secretary, by that time A.P.H.T. Cumming-Bruce, published a declaration notice of intended acquisition in the Government Gazette under Government Notice number 592 of 1947. Another notice was published to place the land under the District Commissioner as per British Resident's notice of July 12, 1947. An order for acquisition was finally published on August 23, 1946 by Government Notice number 703 of 1946.

There also several notices being published for the acquisition of lands from 1964 to 1974. These include, for example, Order number 12 of 1967 declaring to confiscate four *shambas* (farms) and Order number 13 of 1967 declaring to confiscate three *shambas*.

Deficiencies in the inquiry and notice for the land acquisition processes in the current revolutionary government are not yet at all surprising. This is because the Zanzibar Attorney General's Chamber (personal communication, February 16, 2015) and legal adviser of the Ministry of Lands (personal communication, February 2, 2015) were not consulted prior to the acquisition. Hence, in regard to the acquisition of land today in Zanzibar, there exist no legal records to prove that the acquisition was ordered by the government.

LACK OF COURT'S APPROVAL PRIOR TO ACQUIRING PRIVATE LAND RIGHTS

The Land Tenure Act 1992 (section 56) specifies that the government should lodge a case prior to the termination (similar to the meaning of acquisition). The court is responsible to determine whether the termination is, without doubt, a national interest. The government is obliged to tell the court with clear and convincing reasons that the termination is for national interest. On the other hand, section 4 of the Acquisition of Land (Assessment of Compensation) Decree 1949 states that any compensation arising from the Land Acquisition Decree 1909 must be referred to and determined by the Compensation Board. As the Board

does not exist, it is the court that should certainly do the job to determine the compensation. Many of the acquisition and termination commences without such an obligation to be taken into concern. The manners of acquisition and termination are done outside the windows of the courts, and as a result compensation is not supported by a judicial proceeding as required by land acquisition laws. When a case is filed prior to termination, it could be used as a caveat to support the government against any future unnecessary claims. The deprived may claim that they have not been compensated, while they surely have.

The acquisition process also shows that it is the deprived who file the case. This is done after the acquisition or termination has taken place by the government. This is contrary to the laws and procedures of land acquisition in Zanzibar. An example is the case of *Abdalla Mohammed Salim and eight Others v. Serengeti Co. LTD and Zanzibar Water Authority (ZAWA)*. The plaintiff claims that the valuation does not meet the actual value of the land and trees. The land was acquired for digging a water well in Kuunguni Pemba. The defendant claims that \$8,548.36 has already been paid to the defendants with a 25% increase. If the government were to file a case before the termination, then matters like compensation which the plaintiffs claims would have no base to be re filed.

A point must be raised in that, the procedures to file a case against the government takes time and is full of bureaucracy. The procedures include informing the Chief Secretary and then the file forwarded to the Attorney General for recommendations (Ministry of Lands, personal communication, February 6, 2015). The Government Proceedings Act, under section 6(2), specifies a sixty day notice has to be filed before opening a case against the government. This is not a proper procedure as the government can acquire land and finish up building in 60 days (Regional Magistrate, personal communication, February 2, 2015).

CONCLUSION AND RECOMMENDATIONS

In general, this paper has revealed significant issues that the government needs to seriously solve them. Otherwise, land acquisition will continue to be a process full of misconduct and gross violation of property rights. This paper has proved that there are significant issues to be tackled by the Zanzibar Government in the land acquisition. The government needs to settle these issues in order to move the land acquisition practice for the benefit of both: the deprived and the government in general.

The land acquisition laws, for instance, have been proved to cause conflicts between themselves. While the Constitution of Zanzibar 1984 and Land Acquisition Decree 1909 introduces the notion of 'acquisition', the Land Tenure Act 1992 comes up with the concept of 'termination'. It must be noted that the Land Acquisition Decree 1909 establishes a framework for the land acquisition to take place. From publication of notice to withdrawal of the acquired land, the Land Tenure Act 1992 does not cover these important procedures in the termination. Hence, it is recommended to amend the laws and introduce a current land acquisition law that suits the present and future generations.

Overlaps of land acquisition institutions have also been observed. Where the law generally confers acquisition powers to the whole government, it raises clashes and confusion. The notion of the whole government having acquisition powers should be dropped. To make it clear which institution leads the land acquisition and which takes full responsibility, the Ministry responsible for land affairs is recommended to authorize and supervise land

acquisition processes.

The District Commission has been detected to have wide land acquisition powers under the Land Acquisition Decree 1909 while the Land Tenure Act 1992 is silent on the District Commissioner's role. Harmonization of the land acquisition laws is recommended in which the District Commissioner will be made useful. Whatever the role the Ministry or District Commissioner has in the land acquisition, it must abide to the principles of transparency and accountability.

There is also a tendency of easily allowing acquisition of private lands for a company or investment as permitted under the Land Acquisition Decree 1909 and the Zanzibar Investment Promotion and Protection Act 2004. Consent to acquire private lands for private investment has made way for private lands being replaced with the tourism industry; leaving the people with little or nothing for a living. Acquisition that benefits investors should only be allowed if they are carried out in the "course of making it possible for them to carry out their mandate on behalf of the public" (e.g. providing electricity for the public), but "strict judicial control is exercised over compliance with the public purpose requirement, particularly with regard to the authority for the acquisition" (Nginase, 2009).

A noteworthy issue in the current trend of acquiring private land rights and interests by the government is that there are laws to guide the land acquisition process, but they are not taken into concern at all. As a result, private lands are acquired contrary to the laws. These include acquiring private lands without paying compensation, absence of notices in the Government Gazette to publicize the acquisition, falling short of holding an inquiry and also jumping to acquire private lands without the court's approval. A great deal of safeguards therefore needs to be introduced by the government in the land acquisition. These include transparency, accountability and public participation.

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THE MANY LAND ACQUISITION LAWS OF ZANZIBAR: IS THERE AN INNERMOST OBJECTIVE?

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ABSTRACT

Private land rights or interests are protected under the Constitution of Zanzibar 1984 (article 17). These rights or interests, when owned as per the laws, are not to be forcefully acquired by the government, save for need of the public. Each land acquisition law in Zanzibar has its own objective, distancing itself with another land acquisition law, and making it worse, even contrary to the Constitution of Zanzibar 1984. Though all land acquisition laws claim to be attaining the public need, they apply different phrases, meaning that they have different objectives. There exists an extended list of these objectives: national interest, public purpose, public use, private purpose (company or investment), ancient preservation and disaster management. A thorough analysis of the land acquisition laws is made in this study, which are the Land Tenure Act 1992, the Land Acquisition Decree 1909, the Town and Country Planning Decree 1955, the Zanzibar Investment Promotion and Protection Act 2004, the Ancient Monuments Preservation Act 2002 and the Disasters Management Act 2003. After the analysis, as well as referencing relevant case laws, this study tries to recommend using 'public interest' introduced by the Constitution of Zanzibar 1984 as the innermost objective, to clean up the confusion.

Keywords: Zanzibar, land, acquisition, public, purpose, interest, private.

INTRODUCTION

The land acquisition involves forcefully taking of private land rights or interests, by the government, to attain the public need. The rules, however, remain to permit acquisition for a private purpose, be it a company or investment. The land acquisition laws in Zanzibar have succeeded from the British rules, such as the Land Acquisition Decree 1909 and the Town and Country Planning Decree 1955. These laws introduce the objective of acquisition to be public purpose, private purpose (company) and public use. From 1992, the Land Tenure Act was passed which allowed the acquisition (termed as termination under the Land Tenure Act 1992) for national interest. Acquisition for investment, another private purpose, is authorized under the Zanzibar Investment Promotion and Protection Act 2004.

With a jumble set of land acquisition laws, this study tries to analyze the described laws with reference to some relevant case laws, in order to show how much the laws contradicts themselves in the accomplishment of the selected target: public need. The study acknowledges that the Constitution to be above all laws, and therefore suggests that the land acquisition laws should take the same concepts, for avoidance of confusion and for ease of public understanding.

This study commences with an analysis of the above listed land acquisition laws and proceeds to discuss the different objectives derived in the described laws. The objectives discussed

herein include: public interest, national interest, public purpose, public use, private purpose (company or investment), ancient preservation and disasters management.

THE LAND ACQUISITION LAWS

The laws of land acquisition are spread in different legislative pieces. These include the Constitution of Zanzibar 1984, the Land Tenure Act 1992, the Land Acquisition Decree 1909 and the Town and Country Planning Decree 1955.

The Constitution of Zanzibar 1984 fosters unity and a socialist revolution in Zanzibar. It protects fundamental rights and individual freedom. Among them is protecting private property rights and interests. The Constitution brings in the concept of 'acquisition' in the deprivation article which is concerned with the protection from deprivation of property

The Land Tenure Act provides for land ownership, use and rights attached to land. It has been amended in 2003, 2010 and 2013. The concept of termination of a right of occupancy dominates the Land Tenure Act 1992. Termination may be defined as the cessation of the government-occupant relationship as established through the land tenure law (Der Merwe and Verbeke, 2012). The Land Acquisition Decree is a British adopted law which is applicable as per the Interpretation of Laws and General Provisions Act 1984. The Town and Country Planning Decree 1955 makes provision for the orderly and progressive development of land in urban and rural areas, for the grant of permission to develop such land and for other powers of control over its uses. On the question of land acquisition, the Town and Country Planning Decree 1955 confer powers to expropriate and to acquire lands for development and other purposes.

Apart from the above laws, there are other laws which have a relevance to the land acquisition as they allow acquisition for a certain role. These include the Zanzibar Investment Promotion and Protection Act 2004, the Ancient Monuments Preservation Act 2002 and the Disaster Management Act 2003.

OBJECTIVES OF LAND ACQUISITION

There appears to be several confusing objectives in the land acquisition process. In the laws, land acquisition can occur for public interest, national interest, public purpose, public use and for a private purpose (company or investment). Other reasons to acquire private land rights include ancient preservation and disasters management.

PUBLIC INTEREST

This concept is used as a backbone to the acquisition. The current legal system has built protection for individual property into the Constitution of Zanzibar 1984, proclaiming that no person shall be deprived of his property unless it is for a public interest declared by law and assuring that the deprived will receive compensation (Roman, 2008).

The deprivation article in the Constitution of Zanzibar 1984 (article 17), which is meant to provide the essential elements to implement the land acquisition procedures, is however lacking significant details and definitions that will guide the Zanzibar government in executing the acquisition laws. For example, the Constitution does not define 'public interest'. As one scholar noted, "without a clear definition of public interest, the state essentially has unrestricted power to expropriate and requisition property" (Stevens, 2008).

Though no interpretation of 'public interest' is given, in the case of *Kukutia Ole Pumpun and*

Another v. Attorney General and Another, the Court of Appeal of Tanzaniaⁱ has held that such provision seeking to protect a basic right will not be declared unconstitutional if it satisfies to two requirements: that it is not arbitrary; and that the limitation imposed by such law is not more than is reasonably necessary to achieve the legitimate objective.

Despite the fact that there is no definition of public interest, one can still argue as per the Court of Appeal's decision that the deprivation article under the Constitution of Zanzibar 1984 is not unconstitutional as it is logical and that public interest is applied necessarily for the acquisition to take place. For instance, acquisition done for planning, development, defence and health requirements must meet the public interest.

However, in determining the legality of the acquisition, the court will obviously take into account the purpose provided for in the Constitution and the land acquisition laws. It is therefore important for the legislation to define the terms and also avoid general wordings such as 'other development' which appears in article 17 of the Constitution.

In the case of *The Attorney General v. Sisi Enterprises LTD.*, the respondent's land was acquired by the Tanzanian government and transferred to the US Embassy. It was claimed, by the appellant, that the acquisition was for public interest as the "general public was to benefit from services offered by the American embassy at the acquired piece of land". The Court of Appeal of Tanzania did not agree that the acquisition was in public interest for two particular reasons. Firstly, that 'public interest' must have "an aim or object in which the general interest of the community is concerned or involved, as opposed to the particular interest of individuals or institutions". Secondly, the acquisition and the transfer to the US Embassy was not within the ambit of section 4(1) of the Land Acquisition (Tanzania Mainland) Act 1967. The sub section lists down the purposes of the acquisition including; government use, sanitary, township, airfield, minerals, community corporation and agricultural development.

As Zanzibar form part of the East African Community, it is also significant citing relevant cases from Kenya. In *Niaz Mohamed Jan Mohamed v. Commissioner for Lands & 4 others*, the High Court of Kenya at Mombasa not only took into account the purpose of the acquisition as per the legislation, but also held that the government is not free to use the acquired land in any manner it desires. The government is bound to use the land as per the purpose outlined in the laws.

NATIONAL INTEREST

The Land Tenure Act 1992 was passed with the purpose that it will affirm to the Constitution of Zanzibar 1984, specifically to the deprivation article (Debates on Land Tenure Bill, 1992). The Constitution of Zanzibar 1984 (article 17) provides that the acquisition is to be done in regard to public interest. The Land Tenure Act 1992, as one of the current active law on land tenure and acquisition, however uses 'national interest' to acquire private lands contrary to 'public interest' as formulated under the Constitution of Zanzibar 1984.

Making things more complicated is that the Land Tenure Act 1992 mixes together both concepts of 'public interest' and 'national interest' within the same legislation, meaning that these are two different theories to be applied in different situations. For instance, the Land Tenure Act 1992 (section 5(2)) contradicts itself by using 'public interest' on reduction of lease rather than using the same concept of 'public interest' for terminationⁱⁱ (similar to acquisition) as required under the Constitution of Zanzibar 1984. Easements in respect of

telegraph, electric transmission lines or water mains can be imposed on any parcel of land or building when it is in the 'public interest' to do so as ordered by the Minister.

Apart from contradictions and the termination provision being contrary to the Constitution of Zanzibar 1984, the Land Tenure Act 1992 does not define 'national interest' nor 'public interest'. In section 56 and section 48(1)(d), the Land Tenure Act 1992 uses the phrase 'national interest' in terminating a right of occupancy or leases. This reflects the early revolutionary government which used the phrase in confiscation under the Confiscation of Immovable Property Decree 1964. Also, 'national interest' has been applied under the Commission of Land and Environment Act 1989. Both the Confiscation of Immovable Property Decree 1964 and the Commission of Land and Environment Act 1989 have been repealed under the Land Tenure Act 1992, but the notion of national interest, which once permitted confiscation, is in use under the Land Tenure Act 1992.

PUBLIC PURPOSE

The public purpose in the Land Acquisition Decree 1909 is largely based upon the British models (Roman, 2008). Once the British established themselves as sovereign, legislation based on British experience was quickly introduced (Dunning, 1968).

This legislation, which is still active, includes a public purpose limitation restricting compulsory acquisition of lands. Section 32(1) of the Land Acquisition Decree 1909 is gradually broad and includes the provision giving the companies the benefit of compulsory acquisition, if the government officials are satisfied that the acquisition was necessary for the construction of a work likely to prove useful to the public.

The Zanzibar Land Acquisition Decree 1909, revised in 1934 and 1948, makes provision under section 4 for the compulsory acquisition of land for public purposes though no interpretation of public purpose is provided. Public purpose will of course be the intention of the government, but the problem lies with what constitutes public purpose. Under section 9(2), the person so desirous of challenging acquisition can do so as per the Land Acquisition Decree 1909. Objections can be made in measurement of compensation and not on the public purpose justification. Hence, a deprived land owner cannot appeal under a claim that the acquisition did not meet 'public purpose', but can do so on compensation.

The Land Acquisition Decree 1909 requires a notice for assessing public purpose to be published by the Minister of Lands (section 4), who is required to indicate the specific purpose for seeking acquisition (section 6(2)). The burden to prove the purpose is therefore left specifically for the Minister to determine and not the law. Acting upon this notice, the government shall receive conclusive evidence that the land is needed for public purpose and the government may proceed to acquire the land (section 6(3)). A notice to acquire land for temporary occupation (section 27(1)) must also state the purpose and term of the occupation (section 27(2)).

Acquisition is based on the perception that the benefits of forcefully taking certain land accrues to the public at large. This is the logic of conditioning the acquisition on the concept of 'public purpose'. However, a public purpose under the Land Acquisition Decree 1909 would be satisfied even when a small portion of society is to benefit by an acquisition. Thus, the criterion of public purpose under the Land Acquisition Decree 1909 does not account for two issues. First, it does not weigh the benefit of acquisition against its social costs. Second,

it is indifferent as to who exactly benefits from the acquisition (Joseph & Rao, 2012). Inevitably, in most acquisition projects, the displaced are not part of the beneficiaries. It is therefore, suggested that a more suitable definition, control and limitation be placed on the purpose of acquisition of land alike India,ⁱⁱⁱ such that the benefits of a project are not solely appropriated by one section of society (Joseph & Rao, 2012).

The public purpose under the Land Acquisition Decree 1909 is therefore a legal standard which is laid down in a rather stiff and broad terms; it is determined and laid down at the discretion of the government in every particular case and according to specific needs.

PUBLIC USE

Public use is applied under the Town and Country Planning Decree 1955 (section 25). Any expropriation of land for roads, widening a street, parks etc. must satisfy public use. As the Town and Country Planning Decree 1955 does not give a definition to 'public use', the term 'public use' will be defined in this part by breaking it down into the following elements: definiteness, state control and dominance of public interest over private gain (Eckert, 1968-1969).

As to the definiteness element, it is pointed out that the 'public use' is to be derived from the employment of development rights through saving of the economic value, public funds and tax revenue (Eckert, 1968-1969). As to the second element, state control, it is clear that the rights of the owner would be subordinated to the control of the planning authority both as to the restriction on the existing use and as to the time when the authority would expropriate the remaining interest in the land.

Finally, as to the dominance of the public use over private gain, it must be pointed out that there is no private gain to be derived from the employment of the right to expropriate land. The owner will continue to receive the same economic benefit from his land, subject only to limitation when the land is expropriated for public interest (Eckert, 1968-1969).

PRIVATE PURPOSE (COMPANY OR INVESTMENT)

Private land rights and interests can additionally be acquired and transferred to a private company or investor. This implies that the acquisition is to benefit the company or investor, in the most part of it. This mode of acquisition is known as a third party transfer because the government which acquired the land right, transfers it to another person (a third party). The owner is the first party; the government is the second and the company in this sense, the third party.

Acquisition for private purposes is formulated within the Land Acquisition Decree 1909 (sections 30-31) by acquiring land for a company. The Land Acquisition Decree 1909 (section 32) confer the Minister broad powers to receive the application, scrutinize and approve the private purpose but in the name of 'public purpose.' The Minister only has to satisfy himself that the acquisition for a company is 'likely to prove useful to the public'. This provision is badly written in a way to favor the company and the government.

The Zanzibar Investment Promotion and Protection Act 2004 (referred herein as the ZIPA Act 2004) is used in this part as another sample law on acquisition for private purpose. The ZIPA Act 2004 establishes the Zanzibar Investment Promotion and Protection Authority (ZIPA) as a government focal point for the promotion and facilitation of investment in Zanzibar. The authority, under section 19 of the ZIPA Act 2004, is responsible for promoting

and protecting investment in Zanzibar (i.e. ZIPA) is given enforcement to acquire private land, through the Ministry of Lands. Investment can therefore be another ground for acquiring land and then transferred the same to an investor.

Where no area is available at the designated land in Freeport and Free Economic Zones, and where an investment having a certificate requires an acquisition of land, the investment authority can request to the Ministry of Lands to acquire a suitable land, on behalf of the investor.

The Minister of Lands is then required to take into concern the acquisition by granting a lease with terms and conditions. The investor is waived to pay rent during the construction period. Compensation is to be paid by the investor in full and prompt compensation as per the Land Tenure Act 1992 (section 19(3)).

ANCIENT MONUMENT PRESERVATION

The Ancient Monuments Preservation Act 2002 (section 8(1)) provides for the preservation of ancient monuments and objects of archaeological historical or artistic interest. The Minister responsible for ancient monuments can acquire private land having in it a monument or antiquity. The acquisition must be based on protecting a monument or antiquity which is in danger or apprehension.

Exception for acquisition is given to a monument used for religious observances or it is a subject of a subsisting agreement. The acquisition is to follow the Land Acquisition Decree 1909 in order to comply with the justification of 'public purpose'. The Land Acquisition Decree 1909 will however be ignored if the land has been registered and the 'termination' procedure will come into application as per the Land Tenure Act 1992 (sections 8(2), 10(1) and 56).

DISASTERS MANAGEMENT

The Disasters Management Act 2003 (sections 6(c) and 34(b)) provides for the anticipation, co-ordination and control of disastrous situations. The Commission for co-ordinating disasters in Zanzibar can acquire any land temporarily for the purposes of operation relating to disasters. Temporary acquisition is regulated in the Land Acquisition Decree 1909 (section 27).

Under section 33(1) of the Disasters Management Act 2003, compensation has to be paid to any owner or person affected by the land acquisition, after evaluation has been made. The compensation is based on the damage caused to any land during the disaster operation. An appeal to the appropriate court is permitted, if the owner isn't satisfied with the amount of compensation. This implies that an appeal against the purpose of the acquisition will not be allowed.

There is no compensation for land which is not lawfully occupied or no proper evidence is produced. It is not clear what elements would be taken by the Commission in satisfying itself that the land is not legally occupied. Also the 'improper evidence' can be misused to refer title or deed registration, leaving out customary land tenure or even lands held for decades long but not yet registered.

CONCLUSION

The laws on land acquisition are scattered in different legislative instruments. Though the

Constitution of Zanzibar 1984 has guided the land acquisition process, the laws have taken different approach leading to various conceptive objectives on land acquisition. The different purposes found in the land acquisition laws are not to be taken into granted. This is because laws are interpreted in the court rooms according to the phrases. Having the land acquisition objectives being build contrary to the Constitution of Zanzibar 1984, is the main underlying problem. Apart from recommending amendment or repeal of the British adopted laws to conform the current socio-politico economic situations, it would be helpful if the land acquisition objectives followed the guidelines of the Constitution. It is time to simplify the land acquisition laws and make them speak a common language as well as making it simple for the public to use them.

While the 'public interest' found under the Constitution of Zanzibar 1984 can be used as the innermost objective, it should be limited with a concrete definition to avoid abuse and confusions. The land acquisition laws are to match the same concepts and objectives found in the Constitution. Acquisition for ancient preservation and disaster management should also take the same path: obey the rules found under the Constitution and the main land acquisition laws. Otherwise, the confusion and ambiguities will continue to make the land acquisition a jumble created theories and a mess in practice.

With regard to the 'private purpose', the land acquisition are suggested to allow the acquisition for a private company or private investment when all due procedures have been proved to be met according to the public interest definition. Any acquisition which is to benefit the private sector, once and for all should be disregarded, unless concrete reasons are raised with the support of the public and deprived.

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ENDNOTES

The United Republic of Tanzania is formed by Tanzania Mainland (also known as Tanganyika before it united with Zanzibar in April 1964) and Zanzibar, each having its High Court. Different land laws, including land acquisition, are applied in Tanzania Mainland and Zanzibar. However, both jurisdiction share the same highest appellate court of Tanzania, i.e. the Court of Appeal of Tanzania, established by Constitution of the United Republic of Tanzania 1977 (article 117(1)). The Constitution of Zanzibar 1984 (article 99(1)) recognizes the Court of Appeal to hear appeal arising from the High Court of Zanzibar, including land issues.

² The concept of termination of a right of occupancy dominates the Land Tenure Act 1992. Termination may be defined as the cessation of the government-occupant relationship as established through the land tenure law. Part VII of the Land Tenure Act 1992 defines the grounds for termination of a right of occupancy, with the reason being the need for national interest or the occupation contradicts the very essence of the land right or interest (e.g. land being left idle or abandoned).

³ The Land Acquisition Decree 1909 has similar provisions with the Indian Land Acquisition Act 1894. The 1894 Act has now been replaced by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (Act No.30 of 2013).

ADMINISTRATION OF NON-CONTENTIOUS ESTATES IN WEST MALAYSIA: LEGAL AND ADMINISTRATIVE REFORMS

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ABSTRACT

In West Malaysia, the structure and procedures for estates administration were originally initiated during the colonial period. At present, the jurisdiction to administer the deceased's estates lies with the High Court, the Small Estates Distribution Section and the Public Trust Corporation (Amanah Raya Berhad) depending on the types of estates left by the deceased and governed by various statutes of general application, namely, the Rules of Court 2012, the Probate and Administration Act 1959, the Small Estates (Distribution) Act 1955 and the Public Trust Corporation Act 1995. These various administrative bodies, estates and statutes have resulted in the non-uniformity, uncertainty and inconsistency of the laws and procedures applicable to the administration of estates. Hence, reforming the existing legal framework for the administration of the deceased's estates has become highly necessary. In pursuant thereto, this research analyses the emerging legal and administrative issues in the administration of the deceased's estates in West Malaysia based on the analysis of the governing statutes, reported cases, interviews conducted with various individuals and groups, and data obtained from the respective administrative bodies. This research finds that reform should be made to the existing law and administrative institution in order to regulate the law and procedure on the administration of non-contentious estates in West Malaysia. The research also finds that there should only be a single administrative body to deal with estate administration particularly for the non-contentious estate proceeding.

Keywords: Estate Administration, Legal Framework, Procedural Issues, Reform, Single Administrative body.

INTRODUCTION

Generally, most people no matter how little they possess, will leave behind an estate when they die. Upon their death, the deceased's estates needs to be administered for the purpose of paying funeral expenses, debts and liabilities, and thereafter the remnants is to be distributed to the entitled beneficiaries (sec 67, Probate and Administration Act 1959 & sec 13(1), Small Estates (Distribution) Act 1955), through a legal process known as the administration of estates.

An estate under the Probate and Administration Act 1959 refers to all money and property that a person owns, especially everything that is left when he dies (Jonathan Crowther (ed), 1995). However, Kamalanathan Ratnam J, in *HSBC (M) Trustee Bhd v Kong Kim Hoh & Ors*

[1999] 3 MLJ 383 at 392, states that the word ‘estate’ does not refer to all the properties possessed by the deceased at the time of his death, rather, the property of the deceased left after due administration thereof.

Under the law of succession, estates are classified into two types i.e., testate and intestate. The former is an estate of a deceased person who dies leaving a will, whilst the latter is the estate of a deceased person who dies without leaving a will. A person will also be considered to have died intestate even when he left behind a will, if he failed to name his executor or trustee, or where the executors named in the will had all predeceased him (sec 16, Probate and Administration Act 1959).

LEGAL FRAMEWORK

In West Malaysia, the jurisdiction over administration of estates resides several judicial and administrative bodies which include: the High Court, the Small Estates Distribution Section of the Director General Land & Mines Department, and the Public Trust Corporation (Amanah Raya Berhad). Specific role of the above mentioned bodies depend on some requirements which include the types of estate and the total value of the estate of the deceased. Meanwhile, the Syariah Court shall only deal with matters of issuance of inheritance certificate for the purpose of distribution of estate of the Muslims and determination of issues regarding Islamic inheritance.

In cases of testate or where the value of estate exceeds RM 2 million and/or the estate consists of moveable property only, then, it should be administered by the High Court. On the other hand, where the intestate estate total value does not exceed RM 2 million which consists wholly or partly of an immovable property, the jurisdiction to administer the estate lies with the Land Administrator at the Small Estates Distribution Section. Whereas an estate which consists of only moveable property and the value which is less than RM 600,000 would be administered by the Amanah Raya Berhad. The administration of estates in Malaysia is governed by various statutes of general application, namely, the Rules of Court 2012, Probate and Administration Act 1959, Small Estates (Distribution) Act 1955, Small Estates (Distribution) Regulations 1955 and Public Trust Corporation Act 1995.

Consequently, there exists obvious discrepancy, uncertainty and inconsistency of the laws and roles or functions of the High Court, the Small Estates Distribution Section and the Public Trust Corporation (Amanah Raya Berhad) and the Syariah Court with regards to the administration of the estates.

Based on the Principal Registry’s report from 2008 to 2013, more than 70% of the application for estate administration had been made to Small Estates Distribution Section/ Unit. While the remaining numbers of the application were made to the High Court and Amanah Raya Berhad. The report is based on the following data:

Figure 0: Number of Applications Referred to the Principal Registry of the High Court. Source: (JKPTG, 2014)

Year	2008	2009	2010	2011	2012	2013
Amanah Raya Berhad	7629 (17%)	7610 (14%)	7738 (15%)	8486 (15%)	8280 (14%)	8967 (14%)
High Court	5385 (12%)	6101 (12%)	6363 (12%)	7102 (13%)	7692 (13%)	8896 (14%)

Small Estate Distribution Section	32333 (71%)	39441 (74%)	39002 (73%)	40815 (72%)	43400 (73%)	45252 (72%)
Total	45347	53152	53103	56403	59372	63115

Moreover, issues relating to administration of the deceased's estates is crucial that it had been reported that since 2006 there are more than a million cases of unsettled or administered (Utusan, 2006, Rozaidi A Rahman & Mohd Al Qayum Azizi, 2010) with an estimated value of RM38-40 billion. Many of such estates were frozen (Rozaidi A Rahman & Mohd Al Qayum Azizi, 2010, Hakimi Ismail, 2011), and RM1.8 billion of the estimated value has now been deposited and classified as unclaimed monies (Mstar, 2010). Unfortunately, most of them comprise of estate of Muslim which form the majority population in the country.

Among the reasons and contributing factors for the above situation are: the non-nomination of estate (Utusan, 2007), ineffective system of administration of estates (Rozaidi & Mohd Al Qayum, 2010), the weaknesses of the laws (Rozaidi & Mohd Al Qayum, 2010), the habit of the beneficiaries in delaying the administration of the estates of the deceased and lack of awareness on the importance of preparing a will (Hakimi, 2011).

In addition, another important factor is the public concern and confusion over the different roles and functions of available bodies and agencies such as the state Islamic councils, the Syariah courts, land office, Civil High Courts and Amanah Raya Berhad (Rozaidi A Rahman & Mohd Al Qayum Azizi, 2010). This contributes to delays in administering the deceased's estates by the heirs or beneficiaries.

The obvious non-uniformity, uncertainty and inconsistency in the laws and procedures for administration of the estate predicates that a thorough reformation of the laws of administration of estates in West Malaysia is necessary in order to achieve uniformity of the laws, especially on the non-contentious estate proceedings.

RESEARCH METHODOLOGY

This is a non-doctrinal legal research of qualitative (McConville, & Wing, Hong Chui, 2007). It is an empirical legal research that employs several methods in order to generate data relevant to existing legislations, result of interviews and the researcher's observation which is valuable in assessing and evaluating the existing laws and procedures of administering estates in West Malaysia.

The manual analysis of the data was done by examining the existing primary and secondary materials including interviews, data obtained by the researcher's observation, statutory provisions, case laws and other legal and non-legal literatures relating to the law and procedure for the administration of estates in West Malaysia. An analysis of the succession statutes including but not limited to the Rules of Court 2012, Probate and Administration Act 1959, Small Estates (Distribution) Act 1955, Public Trust Corporation Act 1995, National Land code 1965 and Courts of Judicature Act 1964, is made in order to suggest necessary reforms towards achieving uniformity of the laws on the administration of estates in Malaysia. The research also undertaken some library research, in which relevant materials relating to the administration of estates in Malaysia were collected from local libraries and also through online databases. The materials consist of literatures such as textbooks, articles, newspapers, journals, the legal encyclopedias such as Halsbury's Laws of Malaysia, Case Digest and Mallal's digest, Statute Annotators, Hansard, seminar papers, Practice Notes, Practice

Direction and Circulars relating to the process of estate administration. As some legislations originate from English statutes, references are occasionally made where necessary to English common law and textbooks.

In this research, empirical data were collected from the researcher's observation, encompassing several methods and techniques which includes the researcher observing the proceedings at the administrative bodies, perusing and reading of files, and statistics obtainable from relevant administrative bodies. In addition, data was also collected from a qualitative semi or half structured interview with those in the authority, who are directly involved in the administration of estates.

LITERATURE REVIEW

According to G Raman (2005) and Akmal Hidayah *et al.* (2009), the present laws on the administration of estates in Malaysia and Singapore originated from the English Common law which began with the introduction and enforcement of the Charters of Justice. Later, the dual system of English law and the customary law were adopted in Malaysia. However, since the structure and procedure on estate administration initiated during the colonial period still exists in the current legal framework, the need for reform has become obvious.

In considering the above and reaching the same conclusion, Ismail Said, Abd Shukur Siraj, Hashim Endut (Hansard, 1981), Akmal Hidayah Halim (2006), Abdullah Muhammad (2007), Mohd Fitri Abd Rahman (2007), Zulkifli Hasan (2008) and Nik Mohd Zain Nik Yusof (2012), mentioned proposals for establishment of a single administrative body or one stop agency dealing with administration of estates in West Malaysia. Nonetheless, the discussion on the realization of the proposed body has not attracted any research thus far.

The existing literature alluded to the significance of establishing a single body for administration of estates, but they lacks comprehensiveness in discussing the crucial aspects of the establishment, which is the means of actualisation of the legal and administrative reforms. Hence, the research was undertaken to fill in the gap in order to demonstrate how the reformation of laws and procedures dealing specifically with the administration of estates for the non-contentious estate proceedings can be implemented. This was essential in order to achieve uniformity in the laws and procedure for the administration of estates in West Malaysia.

LEGAL AND PROCEDURAL ISSUES

The research has established the legal and procedural issues in the current estate administration. The legal issues examined in the research revolves around the existence of four distinctive administrative bodies, the different types of estates, conflict of laws or jurisdiction, non-compliance with the written law, transfer and transmission of property, uncodified Islamic inheritance law, misconduct of the personal representatives, order of distribution and the Principal Registry. While the procedural issues revolves the duration of time to administer the estate, the issuance of *faraid* certificate, shortage of Land Administrator at the Small Estates Distribution Unit, the administration of wills, the concept of waiting, valuation of property and the legal fees and charges.

From the above, it is submitted that the most obvious and identifiable issue is the confusion among the public and practitioners over the distinctive powers and jurisdiction conferred on the administrative bodies, not excluding the limited jurisdiction or powers of the Syariah

Court in the matter of Islamic inheritance. Thus, in order to simplify and expedite the whole process of estate administration, it is suggested that a single non judicial body or a one stop agency must be established, to deal with the administration of estates for non-contentious estate proceeding.

In the same vein, it was also established that although the distribution order at the Small Estates Distribution Unit is comprehensive in nature, delay in the process of administration is unavoidable due to compliance with the pre-requisite for valuation report and Form C, which is issued by a separate and independent body. On this basis, it is suggested that valuation should no longer be a pre-requisite in determining the jurisdiction of the body and that both the Principal Registry and valuation office be located under the same roof or body. It is further established that the present concept of waiting for beneficiaries to file an application for distribution of the estates has resulted in several un-administered estate. One of the reasons for the delay by the beneficiaries in the administration of estates is due to the lack of information regarding the deceased's estates and liabilities. Hence, the integration between the proposed administrative body and relevant agencies would be necessary in obtaining or accessing online information which would definitely expedite the process of estate administration.

The research also identifies other apparent issues which relates to the costs or fee incurred for administration of estates matters, which is dependent on the value of the estate, its complications, complexity of the cases and the documentation process. The fees are incurred during the three main stages involved in administration of estates, i.e., application for grant of representation, settlement of debts and distribution of assets to the beneficiaries. At each stage, different administrative bodies attended by the appointed lawyer shall incur different charges and costs, as the case may be. In addition, Muslims might need to deal with the Syariah Court, thus rendering additional costs and time to be incurred. Therefore, establishing a single administrative body would achieve the objective of simplicity, accessibility and low costs administration procedure.

FINDING

The research recognizes that it is high time that a single administrative body in the administration of the non-contentious estate proceeding be established in order to promote the uniformity of laws and enhance the experience of the administration of estates in West Malaysia for both Muslims and non-Muslims. Hence, in realization of such, the research has demonstrated the legal and administrative reforms of the existing laws and procedural frameworks for estate administration in West Malaysia.

In light of the above, the research finds that an administrative body should be set up as an independent unit or department under the Ministry of Natural Resources & Environment known as the Estate Department. The implementation of the proposed body as well as the structure of the institution which would be headed by the Director General is illustrated by the research.

Taking into consideration all issues discussed therein, the research has suggested that the proposed Estate Department should comprise of two branches namely Legal & Operation and Policy & Management. The Legal & Operation branch should consists of seven divisions with its own distinctive functions. The divisions are: the Principal Registry Division, Valuation Division, Wills Division, Syariah Division, Dispute Resolution Division,

Distribution Division, and Compliance and Enforcement Division. The Policy & Management branch on the other hand, include; Policy and Corporate Management Division, Research & Development Division, Finance & Revenue Division and Information Technology & Communication Division.

With the peculiarities of Syariah matters, the research proposes that a Syariah officer from the Syariah Division be engaged in the issuance of *faraid* certificate. This would also serve to simplify and expedite the process in the Syariah Court. Furthermore, the dispute resolution officer from the Dispute Resolution Division would at hand to resolve any conflict or dispute relating to estate administration generally and collateral disputes specifically excluding probate action for contentious estate proceeding.

Furthermore, in order to expedite the process of obtaining the valuation report and Form C, the research has proposed that the valuation officer from the Valuation Division should possess distinguishable power to value the asset of the deceased for the purpose of determining the fees payable to the Government as opposed to determining the jurisdiction of the administrative bodies in administration of estates in non-contentious proceeding. Therefore, the structure of the Principal Registry should enable the current system for management of bluecard to be extended or introduced.

On the fundamental purpose of proposing the establishment of the above Estate Department is to facilitate legal reforms. In this regard, the research suggests that the existing Small Estates (Distribution) Act 1955 and Small Estates (Distribution) Regulations 1955 be repealed and replaced by the Estates (Distribution) Act and the Estates (Distribution) Regulations.

It has been expounded through the research that in order to reflect the jurisdiction, structure and functions of the administrative body, the substantive alteration to the Small Estates (Distribution) Act 1955 or Small Estates (Distribution) Regulations 1955 is necessary.

Furthermore, having considered the procedural work flow of the Estate Department, it is submitted that amendments should also be made to Small Estates (Distribution) Regulations 1955. Among others, the location of the Principal Registry need to be changed from the High Court of Kuala Lumpur to the Estate Department's main office, transfer of collateral disputes to the Dispute Resolution Division for determination, the insertion of regulation or provisions on testate estate and application of caveat.

Moreover, in order to reflect provisions of the proposed Estates (Distribution) Act and Estates (Distribution) Regulations, statutes relating to administration of estates require a few amendment, addition, substitution, insertion or deletion. These laws include Probate and Administration Act 1959, Rules of Court 2012, Public Trust Corporation Act 1995, National Land Code 1965 and Inheritance (Family Provision) Act 1971.

CONCLUSION

As a whole, the research establishes that the proposed reform should benefit the public at large as the procedures will be standardized and less complicated. Reforms are highly necessary and suitable due to the non-uniformity, uncertainty and inconsistency of the laws and procedures applicable to administration of estates in West Malaysia. In addition, the proposed administrative reform aims to establish a single administrative body known as the Estate Department which should absorb the jurisdiction of the Small Estate Distribution Section and take over the jurisdiction of High Court and AmanahRaya particularly for non-

contentious estate proceeding.

While acknowledging that the process of amending and introducing new laws are not straight forward, the above recommendation should prove to be the best solution at hand and what is left is only to implement and execute the proposed legal and administrative reforms to better regulate and standardized the law and procedure relating to the administration of estates in West Malaysia.

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STRATEGIC ORIENTATION AND BUSINESS PERFORMANCE: THE MEDIATING ROLE OF TEAMWORK

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ABSTRACT

In today's intensely competitive business environment, there is a need for business organizations to be strategically positioned. Similarly, there is a need for employees to work together as a team for business organizations to benefit from being strategically positioned as per improved performance. It is against this background that this study examined the mediating role of teamwork in the relationship between strategic orientation and business performance. This study used SmartPLS-SEM to analyse data collected from 253 commercial bank managers in Nigeria. Results of the structural model indicated that strategic orientation and business performance were positively and significantly related. Further analysis revealed that teamwork fully mediated strategic orientation-performance relationship. Based on the findings, it was concluded that although business organizations may benefit from being strategically positioned, however, they will benefit more if employees work as a team.

Keywords: Business Performance, Nigerian banks, Strategic Orientation, Strategy, Teamwork

INTRODUCTION

Globalization and developments in information and communications technology (ICT) have made the world to become a global village; and the competition landscape has become increasingly intensified. Business organizations now compete with their rivals beyond their national territories. Thus, there is a need for business organizations to be strategically positioned in order to outperform competitors in the marketplace. The need for business organizations to be strategically positioned becomes imperative not necessarily because it enables them to compete with and outsmart rivals in the marketplace, but it helps them to achieve optimum performance, even in a highly competitive environment. In the light of resource-based view theory, strategic orientation gives a business organization a competitive advantage over competitors, which, in turn, contributes to superior business performance (Barney, 1991). Available empirical evidence reveals that there is a positive relationship between strategic orientation and business performance (Pleshko & Nickerson, 2008; Storey & Hughes, 2013; Weinzimmer, Robin, & Michel, 2012). According to Weinzimmer et al., (2012), a business is strategically positioned when: i) it has a shared vision of what it wants to be in the future; ii) its strategic direction or orientation is clearly defined; iii) its goals and objectives are clearly linked to its mission, vision, and strategy; iv) its short-term thinking

does not compromise its long-term vision; v) it has an effective business plan; and vi) it has effective planning process at all levels.

A lot of studies have examined the relationship between different types of strategies and business performance. Nevertheless, available empirical evidence shows that the findings from the studies are mixed. For instance, Miles and Snow (1978) identified strategy typologies as prospector, defender, analyzer, and reactor; and they proposed that prospector, analyzer, defender strategies are more effective than reactor strategy (Andrews, Boyne, Law, & Walker, 2009). Some studies found prospector, defender, and analyzer strategies to be more effective than reactor strategy, thereby confirming Miles and Snow's proposition (Aragón-Sánchez & Sánchez-Marín, 2005; Conant, Mokwa, & Varadarajan, 1990; Smith, Guthrie, & Chen, 1986). On the contrary, other studies found reactor strategy to be more effective than prospector, defender, and analyzer strategies (Snow & Hrebiniak, 1980). Also, some studies confirmed prospector strategy to be better than analyzer and defender strategies (Segev, 1987; Veliyath & Shortell, 1993) while other studies affirmed analyzer strategy to be more effective than prospector, defender, and reactor strategies (Pleshko & Nickerson, 2008). On the whole, some strategic management scholars have argued that the effectiveness of strategy typologies depend on organizational resources and capabilities (Basu & Gupta, 2013; Desarbo, Benedetto, & Song, 2005; Sinkovics, 2004; Slater, Olson, & Hult, 2006; Storey & Hughes, 2013), organizational culture (Storey & Hughes, 2013), organizational size (Smith et al., 1986), industry type (Snow & Hrebiniak, 1980) and external environment (Chung, Jung, Baek, & Lee, 2008; Desarbo et al., 2005; Hambrick, 1983). Given the inconsistency in the findings and arguments concerning the relationship between strategy typologies and business performance, there is a need to examine whether strategic orientation (as a unidimensional construct) is positively related to business performance, regardless of the strategy typologies adopted by the organizations.

Different from most previous studies, Weinzimmer et al., (2012) developed an instrument for measuring strategic orientation (as a unidimensional construct) of a business firm and investigated the relationship between strategic orientation and business financial performance. In the same way, this study replicates not only the study conducted by Weinzimmer et al., but also extends the study by investigating the mediating role of teamwork in the relationship between strategic orientation (as a unidimensional construct) and business performance. From the perspective of contingency theory, this study, to the knowledge of the authors, fills a gap in the literature on strategic management and organizational performance by being the first to examine the mediating role of teamwork in the relationship between strategic orientation and business performance. Contingency theorists postulate that there must be proper alignment among key organizational and environmental variables for optimum performance to be achieved (Lumpkin & Dess, 1996; Rauch, Wiklund, Lumpkin, & Frese, 2009). In this study, we argue that the impact of strategic orientation on business performance is contingent on teamwork. By this, we mean strategic orientation passes through teamwork to affect business performance. In other words, teamwork could transfer the influence of strategic orientation to business performance. This is because it takes the working together of all employees for a business to be strategically positioned. All hands must be on deck for a business to be strategically positioned and for a business to benefit from being strategically positioned as per improved performance. Simply put, the more employees work together as a team, the more strategically positioned a business becomes,

and the more impact strategic orientation has on performance.

In view of the above, the objectives of this study are:

- 1) To determine whether there is a relationship between strategic orientation and business performance; and
- 2) To determine whether teamwork mediates the relationship between strategic orientation and business performance.

To achieve the objectives stated above, the remaining part of this paper is structured as follows. First and foremost, we review literature on strategic orientation, teamwork, and business performance with a view to formulating testable hypotheses and presenting the research framework that shows the relationship among the variables studied. Thereafter, we explain the methodology adopted to carry out this research. Afterward, we present results of data analysis. And lastly, we discuss findings of this study and highlight their implications.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

STRATEGIC ORIENTATION AND PERFORMANCE

Before we explain strategic orientation and relate it to business performance, we first of all explain the concept of *strategy*. This is because strategy plays a key role in strategic orientation. Besides, strategy is meant to help accomplish organizational mission, vision, and objectives. Strategy is defined as the relationship between an organization and its environment, and actions taken by the organization to achieve its goals and superior performance through effective and efficient deployment of resources (Ndubisi & Agarwal, 2014). It may also be defined as the matching of organizational resources and capabilities to opportunities and threats posed by the external environment (Chung et al., 2008). It is deliberate action-plans, decisions, and guidelines formulated in advance in order to gain a sustainable competitive advantage. A good strategy must be well managed. This means a good strategy must be properly formulated, implemented, and evaluated (Wheelen & Hunger, 2012). Strategy formulation entails development of organizational mission, vision, and objectives and formulation of strategies necessary to accomplish stated mission, vision, and objectives. Strategy implementation involves deployment of organizational resources, development of supportive organizational culture, and establishment of adaptive organisational structure necessary to achieve stated mission, vision, and objectives. Strategy evaluation, on the other hand, entails reviewing internal and external factors that could work for and against stated mission, vision, and objectives; monitoring and measuring the level of progress made in relation to the strategy formulated to achieve stated mission, vision, and objectives; and taking corrective measures (where and when necessary) in order to correct deviations from stated objectives.

A lot of scholars have proposed different business strategies; however, the works of Miles and Snow (1978) and Porter (1985) are very popular among them. Miles and Snow identified strategy typologies as prospector, defender, analyzer, and reactor (Andrews et al., 2009; Slater et al., 2006; Wheelen & Hunger, 2012). While prospector strategy is about continuously searching for new market opportunities through innovation and development of new products, defender strategy is about choosing a limited product-market domain and aggressively maintaining and protecting the selected market segments. Businesses that adopt prospector strategy have broad product lines, focusing mainly on product innovation and

market opportunities while businesses that adopt defender strategy have a limited product line, focusing on improving the efficiency of their existing operations (Wheelen & Hunger, 2012). Analyzer strategy deals with analyzing the external environment in order to match capabilities with the environmental forces while reactor strategy is about responding to external environmental forces or changes. Businesses that adopt analyzer strategy operate in at least two different product-market areas, with one variable and one stable whereas businesses that adopt reactor strategy hardly respond to environmental pressures and lack a consistent strategy-structure-culture relationship (Wheelen & Hunger, 2012). Porter, on the other hand, classified business strategies as cost leadership strategy, differentiation strategy, and focus strategy (Sumer & Bayraktar, 2012). Cost leadership strategy refers to the production of products at low possible cost and offering them at the prevailing market prices. Differentiation strategy entails offering a product that is distinct from other products produced by competitors. Focus strategy only seeks narrow competitive advantage within chosen market segments, which may be cost focus strategy or differentiation focus strategy. Strategic orientation is defined as the direction that a business takes to achieve clearly defined mission, vision, and objectives (Wheelen & Hunger, 2012). It is the strategic positioning or posture of an organization. Strategic orientation may also be defined as the strategic focus that a business chooses and how it aligns with external environment to achieve stated organizational goals (Weinzimmer et al., 2012). Being strategically positioned gives a business a competitive advantage, which, in turn, leads to superior performance. Thus, it is presumed that strategic orientation is related to business performance, resulting in the development of the following hypothesis.

H1 There is a relationship between strategic orientation and business performance

TEAMWORK AND PERFORMANCE

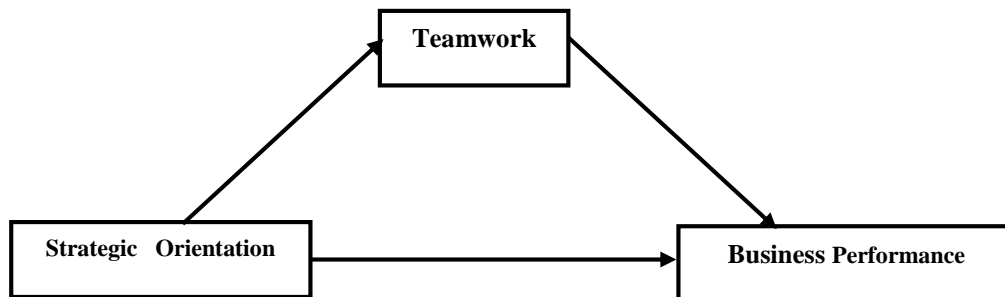
There is a need for organizational members to work cooperatively as a team for a business to achieve its objectives and improve its performance. An atmosphere for teamwork to thrive should be created. Organization is made of people (employees) who are employed to work for the achievement of organizational goals. The more employees work together as a team, the more results they achieve. Teamwork exists where employees work interdependently to achieve organizational goals (Eldon, 2010). Although the role of teamwork is stressed in human resource management, however, there is a paucity of its empirical relationship with business performance. Nevertheless, existing literature confirms teamwork to be related to leadership and workers' motivation and productivity (Chen, 2010; Mattick & Miller, 2006; Sewell, 2005; Sohmen, 2013); and leadership and workers' motivation and productivity are related to business performance (Elena, 2010; Pharpruke, 2011; Sokro, 2012). By extension, it means that teamwork is also related to organizational performance. But there is a need to investigate empirically the relationship between teamwork, business performance, and other organizational variables. Based on the above discussion, the following hypothesis is formulated.

H2 Teamwork mediates the relationship between strategic orientation and business

performance

Based on the review and discussions of existing literature on strategic orientation, teamwork, and business performance; the following research framework was developed to guide this study. Thus, Figure 1 illustrates the relationship among strategic orientation, teamwork, and business performance. From the figure, strategic orientation is presumed to have a direct relationship with business performance while teamwork is hypothesized to mediate the relationship between strategic orientation and business performance.

Fig. 1: Research Framework



METHODOLOGY

DATA COLLECTION AND ANALYSIS

The data for this study were collected from 253 commercial bank managers in Nigeria through a self-reported questionnaire. The questionnaires were administered through the mail. Data analysis was carried out using SmartPLS-SEM.

OPERATIONALIZATION OF CONSTRUCTS

To measure strategic orientation of Nigerian commercial banks, this study adapted the strategic orientation instrument developed by Weinzimmer et al., (2012). Weinzimmer et al developed a six-item instrument for measuring strategic orientation as a unidimensional construct. Teamwork was measured with five items adapted from Denison's (1990) instrument for measuring team orientation of employees (Denison & Neale, 1999). Strategic orientation and teamwork were measured on a 5-point Likert scale, where where "1" = "strongly disagree", "2" = "disagree", "3" = "undecided", "4" = "agree", and "5" = "strongly agree". On the other hand, business performance was measured subjectively as a unidimensional construct with three items, namely market share, profitability, and return on assets, where bank managers (the respondents) were asked to assess the performance of their banks in the last three years. Business performance measures were adapted from Antoncic and Hisrich (2004). Note that business performance was measured on a 5-point Likert scale to ensure consistency. On the scale, 1 = "very low", "2" = "low", "3" = "moderate", "4" = "high", and "5" = "very high".

RESULTS

RESULTS OF MEASUREMENT MODELS

The results of the measurement models as shown in Table 1 indicated that all the criteria for assessing reflective measurement models were satisfied. The Cronbach's Alpha and composite reliability values for all the constructs were above the recommended value of .70,

confirming that the items measuring the constructs were internally consistent (Fornell & Larcker, 1981; Hair, Hult, Ringle, & Sarstedt, 2014; Hair, Black, Babin, & Anderson, 2010). The AVE for all the constructs were greater than .50, meaning that all the constructs passed the discriminant validity test criteria (see Table 2) (Hair et al., 2014). Also, all the items measuring the constructs loaded above the recommended value of .70 (Hair et al., 2014).

Table 1: Results of the Measurement Models

Construct	Indicators	Loadings	Indicator Reliability	Cronbach's Alpha	Composite Reliability	AVE	Discriminant Validity?
Strator	Strator1	.726	.527	.734	.833	.556	Yes
	Strator2	.789	.623				
	Strator3	.783	.613				
	Strator4	.722	.521				
Teamwork	Team1	.794	.630	.701	.832	.624	Yes
	Team2	.837	.701				
	Team5	.736	.542				
BusPerf	Perf1	.829	.687	.739	.851	.657	Yes
	Perf2	.801	.642				
	Perf3	.800	.640				

Strator = Strategic orientation; BusPerf = Business performance

DISCRIMINANT VALIDITY AND SQUARE ROOTS OF AVERAGE VARIANCE EXTRACTED (AVE)

Discriminant validity is defined as the degree to which a construct differs from the remaining constructs (Hair et al., 2014; Hair et al., 2010). It indicates the relationship between a construct and other constructs. For a construct to pass a discriminant validity test, its AVE must be greater than the highest relationship that the construct has with other constructs (Fornell & Larcker, 1981). Table 2 shows the average variance extracted values for the constructs and the correlation that each construct had with other constructs. The table shows that all the constructs passed the discriminant validity test. The AVE for each construct was above the correlation that the construct had with other constructs.

Table 2: Discriminant Validity and Square Roots of AVE

Constructs	Business performance	Strategic orientation	Teamwork
Business performance	<i>0.810</i>		
Strategic orientation	0.233	<i>0.746</i>	
Teamwork	0.275	0.472	<i>0.790</i>

Note. Numbers shown diagonally (in italic & bold) are square roots of AVE and the remaining values are correlations between constructs.

RESULTS OF STRUCTURAL MODEL AND HYPOTHESES TESTING

Table 3 and Figure 2 show details of bootstrapping results of the structural relationships between the constructs.

Table 3: Results of Structural Models and Hypotheses Testing

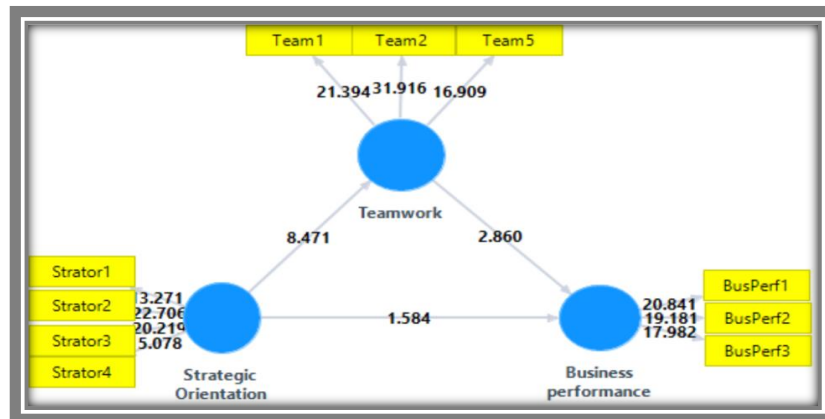
Structural relationships	Path Coefficients	Std Errors	T values	P values
Strator→Performance***	.248	.054	4.586	.000*
Strator→Performance****	.133	.084	1.584	.113
Strator→Teamwork	.472	.056	8.471	.000*
Teamwork→Performance	.213	.074	2.860	.004**

Note: *significant at $< .001$ (two-tailed); **significant at $< .05$ (two-tailed); Strator = strategic orientation; ***without mediator variable; ****with mediator variable

The results of the structural model indicated a positive and significant relationship between strategic orientation and business performance, $b = .248$, $t = 4.586$, $p < .001$. Strategic orientation and teamwork were positively and significantly related, $b = .472$, $t = 8.471$, $p < .001$. Also, teamwork was positively and significantly related to business performance, $b = .213$, $t = 2.860$, $p = .004$.

To examine whether teamwork mediates the relationship between strategic orientation and business performance, the following steps were taken. First, the relationship between strategic orientation and business performance was assessed and the result was significant, $b = .248$, $t = 4.586$, $p < .001$. Second, teamwork (mediating construct) was added to the model and the relationship between strategic orientation and business performance became nonsignificant, $b = .133$, $t = 1.584$, $p = .113$, meaning that teamwork fully mediated the relationship between strategic orientation and business performance (Baron & Kenny, 1986; Hair et al., 2010; Wu & Zumbo, 2007). To further confirm the significance of the mediation effect, a Sobel test was performed using the path coefficients and standard errors for the relationship between strategic orientation and teamwork ($b = .472$, standard error = .056) and for the relationship between teamwork and business performance ($b = .213$, standard error = .074) (Kock, 2014). The Sobel test results showed that the mediation effect was significant, $t = 2.7069$, p value = .0036 (one-tailed), p value = .0073 (two-tailed).

Fig. 2: Bootstrapping Results of Structural Model



DISCUSSIONS AND IMPLICATIONS

This study examined the relationship between strategic orientation and business performance and the mediating effect of teamwork on the relationship. As hypothesized, the results of the structural model showed a positive and significant relationship between strategic orientation and business performance. This means that strategic orientation is a predictor of business performance. Simply put, the higher the strategic orientation, the higher the business performance. This finding is consistent with the findings of previous studies that investigated the relationship between strategic orientation and business performance (Pleshko & Nickerson, 2008; Storey & Hughes, 2013; Weinzimmer et al., 2012). The implication of this

finding is that the more strategically positioned a business is, the greater the performance. The finding suggests that business organizations must be strategically positioned in order for them to achieve superior performance and outperform competitors in the marketplace.

Furthermore, as predicted, teamwork fully mediated the relationship between strategic orientation and business performance. It means that strategic orientation passes through teamwork to affect business performance. In other words, teamwork transfers the influence of strategic orientation to business performance. Also, findings revealed that teamwork was positively and significantly related to strategic orientation and business performance respectively. This finding suggests that business organizations must create an atmosphere for employees to work as a team. It implies that for a business organization to benefit from being strategically positioned, employees must work cooperatively as a team. This also means that business organizations must encourage team spirit among employees.

Additionally, the findings of this study have some insightful theoretical implications. The findings add to the existing knowledge on strategic management and organizational performance, by providing empirical evidence of the mediating effect of teamwork on the relationship between strategic orientation and business performance. Also, the findings confirm the applicability and generalizability of contingency and resource-based view (RBV) theories across different environmental settings. Specifically, while Weinzimmer et al., (2012) confirmed a positive relationship between strategic orientation and objective performance measures, this study confirmed a positive relationship between strategic orientation and subjective performance measures. This implies that both objective and subjective performance measures do not produce significantly different results in the study of organizational performance. Based on the findings of this study, it is concluded that although business organizations may benefit from being strategically positioned, however, they will benefit more if employees work as a team.

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WORK INTEGRATED LEARNING: AN ASSESSMENT OF UNIVERSITY STUDENTS' PSYCHOLOGICAL ATTRIBUTES

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ABSTRACT

The study was undertaken to investigate Work Integrated Learning (WIL) effects on the psychological attributes of university students who have participated in such programmes. The rationale for the study is based on previous empirical evidences that students who have undergone WIL achieved improved soft skills and competences and this impacts on the students' self-esteem and self-efficacy. Data was collected using structured survey instrument. The respondents are 205 public university students majoring in accountancy who have undergone six months compulsory internship. Findings support that the soft skills obtained during their internship will influence the students' self-esteem and self-efficacy.

Keyword: Work integrated learning, students, soft skills, employability, self-esteem, self-efficacy

INTRODUCTION

As Malaysia inches its' way towards Vision 2020 and aspires to transform itself into a developed nation, a more flexible workforce with advanced technical skills coupled with well-developed generic skills is greatly required by the employer in the industry in order to meet the challenges faced by businesses. While, hard skills can be taught and learnt, employers complains that university graduates are lacking in soft skills. Prospective employers argue that universities have been putting too much focus on theoretical aspects of the courses taught at the expense of the practical perspective. To address this issue, one of the universities' effort is the implementation of compulsory Work Integrated Learning (WIL) programs, commonly in Malaysian universities, WIL refers to internship/ industrial training programmes. Work-integrated learning (WIL) has been identified as an instrument for enhancing professionalism and work readiness in new graduates. It is commonly believed that WIL experiences will result in the improvement of the students soft skills. However, an issue that has been frequently overlooked by the stakeholders is the effect that WIL has on the students' psychological attributes. Therefore, the study undertakes to explore whether the acquisition of skills is related to the students psychological attributes, especially, their self-esteem and self-efficacy.

According to Freudenberg, Bramble and Vyvyan (2010) WIL improves university students employability skills as the students are able to apply, what they have learnt in lecture halls, into practice and at the same time, they are able to develop their communication skills. WIL exposes students to a gamut of experience, where, they are afforded with the opportunity for personal development and growth Costley (2007). Brown, Collins and Duguid (1989) define this experience as a form of ‘cognitive apprenticeship’. Costley (2007), Crebert, Bates, Bell, Patrick and Cragnolini (2004), Dreuth and Deuth-Fewell (2002), Lizzio and Wilson (2004) and Rickard (2002) unanimously agree that WIL contributes to improvements in personal skills and professional competencies such as decision making, interpersonal and self-management skills, the application of theoretical knowledge in workplace environments, professional networking, professional behaviour, and leadership skills.

While it is established is that WIL provides the transition from theory to practice. Yet, what the students gained during WIL programs is much more valuable and transcends the improvement in employability skills and competencies. Purdie et al (2013) opines that the actual benefit of WIL is its’ effect on the university students psychological attributes and this contribution is perceived to be much more significant that it eclipsed the development of basic competences. This implies that WIL students are able to adapt to both the working environment and the social environment. Thus, WIL impacts on psychological developments by bestowing the students with a more positive outlook which provides them with better opportunity for gaining employment (Allen & van der Velden, 2007).

Therefore, the main objective of this study is to unveil the relationship between the skills obtained during WIL and its’ effect on university students’ psychological attributes. The psychological attributes utilized for the study is based on the two psychological domains identified by Cuzzi et al (1996) and Crebert et al (2004), they are: self-esteem and self-efficacy. The basic skills which are the main focus of the study will be critical thinking skill, communication skill and leadership skill. In other words, critical thinking skill, communication skills and management skills are the independent variables and self-esteem and self-efficacy are the dependent variables.

LITERATURE REVIEW

SOFT SKILLS

WIL is generally accepted as a powerful vehicle for developing generic and professional skills, thereby providing students with the opportunity to improve their employability and work readiness (Freudenberg et al., 2011; Knight, 2006; Subramaniam & Freudenberg, 2007). The growth of WIL in universities reflects both government and industry concern about addressing skill shortages as well as making students more employable upon graduation. Embedding WIL in the curriculum offers universities an alternative way in which to enable all students to enhance their employability skills. It has also provided universities with an appealing avenue to meet the accreditation requirements of professional associations (McLennan & Keating, 2008; Woodley & Beattie, 2011).

Drysdale et al (2007), Drysdale, Goyder and Cardy (2009); Drysdale and Chiupka (2011) and Drysdale et al (2011) provided evidence in establishing the effects of WIL on psychological outcomes. Self-efficacy (Cuzzi, Holden, Rutter, Rosenberg & Chernack, 1996) and self-esteem (Crebert et al., 2004) are the two psychological domain of university students affected by their participation in WIL. Kolb (1984) contributes this to experiential learning,

where, students learn more about themselves in a work-based context through the process of self-reflection.

Munir, Aniswal and Haslina (2005) listed the skills and abilities required by graduates in the arts and related fields (i.e., Humanities, Social Sciences, Communication, Management, and Information Technology) by Malaysian employers. Their study showed that the order of the list reflected the importance of each attribute from the surveyed employer's point of view. This indicates that the ranking of competencies of potential graduates, as needed by employers, is as follows: management skills, personal qualities, communication skills, interpersonal skills, thinking skills, and ICT skills. According to Vathankah et al (2013) soft skills such as communication skill accord individuals with the ability to convey their needs more effectively and equip them with the competence to understand the needs of others. Shover (2003) is of the opinion that communications skills lead to improvement in self-esteem, as it enhances interpersonal relationship, instil positive behaviour and coping skills.

SELF-ESTEEM

Self-esteem refers to how an individual assesses himself and this is related to the person's self-worth (Qureishi, 2011). According to Creed et al (2001) self-esteem emanates from a person's conviction in his ability to improve his station in life. Thus, an individual will act and react in ways that will determine the person's attitudes and behaviours to sustain their level of self-esteem. Self-esteem affects the thinking process, emotions, desires, values and goals in a person, developed when the acceptance of others and their personal and group contributions are recognized and applauded, especially in a multi-culturally diverse world; it is a key ingredient that affects the level of proficiency in all fields of endeavour (Harris, 2009).

Having a higher level of self-esteem allows an individual to possess a higher level of social skills, impressing an employer in the recruitment stage (Saks & Ashforth, 1999). Schmit, Amel and Ryan (1993) research could agree with these finding, as they reported that self-esteem shows positive correlation related to assertive and self-confident career seeking behaviour. In addition, Saks & Ashforth (1999) research showed a positive correlation through individuals actively seeking for a job, and higher level of self-esteem; which is important for an individual to possess during the job search. Thus, positive levels of self-esteem would assume to help and encourage an individual to get a career job. It is then predicted that those university students, with a high self-esteem, will directly enter the labour market after graduation. Those individual with lower self-esteem will then choose an alternative path, like attending more school or taking time off to travel, as it does not seem favourable for them to enter the labour force at this time in their lives

Potgieter (2012) discovers that competencies, like self-esteem, do influence employability attributes significantly. Thus, in order to improve employability quality and competences among university graduates, self-esteem sustainability should be a fundamental issue to be addressed during career development support practices and career counselling interventions. Similarly, Fugate et al. (2004) and Griffen and Hesketh (2005) observed that people with higher self-esteem will have higher employability attributes and thus, these candidates are much more attractive to prospective employers. Muller (1992) in his study on unemployed women found that the participants' self-esteem improved significantly after attending personal development courses. Various authors found that one could improve low self-esteem through training (Brockner & Gaure, 1983; Fugate et al., 2004; Smoll, Smit, Barnett & Everett, 1993) Therefore, one can conclude that experience and exposure during WIL, will help undergraduates seeking employment.

SELF-EFFICACY

Self-efficacy is a central concept in Bandura's social cognitive theory, where it is defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). The level of an individual's self-efficacy is seen to be an important determinant of how well he or she copes with learning and performing at the workplace. It has also been argued that self-efficacy plays a significant role in scholastic achievement (Tucker & McCarthy, 2001). This is because individuals' self-efficacy is seen to influence their course of action as well as how much effort they will expend in given situations. Given that WIL programs are structured to increase job knowledge and skills of students, which in turn tend to improve their attitude and behaviour toward work readiness (Hughes & Moore, 1999), such programs are also likely to impact students' self-efficacy.

Self-efficacy is a type of internal confidence of oneself towards his or her ability to achieve goals. It drives the motivational development of a person that led them to achieve their objective. Without prior related knowledge or experience in any related areas, it is hard for any individual to believe in their ability in achieving any goal in that discipline since the confidence level of oneself comes from their absorptive capacity level (Fakhrorazi & Hazril Izwar, 2014). Thus, with experience obtained during their internship it is expected that the students' self-efficacy will be improved. In social science, self-efficacy is the motivational force that can influence someone to perform certain behaviour, to endure the challenges, obstacles, and difficulties (Stajkovic & Luthans, 1998). Moreover, the existence of self-efficacy in oneself also increases the tendency of oneself to perform a specific challenging behaviour (Bandura, 1997) especially if it involves acquisition of new knowledge and performing an innovative behaviour in an organization. Acquiring new knowledge is considered as challenging behaviour for an individual since the process of knowledge acquisition involves sophisticated learning activities that require integration between both cognitive and behavioural elements during the learning process.

HYPOTHESES GENERATION

Thus, it is suggested that students' participation in WIL will result in the students obtaining specific and tacit knowledge as they benefit from undergoing realistic experiences workplace demands and practices. It is also believed that the psychological attributes resulting from the experience of WIL are likely to surpass the development of novel competencies. The study argues that with skills acquired during WIL will improve the students' psychological attributes, i.e., self-esteem and self-efficacy. This psychological factor has long been overlooked in developing and enhancing university students' employability. The generic skills attained during their internship/ industrial training should provide with higher level of self-esteem and self-efficacy as employers are looking for versatile graduates who are able to drive their organizations to compete successfully in the market.

The literature review has presented evidence that a range of soft skills/ competencies obtained by university students while undergoing WIL has been associated to their psychological attributes. The present study will examine the association between critical thinking skill, communication skill and management skills and psychological attributes variable such as self-esteem and self-efficacy. From the abovementioned discussions, the hypotheses for this research are formulated:

H1 (a): Thinking skills are significantly related to the students' self-esteem.
H1 (b): Communication skills are significantly related to the students' self-esteem.
H1 (c): Management skills are significantly related to the students' self-esteem.

H2 (a): Thinking skills are significantly related to the students' self-efficacy.
H2 (b): Communication skills are significantly related to the students' self-efficacy.
H2 (c): Management skills are significantly related to the students' self-efficacy.

METHODOLOGY

DATA COLLECTION

The sampling design for the study utilised purposive sampling as it targets specific group of respondents. Data were collected from 205 students from four public universities in Malaysia. They are undergraduates in business degree programs, who were majoring in accounting and they are required to complete their final semester in-campus. Most importantly this group of students have undergone compulsory internship for six months according to Malaysian Institute of Accountants professional requirement. 400 questionnaires were distributed, with 205 surveys returned indicating 51.3% rate of return.

MEASUREMENT

A self-administered survey that rates the level of self-esteem using the Rosenberg Self-Esteem Test (Rosenberg, 1985) was used. The Rosenberg Self-Esteem Scale Test was used because it is referred to as generally the standard tool against which other measures of self-esteem are compared. It is composed of 10 questions and scored using the five-point response scale, ranging from strongly disagree to strongly agree. The general self-efficacy scale was adopted from Chen et al.'s (2001), it is composed of eight items and measured using five-point response scale, ranging from strongly disagree to strongly agree. Thinking skills, communication skills and management skills were adopted from Mohamed Shukri, Rafikul and Noor Hazilah (2014). Thinking skills contains eight items and measured using five point responses ranging from strongly disagree to strongly agree. Communications skills contain eleven items and measured using five point responses ranging from strongly disagree to strongly agree. Management skills contain nine items and measured using five point responses ranging from strongly disagree to strongly agree.

RESULTS

Correlation analysis is employed to determine the direction and significance of the bivariate relationships of the variables (Sekaran, 2006). Based on the result in table 1, there are 10 correlations between the independent variables and dependent variables that are statistically significant. In other words, the correlation analysis provided indication that all three Soft Skills variables have positive relationships with self-esteem and self-efficacy.

Table 1: Correlation between Variables

Variables	M	SD	1	2	3	4	5
Thinking skill	3.82	.44	1	.540**	.618**	.327**	.542**
Communication Skill	3.67	.45			.588**	.381**	.518**
Management Skill	3.73	.52				.334**	.548**
Self-esteem	3.82	.63					.499**
Self-Efficacy	3.90	.40					1

N= 205, * $p < .05$, ** $p < .01$

To investigate the hypotheses, a multiple regression analysis was conducted using SPSS. The result of the analysis is exhibited in table 2 and table 3.

Table 2: Soft Skills and Self-Esteem

Variables	β	Sig
Thinking Skill	.147	.086
Communication Skill	.241	.005
Management Skill	.104	.241
R ²	.177	
Adjusted R ²	.165	
F Value	14.352	

Dependent Variable: Self-Esteem

The prediction model was statistically significant, $F(3, 200) = 14.532$, $p < .001$, and accounted for approximately 17% of the variance of self-esteem ($R^2 = .177$, Adjusted $R^2 = .165$). The results in Table 1 indicate that only Communication Skill significantly predicts Self-Esteem ($\beta = .241$, $p = .005$). However, Thinking Skills ($\beta = .147$, $p = .086$) and Management Skills ($\beta = .104$, $p = .241$) do not significantly predict Self-Esteem. Based on the statistical results, hypothesis H1 (a) is accepted, while, hypotheses H1 (b) and H1(c) are rejected.

Table 3: Soft Skills and Self-Efficacy

Variables	β	Sig
Thinking Skill	.236	.001
Communication Skill	.241	.001
Management Skill	.263	.001
R ²	.391	
Adjusted R ²	.382	
F Value	42.746	

Dependent Variable: Self-Efficacy

The prediction model was statistically significant, $F(3, 200) = 42.746$, $p < .001$, and accounted for approximately 39% of the variance of self-esteem ($R^2 = .391$, Adjusted $R^2 = .382$). The results indicate that all four soft skills significantly predict Self-Efficacy, Thinking Skills ($\beta = .236$, $p = .001$), Communication Skills ($\beta = .241$, $p = .001$) and Management Skills ($\beta = .263$, $p = .001$). Thus, hypotheses H2 (a), H2 (b) and H2 (c) are accepted. The standardised coefficient of Management Skills ($\beta = .263$) proved that the strongest unique contribution to explaining Self-Efficacy comes from Management Skills, followed by Communication Skills ($\beta = .241$) and Thinking Skills ($\beta = .236$).

CONCLUSION

The results of this research are important, as they not only demonstrates the importance of WIL in providing students with the necessary soft skills, but also, once the students obtain these soft skills, it results in improvement of their self-esteem and self-efficacy. This is meaningful as it proves the significance of WIL in shaping the psychological attributes of the students, as both self-esteem and self-efficacy are important components in building the

students' determination and confidence. Both are important elements as they make the students more appealing for future employers. Therefore, WIL is not solely about obtaining essential generic skills to gain employment in the future but it also shapes the students psychological attributes throughout their working career.

The result provides valuable information for the relevant authorities, universities and employers, as it is apparent that WIL programmes must be designed to address issues related to psychological attributes. There is no doubt WIL is important but it must contain components that will assist in the development and improvement of the students psychological attributes, otherwise, the same recurring issue of graduate employability will persist. Given the gravity of instilling self-esteem and self-efficacy in university students, the relevant parties should give more attention character-building elements of WIL. Specifically, design of WIL must be more holistic and must take into account both soft-skills and hard-skills.

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EXAMINING ORGANIZATIONAL JUSTICE AND CONFLICT MANAGEMENT STYLES AMONG BANK EMPLOYEES IN MALAYSIA

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ABSTRACT

Conflicts that occur among employees can be prevented by managing the conflict effectively. Conflict management is important as it will affect employees' attitudes and behaviors. This paper discusses how the specific organizational justice dimensions influenced the conflict management styles. The main objective of this research is to investigate which styles have significance relationship with organizational justice dimensions such as distributive justice and procedural justice. The study was conducted using random sampling method. The result shows that employees with high sensitivity in organizational justice issues used integrating, obliging and compromising styles while employees whom with low sensitivity on justice issues are more favorable with dominating and avoiding styles.

Keywords: Procedural Justice, Distributive Justice, Conflict Management Styles, Bank Employees

INTRODUCTION

Organizational justice is a well-established concept in organizational psychology studies among researchers over the last twenty years (Greenberg, 2001). Studies by Suliman and Kathairi (2013) and Ghosh et al. (2014) verified that employees' perceived justice in their organization will affect their attitudes towards the organization. For example, if they perceive organizational justice to be high, employees tend to be more satisfied and attached to their job. Organizational justice and conflict management styles have attracted the attention of researcher as organizations are rapidly progressing towards achieving high performing organizations which exposes employees to a variety of obstacles in their job and causes conflict among them in the organization (Ozgan, 2011). Studies by Trudel (2009) and Alzahrani (2013) highlighted negative effects, such as higher turnover, where employees perceive low organizational justice and ineffective conflict management styles. Hemdi et al. (2012) and Nadiri and Tanova (2010) discovered that turnover among employees in an organization is influenced by organizational justice. The severity of turnover in Malaysian financial services sector has increased every year. Rubiah (2012) revealed that turnover rate among bank employees in Malaysia had increased from 9.3% in year 2009 to 10.1% in year 2010 and the highest turnover rate found to be recorded by the financial services which is about 18.3%. Consequently, employees must be alert on issues regarding fairness in organization to resolve conflict as working together in fair systems is an important

component of organizational success (Tatum & Eberlin, 2006). Therefore, perceived fairness in conflict management styles has become increasingly important for organizational excellence. Specifically, the present study will examine the relationships of main two dimensions of organizational justices such as procedural and distributive justices and five styles of conflict management namely integrating, obliging, compromising, dominating and avoiding.

LITERATURE REVIEW

Cropanzano et al. (2011) indicated that the two most researched dimensions in organizational justice are distributive justice and procedural justice. Greenberg and Baron (2003) defined distributive justice as employee's perceptions of fairness regarding the distribution of rewards among them. Greenberg (2001) indicated that distributive justice focuses on the fairness of the remuneration received relative to the work performed. Alternatively, Ghosh et al. (2014) confirmed that employees might want to quit when realizing how unfairly rewards are distributed. Employees will stay loyal to their organization if they cannot obtain the same benefits in another firm (Alzahrani, 2013). According to Suhaimi (2011), procedural justice is an application of procedures with concern of perceived fairness in organizations. Procedural justice refers to the perceived fairness used in making decision regarding the distribution of rewards, for instance promotion (Crow et al., 2012).

Rahim (2002) outlined five types of conflict management styles such as integrating, obliging, compromising, dominating and avoiding styles. The first style is integrating style. This style is linked with problem solving and involves openness, sharing information, searching for alternatives and examination of differences to reach an effective solution acceptable to both parties. The second style is obliging style. Obliging style is linked with low concern for self and high concern for others while attempting to play down the differences and emphasizing the commonalities to satisfy the concern of the party. An obliging person neglects his or her own concern to satisfy the concern of the other party. The third style, compromising style, intermediates between concern for self and others. It involves "give and take" situation where both parties give up something to make a mutually acceptable decision. On the other hand, dominating style involves high concern for self and low concern for the other party involved in the conflict and described as a win-lose situation. Avoiding style is the last style among those five styles. Avoiding style involves low concern for self and others which is associated with withdrawal or sidestepping the actual situation. An avoiding person fails to satisfy his own concern as well as other party's concern. The avoiding style is suitable when an employee wants to reduce tensions, stalling for more time, or when he is in a lower position of authority (Rahim, 2002).

Justice in organization has been shown to be a central concern of employees (Sheppard & Lewicki, 1992). Volkema and Bergmann (1995) found that employees often identify justice-related issues such as inequitable distribution of rewards and unfair evaluation as sources of conflict between them and their superiors. Nevertheless, several studies have indicated that positive perceptions lead to the use of cooperative behavior. For example, Moorman (1991) found that employees who perceived greater levels of justice are generally engaged in more organizational citizenship behavior. Similarly, greater frequencies of integrative (win-win) behaviors and concessions have generally been observed when negotiators perceive others to have acted in a trustworthy or fair fashion (Pruitt & Carnevale, 1993). Thus, when managing

conflict with their superiors, employees who perceive that organizational justice is present may frequently use more cooperative styles (e.g., integrating, obliging, and compromising) rather than less cooperative styles (e.g., dominating, and avoiding). This expectation is based on the following consistent finding in the organizational justice literature: greater levels of perceived justice are generally related to more positive work attitudes and behaviors (Tyler & Lind, 1992), and thus, possibly, to more positive conflict management behaviors.

Tatum et al (2003) discovered that there is a significant relationship between organizational justice and conflict management styles. Tatum et al (2003) discovered that employees that are sensitive to organizational justice issues are more likely aware of potential conflicts that might arise during an encounter with an employee, these employees will not seek to dominate or avoid negotiation with an employee but rather chose the integrating style (Tatum & Eberlin, 2006). Consequently, Tatum and Eberlin (2006) discovered that the most likely and beneficial approach to addressing conflict for the employees who are highly sensitive to organizational justice issues is the integrative style as employees who perceive fairness in organizational justice are more likely to achieve integrating outcomes such as information sharing, employee involvement, and a genuine demonstration of care and concern from other employees. Therefore, the hypotheses for this study will assume direct relationships between both dimensions of organizational justice (distributive justice and procedural justice) and conflict management styles (integrating, obliging style, compromising style, dominating style and avoiding style).

Table 1
Hypotheses of Study

Hypotheses: There is a significant relationship between organizational justice and conflict management styles

- H1.1: There is a significant relationship between distributive justice and integrating style
- H1.2: There is a significant relationship between distributive justice and obliging style
- H1.3: There is a significant relationship between distributive justice and compromising style
- H1.4: There is a significant relationship between distributive justice and dominating style
- H1.5: There is a significant relationship between distributive justice and avoiding style
- H1.6: There is a significant relationship between procedural justice and integrating style
- H1.7: There is a significant relationship between procedural justice and obliging style
- H1.8: There is a significant relationship between procedural justice and compromising style
- H1.9: There is a significant relationship between procedural justice and dominating style
- H1.10: There is a significant relationship between procedural justice and avoiding Style

METHODOLOGY

SAMPLING DESIGN

The sample for this study comprises of employees working in commercial banks in Malaysia. Random sampling method was used in selecting the samples from the population. Data were obtained through survey questionnaire.

RESEARCH INSTRUMENT

Conflict management styles were measured by using the Form C of ROCI-II (Rahim, 1983).

This multi-item instrument contains 27 items uses a 5-point Likert scale to assess employee's style of handling conflict. The ROCI-II was designed to measure 5 dimensions or styles of resolving conflict. 7 items for measuring integrating style, 6 items each for measuring obligating style, 4 items for measuring compromising style, 5 items for measuring avoiding style and 5 items for measuring dominating style. Past studies have shown each of these five styles has an acceptable level of reliability with Cronbach's coefficient alpha of .95, .85, .78, .84 and .70 respectively (Rahim, 1983). The present study adopted the 10-item scale developed by Rahim et al (2000) to assess organizational justice such as distributive justice (4 items) and procedural justice (6 items). Past studies have shown each of these dimensions has an acceptable level of reliability with Cronbach's coefficient alpha of .96 and .85 respectively (Rahim et. al., 2000).

DATA ANALYSIS TECHNIQUES

Reliability and factor analysis was used to check the consistency and dimensionality of the scale items. Pearson Inter-correlation was used to measure the relationships among conflict handling styles and organizational commitment. Multiple regression analysis is performed to analyse whether the hypotheses were acceptable or rejected and directly explains the hypotheses relationships.

RESULTS

SAMPLE CHARACTERISTICS

The survey was distributed to 1200 bank employees. From the total of 300 responses received, only data from 255 respondents were usable. By ethnic group, 52% of the respondents were Malay, 26% were Chinese, and 21% were Indian, while other races made up the rest. By gender, 63% were female and 37% were male. In terms of age, the highest proportion of respondents fell into those above 31 – 40 years old. They accounted for 45% of the total number of respondents. This was followed by the 21-30 years age group (23%), while respondents on 41 years above age group accounted for the remaining.

RELIABILITY ANALYSIS

The Cronbach's alpha values for distributive and procedural justices were .83 and .89 respectively. Meanwhile, conflict management styles variable included compromising, obliging, integrating, dominating and avoiding styles had Cronbach's Alpha values of .91, .93, .90, .84 and .81 respectively. All of the values were above .60 and therefore the internal consistency of the measures used in this study was acceptable. Table 2 exhibits the reliability coefficients of all of the items for each variable.

Table 2
Reliability Coefficients of the Variables

Variables	No. of items (Original)	No. of items (After Factor Analyses)	Cronbach's Alpha (α)
Organizational Justice:			
- Distributive Justice	4	4	.83
- Procedural Justice	6	4	.89

Conflict Management Styles:			
- Compromising	4	4	.91
- Obliging	6	4	.93
- Integrating	7	7	.90
- Dominating	5	5	.84
-Avoiding	5	4	.81

PEARSON CORRELATION

Distributive justice was found to be positively correlated with procedural justice ($r = .55$, $p = .000$), compromising style ($r = .63$, $p = .000$), obliging style ($r = .42$, $p = .002$), integrating style ($r = .41$, $p = .000$) and negatively correlated with dominating ($r = -.24$, $p = .000$) and avoiding styles ($r = -.21$, $p = .000$). Besides that, procedural justice was found to be positively correlated with compromising style ($r = .56$, $p = .000$), obliging style ($r = .52$, $p = .000$), integrating style ($r = .47$, $p = .000$) and negatively correlated with dominating ($r = -.27$, $p = .000$) and avoiding styles ($r = -.26$, $p = .000$).

Compromising style was positively correlated obliging style ($r = .48$, $p = .000$), integrating style ($r = .61$, $p = .000$) and negatively correlated with dominating ($r = -.23$, $p = .000$) and avoiding styles ($r = -.22$, $p = .000$). In addition, obliging style was found to be positively correlated with integrative style ($r = .63$, $p = .000$) and negatively correlated with dominating ($r = -.19$, $p = .000$) and avoiding styles ($r = -.13$, $p = .000$). Integrative style was found to be negatively correlated with dominating ($r = -.16$, $p = .000$) and avoiding styles ($r = -.15$, $p = .000$). Dominating style was found to be positively correlated with avoiding style ($r = .61$, $p = .000$). The Pearson correlations of the study variables are shown in Table 3.

Table 3
Pearson Correlation Coefficient for Variables

Variables	DJ	PJ	COM	OBG	IN	DOM	AV
DJ		.55***	.63***	.42***	.41***	-.24***	-.21***
PJ			.56***	.52***	.47***	-.27***	-.26***
COM				.48***	.61***	-.23***	-.22***
OBG					.63***	-.19***	-.13***
IN						-.16***	-.15***
DOM							.61***
AV							

Note. $N = 303$. ** $p < .01$, * $p < .05$

MULTIPLE REGRESSION ANALYSIS

In multiple regression analysis (see table 4), when organizational justice variables were entered into the regression equation in Model 1, the R^2 was found to be .42 and significant ($p = .000$). It indicated that organizational justice explained about forty two percent of the variables in the integrating style. In this regression model, it can be observed that distributive justice ($\beta = .13$, $p = .076$) and procedural justice ($\beta = .31$, $p = .000$) had significant and positive relationship with integrating style. Thus hypothesis H1.1 and H1.6 were supported. For obliging style, the R^2 was found to be .36 and significant ($p = .000$). It indicated that organizational justice explained about thirty six percent of the variables in the obliging style as distributive justice ($\beta = .27$, $p = .000$) and procedural justice ($\beta = .29$, $p = .000$) had

significant and positive relationship with obliging style. Thus hypothesis H1.2 and H1.7 were supported. Besides that, compromising style recorded the R^2 value to be .49 and significant ($p = .000$). It indicated that organizational justice explained about forty nine percent of the variables in the compromising style as distributive justice ($\beta = .31$, $p = .000$) and procedural justice ($\beta = .35$, $p = .000$) had significant and positive relationship with compromising style. Thus hypothesis H1.3 and H1.8 were supported. Conversely, the R^2 value for dominating and avoiding styles was found to be .05 and .09 and significant ($p = .000$) respectively. It indicated that organizational justice explained about five percent of the variables in the dominating style while nine percent in the avoiding style. In this regression model, it can be observed that distributive justice ($\beta = -.14$, $p = .00$), ($\beta = -.07$, $p = .00$) and procedural justice ($\beta = -.17$, $p = .06$), ($\beta = -.03$, $p = .00$) were negatively significant to dominating style and avoiding style respectively. Therefore, hypotheses H1.4, H1.5, H1.9 and H1.10 were supported.

Table 4
Relationships between Organizational Justice and Conflict Management Styles

Variables	Integrating Style	Obliging Style	Compromising Style	Dominating Style	Avoiding Style
	Std. Beta	Std. Beta	Std. Beta	Std. Beta	Std. Beta
Distributive Justice	.13*	.29***	.31***	-.14***	-.07***
Procedural Justice	.31***	.27***	.35***	-.17***	-.03***
R^2	.42	.36	.39	.05	.09

Note. *** $p < .01$, ** $p < .05$, * $p < .10$

CONCLUSION

The findings revealed that the objectives of this study had been achieved. The dimensions of organizational justice were significantly correlated with all of the conflict management styles. Distributive justice and procedural justice were positively significant with three of the styles such as integrating, obliging and compromising while negatively significant with dominating and avoiding styles. Thus implying, the bank employees' perception of the organizational justice in the banks is fully connected to conflict management styles.

Bank employees with higher sensitivity with fairness issues in organization tend to be integrative, obligated and compromising with each other in handling conflict as these styles are most favorable resolution approach. Additionally, these styles will enhance employees' perception relating to organizational ethics and fair play, these results from fair distribution of rewards among the employees. Furthermore, employees that select these styles are more inclined to share information, build trust and respect among themselves. Alternatively, employees with low compassion on issues related to justice and fairness in the organization will try to dominate or avoid the conflict. These employees are less inclined to not sharing any information and not keen to develop belief and esteem among them.

Employees' knowledge, skills and ability in organizational justice must be developed in order to sustain and guarantee the professionalism and quality of their work life. This can be done by improving employees' understanding on the strength and weaknesses of those organizational justice dimensions and move towards the appropriate use depending on situation. Apart of that, employees' perception of the organization will also be improved as

the findings showed that some of the respondents agreed that justice in organization is very important and should not be ignored. Justice also could be better managed by improving employee awareness in accepting and appreciating the diversity of individuals within their organization. Consequently, justice is important in every organization. Therefore, it is proposed that the relevant parties in the banking industry organized programs such as team building, seminars or workshops related to organizational justice, for the members of their organization. Once, the members are able to manage organizational justice related conflict well, timely and effectively it will help the organization in moving ahead in terms of work quality. Therefore, the banking industry is advised to recognize justice adequately to increase positive outcomes among employees.

The findings from this study should be viewed cautiously due to several methodological limitations. As with all types of data collection techniques, the self-administered questionnaire too has its share of shortcomings. One of the problems was that the respondents took longer time to answer the survey as they were very busy with their daily work responsibilities. Nevertheless the study provides an empirical glimpse of the organizational justice and conflict management styles prevalent among bank employees in Malaysia. The findings provide encouraging empirical illumination that an important aspect of organizational psychology has important applications for bank employees in Malaysia. For a broader and deeper understanding of the organizational justice and conflict management styles among bank employees in Malaysia, further research is warranted. Longitudinal and experimental studies need to be conducted to provide stronger causal evidence of how a set of work related variables can affect the variation in organizational justice and conflict management styles.

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GENETICALLY MODIFIED FOOD (GMF) ACCEPTANCE AMONG THE MALAYSIAN FOOD INDUSTRIES

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ABSTRACT

The acceptance of an industry towards new technology would help them to be remained in the current competitive global market. For instance, Genetically Modified Food (GMF) is a new technology in Malaysia, also known as food biotechnology which has been produced through the modern genetic engineering method. Through the acceptance for commercializing GMF in the food production, comes many advantages for the food industry. Unfortunately, acceptance of GMF itself is an issue as portion of the food industry still prefer to accept and use non-GMF rather than GMF in their food production process. This circumstance happens due to several elements such as the strategy of the industry itself, complexity or stringency of government's regulation as well as attitude shown by the stakeholders towards the usage of GMF. Although past studies indicated the industry strategy, regulation and attitude are significant in influencing industry acceptance of GMF, there has been comparatively little research which examine the relationship between these variables. In order to fill this gap, a study is to be carry out in the context of Malaysian food industry to examine the influence of industry strategy, regulation and attitude on industry acceptance of GMF. In addition, as illustrated from the institutional theory, the positive strategy of the industry, government's regulation and stakeholder's attitude are the root cause for the food industry to accept GMF. This paper elaborates the research framework conceptualized to address the relationship between all the variables, to be tested in the planned quantitative survey of 248 processed food industries in Peninsular Malaysia.

Keywords: Genetically Modified Food, Genetic Engineering, Food Industry, Acceptance, Malaysia, Quantitative Survey

INTRODUCTION

The acceptance of new technology in Malaysian food industry could lead them to be remained in the current competitive global market due to complexity and continually changing environment in those industries, market liberalization, globalization, dynamic and diverse customers demand as well as increased competition pressure among the industries (Rudder, 2001; Stronen, 2011). Simultaneously, the food industry acceptance towards GMF

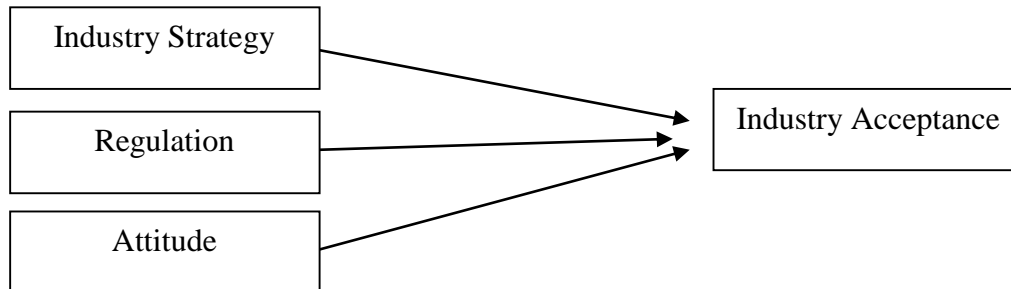
as portion of new technology would contribute to the economic growth of Malaysia. The food industry which is part of manufacturing sector contributes 53.5 billion of sales revenue or 4 percent annual percentage changes to Malaysia's gross domestic product instead of increasing index of industrial production and total merchandise export about 5.2 percent and 58.9 billion. (Department of Statistics Malaysia, 2015; Economic Planning Unit of Prime Minister Department Malaysia, 2015). Besides, by accepting new GMF technology, the food industry could enhance nutritional and processing features of food, provide an extensive type of product in the food production, increase an efficiency of the food supplies, produce lower cost product as well as establish lower production cost and product development (Bennett et al., 2013; Bredahl, 1999; Ceccoli & Hixon, 2011; Ellahi, 1994; Wesseler, Scatasta, & Fall, 2011).

Unfortunately, an acceptance of GMF has triggered controversy among the food industries which lead them to be reluctant and unsure whether to accept or reject GMF usage in their food production due to several reasons (Bennett et al., 2013). First and foremost, in the context of Malaysian stakeholders, an acceptance of GMF still is in the early stage of introduction and development to the current Malaysian market since the Food Act of GMF just amended on 8 July 2010 whereas GMF regulation was enforced on 8 July 2012 by the Malaysian Ministry of Health (MOH) (Fauziah, 2011). Secondly, the food industries are preferably to accept and sell non-GMF rather than GMF due to attitude shown by the stakeholders or known as manufacturers were worried and sensitive about the uncertainty of benefits and risks which may badly affect the distribution channel (Adam, 2002; Costa-Font, Gil, & Traill, 2008). For instance, many multinational companies (MNCs) in United Kingdom, Switzerland, France, and Canada have ceased to accept and sell GMF in their industries (Costa-Font & Gil, 2012; Gaskell et al., 2006; Siipi & Launis, 2009; Vermeulen, 2004). In contrast, GMF was accepted by the industry such located in Japan, Taiwan, China and United States (Hallman, Hebden, Aquino, Cuite, & Lang, 2003; Ishiyama et al., 2012; Marre, Witte, Burkink, Grunhagen, & Wells, 2007; Powell, 2011). Thirdly, the food industry would have to be dealt with a high cost and risky condition for food industry's operation due to stringent and complicated GMF regulation such as obtaining licensing agreement as well as meet the standard and requirement of product development which has been regulated and fixed by the government authorities (Bauer & Gaskell, 1984; Jasanoff, 1995; Tait & Chataway, 2007; Tait & Williams, 1999).

Therefore, in order to cope with those problems, the industry strategy plays an imperative role in increasing the performance of the food industries once GMF being accepted in their production (Inghelbrecht, Dessein, & Huylenbroeck, 2014; Sharma, 1997). However, many managers of the food industry stated that an adoption or implementation of industry strategy related to GMF is not an easy task (Sung & Hwang, 2013). As an illustration, the industry will have managerial or management problems such as, the manager or leader of the industry is required to design new techniques, instead of restructuring the management of the industry (Doubleday, 2005; Levidow & Bijman, 2002). This is mainly due to industry strategy will be based on industry's current operation, culture, history, experience and affordability to formulate GMF strategy (Chataway & Tait, 1999; Foy, 1980). Moreover, previous researchers have shown that there are many researches pertaining to GMF have been implemented and discussed among other countries such United Kingdom, Australia and United States rather than in Malaysia (Daud, 2002; Ibrahim et al, 2013; Ismail et al, 2012).

Therefore, this directly shows that an empirical research related to the industry acceptance of GMF is deemed necessary to be implemented in Malaysia.

Fig. 1: Proposed Framework of the Influence of Industry Strategy, Regulation and Attitude on Industry Acceptance



LITERATURE REVIEW

INDUSTRY ACCEPTANCE OF GMF

Industry acceptance known as the situation which is giving a feedback on how far the potential stakeholders are willing to adopt, accept or reject something or any new technology (Ausserer & Risser, 2005; Chang, Hwang, & Li, 2007). A review of previous literature indicated that numerous of studies are devoted to industry acceptance elements. According to Chen & Li, (2007); Rodríguez-entrena & Salazar-ordóñez, (2013); Bredahl et al (1998) industry acceptance is measured through perceived benefit and perceived risk. As supported by Siegrist (1999, 2000); Tanaka (2004), both perceived benefit and perceived risk are the strongest elements to measure industry acceptance. For instance, Sheth (1973) & Sternquist (1994) stated that while minimizing the risk of GMF usage in industry's production, the food manufacturers are required to concentrate on perceived benefit such as quality and desirability of product.

In addition, Morris & Adley (2000) stated trust is a vital element to measure industry acceptance. Therefore, trust is divided into two categories namely information and source of that information which both of them shall be valid and believable (Hunt & Frewer, 2001) (Frewer, Scholderer, & Bredahl, 2003). As for an example, the manufacturers are prohibited to hide the risks and problems regarding GMF usage in their industry to avoid any controversies emerge which may directly cause the downturn of food industry (Wartburg & Julian, 1999). On the other hand, industry acceptance is measured in accordance with food manufacturer's knowledge related to science and technology which emphasized on GMF (Prati, Pietrantoni, & Zani, 2012). As a corollary, although there are many ways or elements in measuring industry acceptance, this study will employ perceived benefit, perceived risk, trust and knowledge to measure industry acceptance.

INDUSTRY STRATEGY

The competitive global manufacturing sector has insisted industry to properly design its business strategy (Kaplan & Norton, 2001). The strategy is a paramount role in the industry, but it will cause the industry facing with a tough time while formulating or developing the

strategy (Stalk & Evans-Clark, 1992). Hence, the strategy and action of the industry are affected by managerial interpretation (Daft & Weick, 1984). Managerial interpretation referred as a process taken by the manager of the industry by ensuring the event and other information related to industry's environmental are in place very well (Dutton, Fahey, & Narayanan, 1987). Managerial interpretation consists of environmental perspective namely threat and opportunity (Dutton & Duncan, 1987; Jackson & Dutton, 1988; Sharma, Pablo, & Vredenburg, 1999; Sharma, 1997). Besides, risk propensity would also affect the industry acceptance (Douglas & Wildavsky, 1982). Risk propensity defined as the inclination of industry's decision maker either to take or avoid the risk (Sitkin & Pablo, 1992). The risk propensity will be influenced by the customer demand, current global market, price, quality, technology as well as retailer or supplier's commitment (Pablo, 1997; Sitkin & Pablo, 1992; Stearns, Carter, Reynolds, & Williams, 1995).

REGULATION

The regulatory system of GMF is an imperative mechanism that has to be monitored by the government (Vermeulen, 2004). GMF regulation which is related to the trade, manufacture and license are established and enforced purposely to ensure that the food manufacturers follow the regulations that has been designated (Shrestha & Shrestha, 2002). Nevertheless, the restriction level of GMF regulation is dependent on the dimensions such as approval process, risk assessment, labelling and traceability (Vigani & Olper, 2013). For instance, the approval process is a vital element in measuring regulation because unapproved GMF usage in market will lead to the difficulty of the industry to survive (Kothamasi & Vermeulen, 2011). Moreover, risk assessment and traceability hold a position as a strong element to measure regulation (Schilter & Constable, 2002; Vigani & Olper, 2013; Vigani et al; 2012; Hood, Requensen, & Eversole, 2012). Furthermore, Costanigro & Lusk (2014) explained that labelling also being an imperative role for the production, development and trading process of industry to measure the stringency regulation of GMF before making any acceptance into its industry's operation. This clearly shows that those measures of GMF modern biotechnology is imposing the most heavily regulated system which influence the food industry whether to accept or reject the GMF usage in their production (Quah, 2007).

ATTITUDE TOWARDS GMF USAGE

The attitude towards GMF is defined as a positive or negative response, either it is seen useful or scary condition (Frewer et al., 1997; Purchase, 2005). Hence, the attitude of GMF usage in the industry is a powerful to be explained by both positive and negative elements separately (Cacioppo, Gardner, & Berntson, 1997). Simultaneously, Henderson, Weaver, & Cheney (2007); Kimenju et al (2011) indicated that the manager in the food industry has a responsible to make an appropriate decision regarding purchasing, selling and utilizing of GMF in the food industry's production which will be based on their positive attitude towards GMF by looking at the safety, quality and preferences. This could be visualized when the food manufacturers in western countries such as Germany, Italy, Netherland and Greece shown their positive attitude by accepting and involving in the import and export chain of GMF (Knight, Holdsworth, & Mather, 2008). In contrast to negative attitude towards GMF usage, Reg-Garcia (2006) Bett et al (2010) & Areal et al (2011) indicated the technology complexity, long term unpredictable effect, unforeseeable economic condition, emergence of health and

environmental concern, negative response from public consumers and status of unnatural GMF usage which may impede the industry's operation had caused the manufacturers rejected the GMF usage.

RESEARCH METHODOLOGY

This research will be based on simple random sampling by using self-administered questionnaire. The questionnaire consists of five sections such as industry acceptance, industry strategy, regulation, attitude as well as respondents and organization. It will be distributed among the food industry's managers in Peninsular Malaysia. The rational of choosing these respondents from a manager level is because they are basically known as a people in charge or responsible to make a decision either to accept or reject the product in their industry's production. However, it is planned that before undertaking actual data collection, the survey will be first pre-tested by three academicians from Universiti Utara Malaysia which is based on their industrial experience and their previous research activities in acceptance study. This is purposely to analyze the readability, accuracy of words, clearness of questions and adequacy of the items used in the questionnaire. In addition, the sample for this research will be selected from a population of food industry throughout Peninsular Malaysia. Referring to the directory Federation of Malaysian Manufacturers (2014), the total Malaysian food industry registered was 656 industries. For this population size, the appropriate sample size is 248 industries (Krejcie & Morgan, 1970).

CONCLUSION

The acceptance of GMF among the food industries provide many benefits towards their business' operation and production . Surprisingly, the acceptance of GMF has triggered various controversies or problems that may badly affect the existing success and performance of the food industry. For instance, there are several issues being raised up such as industry strategy, regulation as well as attitude before proceed to GMF acceptance. Thus, this paper has proposed a conceptual framework as shown in Figure 1 to examine the influence of industry strategy, regulation and attitude on industry acceptance. In this study, the industry acceptance will be measured through perceived benefits, perceived risks, trust and knowledge. Meanwhile, industry strategy will be measured by both managerial interpretation and risk propensity. Approval process, risk assessment, labelling and traceability will be utilized to measure government regulation. Besides, the industry acceptance of GMF would also depend on the positive and negative attitude shown by the stakeholders. As a corollary, previous researchers stated those independent variables of industry strategy, regulation and attitude have a significant positive relationship with industry acceptance of GMF. Finally, since the Malaysian food industry still is in the infant stage of accepting GMF usage, it is hoped that Malaysian food industry would open their eyes and positively react to accept the use of GMF such other manufacturing industry from developed nations.

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AGRICULTURE TECHNOLOGY BUSINESS IN MALAYSIA: KNOWLEDGE SHARING FROM OTHER AGRO-TECHNOLOGY ECONOMY-BASED COUNTRIES

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ABSTRACT

This paper demonstrates factory farm-technology in Malaysia and includes a literature brush-up from a few other countries. This study compares the Agro technology transformation program in several countries; Taiwan, South Korea, Thailand, Israel and Malaysia. How are they improving their economy, though agribusiness? The concept of advanced technologies in agronomic systems has been given a significant role in the melioration of agricultural creations e.g. sustainable agriculture, livestock production and Crop yield, in order to maintain food security. This paper illustrates what form of sweetening needs to heighten the Malaysia economy through agronomy, communion and knowledge of agricultural technology and exploring the reasons why the agriculture economy is back on the policy docket of Malaysia.

Keywords: Agriculture, agro, agronomy, boost, countries, economy, enhancement, modern, technology, yields

INTRODUCTION

Department of Agriculture is the backbone of many saving which is fundamental to the socioeconomic growing of a nation because it is a major element and factor in national development (Ahmed, 1993). The main challenge are standard of support, adequate food, shelter, a healthy and secured environment, clean and jerk water, and first and most BASIC to human life and natural selection is food certificate [1]. Agriculture maneuver a crucial role in social and economic activities of countries, for in-stance, poverty reducing [deuce]. Technological change has given a new shape to USDA in the last 100 years. Previous research suggests that agricultural growth reduces poverty because most of the poor people live in rural orbit and they are highly dependent on agriculture for living disbursal [2].

Agriculture has been considered the hallmark of the first stage of ontogeny of any state. The aim of the news composition is to learn how Department of Agriculture technology boosts the economy of the country and in this paper we compare several countries for instance, Taiwan, South Korean Peninsula, Thailand, and Israel with the Malaya agricultural transformation program. Like-Isaac Mayer Wise, as solid food constitutes such a high consumption by the poor it is also delightful to imagine that lower food damage, would be impoverishment reducing [quaternion]. The adoption of modern agro-technology gives tremendous benefit to boost national food security, boost net profit and foreign exchange earnings, through exports and encourage industrialization all around the world and increment the number of farmers [3].

Taiwan is using ergonomics to hike their USDA economy. The rapid increment in agricultural

technologies includes areas such as breeding, biotechnology, fossil oil and agricultural mechanization, nutrition management, and post-harvest management. South Korea agribusiness had numerous innate issues. South Korea has been an uneven nation with just 22 % arable area and less haste than most other neighboring rice-developing [half a dozen]. Israel is internationally known for its advanced agriculture technology. Siam has about 208,000 square click of farmland. About decade % of this is devoted to department of energy harvest, but this amount is growing fast. To grow yields, the ministry plans to advance land-use efficiency while sustaining the stage of energy crops. Thailand is using the latest technology for harvest home crops and for the growth of agriculture. In retrospect, Malaysia has marvelous métier in agriculture, large scale production of industrial crops like oil ribbon and rubber as well as selected crops, and stock, but current Malaysia needs to advance in agro-tech like other land.

TAIWAN

Taiwan China is a little island with a public of just 23 million, yet it acts as a stellar part in the international high-technology diligence and was rated as the human's 25th-largest thriftiness in 2009.

According to the Council of Department of Agriculture in Taiwan in 2014 it stated that the foundation of the national organization of agrarian science and engineering expects to bread and butter advancing Taiwan's farming inventive tone range of mountains [17], with a specific end to lessen the immediate effect ex-alteration relaxation has on Taiwan factor y farm. COA proposed inventive ideas planned to change the electric current generation approaches to "new value chain Agriculture" as its key destination.

As of late, biotechnology has been connected in agrisociety and different fields and has step by step been taken seriously around the world (Sun 2006; Lee 2008). Later on, agricultural biotechnology will have an expansive effect on in-wrinkling nourishment creation, securing the characteristic environment and the Earth's assets, enhancing the nature of human life in Taiwan, and upgrading the prosperity of ranchers [4]. As indicated by the board of horticulture, they begin ventures under Taiwan Agricultural Technology Foresight 2025 to support the farming part economy [5].

In 2012, Taiwan's total green creation was justified regardless of NT\$466.82 billion (Us\$15.77 billion), speaking to 1.90 percent of the nation's GDP. The primary center of the is-land's horticulture has moved from customary cultivating of staple products to the formation of client organized and high-regard things picked for their business segment potential [6]. The adequate sunshine and precipitation implies it is conceivable to harvest rice up to three times every year. All foods grown from the ground are moreover planted in a decent manner; Taiwan is depicted by its varying qualities and by their detailed, surprising, high dietary quality and high volume. Kaohsiung is in like manner general arranged to address these needs.

PINGTUNG AGRICULTURAL BIOTECHNOLOGY PARK

In 2003 to cultivate the advancement of horticultural innovation, COA has been advancing the improvement of science stops in a move to change Taiwan into an Asia-Pacific habitat for rural biotechnology and sub-tropical gardening. PABP is the main science stop in Taiwan devoted to agro-social biotechnology. PABP involves an aggregate area territory of 233

hectares and gives one-stop administrations including various administrative help, R&D subsidizing, manufacturing plant authorizing, and universal advertising support. At end-2013, there were 78 stop inhabitants in PABP sorted into six agro-bio groups, specifically (a) practical sustenance and bio-cosmetics (b) aquiculture (c) reproducing animals and creature vaccine (d) green energy programmed control office for agro-use (e) bio-manure and bio-pesticide (f) biotechnical service [7s].

BENEFITS OF TECHNOLOGY IN TAIWAN

The advancement work started six years once more with a master grassed rice seed treatment test in nursery boxes. What makes the Taiwan model one of a kind is that Bayer has Organized Taiwan Provincial Farmers' Association's agro-invention plant to present Prophet Rice for sound seedling building. Bayer treats the rice seed in little boxes where they develop and form into seedlings, which are then sold to agriculturists. The results have been amazing. The principle arrangement is not just diminishing pesticide, additionally decreases cultivating time also. Likewise the building has extended yields by 8% over standard techniques [10]. Taiwan Agriculture Land Information Service helps the legislature with area arranging. Since it was opened free in 2006, the structure has furthermore energized the change of exactness developing. Agriculturists have the ability to assess farmland availability using data on soil properties, trimming suitability, watering framework work places, territory use zoning, and the achievability of farmland union. To keep green experts instructed regarding principal news and information, the COA has assembled convenient information arrange that conveys advantageous perceives about plant illness warnings and consistent calamity gifts. The developing region has additionally wound up dynamically subject to an online organization made in 2009 to give detachment meeting on agrarian frameworks. Proceeding, the legislature arrangements to use circulated processing building to ensure support wellbeing and give a constant database of country creation and business segment costs [11].

SOUTH KOREA

South Korea's economy is exceptionally subject to fare as it backings a moderately rich society of 48 million individuals. The nation's unpleasant mountains leave decently minimal arable region district. Rice overwhelms crop generation and has long been the staple sustenance, and Korea has turned continuously to support imports to satisfy clients' appeals for more conspicuous sustenance collection, lower costs, and accommodation [12]. South Korea is beat ten businesses for U.S. agrarian fares, and the nation's business for buyer prepared nourishment things shows incredible guarantee. The quick improvement in agricultural advances incorporates ranges, for example, reproducing, biotechnology, soil and nourishment administration, rural mechanization, and post-harvest administration. Korean farming tumbled down in 1994, when South Korea joined the WTO and the Agreement on Agriculture, which effectively constrained the administration to take out standards and obligations [13].

Korea took the Land Grant College framework from USA in 1947, which built the National Agricultural Development Institute in charge of rural examination expansion training. This is an idea of exchanging educational capacity to the Ministry of Education in 1949. Solid holding in the middle of exploration and expansion brought about the rap-id transport of cultivating advances to agriculturists. Korea had the capacity accomplish independence in

rice with its Green Revolution in a brief time of time. Seed yield and supply framework were likewise helped by IBRD and propelled countries [15]. The reason for existing was to expand the agrarian benefit and to enhance rural items' quality [14]. Two noteworthy shortcomings existed in the South Korean economy. At first is its mind-boggling reliance on transported fossil energies (oil and gas). South Korea is the second greatest shipper of consolidated basic gas (LNG), for the most part from Malaysia and Indonesia.

TECHNOLOGY

The KOPIA (Korea Project on International Agriculture), which is controlled by the Rural Development Administration (RDA), was propelled in 2009 to help coordinate such farming undertakings in a more precise manner. The RDA secured KOPIA focuses in 2009 in six countries (Vietnam, Myanmar, Uzbekistan, Kenya, Brazil, and Paraguay), and after a year set up focuses in four different countries (the Democratic Republic of the Congo, Algeria, Cambodia, and the Philippines). The spirit of the project is based on customized support. As one RDA expert explained, "At first, each member nation proposes three technological fields they want to develop. Korea then invites experts from each of these fields to offer a 10-week training session at related re-search centers. Through this process, the two parties come up with a list of goals to accomplish and establish a direction in which to perform the projects." [15] Major Crops of South Korea Rice is the most essential yield in South Korea as noted by Donald S. Macdonald, nonetheless, climbing pay levels and area qualities have made it costly to create. Rice accounted for around 90 percent of aggregate grain generation and in excess of 40 percent of ranch salary. Other crops which contribute in agriculture economy are barley, wheat, corn and soybeans.

THAILAND

Thailand's farming has long has been called "spine". Thailand is considered as an agrarian state. The whole zone of the state is 513,115 square kilometers, of which 41 percent or 21,196,571 hectares is committed to cultivating. The most recent study shows that dirt under development incorporates 51% for rice generation, 24% of field products, and 17% of soil grown foods trees and lasting yields. Throughout the previous four decades, rural ace duct ion has expanded essentially. In any case, expanded creation generally was because of the extension of developed land through timberland infringement as opposed to expanding the yield every unit range. To help yields, the service arrangements to better soil-use effectiveness while keeping the level of vitality product. Besides, the Ministry of Thailand is considering multiplying the measure of flooded sections of land in the state. Husbandry is an enormous monetary division in Thailand, creating huge measures of farming and wood buildups, sugar, Rice, palm oil, and woodland related businesses are the significant potential biomass vitality sources. There are several technologies which use agriculture in Thailand for instance .Rice Combine Harvester, Grain Dryer, Biomass energy, solar energy applications including in the food industry. Greenhouse dryer.

ISRAEL

Israel is very progressive in Agro-tech and this nation is utilizing apparatus for industry and for boosting the agricultural economy. With respect to, Israel has an absence of water and it is not characteristic for cultivating. More than a vast part of the territory region is desert, and

the atmosphere does not support development in farming. In Israel crisp water allocated for agribusiness was diminished step by step meanwhile, the measure of suitable territory open for developing (360,000 hectares is 18% not exactly at present. Israeli agriculture is likewise one of a kind in its interest in capital for additional water and area. Agriculturists use blends of cutting edge watering system advances, case in point trickle watering system and spread technology so as to adjust specific cultivating methods to the nearby atmosphere. Israeli ranchers exploit warm as opposed to be a casualty of it. [17]. Israel has the ability to create a far reaching mixed bag of items. Field trims in the country consolidate wheat, sorghum and corn. Foods grown from the ground created incorporate citrus, avocados, kiwi products of the soil, guavas and mangoes, and grapes from ranches found on the Mediterranean shoreline plain. Tomatoes, cucumbers, peppers and zucchini are become normally all through the nation; the melons are developed amid the winter months in the valleys. Subtropical territories in the nation produce bananas and dates, while in the northern slopes fruits, pears and cherries are developed.[17] Israel, allowing automatic control of the greenhouse water and fertilizer and continuity of climate systems.

MALAYSIA

Malaysia is right now confronting new difficulties regarding creating new discoveries that will help to support the Malaysia horticulture and nourishment area to a more elevated amount. Along these lines, a lot of exertion is expected to guarantee that the agribusiness part can hoist the financial improvement of Malaysia. Trade for this industry has been recorded at just about more than 10 million US dollars in 2010.

Taking into account the information assembled from the different nations, it has been demonstrated that farming is the principle calculate as far as fortifying financial advancement. As indicated by [18], utilization of machines with Internet access is straightforwardly identified with the instructive level of the administrator, off-homestead business salary, the vicinity of a life partner and the local area of the ranch, and this exploration is additionally underpinned by [19].

A study directed by [19] which concentrated on rice agriculturists' reception of engineering in the Mekong Delta was picked as the foundation of this study exchange as the Mekong Delta is an extremely extraordinary and effective paddy region advancement in the area and it is a trust that comparable achievement can be received in different zones in the district. Truong, T. N. C. [19], demonstrates that there are a few advances that advantage both ranchers and the business. Innovations, for example, Integrated Pest Management (IPM), "three diminishments three increases", column seeding, collecting by machine and rice dryers have been demonstrated to expand paddy yields.

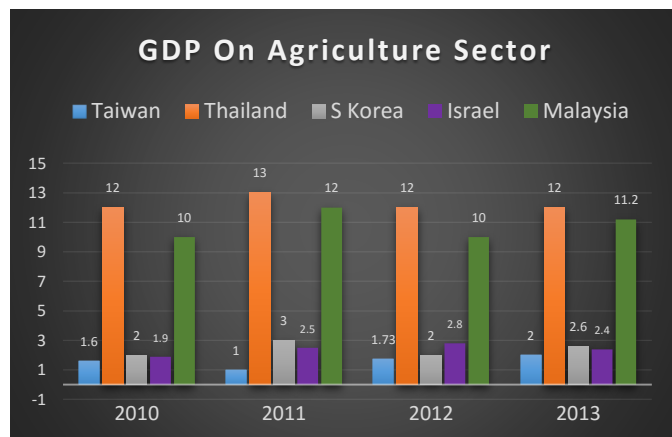
The IPM method offers a few favorable circumstances, for example, information cost lessening (reserve funds emerging from diminished seed and pesticide use) and natural insurance. Then again, line seeding engineering gives focal points identifying with sparing seeds, facilitating the product taking care of procedure, and evading bug assaults; the innovation is likewise simple to utilize. Real Crops in Malaysia Oil palm, versatile, cocoa and rice have been and continue being the critical harvests from the private and open zones. Moreover, distinctive yields, for example, coconut, tropical soil developed nourishments, vegetables, blooms, yearly items along these lines on are developed. [18]. The involvement of Ministries like MOSTI, MOA, Agro bank and also privatized bodies like Malaysian

Biotech Corp has become important as loan and grant providers for agriculture research and development (Qurat-ul-ain et al 2014). MARDI has an advantage from the allocation for its research and development program as well as for Advanced Reproductive Biotechnology (ARB) Project, a spearhead for the Enhancement of Commercial Production of Quality Beef Cattle and Goats in the nation. The impact would be the total transformation in the general agriculture industry and specifically in livestock industry. Science funds and Techno funds have been awarded for the noble purpose [19].

DISCUSSION

The world population is projected to reach 9 billion by 2050. Therefore, managing agricultural production systems on a sustainable basis is one of the most critical challenges for the future of humanity. Technological advancements must be used to provide farmers with tools and resources to make farming more sustainable. Based on our findings, we relate the situation in Taiwan, South Korea, Israel, Thailand and Malaysia. These countries are playing a vital role in the agriculture based economy. Agricultural GDP comprises the returns to land, labor and capital used in agriculture. It constitutes a good indicator of farm income trends assuming farmers own most of the land and capital, and supply most of the labor used in the sector. We analyze that Biotechnology application is one of the best means to accelerate the development of modern agriculture [20].

Fig 1: Illustrates countries gross domestic product in agriculture sector (Qurat-ul-ain et al 2014).[20].



This diagram shows examination between nations terrible domestic item in the agrarian area is high in Thailand and Malaysia. In view of our discoveries Israel is utilizing more engineering than different nations, yet its GDP is lower than Thailand and Malaysia. This paper gives data about Agra-tech in different nations while our discovering shows Malaysia and Thailand are boosting horticulture, yet they are utilizing less engineering

than Israel. We found that environmental change likewise assumes a fundamental part in farming segment and Israel is confronting issues in the area all through; stomach muscle sense of water resources don't help developing. Only 20% of the territory is generally arable. Farming in Malaysia makes up twelve percent of the country's GDP in light of the fact that the atmosphere is great and the moistness buzzing around serves to support agribusiness however innovation utilization is less. Then again Thailand and Malaysia have the same measure of coastline however Thai-area is utilizing engineering which is the reason it is higher than Malaysia. Additionally Taiwan and South Korea fundamentally concentrate on sending out and the business area because of the great common assets and area is arable for horticulture. Taiwan is a relatively Small Island however they are utilizing engineering to support agribusiness. 58.8% of the territory is secured in just woods and atmosphere in

Taiwan is tropical. Taiwan's aggregate agrarian area is short of what 3 million hectares: in excess of 800,000 hectares of rural area is level with favorable common conditions which are viewed as suitable for cultivating [20].

CONCLUSION

To condense, Malaysia is assuming a critical part in agriculture yet because of the absence of innovation it experiences issues in economy farming. Malaysia imports rice from Thailand, India and some different nations. Malaysia has instituted the Malaysia 2020 plan to enhance the agribusiness from the customary to the modernized manifestations of farming. Thailand and Malaysia are both nations with coast line however because of the utilization of modernization and higher technology farming in Thailand is support. Also, we found Israel is utilizing higher innovation as a part of horticulture from different nations due to some area and atmosphere troubles agri-society can't be expanded,, however it experience yearly GDP of nations. In view of our discoveries we compress regardless of the possibility that place where there is the nations is arable or not innovation is playing a crucial part to support horticulture economy in these nations

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THE RELATIONSHIP BETWEEN WORKING CAPITAL MANAGEMENT AND PROFITABILITY FOR MALAYSIAN INDUSTRIAL PRODUCT SECTOR

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ABSTRACT

This paper attempts to investigate the relationship between working capital management and profitability in the industrial product sector listed in Bursa Malaysia. The data is retrieved from DataStream for companies that have complete financial statement for 11 year period from 2000 to 2010. There are 136 companies listed in the industrial products sector. However, only 72 companies meet the requirements to be used as samples in this study. The study aims to determine the relationship between working capital management, i.e. current ratio (CR) and net trade cycle (NTC) and firms' profitability, proxied by return on asset (ROA) and return on equity (ROE). Based on Pearson correlation analysis, the findings showed negative relationship between NTC with ROA and ROE. However, the findings showed a positive significant relationship between CR with ROA and ROE.

Keywords: Working Capital Management, Profitability, Current Ratio, Net Trade Cycle, Return on Asset and Return on Equity.

INTRODUCTION

Working capital management is an important element in the management of a company. This is because working capital is a key component required in the daily business of the company's business. Changes in working capital requirements from time to time will make working capital management more dynamic. Firms are making huge investments in working capital as a significant amount on the payment of short-term financial resources.

Companies can put working capital at optimal levels to obtain maximum value. According to Eljelly (2004), the efficient management of the liquidity levels of a company is of extreme relevance for the firm's profitability and well being. Hong and Aryton (2011) said that profitability can be measured in three different ways which are return on sales (ROS), return on assets (ROA) and return on equity (ROE).

Besides, profitability is an important information in economic decision makings and it has been used by investors, managers and financial analyzers as a guide for dividend payment, tool for measuring management efficiency and instrument for predicting and evaluating decision makings (Saghafi and Aghayie, 1994).

Return on asset, return on equity and net profit margin ratio can be used to evaluate profitability because there is a direct relationship between these ratios and company strategy and management performance. Nazir and Afra (2009) have considered the industry type in their research as control variable.

OBJECTIVES

The objectives of the study are as follows:

- i. To measure working capital management by referring to net trade cycle (NTC) and current ratio (CR).
- ii. To measure the company's profitability through return on assets (ROA) and return on equity (ROE).
- iii. To determine the relationship between working capital management and profitability.

PROBLEM STATEMENT

The question is, is there any relationship between working capital management and profitability for companies in the industrial product sector in Bursa Malaysia?

LITERATURE REVIEW

Shin and Soenan (2002) conducted a study to determine the relationship between NTC with company profitability. This study used a sample of companies from 1975 to 1994. Correlation and regression analysis were used in the study. The findings showed negative relationship between NTC and profitability.

Soenen (1993) examined the relationship between NTC as a indicator of working capital and investment return in American companies. Chi-Square Test results showed a negative relationship between NTC and properties return.

Yaghoobnejad, et al. (2010) examined the relationship between working capital management and profitability. They selected a sample of 86 active companies in Tehran stock exchange for the period of 2002-2007. They used regression analysis and Pearson correlation analysis. The results showed that there is a negative relationship between working capital management and profitability.

Samiloglu and Demirgunes (2008) examined the effect of working capital management on profitability for a sample of Turkish companies, for the period of 1998-2007. Empirical findings show that accounts receivables period, inventory period and leverage affect firm profitability negatively which means that growth (in sales) affects firm profitability positively

Katerina, et al. (2002) conducted a study to see whether there is any relationship between working capital with quick ratio (QR) and CR based on a new approach to non-parametric statistics. Manufacturing firms in the UK have been used as samples in this study. The purpose of this study was to make a comparison between the results obtained by the new method with previous results obtained by using correlation analysis with regression. Results obtained by the researchers showed that NTC has a negative relationship with QR and have a positive relationship with CR. The results are in stark contrast to previous studies.

Raheman and Nasr (2007) selected a sample of 94 listed Pakistani companies from different sectors of economy for a period of 8 years, from 1999-2004. The independent variables used were current ratio, day receivable, days inventory, days payable and cash conversion cycle. The dependent variables were net operating profitability and defined as operating income plus depreciation and divided by total asset minus financial assets. The result shows that there is a strong negative relationship between working capital and profitability. The CR is the most important working capital measure that affects profitability. They also found that there is a positive relationship between size and its profitability.

RELATIONSHIP BETWEEN NTC AND ROA

Sayed and Esmail (2013) found that there is a negative significant relationship between NTC and ROA. This result is supported by Raheman and Nasr (2007).

RELATIONSHIP BETWEEN NTC AND ROE

Shin and Soenan (2000), found that there is a negative significant relationship between NTC and ROE. Yaghoobnejad (2010) also stated that there is negative significant relationship between NTC and ROE.

RELATIONSHIP BETWEEN CR AND ROA

Azhar and Noriza (2010), found that there is a negative significant relationship between CR and ROA. However, Sayed and Esmail (2013) stated that there is a positive significant relationship between CR and ROA.

RELATIONSHIP BETWEEN CR AND ROE

Katerina et. al., (2002) indicated that there is a positive significant relationship between CR and ROE. However, Raheman and Nasr (2007) found that there is a strong negative relationship between CR and ROE.

RESEARCH METHODOLOGY

The research methodology is essential to ensure a more systematic study, accurate and meet the objectives and purposes to be achieved. This chapter will discuss about the methods used to select the samples, gathering and analyzing the data. Besides that, this chapter will also discuss about the Pearson correlation analysis.

RESEARCH POPULATION

This study has a population of 136 listed companies in the industrial products sector in Bursa Malaysia. However, only 72 companies that meets the criteria to be used as samples in this study; have available data stated in the annual report for 11-year period from 2000 to 2010.

DATA COLLECTION METHOD

All data from the company's financial statement from 2000 to 2010 were gathered from Datastream. Then, the data were analyzed in stages using quantitative analysis methods. Statistical Package for Social Sciences (SPSS) was used to analyze the data.

RESEARCH DESIGN

Data taken from the annual reports using DataStream was analyzed to achieve the objectives. Pearson Correlation is a statistical approach to measure correlation between two variables. Value of the correlation coefficient is between 0 and 1. r value close to 1 indicates a strong relationship between the two variables. Meanwhile, the r value close to 0 means that there is a weak relationship for both variables studied. Besides, the r value of 0 indicated no direct relationship between these two variables. Towards the magnitude of a relationship between two variables is described by the value of the correlation coefficient r . Correlation coefficient is used to describe how well one variable is explained by other variables. Correlation analysis can be used in conjunction with regression analysis to assess the level of correlation between the dependent and independent variables are not independent. For the application of this method in the study, only correlation analysis alone is used.

Julie (2007), suggests the following guideline to interpret the range values between 0 and 1:

	Weak	$r = .10 \text{ to } .29$
Medium		$r = .30 \text{ to } .49$
Strong		$r = .50 \text{ to } 1.0$

Based on Julie (2007), the guidelines are used to interpret the range value between 0 and 1. For example the strength of correlation of $r=0.5$ and $r=-0.5$ is the same. It is only in a different direction.

VARIABLES

NTC and CR are used as proxies for working capital management while ROA and ROE are used as proxies for profitability.

NTC : $[\text{Accounts receivable} + \text{inventory} - \text{accounts payable}] \times 360/\text{sale}$

CR : $\text{Current asset}/\text{Current liability}$

ROA : $\text{Net income}/\text{Total Asset}$

ROE : $\text{Net income}/\text{Total Stockholder Equity}$

The Pearson correlation analysis is used to determine the relationship between the independent variables with the dependent variables which are:

- i. NTC with ROA
- ii. CR with ROA
- iii. NTC with ROE
- iv. CR with ROE

VARIABLES	PROXIES	
Working Capital (independent variable)	Current Ratio	CR
	Net Trade Cycle	NTC
Profitability (dependent variable)	Return on Asset	ROA
	Return on Equity	ROE

HYPOTHESIS

To find out whether there are relationships between variables in this study, the hypothesis that have been set for this purpose are as follows:

Ho 1 : There is no relationship between the NTC and ROA

Ho 2 : There is no relationship between the NTC and ROE

Ho 3 : There is no relationship between CR and ROA

Ho 4 : There is no relationship between CR and ROE

To test the relationship between working capital management and profitability, the Pearson correlation analysis is used. The aim was to see whether there is any relationship between working capital management and profitability.

DATA ANALYSIS

AVERAGE NTC FROM 2000 TO 2010

Table 4.1 shows the average NTC for 71 listed companies in the industrial sector in Bursa Malaysia.

Figure 4.1 shows the average NTC of 71 listed companies in industrial products in Bursa Malaysia for the year 2000 to 2010. The year 2010 recorded the highest average NTC amounting to 217.5. The year 2005 showed the lowest current ratio of 171.5.

Table 4.1: Average NTC Companies for 2000 to 2010

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average NTC	182.55	189.89	177.15	178.41	193.73	171.56	176.57	172.38	147.98	208.2	217.59

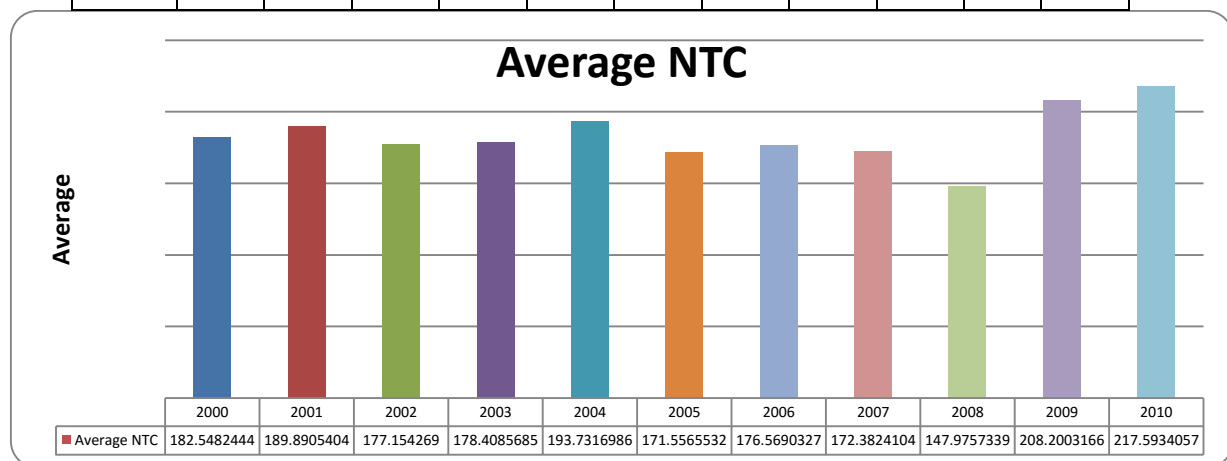


Figure 4.1: Average NTC for companies from 2000 to 2010

AVERAGE CR FROM 2000 TO 2010

Table 4.2 shows the average of CR for 71 listed companies in the industrial sector in Bursa Malaysia.

Figure 4.2 shows the average CR of 71 listed companies in industrial products in Bursa Malaysia for the year 2000 to 2010. The year 2002 recorded the highest average CR amounting to 31.44. The year 2005 showed the lowest current ratio of 6.499.

Table 4.2: Average CR companies for 2000 to 2010

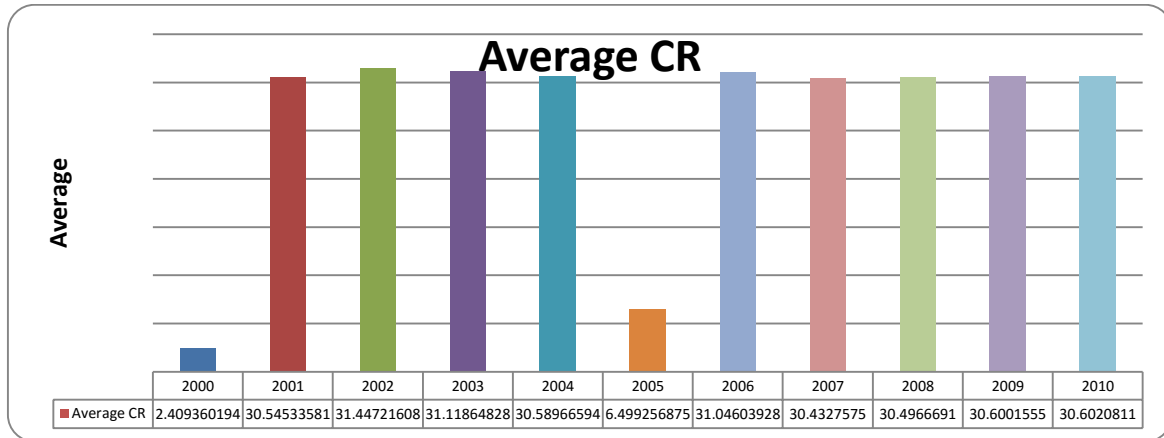


Figure 4.2: Average CR companies for 2000 to 2010

AVERAGE ROA FROM 2000 TO 2010

Table 4.3 shows the average ROA for 71 listed companies in the industrial sector in Bursa Malaysia.

Figure 4.3 shows the average ROA for 71 listed companies in industrial products in Bursa Malaysia for the year 2000 to 2010. The year 2002 recorded the highest average ROA amounting to 27.925. The year 2005 showed the lowest current ratio of -0.01.

Table 4.3: Average ROA companies for 2000 to 2010

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average ROA	0.0281	0.0025	-0.015	0.014	0.016	0.0086	0.0017	0.0496	0.0179	0.0218	0.0316

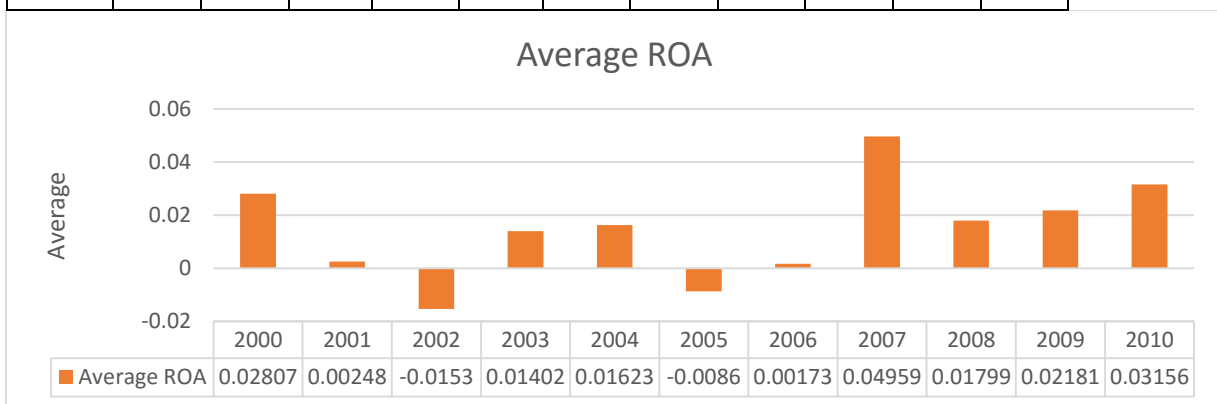


Figure 4.3: Average ROA companies for 2000 to 2010

AVERAGE ROE FROM 2000 TO 2010

Table 4.4 shows the average ROE for 71 listed companies in the industrial sector in Bursa Malaysia.

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
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Average CR	2.4094	30.545	31.447	31.119	30.59	6.4993	31.046	30.433	30.497	30.6	30.602
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Figure 4.4 shows the average ROE for 71 listed companies in industrial products in Bursa Malaysia for the year 2000 to 2010. The year 2010 recorded the highest average ROE amounting to 27.96. The year 2007 showed the lowest current ratio of 0.086.

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average ROE	0.0952	0.0032	-0.029	0.0085	-0.002	0.0153	0.0335	0.0861	0.0222	0.0294	0.0443

Table 4.4:

Average ROE companies for 2000 to 2010

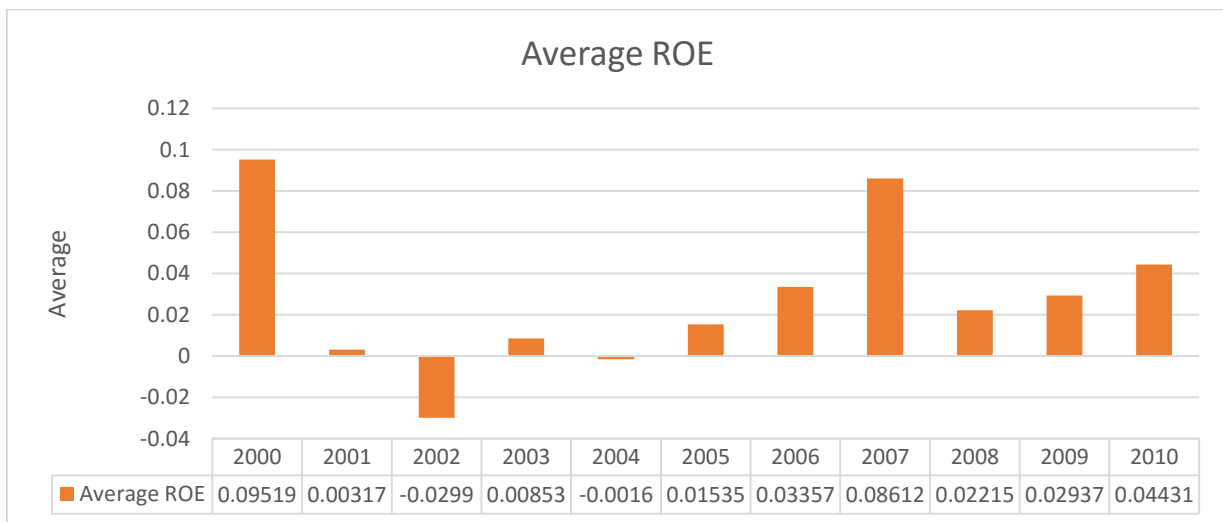


Figure 4.4: Average ROE companies for 2000 to 2010

THE RELATIONSHIP BETWEEN NTC WITH ROA AND ROE FROM 2000-2010

The result shows that there were weak negative correlation between NTC and ROA from 2000 to 2010 with value of $r = -0.71$, $p < 0.05$. Therefore, we fail to reject H_01 . According to Sayed and Esmail (2013) the result for NTC showed negative significant with ROA. This result is consistent with previous research by Raheman and Nasr (2007). This relationship has a logical base and was expected.

Next, there is a weak negative correlation between NTC and ROE from 2000 to 2010 with value of $r = -0.104$, $p < 0.05$. Therefore, we fail to reject H_02 . In other words, there is a negative significant relationship between NTC and ROE. Shin and Soenan (2000) found that there is a negative significant relationship between NTC and ROE. YaghoobNejad (2010) also stated that there is negative significant relationship between NTC and ROE.

Table 4.5 : The relationship between NTC with ROA and ROE with overall year between 2000-2010

Correlations		ROA	ROE
NTC	Pearson Correlation	-.072*	-.104**
	Sig. (2-tailed)	.044	.004
	N	781	781

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

RELATIONSHIP BETWEEN CR WITH ROA AND ROE FROM 2000 TO 2010

The findings show that there is a weak positive correlation between CR and ROA from 2000 to 2010 with the value of $r=0.168$, $p<0.05$. Therefore, Ho3 hypothesis is rejected. In other words, there is significant positive relationship between current ratio and return on assets (ROA). Sayed and Esmail(2013) stated that there is positive significant relationship between CR and ROA.

There is a positive correlation between CR and ROE from 2000 to 2010 with the value of $r=0.076$, $n=781$, $p<0.05$. Therefore, Ho4 hypothesis is rejected. In other words, there is an insignificant relationship between current ratio and return on equity. Katerina et. al., (2002) indicated that there is positive significant relationship between CR and ROE.

Table 4.6: The relationship between the CR with ROA and ROE with overall year between 2000-2011.

Correlations		roa_2010	roe_2010
cr_2010	Pearson Correlation	.322**	.199
	Sig. (2-tailed)	.006	.094
	N	72	72

**. Correlation is significant at the 0.01 level (2-tailed).

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

We can see that there are significant relationship between working capital management and firm profitability of Malaysian public listed companies in the industrial products sector Malaysia for eleven-year period from 2000 to 2010. There are two measures of working capital management which are NTC and CR. ROA and ROE were used to determining the firm's profitability.

The management of working capital is one of the most important financial decision of a firm. The results of NTC provide a strong evidence of negative relationship between NTC and profitability of firms as the correlation is negative and highly significant. It implies that a firm with relatively shorter NTC is more profitable. Furthermore, by reducing NTC to increase the efficiency of working capital management results in increased operating income. Therefore, it can be said that by reducing NTC, firm can create additional value for the shareholders. This result is consistent with previous research by Raheman et al. (2010). Furthermore, the result on current asset shows a significant positive relationship with profitability which is consistent with previous research by Gill et al. (2010).

There are so many different kinds of companies, however, that this test requires a great deal of modification if it is to be really helpful in analyzing companies in different industries. Generally, companies that have a small inventory and easily collectible accounts receivable can operate safely with a lower current ratio than those companies having a greater proportion of their current assets in inventory and selling their products on credit.

RECOMMENDATION

An effective research is very important for companies to improve their productivity of the company. Therefore, for further research in this area, I suggest that future research should use more variable in order to investigate the relationship between working capital management and the profitability. In addition, to get more accurate result on this research, I suggest that future research use various measurements such as Chi-Square Test and regression.

Besides that, it is more interesting if future research can make the analysis on other sectors in Bursa Malaysia. This is because, different sector have different activities and operations.

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THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND FIRMS PERFORMANCE OF MALAYSIAN INDUSTRIAL PRODUCT SECTOR

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ABSTRACT

This study seeks to investigate the relationship between capital structure and performance of the industrial product sector companies listed in Bursa Malaysia during an eleven-year period (2000 to 2010). The problem statement is: Is there any relationship between capital structure and firm's performance in the industrial products sector in Bursa Malaysia? Do the capital structure influence the performance achieved by the company? The study sample consists of 77 companies. The data was analyzed by using the Pearson correlation analysis. The result shows that there is a significant negative relationship between DAR with ROA and DER with ROE. These suggest that, increase in debt ratio will generate lower return and vice versa. Yet, recommendations based on findings are offered to improve certain factors such as considering using an optimal capital structure and future research should investigate other sectors in Bursa Malaysia.

Keywords: Debt Asset Ratio, Debt Equity Ratio, Return on Asset, Return on Equity, Malaysian Industrial Product Sector, Malaysia Stock Exchange.

INTRODUCTION

Capital structure of a firm refers to the mix of its liabilities. Abors (2005) found that the capital structure can be defined as the mix of debt and equity that were used by the firms in their operation. Mohamad et. al. (2012) stated that capital structure is a mixture of a company's debt whether in long term or short term, common equity and preference equity. Capital structure is essential on how a firm finance its overall operations and growth by using different source of funds.

As stated by Ong (2011), Modigliani-Miller (MM) theorem is the broadly accepted capital structure because it is the original theory of capital structure which had been used by many researchers. According to MM Theorem, these capital structure theories operate under perfect market. Perfect market can be defined as no taxes, rational investors, perfect competition, absence of bankruptcy costs and efficient market. However, this theorem stated that capital structure or finances of a firm is not related to its value in perfect market.

Zeitun et. al. (2007) stated that, capital structure is closely related with corporate performance. Corporate performance can be measured by productivity, profitability, growth and even customers' satisfaction. These measures are related among each other. According to Barbosa et. al. (2005), financial measurement is one of the tools which indicate the financial strengths, weaknesses, opportunities and treats. Those measurements are return on investment (ROI), residual income (RI), earning per share (EPS), dividend yield, return on assets (ROA), growth in sales, return on equity (ROE) and others. However, for the purpose

of this study, the firm performance is measured by two proxies namely, return on equity (ROE) and return on assets (ROA).

OBJECTIVES

There are three objectives of the study are outlined as follows:

- i. To determine the capital structure by using the debt asset ratio (DAR) and debt equity ratio (DER) based on the company's annual report from 2000 to 2010.
- ii. To determine the level of performance by using return on assets (ROA) and return on equity (ROE) of the company based on the company's annual report from 2000 to 2010.
- iii. To determine the relationship between capital structure and performance based on company's annual report from 2000 to 2010.

PROBLEM STATEMENT

The problem statement is: Is there any relationship between capital structure and the firm's performance in the industrial products sector in Bursa Malaysia? Do the capital structure influence the performance of the company?

LITERATURE REVIEW

RELATIONSHIP BETWEEN DAR AND ROA

According to Abdul (2011), there is a significant negative relationship between DAR and ROA which is consistent with Pontoh & Ilat (2013). Puwanenthiren (2011), found that there is a weak negative relationship between DAR and ROE. Besides that, Nor et. al. (2012), stated that there is a medium negative relationship between DAR and ROA. Nuhu (2010) found that there is a positive correlation between leverage and ROA. However, Ong (2011), stated that there is no relationship between DAR and ROA.

RELATIONSHIP BETWEEN DAR AND ROE

Abdul (2011) and Nor et. al. (2012) found that there is a negative significant relationship between DER and ROE whereas Nuhu (2010) indicates that there is a positive significant relationship between leverage and ROE. In addition Mahdi and Kumars (2009) showed that there is a meaningful link between capital structure and ROE. However, Ong (2011) and Pontoh & Ilat (2013), stated that there is no relationship between DAR and ROE.

RELATIONSHIP BETWEEN DER AND ROA.

Abdul (2011) and Nor et. al. (2012) found that there is a negative significant relationship between DER and ROA. Besides that, Shubita (2012), also found that there is negative significant relationship between total debt and profitability implying that an increase in the debt position is associated with a decrease in profitability. In contrast, Nuhu (2010), found that there is a positive correlation between leverage and ROA. Besides that, Asad et.al (2011), showed that there is a strong relationship between DER and ROA. However, Ong (2011) and Pontoh & Ilat (2013), stated that there is no relationship between DAR and ROE.

RELATIONSHIP BETWEEN DER AND ROE

Assad et.al. (2011), found that there is a strong relationship between DER and ROE. Then, Nor et.al.(2012) stated that there is a medium negative relationship between DER and ROE. Pontoh & Ilat (2013), found that there is a strong negative relationship between DER and ROE. In contrast, Nuhu (2010) found that there is a positive correlation between leverage and ROE. However, Ong (2011), indicate that there is no relationship between DER and ROE.

RESEARCH METHODOLOGY

The purpose of this research methodology is to ensure that all the data and research information that have been used is suitable with the purpose and the objective of the study. This section will discuss about the methods used to select the samples, gathering and analyzing the data. Besides that, this chapter will also discuss about Pearson correlation analysis.

METHOD OF ANALYSIS

This study uses Pearson correlation analysis to determine relationship between capital structure and corporate performance. Pearson correlation analysis is different than Spearman correlation analysis as the latter is used for measuring ordinal data where there are at least five levels of measurement. This study does not involve ordinal measurement data. Pearson correlations involve measurement data which is used to see the relationship between two variables, such as X and Y, for example the relationship between capital structure and corporate performance.

The size of value of the correlation coefficient is determined by using the range from -1.00 to 1.00. This value will indicate the strength of the relationship between two variables. A correlation of 0 indicates no relationship at all, a correlation of 1.0 indicates a perfect positive correlation and a value of -1.0 indicates a perfect negative correlation. Julie (2007), suggests the following guideline to interpret the range values between 0 and 1:

Weak	$r = .10 \text{ to } .29$
Medium	$r = .30 \text{ to } .49$
Strong	$r = .50 \text{ to } 1.0$

These guidelines apply whether or not there is a negative sign in front of the r value. The negative sign refers only to the direction of the relationship, not the strength.

RESEARCH POPULATION

The population of this study are companies listed in Bursa Malaysia in the industrial product sector from 2000 to 2010. There are about 136 companies that were found by using the information from DataStream. However, there are only 77 companies that can be used because they met all the requirements needed which is a complete financial statement from 2000 to 2010.

DETERMINATIONS OF VARIABLES

In this study, there are two main variables of capital structure and corporate performance. There are 4 proxies used to represent these two variables, namely:

VARIABLES	PROXIES	
Capital Structure (independent variable)	Debt Asset Ratio	DAR
	Debt Equity Ratio	DER
Company's performance (dependent variable)	Return on Asset	ROA
	Return on Equity	ROE

Capital structure is the independent variable that was represented by DER and DAR. Company's performance is the dependent variable that was represented by ROE and ROA. The Pearson correlation analysis is used to determine the relationship between the independent variables with the dependent variables which are:

- i. DAR with ROE
- ii. DER with ROE
- iii. DAR with ROA
- iv. DER with ROA

HYPOTHESIS

This research is focus on the relationship between the capital structure and the performance of the industrial product companies listed in Bursa Malaysia from 2000 to 2010. With this purpose, there are 4 hypothesis stated:

- | | | |
|-----|---|--|
| Ho1 | = | there is no relationship between DAR and ROA |
| Ho2 | = | there is no relationship between DAR and ROE |
| Ho3 | = | there is no relationship between DER and ROA |
| Ho4 | = | there is no relationship between DER and ROE |

DATA COLLECTION METHOD

All data that have been used in this research which is the company's financial statement from 2000 to 2010 are gathered from Datastream.

DATA ANALYSIS

AVERAGE DAR, DER, ROA AND ROE

Table 4.1 and Figure 4.1 show the average of DAR from the year 2000 to 2010 for 77 listed companies in Malaysia under the industrial product sector. The DAR is calculated based on company's total liability divided by the value of its total assets. The DAR indicates what proportion of asset and debt the company is using to finance its business. When the DAR ratio is low, it shows that the company faces less risk in their investment

Table 4.1 Average DAR from the year 2000 to 2010

year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average DAR	0.4674	0.4832	0.5186	0.5913	0.6403	0.4371	0.4457	0.4092	0.4168	0.3949	0.3919

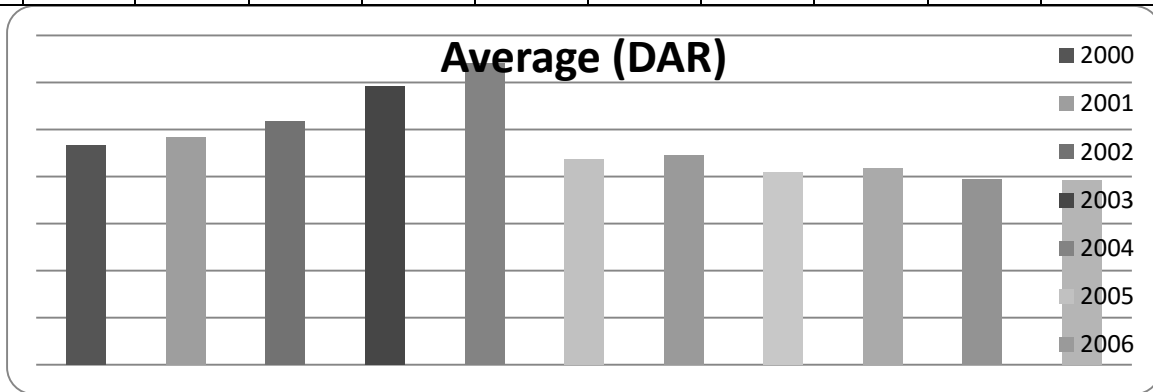


Figure 4.1 Average DAR from the year 2000 to 2010

Table 4.2 and Figure 4.2 show the average DER from the year 2000 to 2010 for 77 listed companies in Malaysia under the industrial product sector. The DER is calculated based on a company's total liability divided by the value of its total equity. The debt equity ratio indicates what proportion of equity and debt the company is using to finance its assets. A high debt equity ratio means that a company has been aggressive in financing its growth with debt. This can result in volatile earnings as a result of the additional interest expense.

Table 4.2 Average DER from the year 2000 to 2010

year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average DER	0.2324	0.7906	0.8733	0.8443	0.9854	1.0209	0.7458	0.7642	0.7939	0.8028	0.8048

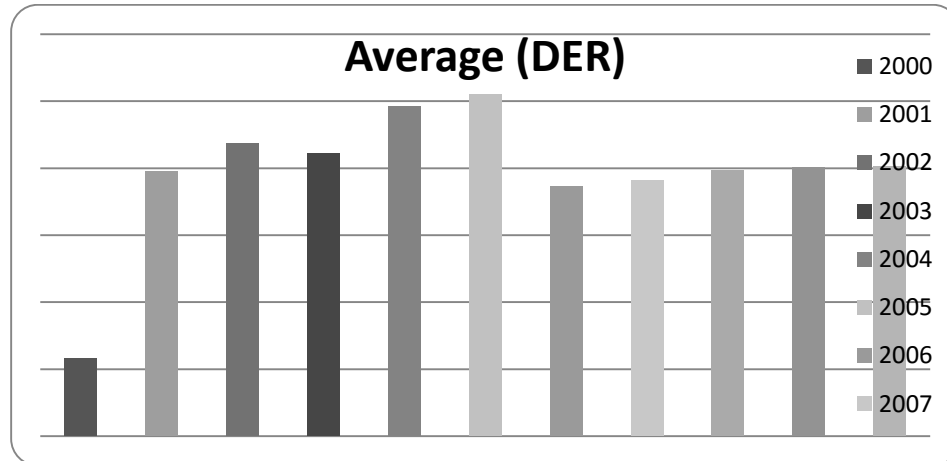


Figure 4.2 Average DER from the year 2000 to 2010

Table 4.3 and Figure 4.3 shows the ROA from the year 2000 to 2010 for 77 listed companies in Malaysia under the industrial product sector. The ROA is calculated based on the company's net profit divided with total asset. Return on asset indicates that how efficient the management is in using its assets to generate earnings. The higher the ROA, the better because the company is earning more money on less investment.

Table 4.3 Average ROA from 2000 to 2010

year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average ROA	0.0196	-0.0158	-0.0219	0.0042	0.0085	-0.0091	-0.0029	0.0433	0.0122	0.0236	0.0323

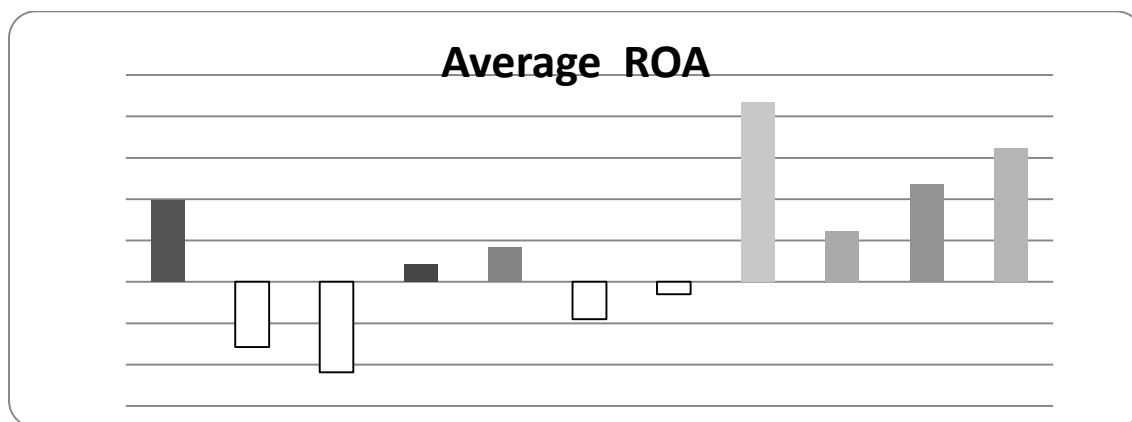


Figure 4.3 Average of ROA from the year 2000 to 2010

Table 4.4 and Figure 4.4 shows the average ROE from the year 2000 to 2010 for 77 listed companies in Malaysia under the industrial product sector. Return on equity is a financial ratio calculated based on a company's net income divided by the value of its total

shareholder's equity. The ROE measures the company's profitability by revealing how much profit the company generates with the money shareholders have invested.

Table 4.4: Average of ROE from the year 2000 to 2010

year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average ROE	0.0887	-0.021	-0.025	0.0197	0.0044	0.0141	0.0250	0.0748	0.0141	0.031	0.0452

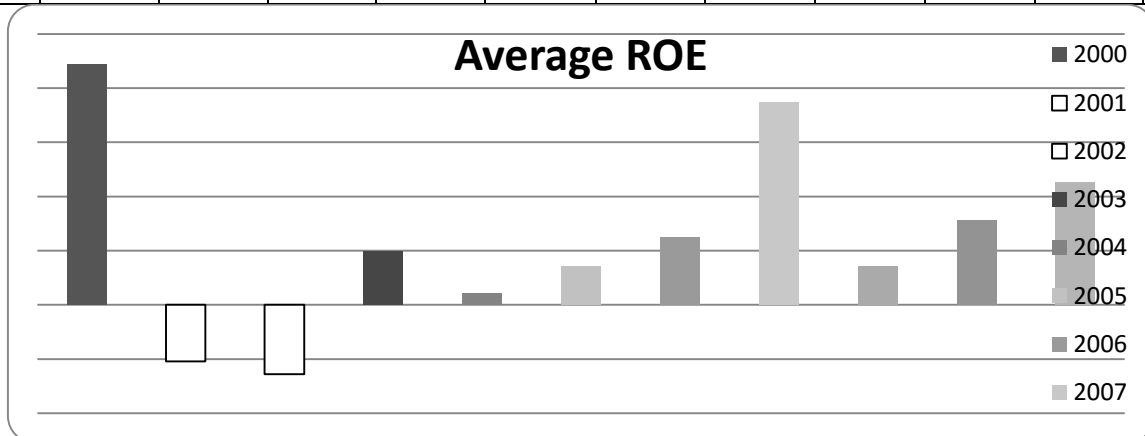


Figure 4.4 Average ROE from the year 2000 to 2010

RELATIONSHIP BETWEEN DAR AND ROA IN 2000 TO 2010

Table 4.5 shows the relationship between DAR and ROA, and also the relationship between DAR and ROE from 2000 to 2010. This relationship was investigated by using Pearson correlation.

The result shows that there was a strong, negative correlation between DAR and ROA from 2000 to 2010, with the value of $r = -.55$, $n = 77$, $p < .0005$. This negative correlation means high level of debt asset ratio associated with lower levels of return on asset. This result is consistent with Abdul (2011), Pontoh & Ilat (2013). However this result is not consistent with the findings of Puwanenthiren (2011) who found that there is a weak negative relationship between DAR and ROE and Mohamad et. al. (2012) who stated that there is a medium negative relationship between DAR and ROA.

From the result, it can be concluded that there are a significant, negatives correlation between debt asset ratio (DAR) and the return on asset (ROA) in Malaysian Industrial product sector for 11 years period which is from 2000 to 2010. This negative relationship indicates that when the debt asset ratio is high, it will cause lower return on asset and vise versa. In other words, the changing in debt asset ratio will give a significant effect to return on asset for the firms. In addition, with this result, it can be concluded that hypothesis Ho1 is rejected. There is a significant relationship between DAR and ROA.

Table 4.5: Relationship between DAR and ROA in 2000 to 2010

Correlations

		ROA
DAR	Pearson Correlation	-.551**

	Sig. (2-tailed)	.000
	N	847

**. Correlation is significant at the 0.01 level (2-tailed).

RELATIONSHIP BETWEEN DAR AND ROE IN 2000 TO 2010

In addition, Table 4.6 shows that there was no significant relationship between DAR and ROE from 2000 to 2010. This result is consistent with Ong (2011) and Pontoh & Ilat (2013). However, this result is inconsistent with Abdul (2011), Nor et. al. (2012) and Nuhu (2010). Based on the result, it can be concluded that there was no significant relationship between debt asset ratio (DAR) and return on equity (ROE) in the Malaysian Industrial Product sector for 11 years period which is from 2000 to 2010. With this result, hypothesis Ho2 is fail to reject. There is no relationship between DAR and ROE.

Table 4.6: Relationship between DAR and ROE in 2000 to 2010

Correlations

		ROE
DAR	Pearson Correlation	.018
	Sig. (2-tailed)	.603
	N	847

**. Correlation is significant at the 0.01 level (2-tailed).

RELATIONSHIP BETWEEN DER AND ROA IN 2000 TO 2010

Table 4.6 shows the relationship between Debt Equity Ratio (DER) and Return on Asset (ROA), and also the relationship between Debt Equity Ratio (DER) and Return in Equity (ROE) from 2000 to 2010. This relationship was investigated by using Pearson correlation. The result shows that there was no significant relationship between DER and ROA from 2000 to 2010. This result is consistent with Ong (2011) and Pontoh & Ilat (2013). However this result is inconsistent with Abdul (2011), Nor et. al. (2012) and Shubita (2012), who found that there is a negative significant relationship between total debt and profitability implying that an increase in the debt position is associated with a decrease in profitability. Based on the result, it can be concluded that there is no significant relationship between (DER) and (ROA) in the Malaysian Industrial Product Sector for 11 years period which is from 2000 to 2010. So, it can be concluded that hypothesis Ho3 is failed to reject. There is no relationship between DER and ROA

Table 4.7: Relationship between DER and ROA in 2000 to 2010

Correlations

		ROA
DER	Pearson Correlation	.030
	Sig. (2-tailed)	.388
	N	847

**. Correlation is significant at the 0.01 level (2-tailed).

RELATIONSHIP BETWEEN DER AND ROE IN 2000 TO 2010

Table 4.8, shows that there was a medium, negative correlation between DER and ROE from 2000 to 2010, with the value of $r = -.38$, $n = 77$, $p < .0005$. This negative correlation means high level of debt equity ratio associated with lower levels of return on equity. This result is consistent with Nor et.al.(2012) who stated that there is a medium negative relationship between DER and ROE. Pontoh & Ilat (2013), found that there is a strong negative relationship between DER and ROE.

In contrast, this result is inconsistent with Nuhu (2010), where he found that there is a positive correlation between leverage and ROE, and Ong (2011), indicate that there is no relationship between DER and ROE.

Based on the result, it can be concluded that there is a significant, negative correlation between DER and ROE in the Malaysian Industrial Product sector for 11 years period which is from 2000 to 2010. This negative correlation indicates that provision of high debt equity ratio will generate lower return on equity for the firm and vice versa. This was due to the increase in debt will increase the cost of debt and cost of equity. Thus, the liability is greatly affected by changes in the capital structure because of the amount of deposits held is insufficient to cover the investment and have to rely on debt financing and asset. So, with this result, it can be concluded that hypothesis Ho4 is rejected. There is a negative significant relationship between DER and ROE.

Table 4.8: Relationship between DER, ROA and ROE

Correlations

		ROA	ROE
DER	Pearson Correlation	.030	-.382**
	Sig. (2-tailed)	.388	.000
	N	847	847

**. Correlation is significant at the 0.01 level (2-tailed).

CONCLUSION AND RECOMMENDATION

CONCLUSION

This study examined the relationship between capital structure and performance of Malaysia industrial product sector for eleven-year period from 2000 to 2010. There are two measures of capital structure which is DAR and DER and two measures that are used in determining the firm's performance which is ROA and ROE.

In overall, the result obtained shows that there is a negative and significant relationship between capital structure and profitability. The negative relationship means that company's performance is affected by the capital structure of the firm because the amount of deposits held by the firm to finance investment is sufficient and it is less dependent on debt financing.

RECOMMENDATION

Research that was conducted effectively is very important for companies to improve their management system. Therefore, for further study in the future, it requires a more robust change. The first recommendation is the companies must consider using an optimal capital

structure. The optimal capital structure includes some debt, but not 100% debt. In the other words, the optimal capital structure will minimize the cost of capital thus reducing the chances of bankruptcy.

The second recommendations that can be used, is in distinguishing the activities and operations of the company. This is because, with the different activities and operations of each company, it will result in different provision of capital structures of equity and liability. In other words, it is recommended to use other or different business sector in future study.

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A MODEL FOR HANDLING OVERLOADING OF LITERATURE REVIEW PROCESS FOR SOCIAL SCIENCE

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ABSTRACT

Literature review is an excruciating part in the process of research. It requires an analysis of published material on the topic on interest. Moreover, for a new researcher, it is challenging extract a great number of required objectives, including the problem identification, commonly known as ‘gap’ in research. Searching and locating most appropriate literature is no more great deal in this era of Information and Communication Technology (ICT), instead overloading of the literature is a major problem and the great change to be handle. Often postgraduate research students raise three questions to their peers and supervisors. First, how many articles are sufficed for a good literature review? Second, how many past years literature will be enough to meet the required level for a good literature review? And third, what if, literature referred is published in the language other than researchers’ language? In this research paper a novel hypothetical model is proposed to answer first two questions; the number of articles required for a good and reasonable literature review and number of years backward the analysis of articles required for the same. Our results indicate that analysis of data partially support our hypothetical model and its assumptions.

Keywords: literature review; hypothetical model; load reduction; proposal writing; information systems.

INTRODUCTION

Literature is defined as a published scholarly material produced by the researchers in their field of research. The review of the literature is an analysis of the content reported in published material (articles, reports and others). It is also a methodology itself used to

analyses other people's work for better understanding which might lead to highlight strength and weaknesses of the reported work.

There are many objectives of a literature review to be obtained when it is carried out through an extra care and vigilance. Literature review is a part of a bigger process of research that plays pivotal role to establish some facts before any foundation for a new project can be built for researcher in the same field. A good review can also provide deep insights on work that has been reported and need further to be improved upon.

The process of review originates from a bigger research questions. The literature review process is next to build close and focused understanding around the bigger question. To do so, one has to review a large number of articles to have a body of knowledge. The review process has three stages, first stage is searching an appropriate literature in breadth and depth, second stage is reviewing the same, considering some targeted outcomes of the review and finally writing the information extracted in a most appropriate manner in the body of the literature review of the report, paper, thesis and or dissertation. Each step in this three step process is of a great importance and needs extra care, else it adds up complexity in the process, and thus, increases frustration and wastage of time for the researchers. To avoid the same, there are some suggestions provided by (Canbera, 2014) and (Cronin, Ryan, & Coughlan, 2008) to handle the process and reduce much of the burden of the process. This paper proposes a hypothetical model to handle literature review and avoid overburden the same. The research will try to support the model and compare outcomes with previous researchers work in this regard.

PROBLEM STATEMENT

Literature review is a rigorous exercise that every researcher has to experience. The proper review of large amount of published articles, and reports is never an easy task. Researchers from all over the fields feel chaotic and muddled at this stage of the research process and often need answers for certain specific questions related to literature review. First, how many articles and reports are sufficient for a good literature review? And second, how many years backward reading articles and referring the same fulfill the desired objectives for a good literature review? In this paper hypothetical model is proposed that answers adequately both the questions as given above.

LITERATURE REVIEW

Literature is defined as published material available for reading and referring in research work. And review of literature is critical reading articles, reports and some cases books, to build the foundation for research project. It is a sub-process of a bigger process of the research and having multiple phases. In phase one, articles are searched and collected using key word using various sources, digital libraries and other places. In second phase, articles and other reports are arranged by chronologically, methodologically, thematically or even one suitable to the research questions. Third phase is reading, analyzing, and synthesizing the same and the last, fourth phase is writing the literature in a document.

Literature appears in various documents in different forms. For example, in Thesis, and dissertations, a complete chapter is dedicated for it, in reports, paper and articles and in some cases proposals, it is a topic headings. It also can be a paper itself in review research and called review papers in this case a almost complete document is only on literature review.

No matter what ways and where literature review appears in research documents, the process of literature review is to reveal and discover a great number of objectives and outcomes. Given below are the objectives that a reviewer must attempt to achieve. As given in (NoName, 2014) and (Levy & Ellis, 2006):

- Compare and contrast different authors views on an issue
- Groups authors who drew similar conclusions
- Criticize aspects of methodology
- Note areas in which authors are in disagreement
- Highlight exemplary studies
- Highlight gaps in research
- Helping the researcher understanding the existing body of knowledge. Including what is already known and where new research is needed? That is what is needed to be known?
- Provide a solid theoretical foundation for the proposed study (related to “what is already known?”)
- Substantiating the presence of the research problem (related to “what is needed to be known?”)
- Justifying the proposed study as one that contributes something new to the Body of Knowledge (BoK)
- Framing the valid research methodology, approaches, goals and research questions for the proposed study.
- Ensure not “reinventing the wheel”
- Gives credit
- Demonstrates understanding of theoretical and research issues
- Provides a critical evaluation of relevant literature
- Provides an integration and synthesis of existing literature
- Provides new theoretical insights or develop a new model as the conceptual framework for your research
- Illustrate significant and substantial contribution and a few more

Canbera (2014) suggest that when proposing a new study or a new theory, researchers should ensure the validity of the study and reliability of the results by making use of quality literature to serve as the foundation for their research.

Testing for applicability of research study, Levy and Ellis (2006) in the paper says that “While searching for quality literature is essential, it is also important to identify articles that are applicable to the proposed study. This issue of testing for applicability of research literature to the proposed study has two critical facets. The first deals with the inclusion or exclusion of articles from the literature review, and the second deals with ethical and unethical use of references. Both facets should be addressed during the literature search and gathering process to ensure high quality and effective literature review”

More on applicability can be seen (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989; Venkatesh & Davis, 1996, 2000) and ethical or unethical use of reference issues (Davison,

Clarke, Loch, & Chairman-Kock, 2000; Laband & Piette, 2000) are beyond the scope of our proposed model.

PROPOSED HYPOTHETICAL MODEL

The proposed hypothetical model is given in Figure 1. It is assumed that for an effective literature review, articles of past five years contribute 90% to the most important outcomes of the literature review. The remaining 10% outcomes may come from articles between past 5 and 10 years. The literature beyond past 10 year contribute most to the background and history of the topic under research, no contribution come from old articles as major outcomes of any effective literature review.

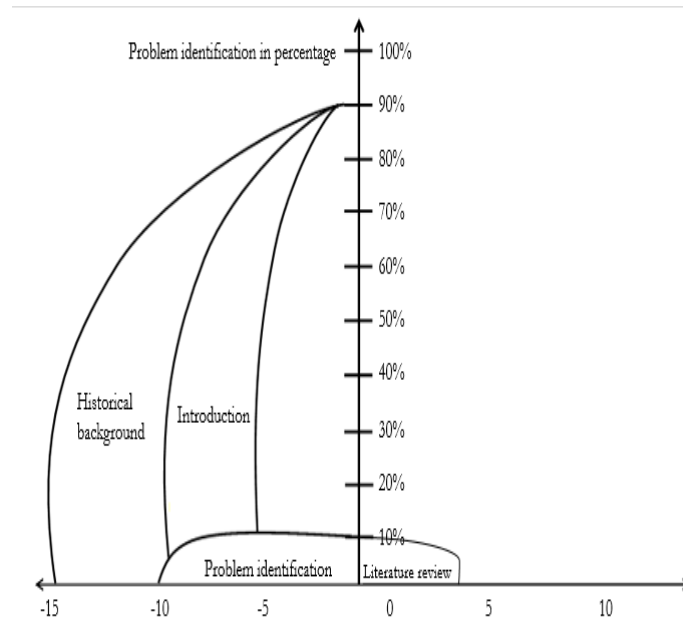


Figure 1. Hypothetical model for literature review

The proposed model is designs to answer two research questions related to literature reviews for a research proposal of postgraduate studies. This study currently include Information systems discipline to prove hypothetical model assumptions to answer following two questions:

How many articles to be referred for a quality research proposal?

How many backward years one might refer for a quality research proposal e.g. (5, 10, 15 or more) years?

As stated in (Canbera, 2014), this depends on what the literature review is for and at what stage of researcher is at in the process. Table 1, is a reproduction of data given by the authors.

Table 1. Literature review suggested by (Canbera, 2014)

Undergraduate	5-20 titles
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Honors dissertation	20 + titles
Master's thesis	40+ titles
PhD's thesis	50+ titles

Cronin et al. (2008) suggest a maximum frame of 5-10 years is usually placed on the age of the works to be included. In conducting the literature search it is important to keep a record of the keywords and methods suggested by (Timmins & McCabe, 2005) used in searching, as these are needed to be identified later when describing how search was conducted.

DATA COLLECTION

For this research, data has been collected from postgraduate research proposals of students who have defended their thesis proposals successfully. Furthermore, the proposals are considered for IT field. For each proposal, the literature review and references are noted for their count and years backward they have been referred for. Total 25 proposals were taken, including the ones who qualified proposal in years, 2014, 2013 and 2012. Also, these proposals include students of computer science, information systems and library & information sciences; for both postgraduate masters and PhD student proposal.

RESEARCH RESULTS

The result of data collected is provided in Figure 2. The graphs shows a breakup of papers from all three years (2012-2014) data in three groups, papers referred in past 5 years, papers referred from past 10 years and beyond 10 years; considering time line from the date of proposal defense for all years (2012, 2013 & 2014) respectively. Analysis indicates that papers referred from past 5 years are 50% of the total, assumed paper in hypothetical model were 90%. From past ten years, assumed percentage of papers was 10% as shown in Figure 1, it turned out to be 25%. It was also assumed that beyond 10 years of the literature, contribution to the body of literature is 0% or negligible. However, it turned out to be 25%. Combined result of 5 and 10 years contribution to the body of literature is 75% as shown in Figure 2 as well as in Figure 3.

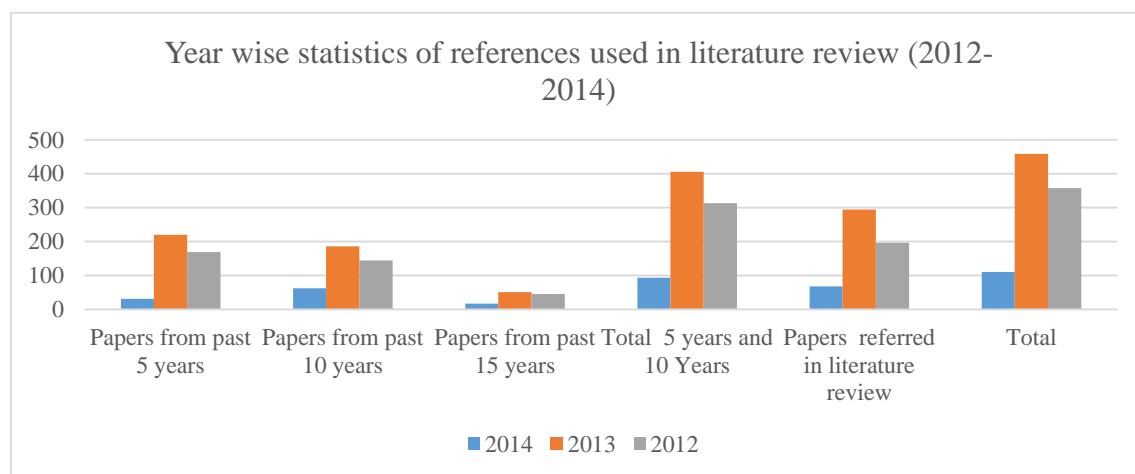


Figure 2. Histograms showing percentage of articles referred in literature review part of a proposal

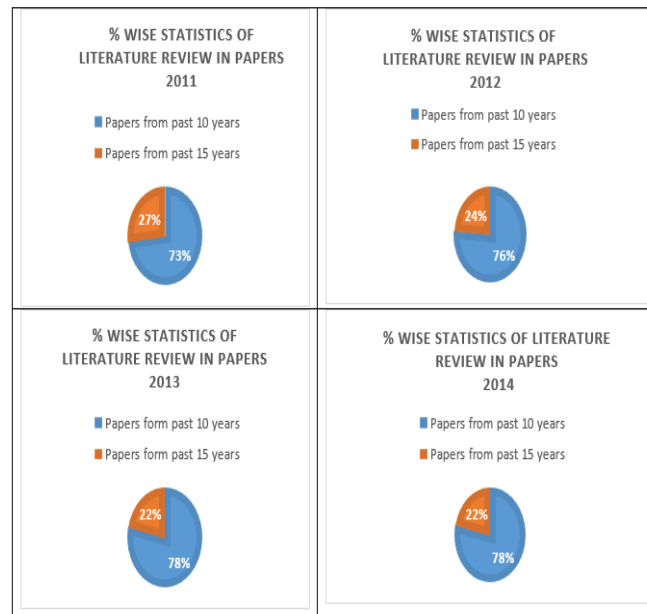


Figure 3. Percentage of literature from past 5-10 years referred in literature review

DISCUSSION

The analysis to support hypothetical model for an effective literature review face some pitfalls. These snags are due to various reasons. First, the data set considered was not sufficient enough to support the assumed model. Second, the data set consists three different, though intertwined disciplines, IS, CS and Library Science. Both IS and Library science falls in social sciences field, whereas CS, does not fall into social science category, rather it falls into a field of mathematics and logic. Third, there was no equal number of proposals taken for corresponding years. For example, for year 2013, a maximum number of proposal was taken and same is not true for years 2012 and 2014, number of the proposals taken was so less, the reason was non-availability of the proposals and finally, postgraduate Masters and PhD proposal were considered indiscriminately, this might have an influence upon the data taking proposals from same level might have a different results then the present results. The data collected from just one method that is proposal only might have effect on the results.

CONCLUSION

Preliminary investigations and results indicate that for a research proposal at post-graduate studies needs to have sufficient articles to study and provide evidence for a depth-breadth of the literature covered. Form current data set the assumed number for a good literature review as suggested by (Canbera, 2014) cannot be supported. This does not mean that the suggested figure are assumed and not empirically supported. It may all be because of insufficient data set considered for this study. The proposed study found that in practice 50% articles may be a reasonable number if considered for a research proposal literature review part. Our hypothetical model is not yet completely proved, this needs a better strategy and higher data

samples to be supported. We still believe that the model may be a stepping stone to guide fresh researchers for reducing overloading of literature review part of their research process.

FUTURE WORK

To support model given in Figure 1 data sample need to be considered higher, and assumed number may well be above 100 proposals, the greater the number, better the accuracy of the results is expected. Proposals from one disciple at a time may be considered due to the fact that each disciple may have its own requirements. Variety of instruments may be used for data collection including interviews to fetch the accurate facts. The work can be extended by measuring outcomes of a literature review and in this regard survey may be conducted to explore and describe new facts and measure set outcomes of a good literature review.

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ENHANCING SOCIETAL WELLBEING, ISLAMIC TRANSFORMATION CENTRE AND NETWORK-OF-MOSQUE: A CONCEPTUAL SOLUTION

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ABSTRACT

Lessons learnt from the history of Prophet Muhammad saw and his companions in harnessing mosques to provide holistic and value-added services such as community, education, businesses, advisory and halal center for the purpose of society wellbeing. Today, mosques are at every nook and corners in Malaysia, but the functions of the Mosque are limited and are used for specific religious and spiritual purposes. Thus, this conceptual program will develop the Islamic Transformation Center (ITC) through the Network-of-Mosque (NoM). Harnessing on the NoM capabilities, mosques can be used as a center for transformation which provides value-added services to the society. These services will include community classes, marriage services, zakat collection and distribution, promoting halal center, sermons and Islamic learning and education hub. Also with NoM, Mosque can be used for medical clinic, home for the poor and the travelers, and eating place for the hungry and needy. This conceptual program introduces to improve the quality of service through strategic partnership between government, industry, and society which will result to raise the entrepreneurs and lead to the prosperity. This program demands for Quadruple Helix Model (QHM) collaboration which involves the Government, Academia, Industry, and Citizen as the main actors for this program. Nine blocks of Business Model Canvas (BMC) framework and literature review used as the methodology for this paper. To achieve its goals, this program consolidates and synergizes the initiatives of government agencies based on the Whole of Government (WoG) approach. The findings of this paper show that the Mosque can facilitate the development and sustainability of ITC functions that serve the public and citizens better by harnessing the NoM potential and capabilities.

Keywords: Islamic Transformation Center, Network of Mosque, Business Model Canvas, Society Wellbeing, Quadruple Helix Model.

INTRODUCTION

Today, mosques are used mainly for the purpose of specific religious duties. However, the Network of Mosque (NoM) has a great potential to contribute towards improving the societal wellbeing, especially those living around the mosque. By harnessing the NoM capabilities, the public can save time where they do not have to go physically to government agencies or companies. At the same time, mosque committee can provide value-added services on

worldly and religious matters.

Based on the Office for National Statistics (ONS), there are ten factors to measure a national wellbeing¹. These factors include health, personal wellbeing, relationship, and education and skills. Islamic Transformation Center (ITC) program, based on these ten factors can help the government to improve the societal and national wellbeing. One of its programs is to provide medical service. ITC collaborating with NoM will create better relationship to the public around the mosque. Personal interaction between the public and mosque committee can bring the positive impact and satisfy the stakeholders. In the education sector, ITC can offer and provide educational programs to the public. ITC and NoM can provide online and face-to-face classes for Muslims and non-Muslims. Moreover, ITC and NoM can help small businesses and SMEs with their wealth creation activities. With ITC, the personal wellbeing can be given priority in order to enhance the society wellbeing.

PROGRAM BACKGROUND

This paper proposed the establishment of ITC and by harnessing the potential of Network of Mosque (NoM) capabilities in enhancing the societal wellbeing. We propose mosques to be our as our center services. Since mosques are everywhere in Malaysia, than we can provide many activities that can help more people. The targeted audiences of this program, initially, are all the people who live around the mosques.

This program has the potential to provide quality and value-added services for the society and improve the societal wellbeing. This can be achieved by providing popular services and programs such as education on marriage, hajj and umroh; zakat collection and distribution; and wealth creation and social welfare. This program synergize with the Whole of Government (WoG), where related/cluster of government agencies collaborate to achieve common or similar goals². This program can also offer Quadruple Helix Model (QHM) based services/activities, combining the contribution of Government, Academia, Industry, and Citizen³.

ITC/NoM-based programs provide services to help the Muslim society. These include counselling and advisory services on family and marriage, social relationship, health, businesses, education and skill development, poverty eradication; making the Muslim communities aware of help and opportunities available to them, have some sort of facilities to the help the destitute and the homeless. This program organizes for welcoming visitors to the mosques and promoting mosque events/activities to the community. Thus, demonstrating the meaning of "Rahmatan Lil Alamin", contributing values and mercy to all mankind.

PROGRAM OBJECTIVES

The main objective for this paper is to propose the creation of ITC in enhancing the societal wellbeing. ITC is defined as a center or hub where the communities are well advanced in terms of nomic, public services and living in accordance to the teaching and traditions of Islam⁴.

By harnessing the NoM, this program can help the public to be more effective in dealing with government or companies by providing a one-stop service center for them. At the same time, mosque committee can provide value-added services such as education on Islamic studies,

marriage, hajj and umroh; waqaf and zakat collection and distribution; economic and community services; and more. These can make the Muslim society more effective and productive in performing their obligation.

As we know, most of the services that are mentioned above are rare to be seen at one same place/center. This is an opportunity for the Muslim to centralize all of the Muslim activities in one place where it is called as an “Islamic Transformation Center” or ITC. The ITC will facilitate the Islamic scholars and experts around the world to contribute in national and human development including giving sermons and public lectures. ITC can be accessible globally and play a very important role in spreading the teaching of Islam and also in clarifying the misconceptions of Islam to the non-Muslims.

This program demands for Quadruple Helix Model (QHM) collaboration involving the Government, Academia, Industry, and Citizen as the main actors. The government actors are Jabatan Kebajikan Malaysia (JKM), Ministry of Health Malaysia (KKM), Ministry of Education (KPM), MARA, Jabatan Kemajuan Islam Malaysia (JAKIM), Tabung Haji and zakat centers.

For events development, this program will facilitate the collaboration with companies such as wedding event organizers that will help the society in managing and organizing wedding functions. For educational cluster, this program will collaborate with universities in Malaysia and the society experts who want to be volunteers. As the main actor in this program, mosque committee has a significant impact to handle the program through the network of mosque.

LITERATURE REVIEW

The word mosque or masjid is taken from the Arabic language which is sujud (sajada). It means the devoted, loyal, and with bowed heads with full of respect and reverence. The mosque is used for many functions, not only for worship but also to seek for knowledge, Muslim center activities, as well as the center for developing the economics of the ummah.

According to Omar Bakri (n.d)⁵ there are 20 activities/tasks which we expect from the mosque, such as mosque in the prophet era as home for needy, mosque as Judiciary Court, mosque as a University for Learning and Teaching, mosque as platform for oratory, eloquence and poetry, mosque as home and refuge for the poor, needy and the travelers, mosque as an eating place for the hungry and needy, mosque as place where people can ask for help, mosque as a place for consultation and exchanging views, and more.

From the points above, only a few activities that handled by the mosque in this time. Today, mosques do not act as the Muslim center-of-excellence anymore. Muslim uses a mosque as the place for specific religious practices only. We as Muslim should expand the strategic role of the mosque based on the Prophet saw era, as a key center of Muslim activities. We need to restore the Mosque to its original role and function.

In this globalization and the new digital age, the Mosque can be utilized as the center-of-excellence as well as the network-of-excellence in making contributions and value-added services to the society and nation. QHM collaborative type of programs can harness the Network of Mosque capabilities in making all mosques as a center for education; zakat collection and distribution; marriage, Umroh and Hajj training; halal certificate distribution; Islamic seminars and workshops; human capital development and wealth

creation; and providing other value-added services to the people who live around the mosque. But, in order to develop ITC, all QHM actors must make their contributions including by the Government agencies, mosque committee, companies, and the society.

In Malaysia, Urban Transformation Centre or UTC becomes one of the good examples to improve the social wellbeing for the public. UTC is one of the government initiatives in providing the urban community with key government and private sector services under one roof. With UTC, people around can come for many purposes and activities. The one-stop services that UTC provide are the services offered by the National Registration Department, MyEg, Public Transportation Commission (SPAD), Immigrations Departments, Department of Road and Transportation (JPJ), Lembaga Hasil Dalam Negeri (LHDN), and Companies Commissions of Malaysia⁶.

The main purpose of UTC is to provide the businesses and government services under one roof that enhances the societal wellbeing⁷. Based on the News Strait Times dated 6 of August 2014, the government targeted 123000 business registrations for the Goods and Service Tax (GST) which bring the social welfare for those who live around UTC⁸. Currently, the coverage of UTC is still not nation-wide. Thus, the researchers suggest the Network of Mosque as the solution to improve the societal wellbeing because mosques can be found including in remote areas.

Smart city is the concept for a specific vision of modern urban development. Smart city recognizes the growing importance of information and communication technologies (ICT) as drivers of economic competitiveness, environmental sustainability and general live ability⁹. Smart cities are expected to be the key to combining a sustainable future with continued economic growth and job creation which also contributed to the wellbeing of the society. According to the Department for Business, Innovation and Skills, UK 2013: "The concept is not static, there is no absolute definition of a smart city, no end point, but rather a process, or series of steps, by which cities become more 'liveable' and resilient and, hence, able to respond quicker to new challenges".

ITC consolidates and synergizes government agencies, private and NGO services in a collaborative approach thus saving effort, money and resources. ITC will connect all the Mosques in Malaysia through Network of Mosque (NoM) and provide collaborative front-desk services to the public and citizens. The services that can be offered in the ITC 1. program through the use of Network of Mosque (NoM) include:

1. Community classes

Community classes' purposes to educate people become better. This will help Muslim youth to learn how to read the Quran, learn about Islamic history, manners and Etiquettes, traditions of the holy prophet (SAW), Fiqh as well as memorization of the Quran. And for the Non-Muslim, they may join the language classes such as English and Arabic for their benefits. We can have Muslim volunteers who are fluent in Arabic and English to teach them.

Furthermore, ITC can organize special classes for the elderly women and men separately. As the fact is, that in our societies we find many elders who cannot even read the Quran. We will provide special classes teaching how to read the Quran properly and memorizing the small surah's of the Quran so that they can read in their prayer. This will also help the elders spent their time in a good matter and gives them the opportunity to meet each

other and strengthen the bond of Muslim brotherhood. These special classes can be offered to the non-Muslims as well. This can be a good example of Da'wah as well as mercy to all mankind.

2. Marriage-related services

Marriage is the Sunnah of our prophet. Based on the malay mail online.com dated march, 3rd 2014 there are 148,806 Muslim marriages in 2012, according to the Department of Islamic Development Malaysia (JAKIM) and a total of 65,993 marriages were registered in 2012¹⁰. This number shows a significant number of marriages each year. ITC will facilitate and help people who want to get married by providing marriage services. These services include marriage registration, certification and wedding event. For marriage event, NoM will also cooperate with other wedding organizers. Besides, it also provide birth certification and marriage consultation.

3. Zakat and Waqaf collection and distribution

Zakat is the practice of taxation and redistribution, including benefits contributed to poor Muslims, imposed upon Muslims based on accumulated wealth. It is obligatory for all who are able to do so, and it is considered to be a personal responsibility for Muslims to ease economic hardship for other Muslims to eliminate inequality among followers of Islam¹¹. As the center of Muslim community, Zakat can be collected through the mosque and it can be distributed to the needy people around the mosque. This will enhance the societal wellbeing, especially those living around the mosque because the mosque committee members know who are the needy and can distribute it to the right people on a timely basis.

4. Promoting Halal Product

NoM enables ITC to distribute and promote halal products easily. One of the conceptual solutions for promoting halal products via eHala¹⁴. All Portal which aim to improve the economic and social status of rural communities, SMEs, and entrepreneurs^{12,17}. ITC can collaborate with JAKIM/JAIN in promoting halal products.

5. Sermons and Islamic lecturers

As the center of Muslim society, Mosque can be used to share and demonstrate Islamic values. One of the ways to share Islamic teaching and value is through the lectures and sermons. Mosque also can be used as the place for those who want to understand and convert to Islam. New Muslim converts, Muslims and non-Muslims can attend the lecturers and learn basic Islamic obligations such as how to perform wudhu, prayers, fasting, zakat and hajj.

6. Umroh and Hajj learning

By harnessing ITC and the NoM, government can manage and monitor the Muslims who intent to perform Umroh and hajj easily. Mosque committee can collaborate with Tabung Haji for Umroh and Hajj learning classes. It includes the registration, classes and seminars,

and practical guidance and counselling on Hajj/Umroh. Besides that it facilitates the public to apply for passport, health test, payments, and providing updated information about hajj.

7. Medical and disaster relief center

Based on the WHO Statistics, Malaysia has a big number for the total expenditure on health per capita in Malaysia which is \$692¹³. With this conceptual solution, mosque can be used as the medical as well as disaster relief center. Thus, Muslims without insurance or those who are in need of emergency help can receive medical treatment and assistance. It can be coordinated with the Minister of Health Malaysia through the nearby hospitals to the mosque. With NoM, people can save their time and money because they do not need to go further if they need any treatment.

8. Home for the disable, needy, and traveller

Jabatan Kebajikan Masyarakat (JKM) has stated that one of their objectives is to help the disable people¹⁴. With NoM, ITC can collaborate with JKM to provide home and shelter facilities for disable people and needy. Not only that, mosque can be used as the lodging and shelter for travelers, especially for those who spread the Islamic messages (da'wah).

9. Eating place for the hungry and needy

ITC and NoM can help government to control and help the disable, hungry and needy people. Based on the Department of Statistics Malaysia, the poverty rate went up from 3.6 percent in 2007 to 3.8 percent in 2009 while the hardcore poverty rate remained at 0.7 percent¹⁵. Thus, by utilizing the NoM, ITC can collaborate with government agencies like JKM to feed the disable, hungry, and needy people. People may also give their Sadaqah to the mosque to feed the needy. In addition, ITC may organize weekly fasting program in the mosque.

10. ITC portal

ITC portal is an online website that consists of all information regarding the services and activities of ITC. Through the ITC portal, the public can get and update any information directly through their gadget and mobile apps. The portal provides online learning capabilities for the public who want to learn Islam via internet. The suggested activities as mentioned above may be able to contribute towards enhancing the societal wellbeing. With NoM, it is possible to develop and enhance the contribution and activities of ITC. The practice of people coming to the mosque at least for performing five times prayers, need to be harnessed by ITC/NoM. Apart from performing Islamic rituals, the people coming to the mosque five times a day may have potential and competencies for making contribution to the public through ITC/NoM platform. Mosques in the center of a city, town or village can be leveraged as a central of ITC/NoM activities because of its strategic location and closeness to the public. With NoM, ITC can provide more value-added services and activities to the society around the mosque.

PROPOSED CONCEPTUAL SOLUTION

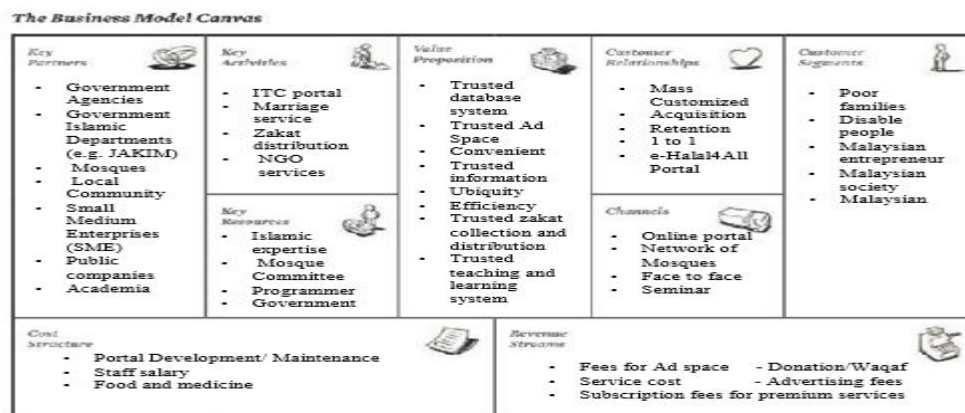
In order to create value-added services and activities, ITC can utilize the NoM to enhance

and improve the wellbeing of the society. Ibnu Khaldun, one of Muslim scholars, states that entrepreneur is seen as a knowledgeable individual and is instrumental in the development of a city-state where enterprises will emerge¹⁶. ITC may apply this concept by leveraging the NoM capabilities and its closeness to the public to improve societal wellbeing. Managing and leveraging the Mosque as the Community center can help the public involved in many value-added activities. Moreover, the public can find the mosque everywhere, which has a better reach to targeted audience in the society.

ITC can provide online portal that include all information and activities that are related to, integrated, and synergize with all of its key partners programs/activities. This portal will help people to view and get the updated news about ITC/NoM activities. It will include the procedure to apply marriage certificate, halal promotion, and eLearning materials. Also it will display information of events and programs that are to be organized by ITC/NoM such as skills development seminar/training/workshop and wedding events. Not only that, it also will include library facilities, business opportunities, khutbah, Islamic articles, and entrepreneurship/skills development articles that can be read by the public for free. Organizations and individuals can offer online consultation services via ITC portal. Thus, it can enhance further the wellbeing of people.

In order to achieve its goal, this program will collaborate with various government agencies including JAKIM, Ministry of Health Malaysia, Jabatan Kebajikan Masyarakat Malaysia, Zakat centers, and Tabung Haji Malaysia. Another collaborator will be the universities and academia in order to provide research outputs and educational program e.g. human capital and skill development, entrepreneurship, and Islamic finance and banking. As for the industry partners, this program is open to Muslim SMEs such as wedding organizers, restaurants and caterers. Mosque committee plays an important role in ITC. They will collaborate with the government, industry, academia, and citizen who will use the system.

Figure 1: Business Model Canvas (BMC)



CUSTOMER SEGMENTS

The Customer Segments are organizations and individuals that ITC/NoM has to serve. The customer segments include poor families, disable people, Malaysian organizations and companies, Malaysian entrepreneurs and SME owners.

COST STRUCTURE

The Cost Structure is the expenses to manage and operate ITC activities. The Cost structure includes Portal development and maintenance, staff salary, food for the poor and needy, seminars and classes, and medicine.

REVENUE STREAMS

The Revenue Streams are the revenue generated from the customer segments to cover the costs in operating ITC/NoM. The revenue streams include:

- Service fees for marriage and hajj program
- Proposal funds from the government
- Freemium service for Online Islamic learnings
- Booking fees for using the ITC/mosque facilities
- Advertising fees for advertisement
- Donation and Waqaf from the public and corporations

KEY PARTNERS

The Key Partner describes the organizations, people or group of people who that act as QHM partners to run the ITC Program. The key partners include:

- Private companies and SMEs such as wedding organizers, restaurants and food caterers, halal food producers
- Citizens that want to be volunteers
- NoM and mosque committees
- MoHR, MoE and institutions of higher learning for education, training and employment services
- Ministry of Health and hospitals for health services
- Social & Welfare Department for welfare and community development services
- JAKIM/JAIN, Zakat centers and Tabung Haji for Islamic related services
- Banks, MARA and Zakat centers for business development and entrepreneurship services

KEY ACTIVITY

The key activities conducted by ITC include:

- Community and youth, human and skill, business development and entrepreneurship classes/couching
- Marriage and family related services
- Collection and distribution of zakat and Waqaf
- Halal certification and promoting halal products/services
- Islamic education and outreach services e.g. Umroh/Hajj
- Government and healthcare services
- Home and shelter for the disable and needy
- Eating place for the hungry and needy
- NGO services

KEY RESOURCES

The key resources required to run and operate ITC program including staff, building, financial and experts on matters such as Islamic affairs, marriage and family relationship, NGO services, welfare and community development, youth development, human and skill development, business development and entrepreneurship.

VALUE PROPOSITION

The value propositions by offered by ITC in satisfying the customer segments include:

- Convenient, effective and efficient services
- Trusted zakat collection and distribution
- Trusted database system
- Trusted advertisement space
- Trusted information distribution
- Trusted teaching and learning system and content
- Ubiquitous and mobile apps

CUSTOMER RELATIONSHIP

The Customer Relationships is the type of relationship that used in the Islamic city Program. The purpose of this program is to providing the efficiency of different aspect of activities, including marriage, umroh, hajj, learning, waqaf, zakat and other related activities for the Muslim society.

CHANNEL

The channels are the platforms that communicate ITC program to its target customer segments. The Channels include Network of Mosque (NoM), ITC Portal, Face to face, and Seminar.

CONCLUSION AND FUTURE WORKS

During the era of Prophet Muhammad saw, the mosque was used to provide holistic and value-added services such as dakwah, justice, community, education, businesses & entrepreneurship, advisory and halal center for the purpose of societal wellbeing. Today, mosques are at every nook and corners in Malaysia, but the functions of the mosque are limited and are used for specific religious and spiritual purposes. To restore and revive the function of a mosque towards societal wellbeing in this world and hereafter, Islamic Transformation Center (ITC) program harnessing the Network of Mosque (NoM) is proposed for implementation as Proof-of- Concept in Malaysia. The ITC program shall leverage on the ICT capabilities including ITC portal, mobile apps and social media.

Later, the concept of ITC can be considered for national and international roll-out. Thus, ITC program acts as a model in demonstrating the meaning of "Rahmatan Lil Alamin", contributing values and mercy to all mankind in all walks of life.

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IMPROVING STRATEGIC MANAGEMENT OF FINANCIAL CAPITAL AND INTELLECTUAL CAPITAL USING ANALYTIC NETWORK PROCESS

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ABSTRACT

This research developed a hybrid model in order to improve a deficiency of well-known strategic management technique, that is balanced scorecard (BSC). BSC is a distinctive method which is widely applied for both business and academic purposes in several organizations all over the world since it could account for both financial capital as well as intellectual capital (IC). Nevertheless, among its comprehensive applications, the method was empirically identified a weakness of similar importance of either element or perspective level. Therefore, this research applied a proper multi-criteria decision making (MCDM) method that is analytic network process (ANP), in order to improve the problem since the method could account for the dependency characteristic of BSC, and also consider on both qualitative and quantitative data. The integration of BSC and ANP was applied with a real case study in academic institution, and this proposed model could identify priorities and weights of strategic objectives. Moreover, the obtained results also suggested that a degree of concentration of each BSC's perspective is dissimilar, and management concentration completely relied on the leading strategic objectives; those of internal process and learning and growth perspective. Moreover, it could be noticed that the critical objectives all clustered in the IC part only. This proposed model could identify critical strategic objectives of the organization which the managements could further consider to use organizational resources more efficiently.

Keywords: Intellectual Capital, Analytic Network Process, Strategic Management, Multi-criteria Decision Making, Balanced Scorecard

INTRODUCTION

In current business market, an intensive competition is an unavoidable circumstance anymore. To survive in this arduous situation, an organization, therefore, critically requires an efficient strategic management as well as a comprehensive decision making. Nowadays, strategic financial management considering on the physical and monetary assets is not sufficient any longer. This traditionally strategic focus was suspected as efficient business supervision. Since the 1980s, non-financial management has been significantly considered as another key success factor (KSF) for intensive competitive business. Therefore, non-financial management is now widely adopted in most well-known organizations, especially in developed countries, since it is empirically identified as sustainable competitive benefit (Solitander and Tidström, 2010). This untraditional management of non-financial or intangible asset is also formally known as intellectual capital (IC) management, and this

managerial method typically concentrates on three dimensions including human capital, structural capital and customer capital. Several strategic management methods have been proposed by many scholars over past decades, and one of methods both providing comprehensive and systematic system, and also concentrating on financial and IC capital is balanced scorecard (BSC).

BSC was developed by Kaplan and Norton (1992). It is an effective and comprehensive method to identify a strategic management approach of organization. This strategic method focuses not only on financial perspective as a traditional management but also on non-financial dimension. Because of the mentioned benefit and also other advantages of BSC, this tool has been highly accepted and also applied in various areas including business and academic perspective. Nevertheless, from the extensive usage, BSC was also identified for its deficiencies on a basis of method, and one of distinctive deficiency of BSC is this method considers on four strategic dimensions, but these dissimilar perspectives are similarly identified for their relative significance as the same degree (Lee *et al.*, 2008; Yüsel and Değdeviren, 2010). Moreover, all subsequently identified objectives or key performance indicators (KPIs) are also typically considered to be similar importance among their class. This mentioned deficiency will bring more sophisticated problem to organizations, especially when they specify too many strategic objectives and relative KPIs. The managements could not realize which strategic objectives or KPIs that they need to concentrate, so they are forced to making a decision by their intuition or experience. Therefore, from these characteristics, management levels could misconduct in resource allocation as well as strategic consideration. Hence, several studies tried to improve the mentioned issue, and multi-criteria decision making (MCDM) is one of mostly applied methods because of its distinctive advantages over this deficiency.

Although several MCDM methods including analytic hierarchy process (AHP), fuzzy AHP, technique for order of preference by similarity to ideal solution (TOPSIS) and analytic network process (ANP) were applied to improve BSC technique, however, from these methods, ANP is the most appropriate method to cope with the weighting issue and dependency among BSC's elements. Nevertheless, there are a limited number of researches that use ANP or fuzzy ANP with BSC (Ravi *et al.*, 2005; Lee, 2007; Leem *et al.*, 2007; Yüksel and Dağdeviren; 2010; Poveda-Bautista *et al.*, 2011; Atafar *et al.*, 2013; Boj *et al.*, 2014). Moreover, most of these studies applied ANP and BSC to prioritize the KPIs in scorecard and also to evaluate the alternatives. There is still no study that applied the ANP with BSC in order to select only potential strategic objectives of BSC. As formerly mentioned, several strategic objectives can bring enormous works and resource consumption. If the firm could not indicate critical strategic objectives, then all activities must be focused on and vast resources must be also used. Therefore, in this study, ANP is applied with BSC in order to prioritize and also to suggest proper strategic objectives of strategic management in an academic institution.

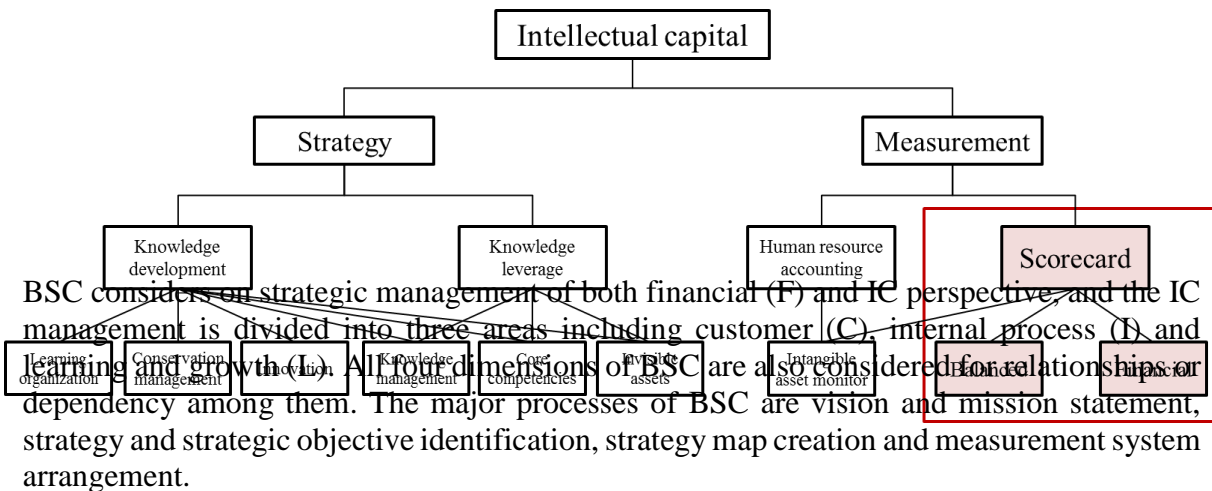
This paper is organized in four sections as follows. The coming section provides all relative theories applied in this study, after that, the proposed model is declared. Later, the model is applied with a real case study in a university, and then the obtained results are discussed. Finally, the conclusion of this research is suggested.

METHODOLOGY

BALANCED SCORECARD (BSC)

Kaplan and Norton proposed BSC in 1992. BSC is a systematic technique, and also a comprehensive strategic management method that inclusively considers performance measurements. The method provides an approach to transfer vision and missions into strategic objectives and KPIs. BSC changes the traditional way of strategic management mainly focusing on financial capital by including the IC consideration into the BSC model also. Moreover, BSC is also indicated as major root of IC in a measurement part as depicted in Fig. 1.

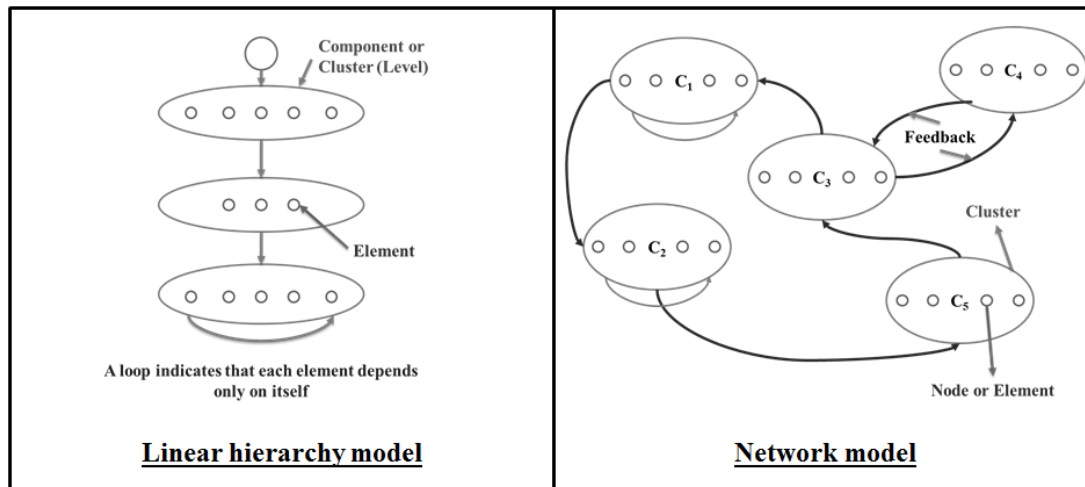
Fig. 1: Conceptual root of intellectual capital (Roos *et al.*, 1998)



ANALYTIC NETWORK PROCESS (ANP)

ANP is a MCDM method that improves some deficiencies found in AHP. Both AHP and ANP methods are developed by Satty in the 1970s and 1990s, respectively. With the ANP method, a multi-criteria decision problem is constructed in a more realistic form, that is a network model which is dissimilar to AHP creating a model in hierarchy. The typical models of these methods are depicted in Fig. 2. ANP has distinctive attributes considering on dependency characteristic among all focused elements, and moreover, also accounting in both qualitative and quantitative data.

Fig. 2: AHP and ANP model (Saaty, 2009)

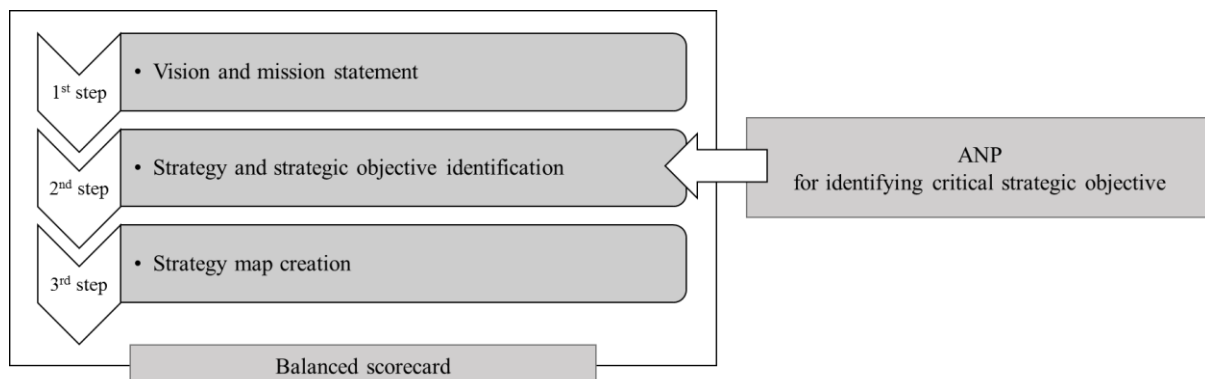


The processes of ANP are (1) identifying cluster and element, (2) making pairwise comparison, (3) calculating unweighted supermatrix, (4) computing weighted supermatrix (5) raising weighted supermatrix to limiting power called limit supermatrix and (6) obtaining results.

THE PROPOSED FRAMEWORK

This study applies two methods including BSC and ANP, examined in the former section as a framework of this study. BSC is used for making a systematic strategic management of an organization and ANP is applied along with the BSC in order to identify critical strategic objective and also to reduce a number of unimportant strategic objectives. Therefore, from the advantages of this hybrid method, a company can concentrate only on crucial strategic objectives and also intensively invest and use limited resources more efficiently. The proposed model of this study can be concluded and presented as Fig. 3.

Fig. 3: The proposed model



A CASE STUDY

This study applied the formerly proposed framework to a real case study of an academic institution in order to suggest the new approach of strategic management to the organization.

At the beginning, all existing strategic informations of focused organization were examined, and the vision and missions of the organization were stated four years ago as follows:

Vision : An internationally leading college aims toward the excellence in creative technology and innovation

Missions: Providing undergraduate and graduate study concentrating on moral, ethic, international standard and academic excellence in knowledge management, software engineering, animation and information technology

- Producing and distributing high quality researches that conform to requirements of education, social, business and community
- Encouraging network creation and providing academic service to private and public organization of both domestic and international to improve the efficiency of human resources
- Applying organizational knowledge to encourage and promote culture, environment, conservation of arts, and creation of social responsibility
- Maintaining and developing academic relationships with academic institutions in Asia and international
- Developing efficient management system by applying information technology, and also developing and encouraging human resources to creatively improve their works

This college identified six strategies to respond and also to drive these mentioned academic missions, and fourteen strategic objectives presented in Table 1 were set as the intentions of strategies. Managements of academic institution dedicated and also used substantial resources to these diverse strategic objectives. Therefore, this study aims to reduce the number of strategic objectives using the proposed method.

Table 1: Strategic objectives of the college

Strategy	Acronym	Strategic objective / Perspective of BSC	
S1	G1-1	Arranging study formats focusing on work integrated learning	I
	G1-2	Arranging excellent education in national level	I
	G1-3	Arranging international program	I
	G1-4	Providing resources encouraging graduates' employment	C
S2	G2-1	Conducting research involved by students	I
	G2-2	Creating research cooperating with international academy	I
	G2-3	Creating research connecting with industries	I
S3	G3-1	Providing excellent academic services involved by students	C

Strategy	Acronym	Strategic objective / Perspective of BSC	
	G3-2	Providing excellent academic services aiming to connect with industries	C
	G3-3	Providing excellent academic services focusing on international level	C
S4	G4-1	Integrating researches with arts, religious and local cultures	I
S5	G5-1	Developing universality by creating academic networks within regional and also international level	I
S6	G6-1	Developing English proficiency of staff	L
	G6-2	Developing up-to-date knowledge and skills of staff	L

ANP was then applied to identify critical strategic objectives of the studied college. The pairwise comparison and other relative questionnaires were created and then answered by the top executive of the organization, that is the dean. The collected data were later input to the Super Decision software version 8.5 for calculating the unweighted supermatrix, weighted supermatrix (shown in Table 2) and final priorities (presented in Table 3).

Table 2: Weighted supermatrix

		C					I							L	
		G1-1	G1-4	G3-1	G3-2	G3-3	G1-2	G1-3	G2-1	G2-2	G2-3	G4-1	G5-1	G6-1	G6-2
C	G1-1	0.000	0.357	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	G1-4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	G3-1	0.387	0.076	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	G3-2	0.070	0.039	0.857	0.000	0.000	0.000	0.000	0.000	0.000	0.667	0.000	0.000	0.000	0.000
	G3-3	0.044	0.028	0.000	0.000	0.000	0.000	0.400	0.000	0.000	0.000	0.000	0.400	0.000	0.000
I	G1-2	0.000	0.374	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	G1-3	0.000	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.444	0.000	0.000	0.350	0.000	0.000
	G2-1	0.500	0.067	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	G2-2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.111	0.000	0.000	0.000	0.050	0.000	0.000
	G2-3	0.000	0.000	0.000	0.857	0.000	0.000	0.000	0.889	0.000	0.000	0.000	0.000	0.000	0.000
	G4-1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	G5-1	0.000	0.000	0.000	0.000	0.857	0.000	0.400	0.000	0.222	0.000	0.000	0.000	0.000	0.000
L	G6-1	0.000	0.000	0.000	0.000	0.143	0.000	0.200	0.000	0.333	0.000	0.000	0.200	0.000	0.000
	G6-2	0.000	0.000	0.143	0.143	0.000	1.000	0.000	0.000	0.000	0.333	1.000	0.000	0.000	0.000

Table 3: Final priorities and weights of strategic objectives

Rankings	Strategic objective	Acronym	Normalized Weight
1	Developing universality by creating academic networks within region and also <u>international level</u>	G5-1	0.363217

Rankings	Strategic objective	Acronym	Normalized Weight
2	Providing excellent academic services focusing on <u>international level</u>	G3-3	0.260935
3	Developing <u>English</u> proficiency of staff	G6-1	0.185346
4	Arranging <u>international program</u>	G1-3	0.168210
5	Creating research cooperating with <u>international</u> academy	G2-2	0.022292

The obtained results identified only five critical strategic objectives including G5-1, G3-3, G6-1, G1-3 and G2-2. These selected objectives then were applied along with unselected objectives to creating strategy map of the college as shown in Fig. 4. In typical BSC technique, after the strategy map was created, a measurement system would further generally be constructed for assessing the succession of strategic management. Nevertheless, in this study, a scope was only limited at the strategy map creation process.

RESULTS AND DISCUSSION

The strategy map presents that the current strategic management of this focused college concentrated on only intellectual capital dimension including customer, internal process and learning and growth. All fourteen strategic objectives were specified for these dimensions. On the other hand, there was no any objective determined for financial perspective, since the college is probably a nonprofit organization that had partial financial supports from government as well as the parent university.

Moreover, from the application of proposed model, the obtained results further suggested that only five strategic objectives were identified a weight of importance whereas nine objectives were identified nothing. Among the five critical objectives, one of distinctively mutual purpose is the concentration on international aspect. Moreover, these weighted objectives were only classified in internal process and learning and growth perspective which were leading objectives, and also parts of IC. On the other hand, there was no selected objective in any lacking objective types; those of financial and customer dimension. Therefore, in this case, the academic institution totally devoted to the strategic IC management including only the human capital and the structural capital management. Furthermore, from the obtained results, weights of strategic objectives could also suggest the degree of concentration in each BSC's perspective that totally differs from the typical BSC. The differences can be presented in Table 4. Therefore, from the results, it can be concluded that the leading objectives, especially of internal process are highly crucial for this academic institution and moreover, the organization also fully concentrated on becoming an international standard college.

Fig. 4: Strategy map

Strategy map

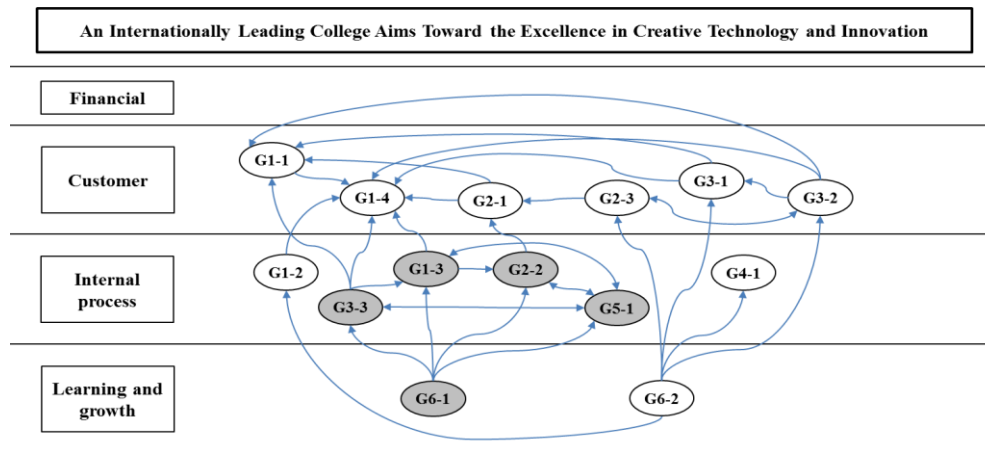


Table 4: Comparing degree of concentration in each BSC's dimension

BSC's perspective	Weight of typical model	Weight of the case study
Finance	Not identified (The importances are generally assumed to be equal)	0.000000
Customer		0.000000
Internal process		0.814654
Learning and growth		0.185346

Moreover, the obtained weights were not only applied to identify a degree of concentration on strategic objectives but also used to reduce a number of strategic objectives that would further affect a number of KPIs as shown in Table 5.

A large number of strategic objectives or KPIs implies massive resources consumption and strategic and relative operations. Therefore, the application of proposed method not only reduces amount of objective and KPI but also could assist the organization to focus on critical points and use resources more efficiently. Nevertheless, although the proposed model could suggest critical strategic objectives and also decrease the unimportant ones, reduction of the objectives could affect the management of the organization also. For example, in this case, if the college focused only on the weighting objectives, five strategic objectives that covered only 36% of all considered strategic objectives and only half of BSC's perspectives; those of internal process and learning and growth perspective, would be attended and improved. Therefore, the abrogation of strategic objectives or the reduction of financial support and resources on these expectations may be an alternative that should be empirically examined in the future work.

Table 5: Number of strategic objectives and KPIs from the typical method and proposed method

	Current management	Suggested management

		(by proposed method)
Number of strategic objectives	14	5
Number of KPIs	23	7

CONCLUSION

Currently, business management is diverted from financial concentration to tangible and intellectual capital focus. Therefore, strategic management that is one of critical managerial operations is also improved to cope with this alteration. BSC, a strategic management technique accounting on tangible and intangible assets, has been widely accepted and applied in several distinguished organizations because of its comprehensive consideration. Nevertheless, among its applications, BSC is identified the weakness of its basis about similar importance of BSC's perspectives and elements. From this deficiency, managements need to concentrate on all objectives or elements either crucial or unimportant at the same effort. Therefore, to improve this issue, this study applied an appropriate MCDM method known as ANP. This MCDM method could improve the deficiency of BSC by considering on the dependency among elements in the scorecard, that is a basis characteristic of BSC and then delivering weighting of all considered elements also. Thence, the calculated weights of objectives could be applied to identify the critical strategic objectives. Moreover, this approach could also reduce a number of objectives as well as KPIs in BSC. From this improvement, the managements could plan to efficiently apply limited resources of organization to those critical strategic objectives.

In this study, the proposed method integrating BSC and ANP was applied with a real case study in academic institution, and the obtained results suggested that the degree of concentration on each perspective was dissimilar. From the application results, strategic management totally exerted intentions to intellectual capital, particularly human capital and structural capital. I

other words, strategic management completely focused on leading objectives which were compositions of internal process and learning and growth perspective in BSC. Nevertheless, in another point of view, the managements did not pay any attention to financial and customer perspective that are lacking objectives also. The hybrid method could deliver weights of strategic objectives, and identify five critical objectives which could be consecutively applied for reducing amount of KPIs from twenty-three to seven. With these decreased objectives and corollary KPIs, the executives could then only devote to critical remaining strategic focuses.

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STUDENT'S PERCEPTION TOWARDS ENTREPRENEURIAL CAREER : A DESCRIPTIVE ANALYSIS

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ABSTRACT

This paper presents a descriptive analysis of student's perception towards entrepreneurial career. Self-report written questionnaires were distributed to final year students of faculty of economics and business Universitas Padjadjaran as samples. The research found that the students of faculty of economics and business Universitas Padjadjaran have positive attitudes toward entrepreneurship, positive perception of subjective norms and high self-efficacy. Control variables of respondents namely gender, profession of father and profession of

mother do not significantly affect those three variables, except for profession of mother that have correlation with variable of self-efficacy.

Keywords: Entrepreneurship, Entrepreneurial career, Student's perception, Attitude towards entrepreneurship, Subjective norm, Self-efficacy

INTRODUCTION

Entrepreneurship activities are believed can be a tool to boost economy growth and to solve other economy problem such as unemployment (Sondari,2014). Universities have an important role in generating new entrepreneurs. In this case, Faculty of Economics and Business, Universitas Padjadjaran have full awareness of this by including entrepreneurship-related courses in the curriculum, as well as encouraging students to undertake activities related to entrepreneurship outside the curriculum. However, when compared with the general trend of entrepreneurship within young people and which is also being encouraged by government, the interest to take entrepreneurship as the minor of study is not very encouraging in terms of number. Beyond the curriculum, students who attend programs related to entrepreneurship such as business plan competitions, business incubators, as well as proposals creativity of students in the field of entrepreneurship, are much less than the number of students of the faculty of economics and business Universitas Padjadjaran in overall.

Thus, there is a need for studying the student's perception towards entrepreneurial career, to be used as a basic consideration in evaluating learning programs related to entrepreneurship, both within and outside the curriculum in the faculty of economics and business Universitas Padjadjaran. Therefore, this paper aims to present descriptive analysis of student's perception towards entrepreneurial career.

LITERATURE REVIEW

Researcher define career as an advancement within an organization throughout one's life (Lau, 2002). According to Coetzee that was cited by Farrington, Gray and Sharp (2011), a career involves a sequence of jobs, roles, and positions carried by an individual during his tenure. Farrington, Gray and Sharp then describes their definition of career as an individual experiences during their professional lives, through employment, roles and tasks that he did (Farrington, Gray and Sharp,2011).

Although many scholars have mentioned the term 'entrepreneurial careers' in their papers, most of them do not define the term explicitly (See Lau, 2002; Ahmed et. al., 2010). According to Farrington, Gray and Sharp (2011), entrepreneurial career refers to "own and manage their own small businesses". The same opinion also stated by Moy, Luke and Wright (2003) that cited Bird (1989) to describe entrepreneurial career as the process of deciding to start and continue to operate as an entrepreneur. When discussing about the career of the entrepreneur, we must realize that it is different with the traditional careers within the organization (Lau, 2002). When traditional career refers to progression or sequence within lifetime of work in organization, it does not seem appropriate to be used as definition of entrepreneurial career, because entrepreneurs do not have promotion in term of the movement of job to the higher level in the organization. In this context then, it seems more appropriate to define a career as a sequence of lifetime employment-related roles. Thus, we define

entrepreneurial career as a decision to make one own business and to play a different role in running businesses and engage in entrepreneurial activity during one's working life.

To develop a framework that will be used in examining perception of student towards entrepreneurial career, we choose theory of planned behavior (TPB) from Ajzen (1991). TPB is considered relevant for examining career choice-related variables (Farrington, Gary & Sharp, 2011; Autio, et.al 1997). The antecedents variables in Ajzen's (1991) model as listed by Engle,et.al (2010), consisting of (1) attitude or desire to the proposed behavior; (2) social norms that are considered subjective and people's opinions about the proposed behavior (especially the opinions of the people who influence); and (3) perceived control, or feasibility of the proposed behavior.

METHODOLOGY

This study is a descriptive study with a cross-sectional design, that is frequently used and acceptable in similar types of research (Ajzen, 1987). The unit of analysis of this study is the students who are studying at the Faculty of Economics and Business, University of Padjadjaran. Self-report written questionnaires were distributed to 150 final year students. Final year students were selected because they had entered the stage where they have to decide their career choices when they are graduated, so that their choice will be more responsible, than their juniors' (Frazier & Niehm, 2008). Matlay (2005) also noted that this kind of research is very relevant to be conducted in business school.

The study included three variables, namely attitude towards entrepreneurship; subjective norm; and self-efficacy. Attitudes toward entrepreneurship operationalized as evaluative responses of individuals towards entrepreneurship. Subjective norm operationalized as the degree to which people who are important to the individual approving the behavior in question. Self-efficacy is operationalized as the degree to which an individual believes his ability to do something. The indicators of all variabels are illustrated in table 1.

Table 1: Indicators of variables

Variables	Indicators
Attitudes towards entrepreneurship	<ol style="list-style-type: none"> 1. Challenge 2. Apply knowledge 3. Autonomy 4. Self-expression 5. Welfare 6. Economic goal
Subjective norms	<ol style="list-style-type: none"> 1. Family 2. Close friend 3. Education environment 4. Society
Self-efficacy	<ol style="list-style-type: none"> 1. Possibility of success 2. Difficulty level 3. Ability

Before the instrument being used in this research, it had been tested for its validity and reliability. Based on the validity test using SPSS 17.0, the whole items in variable attitudes

towards entrepreneurship are valid; items 3 and 4 on the subjective norm variable are not valid; and whole items on self-efficacy variable are valid. Those items which are not valid then were removed and were not included in subsequent testing for reliability. In this study, the reliability test was performed using Cronbach Alpha Formula techniques. Because the Cronbach alpha value for all three variables are more than 0,6, then all variables are considered reliable.

DISCUSSION

The number of respondents who return the questionnaires which were filled out completely as many as 122 people. Of these, the proportion of respondents by sex was close to the ideal, which is 49% for men and 51% for women. It is hoped that the research would not have a gender bias. Associated with parental background which usually affect the career choice of individuals, most of the respondents had a father with a job as an employee of a private / state enterprises (37%), the second most is civil servants (31%) and third place are entrepreneurs (18%), and there are also respondents who chose other fields, namely those who had fathers with professional professions such as doctors, dentists, and others. Unlike the case with fathers profession, the majority of respondents (45%) had a mother who is a housewife (in the questionnaire is listed as other professions), as many as 24% of respondents had a mother with a job as a civil servant who took second place and private employees in the third place as much as 19%. Profession as entrepreneur, ranks in the last with only owned by 12% of respondents.

First variable, attitudes toward entrepreneurship, have six indicators, namely : challenges, application of knowledge, autonomy, self-expression, welfare, and economic goal. When respondents were being asked whether the profession of entrepreneur provide challenges to establish their own standards, the majority of individuals tend to have positive attitude, and only 4% of respondents who had negative attitude over these items. The next aspect that was being asked, whether the entrepreneurial profession can be a means to apply knowledge, was answered positively by the respondents, with 60% of respondents answered agree, and 30% of respondents answered strongly agree. This is probably because all respondents were university students who studied economics and business, which have studied related matters of business and entrepreneurial professions. Profession as an entrepreneur is also often associated with autonomy or freedom in decision making. This is also reflected in the total 94% of respondents who were more favorable to the statements in the questionnaire related to this aspect. When the entrepreneurial professions associated with the freedom to express themselves, as much as 33% of respondents answered strongly agree and 51% responded agree, the remaining 16% of respondents responded negatively for this statement. Positive attitude that is shown by the majority of respondents, might have correlation with age, that in their age, university students tend to choose the things that give them the freedom to express themselves, and tend to avoid things that curb their freedom. Unlike the previous aspects, in the welfare aspects, respondents were slightly less positive, and as much as 29% of respondents to be negative. It is shown that respondent perceived that the entrepreneurial profession can provide lower welfare than other professions. Respondents who do not agree with this statement might use the information they acquire everyday, that their parents who do not have entrepreneurial profession also have a high welfare. If in the previous statement,

respondents were asked to compare the welfare generated by entrepreneurial professions with other professions, in the next aspect, respondents were being asked for a response to the statement that the entrepreneurial profession gives them the possibility to be able to achieve the economic goals set by their own. The answer is a bit of an increase over the previous aspects, as many as 80% of respondents gave positive response. This means that although in term of welfare there are other professions that might give give higher welfare, but the entrepreneurial profession is considered sufficient to achieve their economic goals.

The second variable to be studied is the subjective norm, or the support of the people close to individual in affecting the individual decision to become an entrepreneur. The first indicator examined is the presence of family support. For this indicator, the majority of respondents agreed that their family would be supportive if they choose to be entrepreneurs. The second indicator is the support of close friends. In this indicator, majority of respondents agreed, with higher yields compared with indicators of family support. It is quite relevant where the parents are usually more directive and have a desire for a profession that is run by individuals, compared with close friends.

The third variable in this study is the level of self-efficacy which is an individuals' belief in their ability to do something. The first indicator used is to measure the extent of the respondents consider themselves to be successful as entrepreneurs. As many as 88% of respondents have confidence in the success in entrepreneurship, and only 12% of respondents who did not agree. The second indicator is the extent to which respondents consider that entrepreneurship is in fact not a difficult thing. Respondents who answered disagree and strongly disagree, that means entrepreneurship is considered difficult, are quite a lot, if compared to the previous answer, which is 20% of the respondents. This is probably due to the entrepreneurial practice that is considered not as simple as in theory. Although the respondents are students of the faculty of economics and business, they realize there are other factors beyond the knowledge they have learned that is important for practice entrepreneurship. However, in general they still have confidence in the ability (skills and knowledge) that is sufficient to become an entrepreneur.

In this research, we try to explore the role of control variables, namely gender, profession of father, profession of mother. We conducted the ANOVA test to test whether the differences in those characteristics are significant. ANOVA test results listed in the table 2 below:

Tabel 2 : Result of One-path ANOVA

	Gender	Profession of father	Profession of mother
Attitude towards entrepreneurship	0,476	0,969	0,424
Subjective norms	0,701	0,808	0,679
Self-efficacy	0,827	0,584	0,004

Table 2 shows that all test results value of more than 0.05, except for items on the self-efficacy

for variable control mother's profession. It means that control variables in this study, except for mother's profession, are not have significant differences in respondents' answers to the research variables. Profession of mother, significantly have correlation with self-efficacy variable. To examine which categories of mother's profession that contribute in delivering these differences, we use Bonferroni post-hoc test (see table 3).

Tabel 3 : Bonferroni post hoc test result

(I) Profession of mother	(J) Profession of mother	Mean Difference (I-J)	Std. Error	Sig.
Civil servant	Private employee	-1,17091	,45923	,072
	Entrepreneur	-,94483	,52309	,441
	Housewives	,16426	,37744	1,000
Private employee	Civil servant	1,17091	,45923	,072
	Entrepreneur	,22609	,54585	1,000
	Housewives	1.33518*	,40841	,008
Entrepreneur	Civil servant	,94483	,52309	,441
	Private employee	-,22609	,54585	1,000
	Housewife	1,10909	,47909	,134
Housewife	Civil servant	-,16426	,37744	1,000
	Private employee	-1.33518*	,40841	,008
	Entrepreneur	-1,10909	,47909	,134

From the post hoc test, it was revealed that categories of profession of mother that contribute to the correlation between profession of mother and self-efficacy are private employee category and housewife category (marked with * in the table). It means, those respondents whose a mother who worked as a private employee and housewife have different levels on self-efficacy compare to those who have a mother with a profession as civil servants or entrepreneur.

CONCLUSSION

This paper has presented the descriptive analysis of student's perception towards entrepreneurial career. The findings have shown that the students of faculty of economics and business Universitas Padjadjaran have positive attitudes toward entrepreneurship, positive perception of subjective norms and high self-efficacy. Control variables of respondents

namely gender, profession of father and profession of mother do not significantly affect those three variables, except for profession of mother that have correlation with variable of self efficacy. From result of the study, it has been revealed that respondents whose a mother who worked as a private employee and housewife have different levels on self-efficacy compare to those who have a mother with a profession as civil servants or entrepreneur.

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EMPIRICAL STUDY FOR SKILLS MANAGEMENT APPROACH TO MANAGE AND RETAIN THE HIGHLY-SKILLED BLUE COLLAR WORKERS

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ABSTRACT

The paper is a research paper which aims to verify the practicability of a derived theoretical framework for skills management process to manage and retain highly skilled blue collar workers in the high technology manufacturing industry in Malaysia. The high technology manufacturing industry refers to Electrical and Electronics (E&E) industry. The highly-skilled blue collar workers tend to quit and join another company in the E&E industry when they have been offered with better opportunities. Therefore, a solution should be studied to manage and retain these highly-skilled blue collar workers in the E&E industry. The authors apply the method of study – semi-structured and in-depth individual interviews to collect data to verify the developed theoretical framework for the skills management process. The skills management process verified consists of skills planning, skills development, skills transfer and skills retention and it is a looping process. The concept of skills management developed by the researchers is a new and original concept. It has not been done by other researchers in the field of management science.

Keywords: Skills Management, Skills Planning, Skills Development, Skills Transfer, Skills Retention, Highly-skilled blue collar workers

INTRODUCTION

The Electrical and Electronics (E&E) industry is chosen for the study because Malaysia government has categorised it as one of the National Key Economic Areas (NKEAs) in Malaysia. Malaysia government defined an NKEA as a driver of economic activity that has the potential to contribute a quantifiable amount of economic growth to the Malaysian economy directly (PMO, 2010). The E&E industry in Malaysia consists of four types of business natures: Semiconductor, Solar, LED and Industrial Electronics (ETP, 2011). The different manufacturers in these business natures are competing for both business and employment of workers. Employees in the E&E industry tend to quit and join a new company

when there are new job opportunities in the same industry. The manufacturers need to spend large quantity of resources to retrain a junior blue collar worker to become a highly-skilled blue collar worker. Therefore, it is a great talent loss to the manufacturers in the E&E industry when a highly-skilled blue collar worker quits and leaves from the current company. These workers accumulated skills which are irreplaceable by machinery in their work areas. Therefore, the companies in the E&E industry must develop solutions to manage and retain these highly-skilled blue collar workers.

LITERATURE REVIEW

Skills of employee are a key driver for effective performance and productivity. Therefore, skills of employees are the most valuable asset of a company. Greater effectiveness and better job satisfaction for employees can be achieved by successful skills building (Paulsson et al., 2005). In addition, successful skills building may lead to positive impact upon business performance (Homer, 2001). The authors think that organisations need to better understand the skills of their employees to best utilise them in competitive business environment at present. Skills indicates competency in performing a task (Noe, 2008). A person's skills level is demonstrated by how well he or she is able to carry out specific actions (Blanchard & Thacker, 2010).

The primary purpose of Skills Management is to allocate the appropriate skills at the correct place, at the right time, at optimal costs (Kreitmeier et al., 2000). Skills Management is getting more concern in all areas of human resource management since it enables organisations to assess competencies and to determine skills gaps. Therefore, an organisation is actually managing its business when it manages skills of the workforce.

METHODOLOGY

The research discovers and to gain insights about the topic of skills management (Mark Saunders and Philip Lewis, 2012). Therefore, it is an exploratory study and it is qualitative in nature. The research is a case study. The authors have selected Company X, a high technology manufacturing company in Malaysia as the subject of study. The research applies the semi-structured interviews and in-depth individual interviews for data collection to verify the derived theoretical framework about skills management process. The research explores attitudes, behaviour and experiences of respondents using interviews (Mukesh Kumar and et al., 2013). The research applies in-depth interviews to get in-depth opinions from the respondents. The authors interview the managerial staffs, engineers and highly-skilled blue collar workers in the Company X for data collection.

DEVELOPMENT OF THEORETICAL FRAMEWORK

Skills management process developed by the authors consists of four stages: Skills Planning, Skills Development, Skills Transfer and Skills Retention.

SKILLS PLANNING

In the stage of skills planning, electronics and electrical (E&E) companies need to know the targeted skills that are required for the jobs of highly-skilled blue collar workers. E&E companies need to develop activities to assess, analyse and build these skills. In addition,

E&E companies need to know what trainings are needed for their highly-skilled blue collar workers in skills development at the next stage.

According to Armstrong (2001), a few practical questions are focused in the stage of skills planning:

- What are the existing skills possessed by the highly-skilled blue collar workers of E&E companies?
- What skills are needed for these highly-skilled blue collar workers now and in the future in order to suit the organisational needs?
- How competent these highly-skilled blue collar workers in learning new skills?
- What trainings are needed for further skills development of these highly-skilled blue collar workers?

SKILLS DEVELOPMENT

Skills Development is to develop human resources empowered with the necessary and continuously upgraded skills to obtain decent employment opportunities and to ensure the competitiveness of the workforce in the dynamic global market. Thus, Skills Development aims to increase the productivity and employability of workforce (Agency, N. S. D., 2013). Skills developed through formal education, training or experience is important elements for development of economic. There are a number of developed countries such as United Kingdom has been paying concern on the issue to create skilled workforce (Green and Ashton, 1992).

According to the International Labour Organization (ILO), “Skills development is of key importance in stimulating a sustainable development process and can make a contribution in facilitating the transition from an informal to formal economy. It is also essential to address the opportunities and challenges to meet new demands of changing economies and new technologies in the context of globalization.”

SKILLS TRANSFER

Skills transfer can be defined as the process by which the skills developed by a creator is practiced and utilised by an applier (Khalil, 2000). Skills transfer becomes more complicated because there is a differentiation in terms of feelings and attitudes which are needed in both organisations for two sets of people with different skills, values and priorities to convey capability successfully from one to the other (Cetindamar, Phaal, & Probert, 2010).

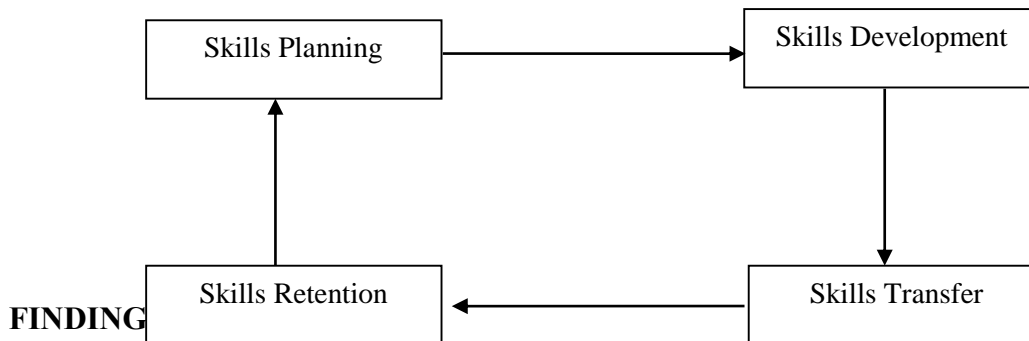
Skills transfer in this context may occur internally and externally. The authors point that, skills transfer internally refers to the transfer of skills which occurs when senior staffs train and teach some specific skills to junior staffs working within an organisation. Whereas skills transfer externally refers to the transfer of skills which occurs when the external skills experts train and teach the internal staffs of an organisation.

Chen (1996) noted that the process of skills transfer to developing countries can be defined as “the process whereby skills in some form changes hands from a person or organisation who possesses it to another individual or organisation”. Skills transfer can be defined as “transfer of skills and know-how to a company or a department for integration into their product or process” (Bidgoli, 2010, p. 330).

SKILLS RETENTION

Skills retention can be achieved when highly-skilled blue collar workers are retained at the workplace. Retention of highly-skilled blue collar workers is recognised as a crucial issue. Additional time and costs need to be spent to recruit, select and train new employees when retention levels are low. These could have been spent on other meaningful activities such as performance improvement and career development of workers (Abbasi and Hollman, 2000; Muchinsky, 1997; Sightler and Adams, 1999). Sightler and Adams (1999) stated that when the retention rates are low, companies may experience a decrease in the level of performance, efficiency, morale and an increase in the disorder of social networks, group cohesion, and communication. The economic results could be demoralizing for companies when they fail to retain their workers (Day, 2000, p. 589). The theoretical framework for skills management process consists of four stages: skills planning, skills development, skills transfer and skills retention.

Fig. 1: Schematic Diagram for Theoretical Framework developed by the authors



FINDING

Skills planning in the Company X are initiated when the expected order and projection of sales originated from the customers are ready. Both expected order and projection of sales are based on the requirement of the customers. Company X will determine the type and quantity of products to be manufactured based on the expected order and projection of sales. Next, it will indicate what sorts of skills and number of manpower that is required to manufacture the products. Then, manpower planning is needed and there are few activities will be done in the manpower planning. The Human Resources department will compare the required number of manpower with the existing number of manpower in the Company X. If there is not sufficient of manpower to manufacture the products, Company X needs to hire additional workers for the production. On the hand, if the needed skills to manufacture the products are not available, Company X needs to train the existing employees of the company. For instance, some of the employees are sent to overseas for external training to gain the skills required.

Company X is applying skills matrix (with four levels) to determine the skills level of the highly-skilled blue collar workers. Level 1- beginners, Level 2- someone who can do the job, Level 3- someone who can train others, Level 4- someone who are able to develop or coach others. Skills development is done when Company X trains a worker from level 2 to level 3 or 4, to up-skill a worker from one skill to more than one skill. The company train a worker with a new skill based on their business requirement. The company develops the skills of the workers to meet their business requirement. For instance, if the workers do not have sufficient skills for certain area, the company will look into alternatives to develop the skills needed for the workers (through internal training, external training or self-development).

Skills development is about work experience developing. There are a few methods to achieve this purpose. Firstly, test paper (examination) in the form of objective and subjective will be given to the workers to exam their level of mastery about a particular skill they possess. Secondly, the superior will monitor the performance of the workers to examine whether they able to perform well in their job using the skills they possess. Thirdly, the company will provide promotion and salary increments as an appreciation to induce the workers to utilise their skills to perform better in their jobs.

Skills transfer is about learning a new manufacturing process. The workers will be transferred to learn another new manufacturing process after they are familiar with the previous manufacturing process. The outstanding workers will be chosen to transfer skills to other workers by providing on-the-job training to other workers. Company X involves those workers who are expert in skills to train others. The company do not have official buddy

programme. Part of the requirement for workers is that they need to transfer skills to other workers.

- Internal skills transfer : It is happens between the various level to the next level or between the employees. Normally employees have to go through training and coaching. It is basically a transfer of skills. Some people named it a retraining. It is about how a worker transfers skills that he/she possess to another worker.
- External skills transfer : It is transferred by the external people to the internal staffs. Company X sends the workers out to expert training providers and to technology provider to learn up/ to have technology transfer. The company will have the capability after the workers have the skills transfer. External skills transfer normally involves overseas training, equipment or knowledge transfer.

Skills retention - Company X retains skills by retaining the highly-skilled blue collar worker working in the company. The company retains the workers who have the skills. In conjunction with this, the company offers compensation package, training and development programme, existing skills development programme to retain the people. To retain the workers, the existing skills have to be learnt by other workers. By doing that, when the workers who are expert in skills retire, the company still can retain the skills within the company. It is more on the activities which the company is focusing to retain the workers. The company retains workers by taking workers to retrain other workers. The company should study on how to retain the information by converting their skills and experience into something which can be stored. The company needs to translate the skills that are possessed by the workers into something that other workers can learn. The compensation strategy of Company X is to compensate workers for the skills which they possess. It is based on their productivity and the additional skills which they possess. The workers will be paid extra based on each additional skill which they possess.

Skills retention is done by providing decision making to the workers. The authorisation and responsibility is given to the workers to retain the workers in the company. In addition, there is annually agreement about salary, promotion and rewards to retain skills by retaining the workers at the company.

The skills management process is a looping process. The process begins with skills planning. Company X must plan on the skills required for the highly-skilled blue collar workers based on the expected order and projection of sales originated from the customers. Expected order and projection of sales will indicate the required skills necessary to manufacture products ordered by the customers of the Company X. Company X will face difficulty to accommodate to the need of skills required if the company do not have proper skills planning.

The second stage of skills management process is skills development. Company X needs to develop the highly-skilled blue collar workers so that they are able to gain the required skills necessary to manufacture the products ordered. Company X develops the skills of the workers by sending them for internal trainings (on-the-job training and formal training) or external trainings (local or overseas). Company X will face difficulty to manufacture the products ordered if they fail to develop the necessary skills required among the highly-skilled blue collar workers.

The third stage of skills management process is skills transfer. Skills transfer in the Company X occurs when skills learnt or developed on the highly-skilled blue collar workers are

transferred within the workers internally. On the other hand, external skills transfer may occur when external people transfer skills to the internal workers. Skills transfer must take place after the process of skills development so that the developed skills on a worker can be further learnt by the rest of the workers.

The fourth stage of skills management process is skills retention. Skills retention is achieved by retaining the highly-skilled blue collar workers at the Company X. Skills retention must take place after the process of skills transfer so that the developed skills among the workers will not diminish when a highly-skilled blue collar worker quit and leave from the Company X.

The skills planning process will be initiated again following the skills retention process. Company X needs to execute the skills planning again to plan for the skills required necessary to manufacture the products when new batch of highly-skilled blue workers are employed at the Company X. Apart from that, Company X needs to determine whether the senior workers possess the required skills necessary to manufacture the products. If not, Company X needs to plan on how to develop the skills among the senior workers so that the workers are able to gain the skills necessary to manufacture the products. The skills management process begins with skills planning, follows by skills development, follows by skills transfer, follows by skills retention and repeats again with the same process. In conclusion, the skills management process is a looping process.

CONCLUSION

Knowledge refers to know what and know why of a particular expertise. However, Skills refer to know how (actions) of a particular expertise. There are many publications discussing about the knowledge management. It is over-researched. However, there are very limited publications especially in the field of management discuss about the skills management. It is under-researched. Therefore, skills management is a very worthy topic to be researched. Skills refer to the application of knowledge by action. The authors aim to transform and integrate knowledge management into skills management.

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THE ASSESSMENT OF COMPANY PERIPHERAL VISION CAPABILITY - THE CASE OF THE INDONESIAN MANUFACTURING INDUSTRY

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ABSTRACT

In this research, the concept of a firm's peripheral vision capability (Day & Schoemaker, 2006) is adopted in relation to a firm's ability to generate market knowledge, and a firm's market position in relation to decisions over marketing strategy competitiveness. The questionnaire was developed based on the dimensions and items for 'market turbulence' and 'internal peripheral vision capability' (IPVC). From a total of 120 returned questionnaires, the analysis in assessing the typology of peripheral vision capability has revealed that 25 firms belong to the vigilant typology, 35 firms are of neurotic typology, 30 firms are in the focused typology and 30 firms are vulnerable.

Further findings revealed that correspondent to the typology and the characteristics of the company in their product life cycle stage, the results showed that the majority of companies in the 'vigilant' typology were in the stage of 'introduction to growth'. The 'neurotic' were the majority in the 'maturity' stage. Those in the 'focused' quadrant were in the 'maturity to decline' stage and lastly were the companies in the 'vulnerable' quadrant which were in the 'growth to maturity' stage.

This research contributes to the development of a company's knowledge of their position in the market and IPVC as a foundation for marketing and business strategy formulation to answer the market challenge and opportunity.

Key words: peripheral vision capability, peripheral vision typology, Vigilant, Focused, Neurotic, Vulnerable

INTRODUCTION

In contemporary society, the pace of market change is accelerating. Some basic assumptions underlie the fact (1) the increased speed of production, service and idea imitation and substitution, (2) the life cycle of product is changing radically and is much shorter in time, (3) competition is intensifying, (4) customers are more demanding and becoming less easier to convince through advertising and other promotional efforts, (4) the prevalence of information technology. Those elements changing influences the fortunes of some firms, but not others. The changes are often pervasive and powerful. Competition will become an increasingly important element in industry and firms will have to strengthen their competitive orientation. Target market selection will be based not only on matching consumer needs with the organizational resources, but also on the magnitude of competition. The bottom line of this issue is that these markets are changing faster than marketing.

RESEARCH PROBLEM

The rapid change of the market and business conditions are more and more becoming a major factor of why many customer-oriented firms are facing a downturn.

This problem exists due to a lack of studies that explore the relevance of environmental factors and the firm's internal capability to shape the best competitive marketing strategy approach that leads to desirable firm performance.

Accordingly, for the purpose of this research, the capability of a firm to generate knowledge on competitors, customers and their market will enhance a firm's ability to choose the most suitable competitive strategy such as the concept of peripheral vision as developed by Day and Schoemaker (2006b).

THE CONCEPT OF PERIPHERAL VISION CAPABILITY

Day and Schoemaker (2006) conclude that there are two broadly defined areas in the market from which a firm should learn; as the focal area and beyond the focal area (peripheral area). A firm that does not possess the capability in detecting and interpreting what is coming from the periphery will suffer from less anticipated action in the competing market battle and may lead to inaction on opportunities and threats that would cause a firm to lose or to go into a downturn (Day & Schoemaker, 2006).

THE RESEARCH OBJECTIVE

This research aims to explore how peripheral vision capability will benefit firms by investigating the firm's positioning in the quadrants of peripheral vision typologies.

LITERATURE REVIEW

PERIPHERAL VISION

In an increasingly competitive market, firm should have the ability to access business intelligence on both its focal and peripheral area. Peripheral vision is referred to as a firm's capability that enables it to analyze beyond its current environment. This capability enables a firm to foresee opportunities and threats contained in its peripheral area, so that is able to take necessary action to benefit from the opportunity or to anticipate its environmental threats.

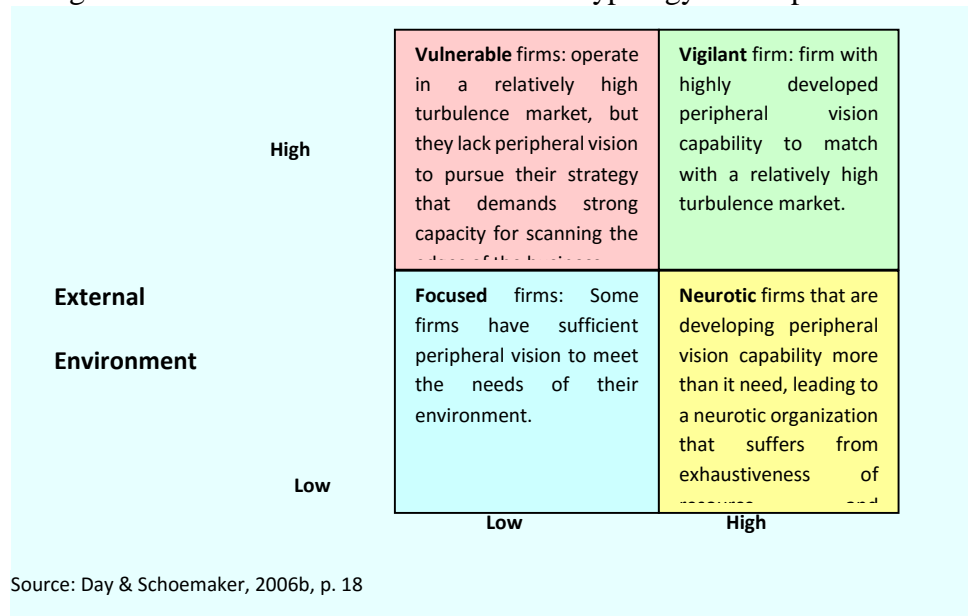
Table 1 below shows the differences between firms identified as vulnerable and firms identified as vigilant.

Table 1 - Vulnerable versus Vigilant Firms

Organizational Factors	Vulnerable	Vigilant
Leadership	Narrowly focused on current performance and competitors	Focused on periphery
Strategy Making	Rigid, static	Inquisitive, option-oriented
Knowledge Sharing	Focused on tracking pre-selected business data	Focused on gathering and sharing weak signals
Organizational Configuration	Configured to look inside	Configured to look outside
Culture	Rigid	Flexible & curious

Source: Day & Schoemaker (2006, p. 25)

Figure 1 - Characteristics of Firms in the Typology of Peripheral Vision



Source: Day and Schoemaker (2006, p. 184)

METHODOLOGY

SAMPLING FRAME

A sample was drawn from the population which represented the consumer goods industry (manufacturers) in greater Jakarta area. The sampling method was based on the a non-probability-convenience sampling approach (Agung, 2003).

DATA COLLECTION

Telephone calls were made to the top administrators of each company to explain the purpose of the study, as well as to solicit agreement for survey participation. A total of 300 questionnaires were hand-delivered or sent via email to the administrators of each of the companies. The target respondents were CEOs or senior marketing managers.

FGD and in-depth interview were also conducted to obtain the group's opinions on specific issues on industry characteristics with regard to firms belonging to certain typologies .

RESEARCH FINDINGS AND DISCUSSION

A total of 120 eligible responses were returned from the 300 sets of questionnaires which were distributed. Therefore, the response rate in this study was 40%.

Table 4 - Respondents' Profiles

Industry Type	%	Market Coverage area	%	Number of Employee		Company Ownership	%
food and beverage industry	50	national	57	>1000	48	Joint venture	23
pharmaceutical	11	major cities	15	500 to 1000	14	Local	56
automotive	17	overseas	15	300 to 400	4	Foreign	21
cosmetics	8	Java and Jakarta only	13	200 to 300	14		
home appliances	11			100 to 200	6		
electronics	3			<100	6		
Total	100				100		100

DESCRIPTIVE ANALYSIS: CLASSIFYING THE TYPOLOGY OF PERIPHERAL VISION

Valid indicators which of the ability for peripheral vision as shown in Table 5 are used to calculate the scores of internal capacity (internal factors and corporate companies) and external factors (environment). Factor scores are calculated based on the load factors of internal capabilities and external environments.

Table 5 - Factor Analysis of Peripheral Vision Capability

Variable		Loading
Firm's internal factors	1. Leader Orientation	0.314
	2. Strategic Making	0.867
	3. Knowledge	0.881
	Management System	0.888
	4. Configuration	0.835
Firm's external factors	5. Culture	
	1. Nature of Strategy	0.395
	1. Environment	0.853
	2. Environment Volatility	0.849

The number of companies included in the study are presented in the following table:

Table 6- Typology: Frequency

	Frequency	%	% Valid	% Cumulative

Valid Vigilant	25	21%	21%	21%
Neurotic	35	29%	29%	50%
Focus	30	25%	25%	75%
Vulnerable	30	25%	25%	100%
Total	120	100%	100%	

In this research, it found that 50% or 60 firms are in food and beverages industry, serving mostly local market and are local owned companies. The detail frequencies for each typology provided in below table.

Table 7- Typology: Characteristic

Typology	Type of Industry		PLC Stage		Market Coverage		Customer Type		Ownership	
		%		N u m		%		%		%
Vigilant N= 25	Food and Beverage	55	Introduction	3	Jakarta area	7	Individual	53	Local	21
	Home appliances	5	Growth	10	Major cities	18	Business	0	Foreign	56
	Others	9	Maturity	8	Java area	7	Mix	47	Joint venture	23
	Pharmacy	11	Decline	4	National	49				
	apparel	2			Overseas market	19				
	automotive	11								
	Cosmetics	8								
	electronic	3								
Neurotic N = 35	Food and Beverage	66	Introduction	10	Jakarta area	14	Individual	29	Local	52
	Electronics	5	Growth	0	Major cities	0	Business	0	Foreign	19
	Cosmetics	14	Maturity	20	Java area	5	Mix	71	Joint venture	29
	Home appliances	0	Decline	5	National	62				
	Pharmacy	0			Overseas market	19				
	apparel	5								

	automotive	3								
	Others	0								
Focused N =	Food and Beverage	35	Introduction	1	Jakarta area	13	Individual	28	Local	64
	Electronics	9	Growth	2	Major cities	19	Business	0	Foreign	19
	Cosmetics	13	Maturity	20	Java area	2	Mix	72	Joint venture	17
	Home appliances	19	Decline	7	National	60				
	Pharmacy	0			Overseas market	6				
	apparel	13								
	automotive	9								
	Others	1								
Vulnerable	Food and Beverage	55	Introduction	3	Jakarta area	4	Individual	32	Local	60
	Electronics	1	Growth	15	Major cities	16	business	0	Foreign	24
	Cosmetics	1	Maturity	10	Java area	0	Mix	68	Joint venture	16
	Home appliances	4	Decline	1	National	64				
	Pharmacy	1			Overseas market	16				
	apparel	4								
	automotive	4								
	Others	8								

PROFILE OF VIGILANT FIRMS

In the vigilant typology, they perceived their external environment as highly turbulent. They based their competitiveness on attractive prices in the market. They perceived their products are in the growth and maturity stages of their life cycle with a quite stable share in the market. They prioritize their strategy on cost effectiveness or cost optimization of production and marketing process (Keegan & Davidson, 2003). They leading companies with high technology in machinery (and formulation) and high standards of hygiene factors and quality

of product. They served mostly mix business and retail customer and majority are local owned companies.

PROFILE OF NEUROTIC FIRMS

Neurotic are firms which develop peripheral vision capability more than they need, leading to an organization that suffers from exhaustion of resources and information overload. The majority are in food and beverage companies. Majority leaders in the industry, and in the maturity stage of the product life cycle, serving mix customer and local owned companies. These firms while they enjoy a relatively stable share in the industry, they are seeking new opportunities for new markets or new segments. They claimed this new objective is the companies' priority. Therefore they R & D function and market intelligent are very important units. Therefore despite of having stable market, firms are aggressively seeking new market opportunity to enter.

PROFILE OF FOCUSED FIRMS

Focused firms are firms with sufficient peripheral vision capability to meet the needs of their environment. These firms are advantageous from their relatively stable environment. One third of are in food and beverage industry (35%) and in maturity and decline stage. They perceived their market as relatively stable with clear competitors who had knowledge of each other's profiles and strategies. Consumers are well maintained, as they are important targets for the next purchase (repurchase) situation. Their marketing strategy attempt to defend their share by launching new variants or new market expansion.

PROFILE OF VULNERABLE FIRMS

Vulnerable although operates in a relatively turbulent market they lack peripheral vision capability to pursue their strategy that demands strong capacity in market-scanning activity. They also characterized mostly at maturity stage of PLC.

Based on in-depth interview, It revealed that although the collaboration with the partner may benefit in the short-term, relying too heavily on partners regarding its marketing strategy would not be advantageous in the long run (e.g.distributors) leads to vulnerability. The lacking of knowledge and information of their market prevent them to able to fulfill opportunities and face challenges from their current and potential competitors.

MANAGERIAL & THEORITICAL IMPLICATIONS AND FURTHER RESEARCH

MANAGERIAL IMPLICATION

Table 8 - Managerial Implications

Typology	Characteristic	Strategy Recommendation
Vigilant	Vigilant has prime capability in finding and exploiting new products and market opportunities	Important for manager to maintain a reputation as an innovator in products and markets, even more important rather than achieving high profitability
Neurotic	Firms with too much market-scanning activity (over-scanning behavior)	<ul style="list-style-type: none"> - Recommended to make adjustments especially on the cost or investment over their market-scanning activity. - Improve its scoping activity by identifying not too broad an area of investigation. - Managing and evaluation on cost-effectiveness of market-scanning activity. - Eliminate market-scanning activity that direct to high cost and investment such as firm knowledge management system (technology for posing information queries), firm configuration (early warning system/IT, incentive for market-scanning personnel) and firm's resources devoted for scanning the periphery area
Focused	Sufficient with low level of peripheral vision capability to operate in stable market environment	<ul style="list-style-type: none"> - Focus on current market and business and develop Product rejuvenation <p>Depend on firm's ability to sustain at lower cost or heighten product quality and additional services to product (Morgan & Hunt, 1994; Sin et al., 2002; Cross & Smith (1995); Tse et al., 2004; Sorce & Edwards, 2004; Iobucci & Hibbard, 1999; Mullin et al., 2008).</p>
Vulnerable	Vulnerable: lack of market knowledge	<ul style="list-style-type: none"> - Urgent to develop its market knowledge capability (Day & Schoemaker, 2006): - Assign the responsibility to an existing functional group - Mobilize ad hoc group - Create a market-testing initiative - Invest in start-up ventures - Focus on strategy to avoid prolonged direct confrontation with larger and stronger competitor (Cravens & Piercy, 2003; Kotler, 2003; Kotler & Singh, 1981)

THEORETICAL IMPLICATIONS

This research had found that there are 25 firms out of 120 firms qualified to be positioned as vigilant, as an ideal firm in terms of their capability to scan the market. This research would suggest that there are pools of firms with high internal capability (demonstrated in the typology of vigilant firms).

Srivastava, Shervani and Fahey (1998) conceptualized that Market-based assets would include assets that mainly consisting of two related types; relational and intellectual. The relational asset results from the relationship between a firm and a key external stakeholder, including distributors, retailers, end customers, strategic partners and government. The concept of assets is as a result of the commingling of the organization and the environment. Therefore, with such understanding, the concept of market-based assets is well applied as a basis of explaining the firm's peripheral vision capability development.

LIMITATIONS OF THE STUDY

This research proposed that the typology is dynamic in nature. There are open opportunities for managers to move from one typology to another typology. However, this research has not provided a systematic explanation on how firms make a shift from one typology to another, how often such shifts are made, the timing and the transition point of the shift and the implication for a firm's performance.

FURTHER RESEARCH

Further research should address the characteristic of the strategic group members of the typologies; the stability or the dynamic of each group. Specifically to explain the phenomena that might occur if there are changes in a groups' typology,

CONCLUSIONS

The conclusion of this research is provided in the following points:

1. This research provides an important framework for managing a firm's position in the market and uses peripheral vision typology to classify a firm's position in the market and as an organizational adaptation capability.
2. This research suggests that typology is dynamic in nature, whereby a company is aware of its position and as it has the capability to move to a desired typology position.
3. Therefore, in responding to the competitive environment, there is an urgent need for a firm to master its peripheral vision capability as an internal capability to face environment challenges.

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SELECTIVE SYSTEM DISINTEGRATION IMPROVES SUPPLY CHAIN EFFICIENCY & ORGANIZATIONAL PERFORMANCE

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ABSTRACT

Supply chain (SC) is a complex and dynamic supply and demand network from manufacturing point to consumer and sometimes vice versa. A set of activities known as business processes are involved throughout this chain. Information related to different activity flows at different stage which makes it indispensable to manage supply chain. Systems integration (SI) involving information technology (IT) plays crucial role for SC network to perform. SI is the process of linking together different computing systems and software applications physically or functionally to act as a coordinated whole. SI is usually an enterprise wide activity and there are several factors related to SI are involved that influence supply chain performance in an integrated network. Despite promise, significant problems are associated with the integrated SC network. This research will examine SI in oil & gas (OG) industries downstream SC to identify variables which are integrated with SC system and performance criteria of SC. Through a SC life cycle model, this research will further examine and demonstrate that the some selective variables which can be disintegrated from SC for better performance of supply network. Roles of SI in various stages of supply chain will be examined to accomplish research objective. An analytical framework as experimental model will be designed and test using structural equation modeling (SEM) to support research goal. OG is a traditional vertical industry and >90 % of the supply chain is done between business to business (B2B).

Keywords: Supply chain, Oil & Gas, Information Technology, System integration, Disintegrated, Structural equation modeling.

INTRODUCTION

Supply chain integration revolves around enterprise architecture methodologies, application-centricity and a vendor neutral approach, with a view to build a robust, business aligned and optimized IT environment. System integrations is one of the most complicated field in the software creation arena involving the connection of heterogeneous systems, which are not primarily designed to communicate with each other. It is essential to examine key supply chain software integration points to meet research goal. Business systems that generally integrate with the SCM software include financial & accounting software, Enterprise Resource Planning (ERP) software, Customer Relationship Management (CRM) software and a host of other auxiliary systems. The traditional interfaces with financial systems include inventory activities, revenue data and logistical costs. A typical interface would be a

warehouse distribution updating inventory management and accounts receivable. Other areas include capturing SCM activities to manage costs, develop budgets and improve forecasts. Integrating data from ERP, CRM and SCM software systems is critical for end to end business process support and for reliable demand trends used in forecasting sales. Fulfilling inventory and customer orders is an integrated effort between several systems, including: ERP, CRM, Warehouse Management Systems (WMS) and Vendor Managed Inventory (VMI) systems. The supply and delivery sides of Supply Chain Management requires integrated operational systems such as manufacturing, distribution, and SCM partner (customer, suppliers and third party logistic providers) systems. A SCM integration requirement is to gather details on the supply channel's capacity to meet demand. Logistics needs include integrating schedules and planning resources. Although many organizations believe that SI can increase market competitiveness and provide other advantages (Guscos *et al*, 2007; Fabbe-Costes & Roussat, 2011; Narasimhan & Kim, 2002, but in reality, have resulted in mixed success. Supply chain integration complexity issues have posed bigger challenges to the organizations.

The goal of this project is to develop and execute a research project to study system integration in the oil and natural gas industry, and how an efficient supply chain can be used to gain advantage. The research design will be exploratory in nature. The project will consist of examining the existing supply chain workflow in the industry, investigate and identify variables that cause an overload and can therefore be disintegrated from the distribution process. There are dependent and independent variables integrated with supply chain system. A framework is to be created and tested using the Structural Equation Modeling technique to demonstrate that selective system disintegration is an important factor for business success. This will in turn be used to propose an intelligent integration and workflow. Not many articles exist on the system dis-integration and little have been written that deals with the degree of integration required for efficient SCM which is the primary motivation of this research. A combination of qualitative interviews through unstructured questionnaire and study will be conducted during literature review (LR) section to gain insights of business processes involved during supply chain. A large scale literature review will be performed and conceptual theory building will be used to examine systems integration in supply chain.

LITERATURE REVIEW

Combining System integration, business processes, supply chain management and information technology, is vast area with several articles, whitepapers, case studies are available. Literature review (LR) therefore need to be exhaustive and systematic at the same time to meet research goal. Aim is to select articles that were from major journals and relatively new, i.e. preferably published after year 2000, focused on B2B integration and scholarly by nature. Research design is exploratory at this stage and tends to tackle new problems on which little or no previous research has been done (Brown, 2006). Exploratory will turn into explanatory during hypotheses test about cause-and-effect relationships. The objective is to determine which variable might be causing a certain behavior, i.e. whether there is a cause and effect relationship between variables (Singh, 2007). The research will end with confirmatory factor analysis (CFA). Large scale literature review will help to identify variables, problem statement and research gap (Creswell, 2013).

SCM involve integration of key activities e.g. operation management, logistics management and process management (Wisner et al. 2015). One of the major activity cited under operation management is production planning & scheduling (Russel & Taylor, 2008) and order fulfillment is a major activity under logistics management (Rushton, 2010). The strategic supply chain continues to be adopted by organizations as the medium for creating and sustaining a competitive advantage (Ireland and Webb, 2007). Of the discussed advantages, increased inventory turnover, increased revenue, cost reduction across the chain, delivery and dependability are the most sought after (Fawcett et al, 2008; Daugherty et al., 2005; Attaran, 2004; Ferdows et al., 2004). Rapid development of client server supply chain management software that typically includes integrated SCM and e commerce has aided in the evolution and adoption of SCM (Wisner et al, 2015). Literature review and related discussions on published work in related field are summarized in below table 1.0.

Table 1.0: Review and discussions

Authors	Discussions
Ding, 2014	Made an attempt to investigate the main factors affecting the integration and performance of the B2B e-commerce supply chain. Investigated the main factors affecting the integration and performance of the B2B e-commerce and addressed key variable for improvement; but left the discussions open to explore the potential managerial implications for future research.
Kim, 2013	Discussed that there is empirical evidence on the positive effect of supplier integration on performance, but findings on benefit through customer integration is conflicting.
Gouscos et al, 2007	Discussed that most integration and interoperation efforts face serious challenges and limitations; information exchange and services are fragmented and complex, plagued by technical and organizational problems, but not examined integration issues.
Huang and Benyouce, 2013	Examined in their study that e-commerce in supply chain is undergoing an evolution through the adoption and integration of Web 2.0 capabilities to achieve greater economic value but this has not proven yet.
Binlootah & Sundarakani, 2012	Discussed about benefits of Vendor Managed Inventory (VMI) in Oil and Gas Industry. In an integrated supply chain environment, this raises questions on the extent of information flow to the vendor (s).
Janvier-James, 2012	Discussed that Dependability/reliability is generally more crucial than speed in SC and thus important to temperate global “velocity” with the need for dependability but failed to explain dependable factors.
Agatz et al, 2007	Addressed SCM issues specific to Internet fulfillment in a multi-channel environment. A gap can be seen here addressing integration issue in their study.
Fabbe-Costes & Roussat, 2011	Discussed that integration of supply chain to be of strategic and operational importance but the role(s) of logistics service providers in supply chain integration remain(s) unclear.
Fawcett & Magnan, 2002; Naslund & Steven, 2008; Bask	Have discussed an interesting conclusions on: the dominant rhetoric dimension of supply chain integration, the indubitable difficulty to operationalize and measure supply chain integration and the need to differentiate integration. But none specified the technical reason behind this and left the discussions open.

& Juga, 2001; Fabbe-Costes & Jahre, 2008	
Ling et al, 2013	Discussed about IT applications in achieving advantages. They commented in their work that organization today are facing difficulties to obtain the appropriate IT applications due to confronting IT issues and unique challenges related to the conditions operating.
Bask, & Juga, 2001	Discussed about semi-integrated supply chains towards the new era of supply chain management, but did not provide any empirical analysis.
Sambasivan et al, 2011	Reported that 70% of supply chain relationship tend to fail. This in turn has contributed to a negative implication of system integration on firm's operational performance in terms of flexibility, delivery, cost and quality
Bask & Juga, 2001, Power, 2005, Pagell, 2004	Number of authors who disagree with the notion that supply chain integration will always have positive impact on organizations' performance either from the aspect of tangible or non-tangible performance and the potential benefits that associated with supply chain integration were ambiguous.
Bagchi and Skjoett-Larsen, 2002	Proposed a contingency approach to supply chain integration, arguing that factors such as dominance versus balanced power in the supply chain, the degree of competition in the industry, the maturity of the industry, and the nature of the products – functional versus innovative products – might determine the desired level of integration in a supply chain
Becerra-Fernandez, Gonzalez, & Sabherwal, 2004	Discussed that IT capabilities can impact overall organizational performance either directly or indirectly but left the discussion open on relationship on the direct impacts, such as revenues or cost linking to organizational vision and strategy. Also types of IT applications are not clearly mentioned.

Literature will be reviewed to identify valid measures for related constructs and adapt existing scales to measure integration (Narasimhan & Kim, 2002) and supply chain performance (Vickery et al, 2003). When there are no reliable or valid existing measures, will develop new measures based on understanding of constructs and observation during interviews. Concepts and definitions of supply chain integration will be examined through LR. Literature study indicated that efficient supply chain indeed has a bottom-line influence on organization performance (Cao & Zhang, 2011).

RESEARCH FRAMEWORK

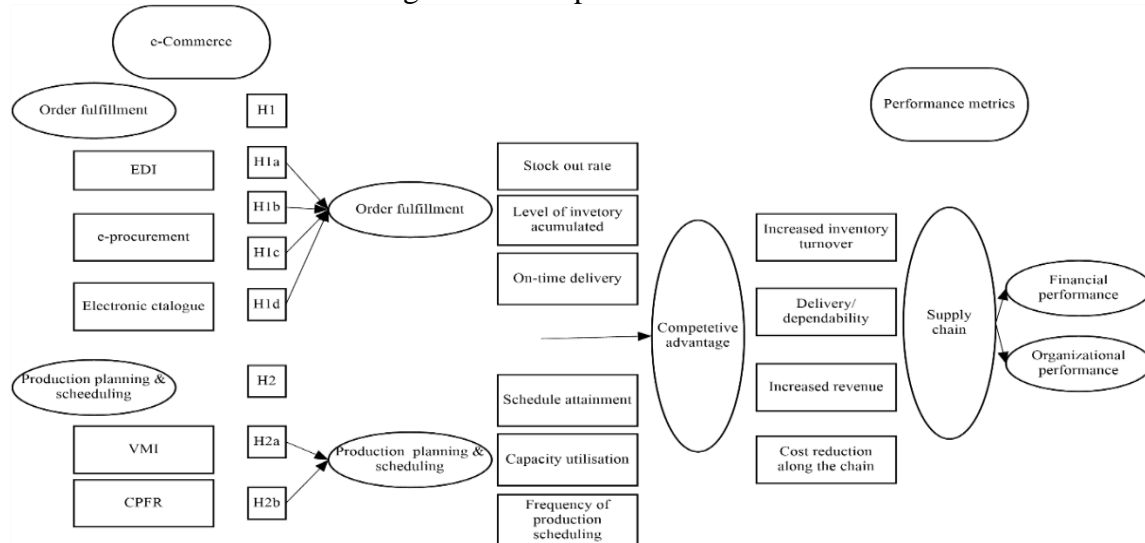
Conceptual framework which is research paradigm, has been developed (Figure 1.0) based on variables and key performance metrics of supply chain from the synthesis of LR. Definition of each construct will be explained. Based on framework, following hypotheses are proposed.

H1- Supply chain integrated with e-commerce software for selected function would reduce the demand uncertainty (better inventory visibility and information sharing) and significantly lead to overall organizational performance through better competitive advantage.

Inventory management is related to the planning, monitoring and control of stocks, which are used throughout the order-fulfillment process. Given the potential benefits of the Internet and other web-related technologies to revolutionize the procurement process, numerous

companies worldwide have already adopted e-procurement in an attempt to leverage this technological infrastructure. Important features of efficient order fulfillment are stock out rate, level of inventory accumulated and on-time delivery.

Fig 1.0: Conceptual framework



Advancement of Electronic Data Interchange (EDI), Internet system, Logistics software application has greatly aided integrated supply chain concept (Wisner, 2015). A significant part of supply chain and B2B purchasing is been conducted via EDI, systems and electronic mail. EDI is expensive to implement with stringent syntax requirements which necessitate a custom integration among trading partners. E-procurement on the other hand is a standard, secure, and reliable universal communication system. Companies can use this universal and global connectivity to execute business transactions, instead of using a set of expensive and complicated networks, as is the case with EDI (Teo, 2009). Therefore, below hypotheses are proposed.

H1a- SC with EDI integrated with only order fulfillment but disintegrated from distributed management would reduce the demand uncertainty (better inventory visibility) and significantly lead to overall organizational performance through better competitive advantage.

H1b- SC with E-procurement integrated with only order fulfillment but disintegrated from distributed management would reduce the demand uncertainty (better inventory visibility) and significantly lead to overall organizational performance through better competitive advantage.

H1c- SC with e-procurement integrated with order fulfillment but disintegrated from EDI significantly improves the efficiency and leads overall organizational performance through better competitive advantage.

H1d- SC with Electronic Catalogue ordering system integrated with only order fulfillment but disintegrated from distributed management would reduce the demand uncertainty (better inventory visibility) and significantly lead to overall organizational performance through better competitive advantage

The globalization of the supply chain has spurred the growth of vendor managed inventory (VMI). VMI is beneficial to both vendor and customer as long as the VMI contract specifies rewards compensating the supplier's loss due to the expanded burden of inventory management (Dong & Xu, 2002). Implementing a VMI therefore discards one echelon of forecasting demand and ordering, dampening the bullwhip effect and eliminating disruptions in the supply chain decision making. Another important process named CPFR (collaborate, planning, forecasting and replenishment) is first to establish collaboration in forecasting efforts between a manufacturer and a retailer so that each party can easily exchange forecasts and future sales with each other. (Boone et al, 2012) focused on the forecasting aspect of CPFR and examined the impact of CPFR on business processes and system performance. Based on the above studies, the following hypotheses are framed:

H2- SC integrated with selected e-commerce software for selected function would increase the Collaboration on forecast and production scheduling and significantly leads to overall organizational performance through better competitive advantage.

H2_a- SC with Vendor Managed Inventory (VMI) integrated with only production scheduling and replenishment but disintegrated from Order fulfillment would reduce the undistorted forwarding of the demand signal and therefore significantly lead to overall organizational performance through better competitive advantage.

H2_b- SC with Collaborate Planning, Forecasting and Replenishment (CPFR) with only production scheduling and replenishment but disintegrated from Order fulfillment would reduce the undistorted forwarding of the demand signal and therefore significantly lead to overall organizational performance through better competitive advantage.

Important features of efficient production planning & scheduling are schedule attainment, capacity utilization, frequency of production scheduling. All these features of order fulfillment and production planning & scheduling will be explained in detail to draw the relevance in framework designing.

METHODOLOGY

At this early stage of the theory development process, a variety of acceptable approaches to observation exist. Attaining information from different functional managers as well as channel positions helps paint a macro-picture of how SCM may be effectively achieved. To develop this picture and extract a more robust and generalizable set of findings, an extensive literature review, a cross-functional mail survey, and in-depth cases studies will be conducted. In-depth interviews, combination of semi structured and structured, will be used for data collection. During structured questionnaire phase, each question will refer to the personal opinion of the respondent measured through 7 point Likert scale. Each respondent will have to give an opinion for each given assertion from “totally disagree” to “totally agree”. An extra ‘I don’t know’ box will be added to avoid non-answer or aberrant answers. The validity of the research constructs will be assessed using SEM by confirmatory factor analysis. This process will be guided by discussions with management and industry experts, case studies and simulations, analysis of secondary data. Prior to testing the hypotheses, measurement items in the questionnaire will be assessed for both content and construct

validity. To ensure content validity, an extensive literature search and adopted measurement items from past related research will be carried out. After which, the survey pretesting will be carried out to check and refine the items, if necessary. Model and hypotheses Absolute Fit Measures to determine how well model fits the data, Parsimonious Fit Measures in tandem with absolute fit measure will be done for better fit indices. Given the complexity of structural equation modelling, it is not uncommon to find that the fit of the proposed model is poor. Thereby fit of each construct will be assessed and its items individually to determine whether there are any items that are particularly weak. Items with low multiple r^2 (less than .20) will be removed from the analysis as this is an indication of very high levels of error. Chi-Square value will be tested for evaluating overall model fit and, 'assesses the magnitude of discrepancy between the sample and fitted covariances matrices. All necessary statistics e.g. goodness-of-fit, adjusted goodness-of-fit, root mean square etc. will be tested. Finally stress testing of the model will be conducted using "what-if" analysis.

CONCLUSION

Viewed over a sufficiently long term prospect, and looking at the broader perspective of one large enterprise (and not just one organization within the enterprise), this research suggests that SI is perhaps best described as a cycle: as a cycle of integration, and selective disintegration. Research will contribute on the degree of BSI in SCM in oil & gas industries and help in developing lean and agile SC linking organization vision and strategy. This work will expand the current understanding of system integration within the context of SC and will provide a critique of empirical work to offer research agendas that can stimulate future researchers to carefully explore the topic. Moreover, pragmatic investigation on benefits of selective disintegration will provide new dimensions to the key decision makers. Limitation of studying complex phenomena with factors like data collection, relevant experts who has expertise on entire value chain (mostly focused on their own work and ignore broader picture throughout the supply chain) can be experienced. The study also limited to one particular flow (downstream). A future study combining upstream, midstream and examining other industries like manufacturing, retail etc. may be useful for next generation intelligent supply chain.

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INNOVATIVE BUSINESS MODEL FOR E-COMMERCE

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ABSTRACT

Indian e-commerce has been drastically growing over the years with a current potential of 150 million internet users with a penetration of over 11% out of which 18% buy online, as given in Forrester McKinsey report 2013, and will continue to grow in near future. In fact India is one of the largest markets in the world and this has encouraged major players to keep battling for a market share. All of these players are facing various issues in the Indian e-commerce market. Some of these major issues include, cash on delivery which is costing companies their margin, losses caused due to return of products, commission charged by banks for each transaction is high. Despite selling with wafer thin margins companies are incurring huge sums of money due these issues. This paper presents an innovative business model to address all these challenges with sustainable and effective revenue model along with shipping and delivery which reflects customer's satisfaction.

Keywords: business model, e-commerce, innovation,

INTRODUCTION

With the growing opportunities, numbers of threats have equally grown and this is a major concern for the key players. The market potential has attracted several players who are now struggling to fight it out. Some of the major challenges faced by these companies are logistics, digital infrastructure, payment, cultural differences, and price sensitive customers. These challenges have continuously made the major e-commerce companies stay on their toes. The current business models of all the major e-commerce companies are all similar. They all sell stuff under different categories with each product having its own price displayed. They all use similar strategies too; attracting different customers with all the discount sales running throughout the year, special campaigns are run during festive seasons so as to attract sales. All of them are basically playing with prices and end up competing with each other. This fierce competition and struggle for the number one spot has been costing a lot for these companies. How many of them know that the number one ecommerce company in terms of sales in India, Flipkart, hasn't reached its break even and is projected to take at least one and a half year more to reach if it continues to grow at a projected pace. This paper is presenting conceptual model for e-commerce to solve the following problems:

- 1) Service differentiation;
- 2) Need for a sustainable Revenue model;
- 3) Need for customer satisfaction through logistics.

LITERATURE REVIEW

Rapheal & Zott (2000) E-commerce businesses are continuously transforming according to

the changing environment. Companies that used to operate with a warehouse model have now adapted themselves to the market place model. This is due to the changing consumers, rules and environment in general. A business model is always considered to be an important combination of innovation and value creation. For every ecommerce business there are certain value drivers, they are :

- Efficiency- efficiency through simplified services, adequate information, eases of transaction etc.
- Complementarities- this refers to providing services bundled with goods add greater value any day than providing only goods.
- Lock-in- it is the ability to make customers loyal to you. Once a customer has shopped with you he/she should feel satisfied and should come back to shop with you again.
- Novelty- this refers to the Innovation quotient. How innovative is your service? An Idea should be novel.

Department of industrial policy and promotion (2013) classifies e-commerce business models into two types- 1) Market place model- It is a model that consists of a platform that allows buyers and sellers to meet. It basically acts as a market where buyers and sellers transact and it earns from the commissions by sellers. 2) Inventory based model- In this model there isn't a party between the seller and buyer to provide a platform but instead the ownership of goods are borne by company that sells online i.e. the company has inventories of the products that it sells. Most of the players are these days shifting from an inventory based model to the market based model. Flipkart, Snapdeal, Amazon are typical examples.

There are a total of eight models for online transactional strategy namely, brokerage model; retail model; mall model; advertising mode subscription model; community model; manufacturer model; and customization model. The most frequently adopted model by e-tailers is the retail model (Wen et al. 2001).

It is a challenging job to build a business model that gives good revenue along with satisfying Indian consumers. Malhotra (2014) focuses on the major challenges which are to be faced by e-tailers in India like product returns are high, cash on delivery is the most preferred option, high failure rate of payment gateways, low internet penetration, basic feature phones still rule. All of these challenges in the Indian context cost a lot to the companies so as to overcome them. Companies should be investing huge amounts of money which requires investors to invest in them. For investors to invest in these companies they would be looking at their business models especially the revenue model. Nagaty (2010) states "A business model is framework of how an organization generates revenue". So as to overcome all of the challenges a sustainable revenue model is desired especially in competitive environment which has been dynamically changing. Gupta (2013) says that some of the biggest challenges and opportunities in ecommerce are logistics, price sensitive consumers, digital infrastructure, payment, cultural differences. A business can succeed if these issues are addressed.

Lee Pui-Mun (2002) states the top three factors such as: i) variety of products and service innovation; ii) fast delivery; iii) purchase security which stimulates online shopping. Also, customer satisfaction is the key for retaining customers. In order to satisfy customers it is very important to understand the behaviour of consumers. After doing a certain research on the leading e-tailers, it is found that all the items in the cart cannot be shipped at the same time on the same day which means customers receive the goods on different days. This leads to lower satisfaction levels. For example according to homeshop18's policy (source:

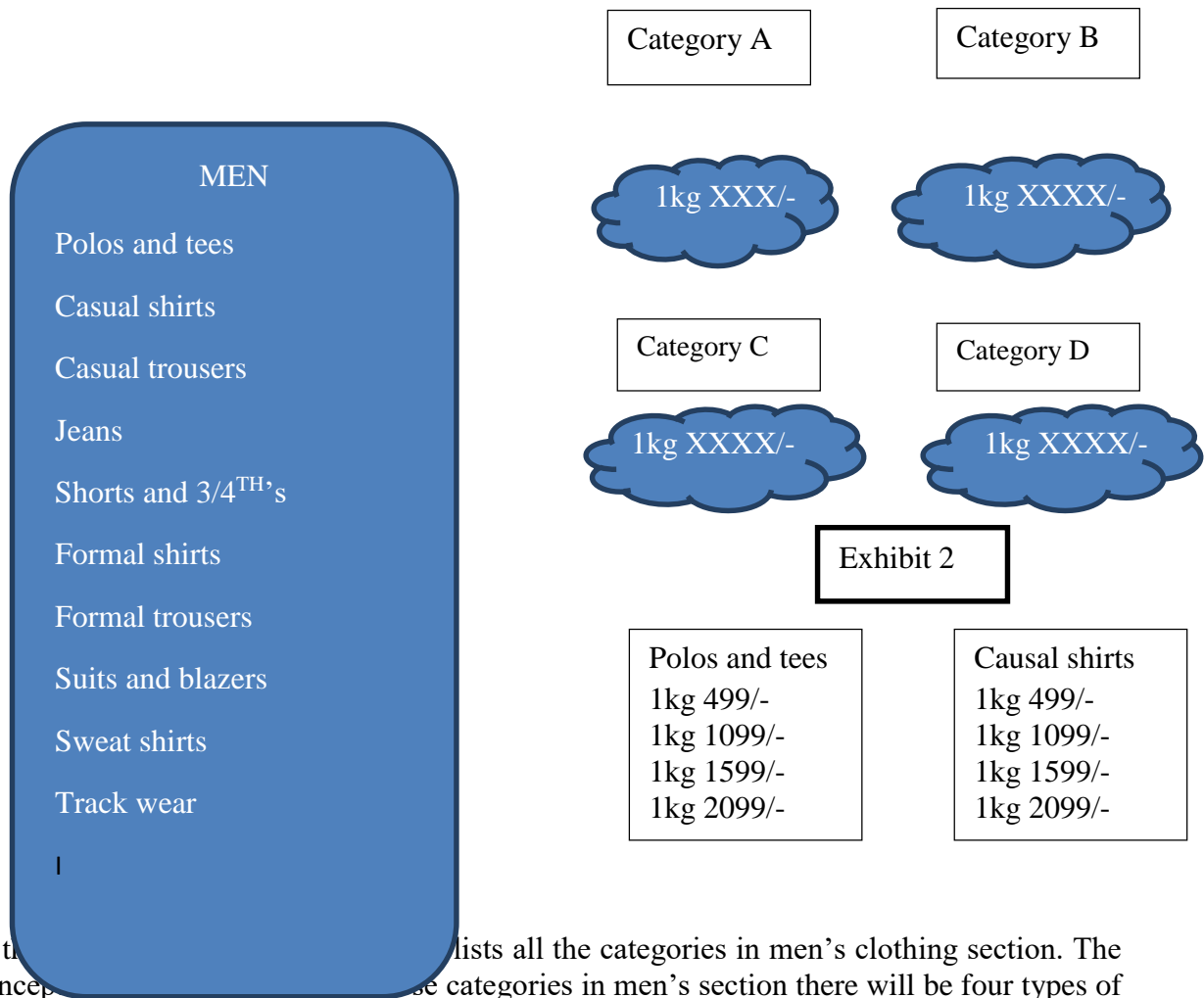
<http://www.homeshop18.com/shipping-policy.html>), “While we shall strive to ship all items in your order together, this may not always be possible due to product characteristics, or availability”. This is another challenge that has come into light.

Clearly, from literature review the e-commerce market is facing a lot of issues and challenges but at the same time is blessed with opportunities. Considering all the challenges a sustainable business model that has been proposed should be able to solve them along with providing a stable revenue model.

BUSINESS MODEL FOR E-COMMERCE

Although there have been several business models in e-commerce all of them require customers to spend time on their website so that the chances of a sale can be increased. In this paper a business model that not only can make customers stay for long but also can fetch better revenues is introduced.

Every business model has a central idea upon which all the others characteristics depend. Likewise, the central idea here is to sell products in weights. Products here include all those that are being offered by regular e-tailing giants such as Flipkart, Amazon etc. So as to get a better understanding of the conceptual business model, taking clothing as example the model can be explained as follows:



In the men's clothing section, all the categories in men's clothing section. The concept of the men's clothing section there will be four types of promotional offers which will show a price per kg (as shown in exhibit 2). Customers will have a choice of four options and each of these options will have a particular range of cloth. Exhibit 1 will be displayed which are applicable to the Exhibit 3 option. An example is shown in exhibit 3 for Polos and Tees, and casual shirts.

This model is entirely based on weights of the products. Every product will have its own weight and instead of displaying the price of the product, its weight will be mentioned and customers have to choose according to the weight so as to purchase their desired products in kilos. The service experience that is being offered in this concept is unique but apart from this there are other activities involved which include logistics and revenues. A good business model always has something that captures customers' attention which ultimately leads to customer satisfaction.

LOGISTICS MODEL

A good business model always has something that captures customer's attention which ultimately leads to customer satisfaction. One of the major challenges in Ecommerce has been logistics. Companies are striving to provide faster delivery options in order to keep the customers trust intact and keep them satisfied. Even though companies have been doing

whatever it takes to keep the customer satisfied there are still certain gaps somewhere or the other that still needs to be addressed. One such gap is in the way products are being delivered. When a product is ordered either it will be handed over to a third party logistics partner or will have its own logistics division who then ultimately deliver the product to customer. This sounds perfectly fine. The problem comes when multiple orders are made by a single customer and these orders come from different sellers. The products then most likely reach on different delivery dates at different times which often are unsatisfactory to the customer. This happens as the sellers are located at different places and shipping from these places takes different amount of time. This is a gap that is quite subtle but certainly affects the satisfaction level of a customer. This gap could be addressed by a small change in the process.

Exhibit 4 shows how a typical process takes place from a customer order to delivery. Every company delivers products the way it is described but in order to satisfy a customer with multiple deliveries it should be made sure that all the products are received on the same date at the same time. This could be done by the way it is described below

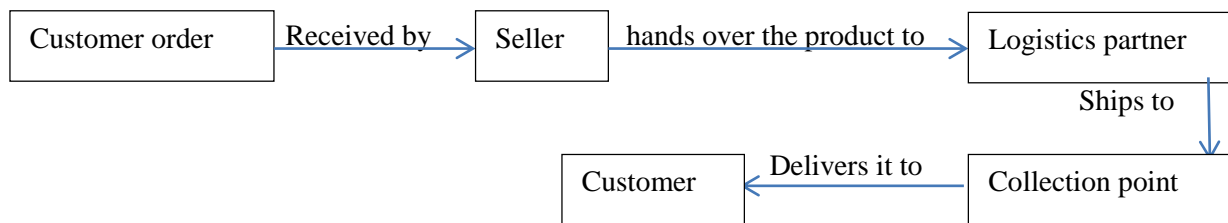


Exhibit 4

Exhibit 5 shows a delivery can be done with just a minor change in the process. In order to ensure customer satisfaction all the products if collected and stored at the collection point until every product belonging to a particular customer is assembled it will make a difference. The strategy is to store each product at the collection until all the products are received and then deliver them to the respective customers as soon as they are assembled. In today's competitive market no stone can be left unturned and every possibility has to be leveraged. The minor step in this process might look simple but can make a huge difference.

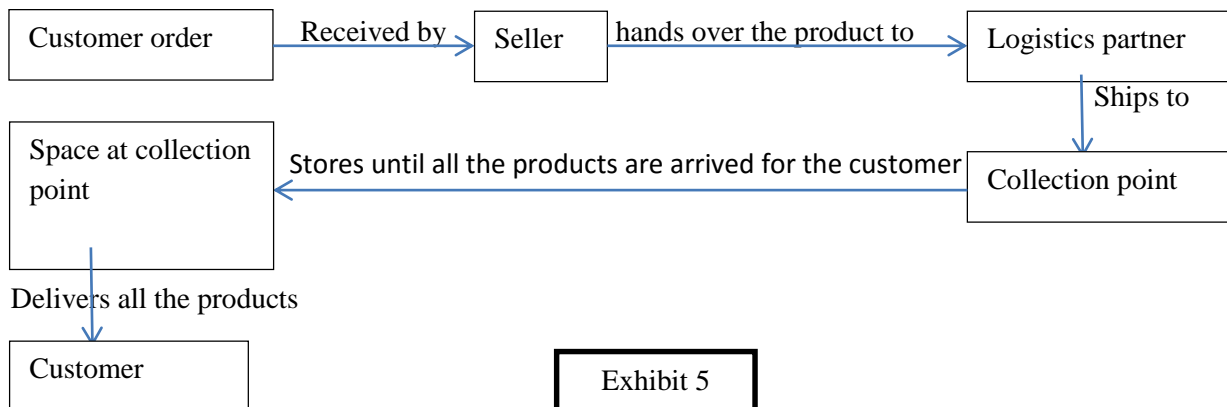
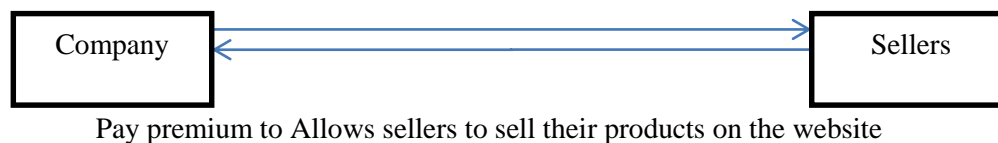


Exhibit 5

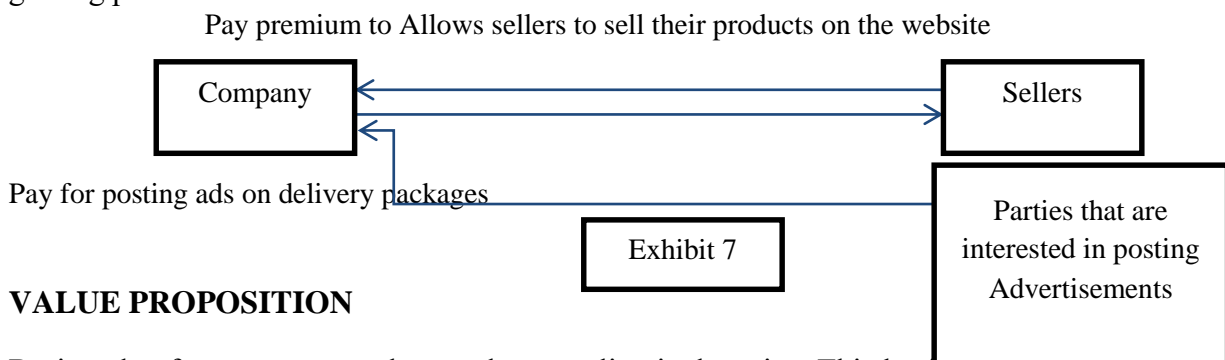
REVENUE MODEL

The back bone of every business is its revenue. How good a business model is determined by how sustainable and unique is its revenue model. With all the fierce competition that is going on today world companies are falling to wafer thin margins and even then it has become difficult to keep up with challenges especially getting proper revenues. Companies are increasingly investing in various elements so as to keep its customers satisfied and in the process incurring huge expenses. A revenue model that could provide good returns and is sustainable is quite necessary in this type of market. The revenue model that is quite commonly in place now is revenues from royalty on each product sold by a seller. In this paper the business model consists of a revenue model that solves the problem of decent returns.

Major Ecommerce companies are nowadays shifting towards or operating on a market place model where many sellers get space to display their products on a single website. This has been widely adopted in the country. All of these major ecommerce companies have a pretty similar revenue model. Revenues in these companies from the premiums paid by the sellers to them who are in turn given space to sell their products to a wide pool of visitors. Exhibit 6 shows the existing revenue model.



Apart from the way companies are Exhibit 6 es there is another way to get additional revenues which has been added to Exhibit 6 model discussed in this paper. This unique revenue model as shown in exhibit 7 definitely would be more profitable than all of the other models of major companies. This too consists of premiums from sellers as well as an additional component which is to sell space on the delivery packets for advertisements or send in advertisements along with delivery packages. These additional revenues would help gaining profits faster.

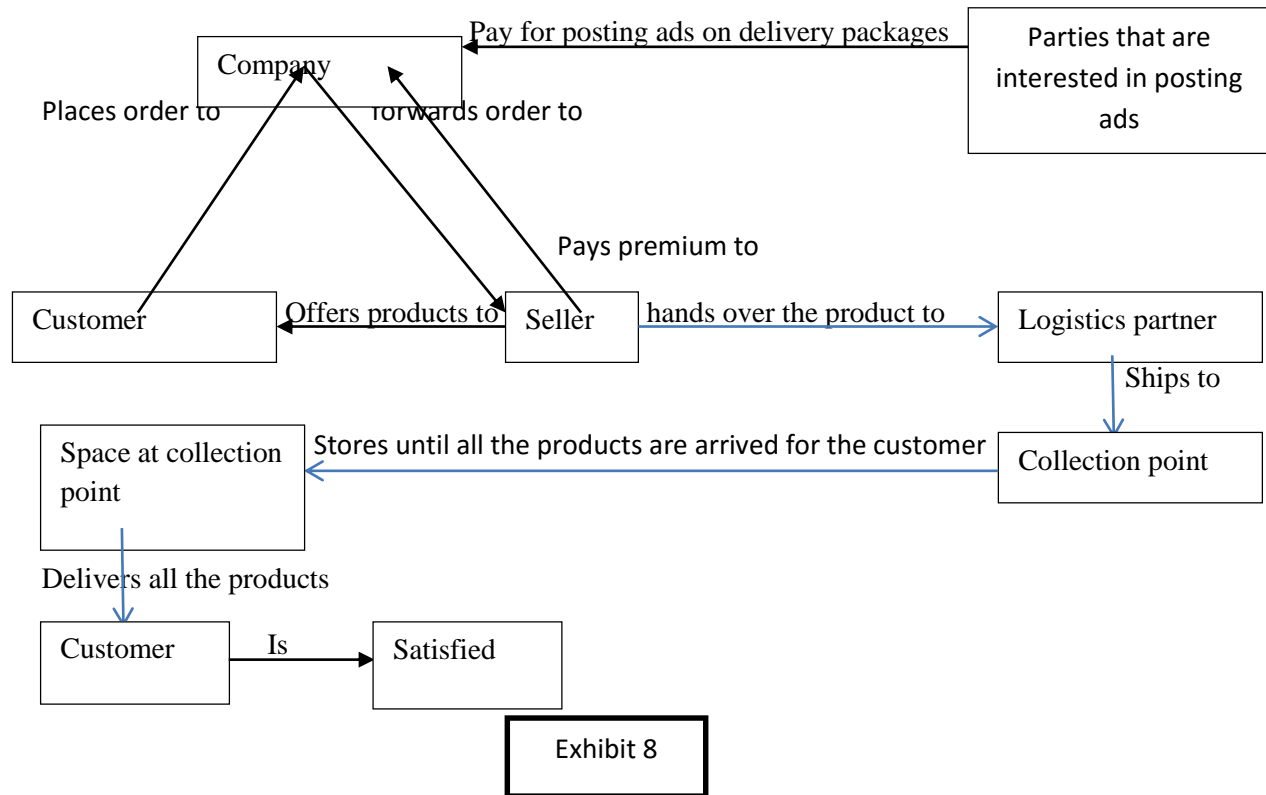


VALUE PROPOSITION

Basic value for a customer who purchases online is the price. This business model ensures reasonably low prices but apart from the price offerings which are common to every e-tailer customer delivery even though subtle is adding value in a way that no other company has done it ever. Improvised experience and improved service are two most important factors leading to customer satisfaction. Service innovation in the proposed conceptual business model ensures a better customer experience which differentiates from all the other companies

there by giving an advantage.

INTEGRATED FRAME WORK OF THE CONCEPTUAL MODEL



CONCLUSION

There are a lot of issues and challenges in the current market for e-commerce. Every e-tailer is looking for revenues and is doing whatever it takes to get and retain customers. This has made it difficult for companies to get good revenues and at the same time keeping investors happy. The proposed business model hopefully has a greater chance of getting good revenues as well as increased customer satisfaction, the two key elements of any business.

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THE RELATIONSHIP BETWEEN STUDENT INDIVIDUAL CHARACTERISTICS AND STUDENT ENTREPRENEURIAL CHARACTER BUILDING (SECB) IN DRIVING ENTREPRENEURIAL INITIATIVES: A STUDY AT UNIKL BMI

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ABSTRACT

This study is regarding the relationship between student individual characteristics and student entrepreneurial character building (SeCB) in achieving entrepreneurial initiatives in UniKL BMI. To build SCB, the student are encouraged to lean with positive individual characteristics which we believe are significant in handling activities especially in entrepreneurial terms. UniKL offers graduates that are excellent in the academic and entrepreneurship as an extra mileage should they intended to become an entrepreneur or a technopreneur in their future. According to Schumpeter, 1961, the encouragement of successful innovators and entrepreneurship is beneficial for the continued health and long term growth of a nation's economy. Therefore the study is relevant to recognize the importance of individual characteristics in driving their entrepreneurship activities. Students entrepreneurial Character Building (SeCB) is part of student development theories that focuses on human growth and environmental influences and designs that provides environment to promote students' learning and maturation, both in and outside of the class. The study focuses on students currently studying in UniKL BMI. Data and information are gathered through observations by subject lecturers, staff and peer evaluation. The results of the study showed that students with positive individual characteristics perform well in the entrepreneurial activities. The findings is crucial for the management of the university to improve the policy and guidelines towards implementing SeCB in the university syllabus.

Keywords: Entrepreneurship, Individual Characteristics, Students entrepreneurial Character Building (SeCB), Student Character Building (SCB), Entrepreneurial Initiatives

INTRODUCTION

In Malaysia, more than 100,000 graduates are produced yearly by the government and private universities. Therefore the universities are responsible to educate and equip the graduates with the right individual skills that will ease them to get jobs or they can use to set up business in future. Towards becoming a good entrepreneur, student should possess positive individual characteristics in order to compete with the scholars and other graduates.

OBJECTIVES

The aim of this paper is to look into the existing Student Development and Campus Lifestyle division (SDCL) initiatives so that appropriate individual characters could be recommended for development of SeCB at UniKL BMI. The objectives of this study are as followed:

1. To identify the right student's individual character to be developed.
2. To identify main individual characteristics in developing entrepreneurial initiatives.
3. To relate individual characters to entrepreneurial initiatives through SeCB activities
4. To identify individual entrepreneurial potentials
5. To recommend improvement plans for student's least developed characters.

DEFINITION AND LITERATURE REVIEW

- A. Individual Characteristics
- B. Student Entrepreneurial Character Building(SeCB)
- C. Entrepreneurial Initiatives

A. *Individual Characteristics* can be different from one person to another person. Each individual is not the same and thus his characteristics are distinct from other people. His individual characteristics can be different and unique depending on his personal background, upbringing and environment. One of the literature reviews by Lucas [1] in 1978 highlighted that individuals who have higher entrepreneurial productivity start their own entrepreneurial venture. And these individuals tend to be more successful. Therefore, these individual characteristics need to be further developed in order to get the right combination of traits and attributes to prepare the individual to be successful technopreneurs in the future. In UniKL we believe that educators need to be committed to equip the students and graduates with ideal characteristics that can lead to entrepreneurial initiatives. Certain individual characteristics are considered to be important and relate to UniKL SeCB; and together these two variables could lead to an entrepreneurial initiative among the students. In this paper, we attempted to analyse the following individual characteristics:

1. Ability to work in team
2. Communication skills
3. Networking
4. Leadership skills
5. Motivation level
6. Ability to cooperate with others
7. Ability to interact with others
8. Ability to participate in activities
9. Planning Skills

10. Organizing Skills

1. *Ability to work in team:*

Working in a team is crucial in today's entrepreneurial ventures. More fresh ideas can be generated from different people of different background. So, in a university setting, students need to be given the opportunities to organize group activities, so that they could be exposed to some group pressures and conflicts. Their ability to handle the unexpected situation will prepare them for future entrepreneurial uncertainties.

2. *Networking:*

Recent studies by Gianneti & Simonov [2] show that networking or social interaction is significant as a predetermined criterion for an individual to become an entrepreneur. To some extent, their socialization with other people especially connection with business people could give them more exposure and experience to cope with certain business problems. When organizing activities within the campus environment, students will of course have to liaise with various students, staff, industry personnel and the public to make sure that their event is successful. These kinds of deals and consultation with various types of people will require the students to have excellent communication skills as explained below.

3. *Communication skills:*

To convince people about good business and entrepreneurial ideas, the most important skills that people must have is good communication skills. Moreover, to convince these people especially the top management, financial institution, potential investors and target customers will definitely require excellent knowledge about the business, intelligence, high confidence level and integrity, which can be made easier if the entrepreneurs really have great communication skills. And as for the students, they can enhance their communication skills if they always practice speaking and writing to deal with others.

4. *Leadership skills:*

Goodman, Fandt, Mitchlitsch and Lewis [3] defines leadership as skill that we observe, learn and practice in an organization. An individual with good leadership skills will be able to influence others to do certain things for the benefits of the organization so that the objectives and vision of the organization can be achieved. In addition, leadership is always associated with some other characteristics such as drive, motivation, integrity, self-confidence, conceptual ability and knowledge on the business. These whole set of leadership skills are very important for the entrepreneurs because they have to direct and monitor the work teams.

5. *Motivation level:*

According to Jackson & Vitberg [4], traditionally people tend to choose working in established companies to get job security, reward of loyalty and job stability. However, recently this perception has lost its popularity. In 1997, Autio [5] stated that the career preferences are influenced by entrepreneurship image as a career alternative and support from the university. It is more motivational to be self-employed and to involve in entrepreneurship due to independence, challenges and self-realization that they can

experience. Only entrepreneurs with high internal locus of control and self-esteem can handle difficult situation and conflicts.

6. *Ability to cooperate with others:*

Most of the time, it is not easy to get cooperation from other people especially if the group is a heterogeneous group. Having employees with different background can be good because they can contribute ideas from different perspectives. However, these people can create a lot of conflicts and can be challenging to handle.

7. *Ability to interact with others:*

Interaction with others is crucial to create harmonic environment and to make people feel appreciated. Having the right communication skills will be helpful when interacting with the staff. In this case, the entrepreneurs need to possess a relations orientation, which means a leadership behaviour that concerns about the workers' feelings, trust, support, and appreciate them.

8. *Ability to participate in activities:*

Technical students are not always inclined to participate in entrepreneurial activities due to the non-technical nature of the activities. However, students need to get involved in entrepreneurial activities organized by the university to get some entrepreneurial exposure. Students can learn a lot of things not taught in class. The soft skills and social skills acquired from participation in activities can help to grow and develop them to be potential entrepreneurs in the future. Nevertheless, in 2003 Luthje, and Franke [6] said that focus must be put especially to those students who have the right personality traits and preferences towards entrepreneurship.

9. *Planning Skills:*

According to Roberts [7], graduates from technical field and universities are more inclined to contribute to economic growth because these people are more innovative and well versed with the latest technologies. Therefore as a technical university, our students will tend to be innovative because they have the technical knowledge to be applied in their entrepreneurial projects. The task of the academicians is to help them plan for the project. Guide them on how to initiate and generate ideas to be sure that the idea can later be commercialized.

10. *Organizing Skills:*

In 1934 Schumpeter [8] highlighted that the quality of entrepreneurs will influence their creative responses and personality of the entrepreneurs affects the quality of them. And to be creative, entrepreneurs need to have a lot of fresh ideas, which can only be accomplished by practicing plenty of reading and doing research work. This process requires good organizing skills to organize the ideas and thoughts systematically. Entrepreneurs need to also learn from previous works by others and also share the ideas to get feedbacks and comments for improvement.

B. Student Entrepreneurial Character Building (SeCB)

This paper is focusing on physical, intellectual, spiritual and emotional of an individual student, which is consistent with UniKL SCB elements as proposed by Subari in 2013[9]. With these entrepreneurial elements together with social and career elements, it is hoped that UniKL can realize its vision to produce enterprising global technopreneurs. Student Development and Campus Lifestyle (SDCL) in UniKL stress on developing the student in terms of their characters. This is known as Student Character Building and it consists of three main outcomes that the students have to achieve upon graduation time. Based on Subari's [9] proposal, the three outcomes are – what students are able to do, knowledge – what students know, and character – the kind of persons the students will become. SDCL wishes to build a meaningful campus life to help students polish their entrepreneurial and leadership traits. Thus, social interaction and student participation in entrepreneurial activities have to be organized. And of course sufficient resources for the programs have to be available for utilization.

In summary, UniKL SCB emphasizes on six main elements which are social, physical, intellectual, spiritual, career and emotional. Since UniKL mission is to produce enterprising global technopreneurs, the element of entrepreneurship has to be developed as one of the main characters for students to have during their studies at UniKL, to prepare them for an entrepreneurial job in a technical field. Under the social element, one of the skills that students need to have is entrepreneurial competencies.

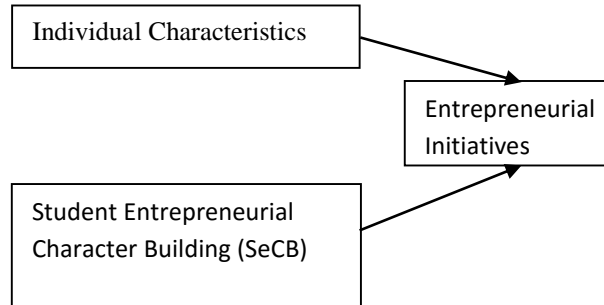
Therefore, in order to support the SDCL initiatives, the educators at campus level are committed to provide students with the opportunity to organize the entrepreneurial programs so that the SeCB could be properly implemented for the benefit of the students.

C. Entrepreneurial Initiatives

Based on Shukor's [10] definition, "entrepreneur" is a French word, which literally means "contractor" or "undertaker". Basically entrepreneurship is the process of introducing new products or services or a new methods of doing something by using new technology. And *Entrepreneurial Initiatives* in our context mean the starting point for someone to get involved in entrepreneurial activities; which mean the initial engagement of someone, so called an entrepreneur, to create new products or services by capitalizing the latest technology or methods.

Basically, as a technical university, UniKL has the vision to prepare the students for the entrepreneurial initiatives as the starting point for them to look into entrepreneurship as a serious and money-generating profession especially because the students have the technical knowledge and capability to be applied in entrepreneurial venture. In this case, the venture can also be called technopreneurship because according to Kamariah et al. [11], in 2009 a technopreneur is a new generation of entrepreneur who can make use of technology to come out with new innovation. In this paper, we would like to explore the relationship between Student's Individual Characteristics and Student Entrepreneurial Character Building (SeCB) in driving Entrepreneurial Initiatives.

THEORETICAL FRAMEWORK



METHODOLOGY

SAMPLE & DATA COLLECTION METHOD

Undergraduate students majoring in Engineering Technology from Universiti Kuala Lumpur British Malaysian Institute (UNIKL BMI) in Malaysia was the focus of this study. Data were mainly gathered from a survey as well as from interviews, readings, observations and experiences. Data were obtained using a set of 5-points Likert scale questionnaire measuring the relationship between student individual characters and SeCB in driving entrepreneurial. Permissions to conduct the research initiatives were obtained from the Dean of UniKL BMI. Data were collected by the researchers who had been trained to properly conduct a good quality research.

INSTRUMENTATION

The following Table 1 indicates the measures of the study variables used in the study. The instrument items were adopted with modifications from previous studies by Ajzen and Fishbien [12], Zaidatol [13] and Wilson, et al. [14]. The measurement of items in the survey questionnaire was based on 5-points Likert scale with 1 demonstrating “strongly disagree” to 5 demonstrating “strongly agree”.

Table I

Table 1: Instrumentation of the study variables

Study Variables	No.of items	Source of Scale	Type of scale
Technopreneurial Intention	13	Ajzen and Fishbien (1980) Zaidatol (2009)	5-points Likert scale
Technopreneurial Self-Efficacy	10	Wilson, F et al. (2007).	5-points Likert scale

FINDINGS AND DISCUSSION

FINDINGS

The result of the study is as the following table:

Individual characteristic	Agree (%)
Teamwork Involvement	93.25
Communication	93.50
Networking	86.75
Leadership	72.00
Motivation	91.75
Cooperation	86.25
Interaction	94.00
Participation	80.50
Planning	87.75
Organizing	90.25

The study indicated that majority of the students agree that SeCB activities in University has improved and increased their level of teamwork, communication, networking, motivation, cooperation, interaction and planning in driving entrepreneurial initiatives.

The study also indicated that SeCB activities do not give much improvement in their level of leadership and participation. It showed that students are reluctant to become leader in activities conducted around campus. Student perceives by becoming a leader, they would be burden by extra roles and responsibilities and therefore they prefer to become regular members in any activities.

It is also showed that students are unwilling to get involved in activities conducted around campus. This is maybe because of they have too many academic-related matters to handle such as assignments, classes, labs and exams.

From the observation, only a few students have shown high level of individual characteristics in leadership and participation. These students usually those that are voluntarily become leader in activities. Most of them also actively involved in student representative council.

RECOMMENDATIONS

LEADERSHIP:

To improve leadership characteristic among students, we would recommend:

- Conduct more leadership talks and seminars by inviting famous motivators.
- Leader of an activity should be chosen not on voluntarily basis.
- Conduct more leadership programs especially during semester break and school holiday.
- Encourage students to lead an activity.
- Give rewards to leaders such as monetary and non-monetary rewards.

PARTICIPATION:

To improve participation characteristic among students, we would recommend:

- SeCB activities to be conducted during weekends and school holidays.
- SeCB activities to be conducted must be interesting to attract student's involvement.

- iii. Rewards to be to participants of SeCB activities such as certificates and activity coupon.
- iv. Sufficient funds and supports must be provided by the university so that activities could be organized properly. Lack of funds and supports may hinder students' participation and may cause pull-out from the activity.

For high quality students, we would recommend:

- i. The university continues to nurture them to become leader and be an example to the others.
- ii. Allow them to recruit other students to become leader.
- iii. Allow them to conduct leadership workshop and talks.
- iv. Reward them and acknowledge other students so that they can be good role models
- v. Give them the opportunity to lead bigger projects and activities.
- vi. Give them the opportunity to go to higher level projects and activities such as national and international level.

FUTURE RESEARCH

Our future research is also related to SeCB and focuses on survey among UniKL students on the connection between team characteristics and SeCB in driving student's entrepreneurial initiatives.

Another planned future research would be the topic of "The effect of environment influences in fostering student's entrepreneurial activities: A study at UniKL".

CONCLUSION AND RECOMMENDATION

For graduates to be outstanding, it is important for them to develop good attitude from the university level. University is a medium place for them to build network, gain knowledge and experiences by participating in classroom activities and university events. Therefore, SeCB plays an important agenda in promoting entrepreneurial initiatives to the students. To be an outstanding student, one should rely on his/her individual successful traits. They have to learn to develop the entrepreneurial traits by getting themselves actively involved in the university entrepreneurial or outside classroom activities. This may spell out the possible potentials and skills that are important in the future working life. Being a leader to ensure the successful of an event especially in entrepreneurial activities can develop right character and improve individual efficiency and skills. Moreover, educators can be the judge to evaluate the student's performance and from the comments, the students will improve themselves and on top of that, they will learn to manage and perform better in future events. Entrepreneurial initiatives prepare the students to be more matured and exposed to real events. Even though they might face difficulties and circumstances, they still have the chance to develop the individual skills that may be needed to overcome the challenges. Other than that, entrepreneurial events will be meaningful if more students get involved in managing the event. They will gain experience and build network outside from the normal classroom activities. As a conclusion, students should prepare themselves to be extraordinary when searching for jobs or to be entrepreneurs in the near future. They have to develop the right individual attributes and from time to time, it has to be improved in order for them to be successful persons.

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DYNAMIC CAPABILITIES IN THE INTERNATIONALIZATION OF SMALL AND MEDIUM ENTERPRISES (SMES): EVIDENCE FROM MALAYSIAN MANUFACTURING SMES

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ABSTRACT

The present study aimed at extending the dynamic capabilities (DCs) perspective into the study of SMEs internationalization. Recognizing the volatility and dynamism of contemporary international market, internationalized SMEs need to adapt in order to survive and grow. This paper argues that Teece (2007) disaggregation of dynamic capabilities as, sensing and seizing opportunities and threats as well as reconfiguring capabilities can provide new insights and contribute to understanding SMEs internationalization process. Semi structured interviews with 10 exporting Malaysian SMEs managers/owners in manufacturing sector have been used for data collection. Research findings revealed that SMEs' managers/owners who possess these dynamic capabilities were able to identify and exploit international business opportunities effectively.

Key words: dynamic capabilities, dynamic environment, internationalization, SMEs, and Malaysia.

INTRODUCTION

Nowadays, SMEs all over the world are involved in rapid internationalization. Hence, the significance of relevant theories that investigate and guide internationalization has increased (Schulz, Borghoff, & Kraus, 2009). In this context, Autio (2005) called for an "integrated explanation" while Coviello, McDougall, & Oviatt (2011), argued that internationalization theories should be supported with "multi-theoretical perspectives". Based on unique nature of each firm in various contexts, literature reports new findings that seem to emerge more or less continuously (Paavilainen-Mäntymäki 2009). These variations opened the doors for conducting new studies that combine existing findings and approaches. Dynamic capabilities are an example of an approach that clearly still lacks theoretical and empirical studies in the SME context.

Pertaining to SMEs internationalization, investigating how SMEs sense and seize new opportunities in international markets is particularly important for economies, enterprises and innovation (Teece, 2007). In addition, given the environmental dynamism, the possession of dynamic capabilities is relevant to achieving a competitive advantage over time and to the successful performance of internationalized firms in this type of business environment (Teece, 2007).

INTERNATIONALIZATION OF MALAYSIAN SMES

Malaysia is known as the 17th largest exporting nation in the world by which almost 80% of overall country's export derived from manufacturing sector with qualified products

accepted in developed countries such as US, EU and Japan (Raja, 2011).

The interest in Malaysian SMEs has witnessed a significant growth over the years (SMIDEC, 2009). The number of SMEs in Malaysia is growing with stronger tendency towards exporting activities than large firms and they are looking for broader market for their products (Shanker et al., 2010).

THEORETICAL BACKGROUND

DYNAMIC CAPABILITIES AND INTERNATIONALIZATION

This study tends to build on the integration of dynamic capabilities view as the emergent paradigm in strategic management and the international opportunity recognition and exploitation perspective in international entrepreneurship (IE) field. Derived from the fundamental question in strategic management, how firms gain and sustain competitive advantage, Teece, Pisano and Shuen (1997) have proposed the dynamic capabilities model that has been extensively used to investigate the firm performance. This model represents as extension to the resource based view as it argues that, in order to prosper in rapidly changing environments, firms need to develop a systematic capacity to conduct activities to sense and seize new opportunities and to transform themselves accordingly (Teece, 2007). On the other hand, international entrepreneurship (IE), as a multidisciplinary field combining both entrepreneurship and international business, has been defined as “the discovery, enactment, evaluation, and exploitation of opportunities -across national borders -to create future goods and services” (Oviatt and McDougall 2005, p. 540). In addition, IE is primarily about opportunity identification and exploitation of business operations in foreign markets and understanding how international entrepreneurs make decisions to identify and exploit opportunities in foreign markets is necessary to the development of the relatively infant field of IE (Zahra, 2004).

ENVIRONMENTAL DYNAMISM

Environmental dynamism can be described as an environment with perceived instability and continuous changes (Lumpkin & Dess, 2001) as it reflects the amount of unpredictability in change of customer tastes, production or service technologies, and the modes of competition in the export firm's principal industries (Drnevich and Kriauciunas 2011). The dynamism of firm's environment can be shown in the rate of market and industry's change and the level of uncertainty about the environment that is beyond the control of individual firm (Wiklund & Shepherd, 2005). In this vein, many entrepreneurial scholars have argued that organizations need to respond to challenging condition in a dynamic environment by adopting an entrepreneurial posture (Lumpkin & Dess, 2005). This stressed the need for SMEs to respond to turbulent or hostile environment with pragmatic solutions This study will investigate environmental dynamism in terms of technological, competition and market changes in international markets.

INTERNATIONAL OPPORTUNITY IN INTERNATIONAL ENTREPRENEURSHIP

International Entrepreneurship (IE) has emphasized the recognition and exploitation of opportunities for international exchange (Ellis, 2011). IE focuses on 'opportunity' in a cross border context (Oviatt & McDougall, 2005). This study adopts international opportunity

definition developed by (Mainela, Puhakka & Servais, 2013). They view international opportunity as a situation that both spans and integrates elements from multiple national contexts in which entrepreneurial action and interaction transform the manifestations of economic activity.

DYNAMIC CAPABILITIES: NATURE AND IMPORTANCE FOR SMES.

Teece et al. (1997, p. 516) initially defined DCs as “the firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments.” in additions, they argued that DCs are firm specific, being embedded in the firm and its processes that cannot be easily transferred without transferring the subunits or acquiring the firm possessing the capability. Building on this definition, (Eisenhardt& Martin, 2000) has stated that DC can be viewed as the firm’s ability to alter the resource base by creating, integrating, recombining and releasing resources. Possessing dynamic capabilities is essential for the existence of a firm under very dynamic international business conditions Luo (2000). In SMEs ontext, Sapienza, Autio, George, and Zahra (2006) argue that SMEs need dynamic capabilities that allow them to survive and reap the benefit of their innovation.

PREVIOUS RESEARCH ON DYNAMIC CAPABILITIES AND SME INTERNATIONALIZATION

Previous research has studied SME internationalization in relation to three specific dynamic capabilities (DCs) of SME entrepreneur, namely entrepreneurial orientation, social capital, human capital (Zahra, Sapienza & Davidson, 2006). However, research has ignored other dimensions of dynamic capabilities. This paper argues that Teece (2007) disaggregation of dynamic capabilities as, sensing and shaping opportunities and threats, seizing opportunities and maintaining competitiveness through transferring and reconfiguring the business enterprise’s intangible and tangible assets can provide new insights and contribute to understanding SME internationalization.

DYNAMIC CAPABILITIES AT INDIVIDUAL-LEVEL

Basically, previous research has focused on organizational-level DCs (Helfat et al., 2007; Winter, 2003). However, (Adner and Helfat 2003) has employed some terms such ‘dynamic managerial capabilities’ to refer to a manager’s capacity to create, extend or modify the resource base of an organization. Hence, an increasing emphasis on the micro-level, namely the level of individual action, that influences the development of DCs in organizations (Easterby-Smith , Lyles, and Peteraf (2009).

INTERNATIONALIZATION AND THE ROLE OF SME ENTREPRENEUR/ MANAGER DYNAMIC CAPABILITIES

According to Schweizer; Vahlne, and Johanson (2010), dynamic capabilities perspective is relevant to explain internationalization. They argued that internationalization of firm may be due to sticky resources and conversely firms may not internationalize as a result of sticky resources. While, Kuuluvainen (2012) in a case study, stated that dynamic capabilities are important determinant of internationalization success. Furthermore, Dynamic capabilities are particularly important for firms seeking to export because “they must develop certain strategic and organizational capabilities to counteract the natural advantages unique to local

businesses” (Luo, 2000, P.357).

In SMEs internationalization, the IE literature reveals a wide recognition of individual entrepreneur’s role in deciding to internationalize and firm performance (Jones & Coviello, 2005; Zahra, 2005). Study by Sternad and Jaeger (2013) highlights the key role of SME managers in the export performance of SME through enabling the improvement of export-related dynamic capabilities that can substitute for deficiency of other resources.

DISAGGREGATIONS OF DYNAMIC CAPABILITIES

The dynamic capabilities literature has provided numerous established conceptualizations of DCs (See table1). In conceptualizing DCs, Eisenhardt and Martin (2000) have suggested that DCs involve (1) acquire and shed, (2) integrate, and (3) recombine resources to achieve new resource configurations and match or create market change. In addition, Wang and Ahmed (2007) define three components of DCs, including adaptive, absorptive and innovative capability.

Table 1: conceptualizations of dynamic capabilities

Author	Microfoundations of dynamic capabilities		
Eisenhardt and Martin (2000)	Acquiring and shedding resources	Integrating resources	Reconfiguring resources
Zott (2003)	Variation and selection	Retention	Reconfiguring and competing with rivals
Wang and Ahmed(2007)	Adapting	Absorbing	Innovating
Teece (2007)	Sensing and shaping opportunities	Seizing opportunities	Reconfiguring

Source: compiled from literature

Furthermore, Teece (2007) has conceptualized three classes of DCs on the most comprehensive level. Firms exhibiting strong DCs effectively sense and shape opportunities, address these opportunities by seizing them, and continuously reconfigure themselves as markets and technologies change. The author has analyzed the nature of each capability and identified the relevant activities attached with them (see table 2). The study at hand tends to

focus on (Teece, 2007) model within the context of internationalized SMEs.

Table 2: Teece (2007) Microfoundation of dynamic capabilities.

Table 1. Types of dynamic capabilities, their nature and the related key firm's activities.

Type of dynamic capabilities	Nature of the capability	Key firm's activities linked to the capability
Sensing (shaping) opportunities and threats	Organizational ability to scan, filter, monitor, assess, create, learn, interpret, figure out and calibrate opportunities and threats	<ul style="list-style-type: none"> • Investment in research activity • Probing and reprobing the information (existing/new, local/distant and Internal/external): <ul style="list-style-type: none"> - Customer's needs (expressed or latent) - Technological possibilities - Supplier and competitor responses - Structural evolution of industries and markets
Seizing opportunities	Organizational ability to address potential opportunities through new products, processes or services	<ul style="list-style-type: none"> • Selection of the physical technology • Design of the business model • Recruitment of managers to supervise and co-ordinate the functional activities
Managing threats and reconfiguration	Organizational ability to recombine and reconfigure assets and organizational structures as the environment changes	<ul style="list-style-type: none"> • Redesign of the business model • Realignment of assets • Revamping of routines

Source: Adapted from Teece (2007).

RESEARCH METHOD

Recognizing the current limited understanding of dynamic capabilities in enhancing SMEs internationalization process, qualitative research method was adopted for this study. As a qualitative study, interviews as one of the most important sources of information (Yin, 1994) were used to gather data. Semi-structured interviews were conducted to individuals who were personally responsible identifying international opportunity and exporting. This individual is usually the senior manager, who may also be the owner of the firm as revealed by Ellis (2010). The study at hand was designed to investigate how SMEs owners/managers who possess a set of dynamic capabilities can recognize and exploit business opportunities in a turbulent foreign market. Given these research objectives, Malaysian internationalized manufacturing SMEs were chosen as they are vulnerable to global market dynamism.

Research in dynamic capabilities relevance to internationalization is at an early stage (Teece, 2007). Thus, this paper tends to build on the existing theoretical vocabulary of dynamic capabilities, such as 'sensing', 'shaping', 'seizing' and 'reconfiguration', to attain new insights, and a better understanding of the relevant phenomena in a specific context (internationalized Malaysian SMEs).

SAMPLING

The main selection criteria of respondents involved 10 managers/owners of manufacturing SMEs with less than 200 employees that maintain independent business based in Malaysia

and actively involved in exporting.

INTERVIEW PROCEDURE

The interview has been conducted in SMEs manager/owner office and it lasted for approximately 35 minutes and answers were recorded into data-shells. The interview was managed by a list of questions prepared by the researcher. The interview has emphasized three aspects. First, the interviewees were asked to describe the environmental dynamism that their SMEs operate in. This section addressed market dynamism, technological dynamism and competition in international markets. Second, each respondent has been requested to explain the internationalization process. More specifically, how do they identify and exploit business opportunities in international markets. Finally, interviewees have been asked to illustrate their sensing, seizing international opportunities and reconfiguration capabilities. In addition, how these capabilities have contributed to international opportunities recognition and exploitation. Due to the language complexity, the researcher has simplified some idioms to respondents so that they understand and respond easily.

RESEARCH FINDINGS AND DISCUSSION

The descriptive statistics of respondents are shown in table 1. Based on interviewing the ten SMEs' managers/owners, numerous themes have been revealed. Almost all respondents have assured the endless dynamism of international business environment. For instance, two companies in food and beverage had to deinternationalize from some of the Middle Eastern markets due to the political and economic commotions. Other SMEs managers (Metal and Metal products) have stated that competition in international market is severe and intensive. On the other hand, some textile and apparels and rubber and plastic SMEs have benefited from industrial transformation and expanded to international markets through exploiting the low wage and economic prices of material.

In addition, research findings have revealed that SMEs manager/owners possess sensing and seizing capabilities that are employed in searching for and recognizing international business opportunities. Majority of SMEs owners/managers have shared the same internationalization process journey. They usually involve in continuous search of new development ideas, collection of market information and review of business environment changes and their possible effects. This is compatible with (Danneels, 2008; & Teece, 2007) as they argued that organizations constitute sensing capability by establishing processes to regularly scan their local and distant business environment, to interpret the gathered information, and to filter the relevant parts (Teece, 2007). Similarly, Sensing activities entail "an inherently entrepreneurial set of capabilities that involves exploring technological opportunities, probing markets, and listening to customers, along with scanning the other elements of the business ecosystem" (Teece, 2011). For some SMEs (food & beverage) when they entered new markets for the first time, when searching for opportunity, they spent a long time collecting and disseminating information. However, once they shape and seize opportunities they decide to conduct the international transaction directly. This is in conjunction with the importance of dynamic capabilities that help SMEs to overcome a lack of international experience and go beyond "its domestic routines in terms of collecting information, disseminating that information across the organization, and designing a corporate response to the market" (Armario, Ruiz and Armario, 2008, P. 490). In this regard, the participants

reported that investment in market surveys and related activities is essential when entering foreign market for the first time. Majority of respondents had usually asked a professional consulting company to do the global market research.

Table 3: Descriptive Statistics.

Manufacturing sector	No. of SMEs	Exporting Destinations
Textile & apparels,	3	Singapore, Africa, USA
food & beverages	3	Middle East, Africa
Metal & metal products	2	EU, Africa
Rubber & plastics products	2	South Korea, India

While sensing dynamic capabilities can provide access to external knowledge, seizing dynamic capabilities focus on the realization and exploitation of this knowledge. Seizing dynamic capabilities thus pertain to the creation of new product or services – as well as new business models – which can transform recognized opportunities into valuable outcomes (Teece, 2007). They also involve securing access to capital and skilled human resources. participants paid attentions to changes in international markets such as changes in consumption practices and supply network dynamics Once SMEs managers have reached an opportunity, they start to plan the finance required (they may apply for loan), plan the supplier networks as well as the human resources needed to exploit the opportunity (they may involve in a part time recruitment).

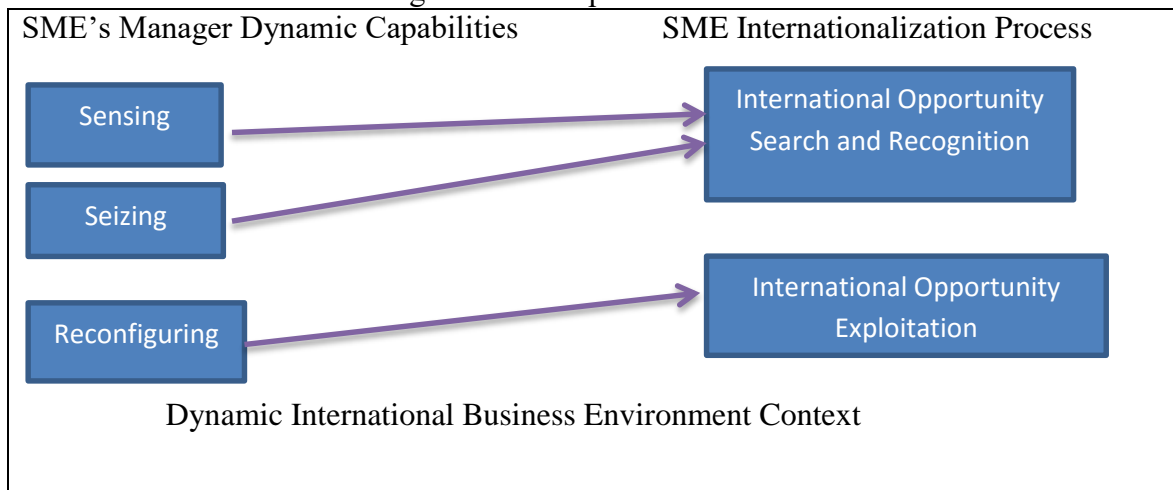
Furthermore, SMEs manager/owners possess reconfiguring capabilities that are employed in exploiting international business opportunities. However, reconfiguration capabilities have proved to be less effective. For instance, SMEs managers/owners can realize potential business opportunities but can't exploit such opportunities due to the inability to reconfigure SMEs resources and competencies to capture these opportunities (e.g. rubber & plastic SMEs / African markets). Once opportunities are recognized and seized upon, transforming dynamic capabilities are needed to achieve “semi-continuous asset orchestrations and corporate renewal” (Teece, 2007: 1335). Eisenhardt et al. (2010) explain the individual attributes and behaviors of leaders in attempting to develop the microfoundations of performance, emphasizing higher order thinking and expertise, abstraction, cognitive variety and interruptions in favoring flexibility over efficiency (Eisenhardt et al., 2010, p. 1271).

When SMEs managers recognize the profit potential of business opportunity, they take actions to exploit it. Here, they set the manufacturing plan, may need to launch new products, conduct product improvements and modifications as well as process improvements.

The findings of the research also reported that SMEs managers emphasize the social networks (e.g. international trade intermediary) in their internationalization process. In addition, when searching for business opportunities, SMEs managers tend to emphasize relationship

management with potential importers.

Figure 1: Conceptual Framework



CONCLUSION AND FURTHER RESEARCH

The main objective of this paper was to investigate the role of dynamic capabilities in enhancing the internationalization of SMEs. The findings of the research have revealed a pervasive environmental dynamism that internationalized SMEs encounter. In additions, the results have emphasized the significant roles of dynamic capabilities in contributing to identifying and exploiting international business opportunity.

In this context, developing and sustaining dynamic capabilities for internationalized require further research especially for reconfiguring capabilities. Based on the Malaysian context, research on investigating how to develop social networks is required as they represent a major determinant for SMEs internationalization. Furthermore, conducting empirical studies that employ large samples will provide a wider understanding of dynamic capabilities relevance to SMEs internationalization. Finally, investigating the moderating role of environmental dynamism on the relationship of dynamic capabilities and SMEs internationalization represents a promising research avenue.

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THE FACTORS INFLUENCING KNOWLEDGE TRANSFER FOR INFORMATION TECHNOLOGY OUTSOURCING SUCCESS IN MANUFACTURING : A PERSPECTIVE FROM CLIENT

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ABSTRACT

This study examined factors that influence Knowledge Transfer for Information Technology Success in manufacturing specifically in food industries. Previous studies have highlighted the failure of Information System Outsourcing (ITO) due to lack of effective KT between client and vendor during various phases. While some outsourcing research has emphasized the need for knowledge transfer from client to vendor or vice versa, little evidence has examined its impact on ITO in manufacturing context. Transactive Memory System (TMS) and IT competencies has been mentioned as factors to facilitate the Knowledge Transfer process. To address the gap, this study attempts to indentify factors from literature that significantly influence ITO success. Using two underlying theories; Knowledge Based View (KBV) Theory and Organizational Learning Theory (OLT), the study outline three factors namely Transactive Memory System, Client factor and IT Competencies. All these factors will be integrated and form the conceptual framework that is applicable for the purposes of further research. Future research may expand the framework besides developing TMS implementation guideline for manufacturing sector and increase ITO success level.

Keywords: Knowledge Transfer, IT Outsourcing Success, Transactive Memory System (TMS), IT competency, Knowledge Based View, Organizational Learning Theory.

INTRODUCTION

In an era borderless technology, the trends towards practising information technology outsourcing (ITO) to attain competitive advantage in an organisation is increasing. ITO has create an interesting business model and new company strategy because of the ability to reduce costs, employed higher end technology and focus to the business core competencies (George, Hirschheim, & Stetten, 2014). ITO has become the engine that leads to continuous growing of IT services business (Dahlberg & Nyrhinen, 2006). ITO is defined as the system to transfer activities related to information technology to an external provider (Duhamel, Gutierrez-Martinez, Picazo-Vela, & Felipe Luna-Reyes, 2014). ITO has become one of company strategy alliences to improve manufacturing sustainability by increasing the product quality.

ITO nowadays, is claimed as one of the important practice in manufacturing sectors, besides

business process outsourcing. Crow & Muthuswamy (2003) mentioned that 90% of IT service employment resides in non-IT companies such as manufacturing, banking and insurance. ITO in manufacturing has been practiced especially for the hardware maintenance, enterprise and supply chain applications. ITO has become popular practice because there are growing pressures on organizations' maintenance costs and limited availability of skilled personnel in the manufacturing. Due to the economic pressure, the manufacturers have begun to appoint a third party vendor for the hardware maintenance and application systems development according to the company needs. Hence, IT outsourcing is seen as one of the alternative methods to ensure the projects can be completed within the stipulated time and within budget. Although outsourcing improve the competitive advantage in the organization, it is still risky and irreversible (Tiwana & Bush, 2007). Some of the companies, were against ITO practice because of the integration issues, sacrificing their competitive base, limited innovation and increasing procurement cost. Studies shows that only one of six ITO projects claimed as successful (Tiwana & Bush, 2007) while Emam & Günes (2007) claimed 26 percent to 34 percent of IT projects failed with 11-15% of projects cancellation before the project termination. Despite various studies on IS failure, the rate of failure has not notably abated and failed projects continue to occur. A successful ITO is marked by a common understanding among team members. An essential element of developing a common understanding is to share knowledge at all stages of software development (Desouza, Awazu, & Baloh, 2006). These problem arise because of impaired knowledge transfer between vendor and clients (Szulanski, 1996), delays or blockages of knowledge transfer, the inability to seek out relevant knowledge, poor aggregation and integration procedures for knowledge synthesis (Desouza et al., 2006). Indeed, organizations that are most effective at knowledge transfer improve project outcomes by nearly 35% (PMI, 2015). When essential knowledge is captured and shared, organizations see improved results across the range of project metrics, including cost savings, time-on-task, error rates, and innovative solutions. In order to do so, the company must trust the credibility of their vendor and treat them as their business partner or stakeholders (Ishizaka & Blakiston, 2012).

Table 1: Malaysia external trade data

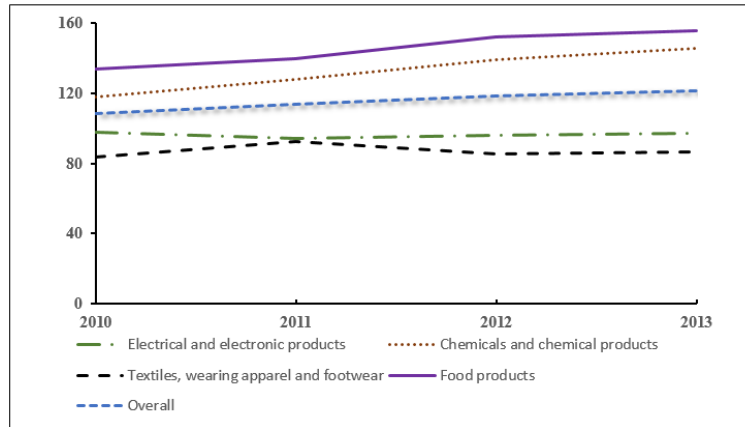
External Trade	2013 ¹	2014 ²
	RM million	
Total Exports	699,340	716,574
Manufactured goods	518,211	533,131
Others	181,129	183,443
¹ Estimate, ² Forecast		

Source : FMM Directory 2014

As one of the important sectors that contribute to the economic growth, manufacturers should be prepared with a range challenges, particularly in ensuring successful IT outsourcing project. According to the FMM 2013/2014 report, all economic sectors are expected to show positive improvements in 2015 in which manufacturing is the largest contributor with total expenditure of RM518,211 million from total RM699,340 million in 2013 and increased to

RM533,131 million from total RM716,574 million in 2014 as presented in Table 1. Thus, it is important to ensure that the plant can be more competitive by addition of advanced technology which is ITO to maximize the process of operation. Further, the FMM 2014 production index categorized four main sectors in manufacturing including food products, chemicals and chemical product, electrical and electronic products, textiles, wearing apparel and footwear. Food sector is the dominant sector with the highest profit margin compare to others. Figure 1 illustrates the Production Index of various sector in Malaysia.

Fig 1: Production index



Source:
directory

FMM
2014

Align with the aspiration of becoming a market leader for halal foods, Malaysia government However, a study in Malaysia is still less focused on the food sector and many previous researchers focus on heavy industry and high-tech. Furthermore, the study focuses on IT outsourcing among food manufacturers are imperatively very smallhas invested vast amount of money in food processing industry towards making Malaysia as a regional halal food production and distribution hub. During the Third Industrial Master Plan (IMP3) from 2006 until 2020, government spend RM1.6 billion per annum to get greater initiatives on total productivity factor (TFP) growth. These include upgrading human resource and technology, enhancing R & D, undertaking the production and export of high value-added and niche products, and adopting quality standard. In order to improve quality and productivity level, food manufacturers also implement a number of systems such as computer integrated manufacturing (CIM), Inventory System, Accounting Management System and Tracking System. However, the most significant application is Enterprise Resource Planning (ERP) system. Modules for manufacturing planning and control is available in all contemporary ERP software packages, and it has also been installed in most manufacturing firms (Tenhiälä & Helkiö, 2014).

Nevertheless, the ERP system is still confronted with some problems that frequently discussed in previous literature review. For instance, the main critique is that ERP systems impede adaptation to changing market requirements (Seethamraju & Krishna Sundar, 2013), even the implementation of ERP in the giant food company such as Hershey Foods Corporation has also been recorded as failed by Perepu & Gupta (2008) which caused the stock decrease to 8% (as cited in Dwivedi et al., 2014). Frustrated with the inflexibility of ERP systems, many managers have looked for help from in-house system development team

or traditional functionally specialized business applications. Although most firms do not have plans to completely abandon their ERP systems, many have implemented standalone tools to replace some functionality of their ERP systems. Therefore, clearly shows the failure of IT outsourcing is applicable in a wide range of systems and sectors. However, the lack of empirical studies carried out in the food sector, there is a needs for a study to be made in the food sector. Previous ITO studies were focused in high tech manufacturing and automobile industries because Large Manufacturing Enterprises (LMEs) always enjoy breadth of cash flow and always have opportunity to outsource the system (Offodile & Abdel-Malek, 2002) compared to the medium enterprise companies.

The reminder of the paper is as follows. In the next section, existing theories related with IS success and failure will be discussed. Afterwards, various factors relate with ITO success and knowledge transfer is presented. These diverse ideas and view-points are then brought together, and conceptual framework for future research will be proposed.

THEORETICAL FOUNDATIONS OF THE STUDY

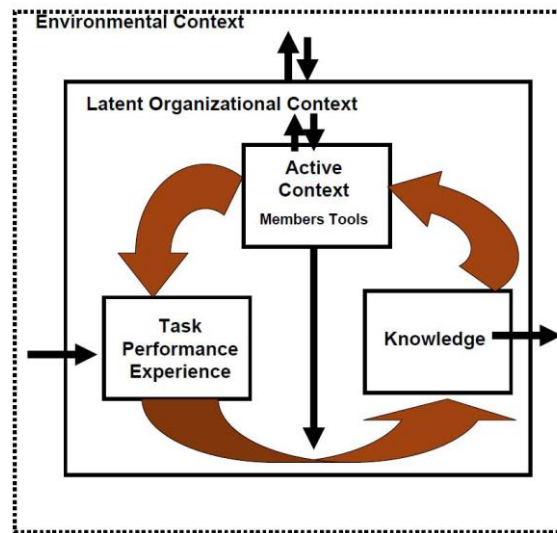
The above discussion provide the theoretical perspectives on the benefits for organizations to practice effective knowledge transfer for ITO success. With regard to the explanations of the phenomena of knowledge resource based on organizational learning, three theories are discussed in the following sections. These are Knowledge-Based Theory (KBT), Organizational Learning Theory (OLT) and Social Exchange Theory (SET). Lopez & Junquera, (2013) affirmed that knowledge management processes requires shared understanding among organizations members.

ORGANIZATIONAL LEARNING THEORY (OLT)

The basic concept of Organizational Learning Theory is, organization make experiences, draw inferences, encode the inferences into work routines such as regulated of organization rules, procedures, convention, technologies and strategies (Schulz, 2002). Argote (2011) define organizational learning as a change in the organisation's knowledge either tacit or explicit that occurs as a function of experience and can marked itself in a variety of ways, including change of cognitions, routines and behaviours.

According to Argote & Miron-Spektor (2010), the basic elements of organizations are members, tools and tasks. From these three basic element, knowledge is created, retained and transferred. The simple concept is member will perform task using specific tools in specific event or process. Each member need to know how to use the tools they have and how to perform the task. More understanding the members on the tools they use, the higher impact they will show on their task performance. Experience also plays an important roles in creating knowledge. There are several factors that cause such experience include good or bad situation, direct or indirect, and sometimes geographic location also may create an experience. Organizational knowledge originated from an individual knowledge. As mentioned by Argote & Miron-Spektor (2010), in order for an individu to achieve higher level of analysis, the individual knowledge should be embedded in a supra-individual repository to help others to access the knowledge. For an example, by using Transactive Memory System (TMS), all knowledge will be connected by each other by using an individual knowledge as a database.

Fig 2 : A theoretical Framework for analyzing organizational learning



Source : Adapted from Argote, L., and E. Miron-Spektor,(2011).

The outcome of learning is knowledge. When it comes to a new knowledge, organizations need to acquire, absorb, transform and utilize the knowledge. Organizational learning plays an important role in the sustainability of the competitive advantage while considering KBV of the firm (Curado, 2006). Eisenhardt & Santos (2002) admits that organizational learning is part of the foundation for knowledge-based view. The author claims that new knowledge will be created by the learning process and it will form the basis of the growth of organizations by recombining all current resources. It will create new organizational routines that bring new collective learning in an organization. All the information learned from the organization will be applied into the outsourcing system to ensure that it is connected to generate the needed information later.

KNOWLEDGE BASED VIEW (KBV) THEORY

In order to sharpen the OLT, KBV is needed as a suitable medium for internal and external knowledge transfer. For inter-organizational knowledge transfer, KBV explores how knowledge is being transferred between organizations. For internal purposes, KBV views knowledge as a key resource which is usually used by managers that help them in making a decision (Tiwana & Bush, 2007). Thus, KBV will help firms to assimilate and codify tacit to explicit knowledge. Tacit knowledge is more personal knowledge which is rooted in action and specific context while explicit knowledge is more formal and methodical knowledge (Valentim, Lisboa, & Franco, 2015). An effective software development will only succeed if there is an integration between client domain knowledge and vendor technical knowledge during the development process (Tiwana & Bush, 2007). IT infrastructure will act as a medium which helps to facilitate the transfer of knowledge and transform it from tacit (unwritten) to explicit (written) knowledge (Lopez & Junquera, 2013). The knowledge will continue moving through the field of strategy (Eisenhardt & Santos, 2002). It depends on the characteristics of the knowledge, the sender, the recipient, and their mutual relationship. As

for external knowledge transfer, knowledge transfer happen across firm boundaries. Effective of external knowledge transfer may lead to sustained competitive advantage and more effectively accomplished within organizations rather than markets (Eisenhardt & Santos, 2002). The studies highlighted KT towards ITO are still inclusive especially in the manufacturing context. The most common practice of KT in manufacturing is by job rotation and training.

KNOWLEDGE TRANSFER CONCEPTUALIZATION THE EFFECT OF KNOWLEDGE TRANSFER TOWARDS INFORMATION TECHNOLOGY OUTSOURCING SUCCESS

Knowledge transfer is very important in the development of an application system in an organization. Complex technical systems always require high knowledge where it often becomes difficult for group members to grasp it. The ability of team members to learn and use technology-related knowledge is one of the critical factors in determining the success of ITO (Park & Lee, 2014). There are three features of outsourcing. The first is firm using external entities to manage internal information usually for non-IT firm, second is ITO as a system to run the whole organization process which include human activities and requires service provider to understand both IT issues and business process of customers and the last one is ITO as the part of IT planning in an organization (Li & Li, 2009). In this study, we are focusing on second issues. Therefore an effective knowledge transfer is essential to ensure that there is no gap between technological knowledge and human knowledge. Based on study done by Chang & Gurbaxani (2012), IT-related knowledge held by IT services vendor enables firm productivity increase include efficiency level, financial leverage and business variability.

Argote and Ingram Linda Argote & Ingram (2000) defined knowledge transfer from the process perspective through which one unit is affected by the experience of another unit as the result of the conclusions or possibility derived from the observed event, act and intense emotions. In context of IT Outsourcing, knowledge transfer is conceptualized as unidirectional communication between the client and the vendor exchange and share their useful information, skill, competencies or routines about the project and both parties is affected by changes in the recipient replication capacity, adaptation capacity and changes in skill or knowledge based that occurs as a function of experience from each other (Aziati, Juhana, & Hazana, 2013). Previous reseachers such as Blumenberg, Wagner, & Beimborn, (2009), Joshi & Sarker (2004) and Lech, (2011) have relates the integrated organizational elements and knowledge significant impact to the success of IS outsourcing characteristics for the effectiveness of KT perceived by through the knowledge transfer factors. Specifically, He, Gallear, & Ghobadian (2011), Lech (2011) and Xu, Li, & Liu (2011) have proved positive impact of knowledge transfer in ERP project success besides strengthen ties suppliers and client.

FACTORS INFLUENCE KNOWLEDGE TRANSFER IN INFORMATION TECHNOLOGY OUTSOURCING

Previous researchers claimed that most of ITO projects were unsuccessful due to lack of communication and coordination between client and vendor. Communications in an important tools as it shows high impact on project team performance which listed as second

among nine knowledge sectors indicated by Project Management Body of Knowledge (PMBOK) (Hsu, Shih, Chiang, & Liu, 2012). Good communication between vendor and client will help in understanding the system operation well, detecting any problem arise and quickly find the solutions. To reduce obstacles arise in knowledge transfer activity, researcher will looked in three factors include client, Transactive Memory System (TMS) and IT competency.

CLIENT FACTOR

Client are the project team who will use the system include managers, entry-level technician staff, IT staff, operators and all person related to the project. As stated by Ishizaka & Blakiston (2012), there are five factors impact the knowledge transfer based on client perspectives which are absorptive capacity level, commitment from top management, clear aims and objectives on company goals, confident and trust with the knowledge of their service provider, good communication quality between client and vendor and discipline among team members. Individual with higher absorptive capacity will have an ability to encode the knowledge and translate it to their work routine (Ko, 2014). Managers are the best source of data an organization and the best person to identify problems within the organization. Cheng, Madsen, & Liangsiri (2010) indicated that client side project managers play a crucial role in determining how the priority with what KT takes place. Thus, commitment from top management is important for KT to gain ITO success. Managers must also have clear company objectives to make sure ITO function in line with company aims and objectives. Trust is a very important tools for knowledge transfer. Trust is an important element of psychological contract and will positively influence knowledge transfer (Ko, 2014). Without good development of trust between client and vendor, all the required information will not be disclosed and will effect back to other problem. The last one is discipline among team members. Discipline is the tendency of team member to follow all in-job and off-job training on learning the system function. This will enhance the ability of workers to perform their daily work.

TRANSACTIVE MEMORY SYSTEM (TMS) FACTOR

Broad of knowledge need to be identify and manage properly thus TMS system is important to break down the knowledge to 'who knows what'. Prior studies have consistently suggested that TMS can facilitate knowledge transfer in system development and IT projects (e.g. Aziati & Salim, 2010; Lin, Cheng, & Wu, 2014). Transactive Memory System (TMS) is a shared system that help user to encoding, storage and retrieve the knowledge between group members (Manteli, van den Hooff, & van Vliet, 2014; Peltokorpi & Hasu, 2014). TMS among ITO members can be developed through shared experiences, on job tarining, and joint application development. TMS plays an important roles as it tells members of the group the range of knowledge that available and who are an experts group members in specific knowledge area (Schulz, 2002). Since team members in ITO project have diverse expertise, knowledge, and information, frequeant communication could help members learn about others' expertise and develop shared perceptions about who knows what. TMS concept has been tested mainly in relationships and groups, including married couples, dating couples,

families, friends, coworkers, and work groups in both organizational and laboratory settings.

INFORMATION TECHNOLOGY COMPETENCIES FACTOR

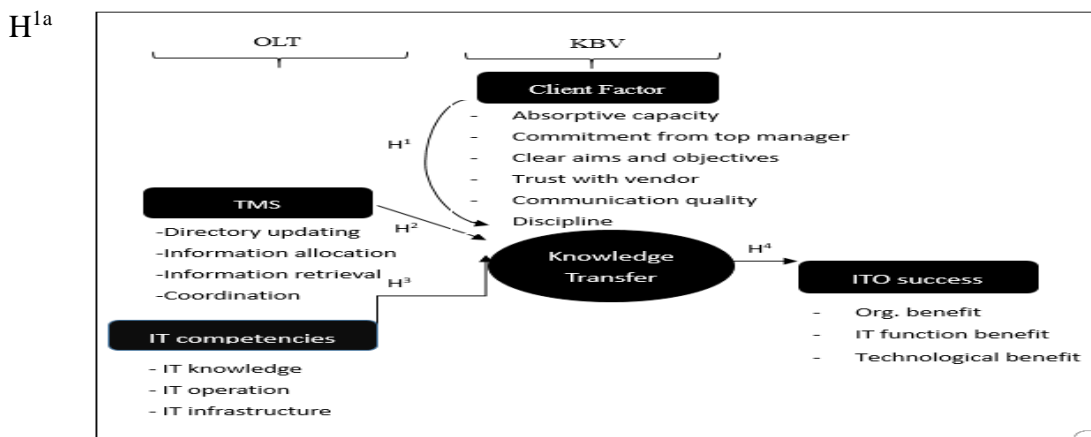
IT competencies is another factor that reported to influence knowledge transfer. Competencies are been defined as “the skills, knowledge, behaviours, abilities, and personal characteristics that lead to a great performance”, (Eschenbrenner & Nah, 2014). IT competent user will give benefits to company by satisfying the company information needs effectively. Higher level of IT competency will help user to absorb the knowledge more compared to noncompetency user. (Pérez-López & Alegre, 2012; Tippins & Sohi, 2003) differentiate IT competency into three dimensions which are IT knowledge (ability to understand knowledge), IT operations (IT business process) and IT infrastructure (standard facilities). Having the great IT skills added with standardize knowledge transfer system will giving more impact on receiving new knowledge.

IT knowledge more to a tacit knowledge that come from information combined with experience, context, interpretation and reflection of an individu. It is more on understanding a body of technical knowledge about the objects such as computer based system (Tippins & Sohi, 2003). Compare with IT operations, the activity is more on understanding the required process, method and skills to completing the tasks while IT infrastructure focus on tools or technical object that represent to computer based hardware, software and support personnel. Tippins & Sohi (2003) also holds that, firms that achieve higher levels of IT competency always in the superior position on managing their ‘invisible asset’ that creating the market leadership.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Based on discussion in previous section, we propose a conceptual framework shown in Figure 3. Knowledge transfer become an object on measuring ITO success. Client, TMS and IT competencies was represent as a factor effected knowledge transfer flow in a manufacturing. Fourteen hyphothesis will be creates to support this research objectives.

Fig 3 : Conceptual framework



Absorptive capacity will positively influence KT in ITO

H^{1b} Commitment from top manager will positively influence KT in ITO

- H^{1c} Having clear aims and objective will positively influence KT in ITO
- H^{1d} Higher trust with vendor will positively influence KT in ITO
- H^{1e} Good communication quality will positively influence KT in ITO
- H^{1f} Higher discipline among team members will positively influence KT in ITO
- H^{2a} Higher directory updating records will positively influence KT in ITO
- H^{2b} Effective information allocation will positively influence KT in ITO
- H^{2c} Effective information retrieval records will positively influence KT in ITO
- H^{2d} Higher coordination will positively influence KT in ITO
- H^{3a} IT knowledge will positively influence KT in ITO
- H^{3b} IT operation will positively influence KT in ITO
- H^{3c} IT infrastructure will positively influence KT in ITO
- H⁴ KT will positively influence ITO success

KBV theory will be used to analyse client factor and OLT will be use to analyse TMS and IT competencies factor.

CONCLUSION

This paper discuss the importance of an effective Knowledge Transfer (KT) to achieve a successful Information Technology Outsourcing (ITO) project in a manufacturing industry. ITO has become a modern manufacturing business strategy in order to strive with nowadays competitive environment. Previous research reported that most of the ITO in organisation has failed to achieve their objectives. The main problem is no effective KT happen between client and vendor because knowledge is too complicated to understand. Researcher look at client, TMS and IT competencies factor on their impact on knowledge transfer process which will effect to ITO success. Organizational Learning Theory was select to analyze knowledge transfer process and sharpen by Knowledge Based View theory. Fourteen hypothesis was produce to support research objectives.. The study focuses on food manufacturing around Johor area.

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KNOWLEDGE SHARING CAPABILITY AND KNOWLEDGE SHARING SUCCESS: ORGANIZATIONAL PERSPECTIVE

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ABSTRACT

To date, studies on knowledge sharing capability and knowledge sharing success are rare. This paper, therefore, focuses on the study of three dimensions of knowledge sharing capability (i.e., knowledge sharing readiness, richness interchanging knowledge, and continuous knowledge integration) and the impact of knowledge sharing capability on knowledge sharing success. The data were collected by postal mail from 192 public and private hospitals in Thailand during May-August 2014. The construct of knowledge sharing capability is tested using factor analysis, convergent validity, and discriminant validity. Also the proposed hypothesis is tested using regression. The finding indicates that knowledge sharing capability aspect can be described by which organizational knowledge sharing readiness, richness interchanging knowledge, and continuous knowledge integration. The results also reveal that knowledge sharing capability has positive impact on knowledge sharing success. This study can be used to foster the effectiveness of knowledge sharing at the organizational level.

Keywords: Knowledge sharing, Capability, Knowledge sharing readiness, Interchanging knowledge, Knowledge integration, knowledge sharing success

INTRODUCTION

There is a saying that “knowledge is power”, which clearly indicates that knowledge is a key factor driving organizations. Knowledge is one of the most important factor, if not the top one, that promotes the organization’s sustainable growth (Gaál, Szabó, Kovács, & Csepregi, 2010). Knowledge is an intangible asset and is essential for the organization’s development. According to Sohail and Daud (2009), knowledge sharing is one of the most important dimensions of knowledge management. Knowledge sharing is one procedure for both making sure that knowledge is available and delivered at the right time (Nassuora, 2011). Based on the results of previous studies on knowledge management and knowledge mobilization in Thai hospitals, it was found that knowledge sharing through social processes, electronic media, and knowledge integration through decision supportive systems had positive effects on work performances (Bordoloi & Islam, 2012). However, it was found that knowledge sharing capability at an organizational level, which is the heart of knowledge management, received little interest in this area (Chen, Chang, & Tseng, 2012). As such, this paper aims to examine what are dimensions of knowledge sharing capability and how knowledge sharing

capability impacts knowledge sharing success. In this study, the construct of knowledge sharing capability at an organizational level will be tested. It is expected that the results of this study will give guidelines on how to foster the effectiveness of knowledge sharing at the organizational level.

LITERATURE REVIEW AND HYPOTHESIS

KNOWLEDGE SHARING CAPABILITY

Knowledge sharing is defined as behavior in transferring knowledge, skills, and experience as well as useful news and information among employees. Knowledge sharing processes involve categorizing, accessing, storing, and deploying knowledge for effective working in the organization (Grover & Davenport, 2001; Ipe, 2003). However, the complexity of knowledge sharing is how to understand the knowledge sharing processes of tacit knowledge and explicit knowledge (Nonaka, 1994).

Capability refers to an organization's capability in managing and using its resources (Barney, 1991). Capability involves skills to manage the organization's internal processes, which focuses on management of resources, personnel, and internal procedures (Tuntribundit & Tuntribundit, 2011). To increase the organization's capability, it is vital to set up its capability level by integrating, creating, and focusing on its major existing characteristics (Teece, 2012). Also, it is important to carefully plan knowledge management or knowledge sharing processes in regard to how to obtain and combine knowledge, and turn it to be the organization's knowledge, which can practically be implemented (Jantunen, 2005).

As such, knowledge sharing capability is the organization's capability in perceiving and managing its human resources as well as creating knowledge delivering processes, which can be conducted in different organizational activities. Based on the literature reviews, knowledge sharing is comprised of different dimensions. The first dimension is readiness or possibility to obtain the knowledge. It involves the organization's capability to provide, access, and prepare for knowledge sharing (Darroch, 2005; Ipe, 2003; Rowley, 2001) through (1) activities that can stimulate knowledge transferring from an individual level to the organizational one (Darroch, 2005), (2) incentives, facilities, and opportunities to share what they know (Goh, 2002; Lehner & Haas, 2010), and (3) coordination effort. According to the study of Christensen (2007), attempts to create collaborating activities to provide opportunities for knowledge sharing had impact on knowledge deployment in the organization's operation and work-related problem solutions. The second factor is skills in seeking, accepting, and delivering knowledge through collaborative activities. Knowledge exchanging activities reflect the organizations' aims to distribute knowledge through different channels (i.e., technology, meeting, and training) (Murray & Peyrefitte, 2007). Knowledge sharing research in Malaysia's healthcare research institutes showed that the most perceived availability and knowledge sharing implementation is face to face interaction, by using storytelling sessions and using (Rahman, 2011). Knowledge sharing can also lead to innovations (Schulze & Hoegl, 2008). The last dimension is knowledge integration, which refers to the integration of knowledge from different parts through knowledge categorization, in particular tacit knowledge that need to be grouped and delivered through technology for staff's constant knowledge accessing (Prencipe & Tell, 2001).

KNOWLEDGE SHARING SUCCESS

Success in knowledge sharing refers to the organization's operation achieved from systematic knowledge sharing, which includes modification and development of behavior and working procedures, and application of technology and innovation. This systematic knowledge sharing reflects employees' capability to work, which is the result of the sharing of knowledge. A model of success in the knowledge sharing among individuals can be measured through the quality of work and the capability to work (Haas & Hansen, 2007). Success in knowledge sharing is the result of the organization's knowledge sharing and capability to respond to changes according to environmental factors and improved performances (Abdul-Jalal, Toulson, & Tweed, 2013). Knowledge sharing as part of routine work and the management of staff's knowledge affecting creativity and operational excellence, previous study showed that the tools and information technology can create value-added to the organization. (Vorakulpipat & Rezgui, 2008). As such, the hypothesis is set as follow:

Hypothesis: Knowledge sharing capability has positive impact on the success of knowledge sharing.

METHODOLOGY

POPULATION AND DATA COLLECTION PROCEDURE

The population of this study was the executives of 254 private and 172 public hospitals in Thailand. Population data were acquired from National Statistical Office, Ministry of Information and Communication Technology and Department of Health Service Support, Ministry of Public Health. The data were collected using a questionnaire sent through a postal mail during May – August 2014. 192 completed questionnaire (100 from the public hospitals (52.1 percent) and 92 from the private hospitals (47.9 percent) were returned and usable. The effective response rate is approximately 45.07 percent. According to the response rate for mailed survey greater than 20 percent is considered acceptable (Aaker, Kumar, and Day, 2001).

MEASURES AND DATA ANALYSIS

The measures of the knowledge sharing capability and knowledge sharing success are comprised of 15 and 5 items by using a five-point rating scale, ranking from '1 = strong disagree' to '5 = strong agree', except control variable. The measures were checked for the content validity by experts; the reliability was tested using Cronbach's alpha coefficient, which shows the strong reliability of .91 and .79, respectively. Furthermore, demonstrating that the responses received are representative of the population studied between the early respondents and lately respondents, test of homogeneity was tested using Chi-square analysis. Hypothesis 1 is set as: among the amount of employee (category variable) late respondents are different than early respondents. The result was found to be not significant, so among the amount of employee late respondents are not different than early respondents. The control variable of this study is firm size (i.e., the total number of the bed).

An Exploratory Factor Analysis and a Confirmatory Factor Analysis were conducted to analyze the construct of knowledge sharing capability. The hypothesis was tested using Regression Analysis.

RESULTS AND DISCUSSION

CONSTRUCT OF KNOWLEDGE SHARING CAPABILITY

As seen in Table 1, the results from the Exploratory Factor Analysis after adjusted for rotation using a varimax method showed three main factors affecting knowledge sharing capability: Knowledge sharing readiness (KSR), richness interchanging knowledge (RIK), and continuous knowledge integration (CKI). The factor loading values were between .53 and .86.

Table 1 Exploratory factor analysis

Construct	Factor loading		
	1	2	3
1. The staff of the hospital are knowledgeable and supportive for knowledge sharing in their work.		.85	
2. The staff have experienced and are encouraged to share their experience with new staff.		.77	
3. The hospital has a system to promote staff's knowledge sharing.		.53	
4. Staff are provided with opportunities to have informal consultation/discussion.		.58	
5. The staff brainstorm to solve problems and improve working procedures.			.64
6. The mentoring system promotes effective knowledge sharing between new and old staff.			.78
7. Training has been continuously given in the hospital.			.86
8. There is a systematic process to collect the knowledge in the hospital.	.80		
9. Staff's expertise has been used.	.77		
10. There is a knowledge database system in the hospital.	.76		
11. There is an information management system which can categorize knowledge appropriate for each type of work.	.75		

Table 2 shows that based on the Confirmatory *Factor* Analysis, factor loadings of knowledge sharing readiness, richness interchanging knowledge, and continuous knowledge integration are between .52 - .86, with appropriate goodness of fit index ($\chi^2/df = 1.80$, CFI = .97, RMSEA = .06, SRMR = .04). A number of normed chi-square smaller than 2.0 is considered very good. In a sample group with less than 250 participants, CFI is .97 or better, RMSEA less than .08 and SRMR less than .05 are acceptable (Hair, Black, Babin, & Anderson, 2010). As such, it can be concluded that knowledge sharing readiness, richness interchanging

knowledge (RIK), and continuous knowledge integration (CKI) contribute to knowledge sharing capability.

Based on the findings of this present study, it can be seen that knowledge sharing is not just communication, but it involves knowledge sharing system before delivering knowledge from an individual to the organizational level (Spender & Grant, 1996). It is not possible to achieve effective knowledge sharing if not supported and performed among employees. Previous studies in practices of managing knowledge sharing revealed that knowledge sharing readiness is a force to provide opportunities for employees to share knowledge, instead of mainly receiving information from the executives. It is expected that when employees are provided with opportunities for sharing, knowledge sharing becomes routine practices that are naturally performed when desiring. Knowledge sharing is directly connected with employees' learning, which is a consequence of their own practices. In human terms, executives can encourage employee to share knowledge, and sharing explicit knowledge can be implemented by information technology. Moreover, tacit knowledge can be shared by human interaction within organization (Vorakulpipat & Rezugui, 2008). To transfer knowledge at an individual level to the organizational level, knowledge integration must be systematized and organized through information technology, especially tacit knowledge which is employees' skills accumulated from working experience (Huysman & Wit, 2004).

Table 2 Confirmatory factor analysis result

Construct	Factor loading	AVE	CR	\sqrt{AVE}		
				KSR	RIK	CKI
Knowledge sharing readiness	.52 - .78	.50	.92	.71		
Richness interchanging knowledge	.57 - .86	.50	.90	.40	.71	
Continuous knowledge integration	.70 -.75	.54	.93	.31	.18	.74
χ^2/df : 70.04/39 = 1.80 , CFI/TLI = .97/.95 , RMSEA = .06 , SRMR = .04						

HYPOTHESIS TESTING

Descriptive statistic and Pearson's correlations matrix are presented in Table 3. The average of knowledge sharing readiness is 4.260, richness interchanging knowledge is 4.085, continuous knowledge integration is 3.982, and knowledge sharing success is 3.844, respectively. Moreover, the correlations matrix shows the significantly positive relations between variables.

Table 3 Descriptive statistics and Pearson's correlations matrix

Variables	KSR	RIK	CKI	KSS
Knowledge sharing readiness (KSR)	1.000			
Richness interchanging knowledge (RIK)	.634**	1.000		
Continuous knowledge integration (CKI)	.559**	.428**	1.000	
Knowledge sharing success (KSS)	.498**	.410**	.531**	1.000
MEAN	4.260	4.085	3.982	3.844
S.D.	.501	.603	.598	.510

** Significant < .01

As seen in Table 4, knowledge sharing readiness, richness interchanging knowledge and continuous knowledge integration had positive effects on the success of knowledge sharing. Consequently, hypothesis is supported. Variance inflation factor (VIF) is 1.02 indicated that the independent variables are not correlated with each other. Therefore, there is no multicollinearity problem encountered in this study. The previous studies on knowledge management revealed that knowledge sharing preparation by encouraging employees to share knowledge is under the responsibility of the executives. With the executives' clear practices on knowledge sharing stimulation for knowledge sharing to occur, this will lead to higher working effectiveness (Vorakulpipat & Rezgui, 2008). As seen, richness interchanging knowledge (RIK) showed strong effects on knowledge sharing success. Based on the results of the previous studies in knowledge sharing and delivering in Thai health organizations, it was found that knowledge sharing that occur in seminars, meetings, and talking, which are interpersonal communication (Bordoloi & Islam, 2012) have impact on knowledge delivering/exchanging behaviors resulting in new working behaviors, which lead to innovation (Guptill, 2005). Finally, as seen continuous knowledge sharing has impact on success in knowledge sharing, this is the result of the organizations' system that focuses on the application of employees' obtained knowledge in their health working context. The organizations' support on storing information and obtained knowledge in an electronic form can result in their improved efficacy in knowledge delivering and care taking to patients (Bordoloi & Islam, 2012).

Table 4 Regression analysis result

Independent variables	Dependent variable Knowledge sharing success
Firm size (Control variable)	.05 (.12)
Knowledge sharing readiness	.37*** (.06)
Richness interchanging knowledge	.21*** (.06)
Continuous knowledge integration	.43*** (.06)
R ²	.36
Adjusted R ²	.35
VIF	1.02
F	26.48
Sig. F	.000***

*** Significant < .001

THEORETICAL AND PRACTICAL IMPLICATIONS

Although knowledge sharing commonly occurs at an individual level, the results of this study suggest that there is a possibility that the organization can increase its capability/performance through the promotion of knowledge sharing readiness, richness interchanging knowledge and continuous knowledge integration in its organization. The organization needs to focus on preparing the employee to be ready to share knowledge. This involves the preparation of human resource management as well as the provision of opportunities for the employee to share knowledge and experience. The executive's support on richness interchange sharing has the role to push activities to relay, communicate, or transfer knowledge among employees through different media and to integrate and systematize existing knowledge for the organization's higher performance. The organization's knowledge sharing capability does not mainly involve only providing opportunities to employees to share their knowledge and experience, but it requires a more challenging role which is how to make knowledge sharing occur among employees and transfer the knowledge at an individual level to the organizational level and how to constructively and successfully apply the obtained knowledge into work.

The present study shows that knowledge sharing success is mainly the result of the organization's knowledge sharing at an organization. The findings of this study indicate that the executives need to understand and develop performance indicators that involve systematic knowledge sharing procedures (i.e., ability to solve work-related problems, ability to design and improve operations, and create high quality of work).

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A QUEST FOR BUSINESS MODEL TO INCREASE THE WELFARE OF INCLUSIVE AGRIBUSINESS IN INDONESIA

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ABSTRACT

The study focus on inclusive agribusiness, BOP people condition in Indonesia, their problems, and propose Indonesia Agribusiness Ecosystem to increase BOP welfare through research. Researcher used qualitative method: exploratory research & interview.

Keywords: Agribusiness, Inclusive Business, Business Model, Business Ecosystem, Inclusive Business Ecosystem, Indonesia

INTRODUCTION

The prosperity level of farmers in Indonesia declined since December 2012, rose up but never been better than before. They also have low education level that only reach secondary school. The low of prosperity and education level of the farmers caused serious problem in managing food product in Indonesia. A study done in fruits sector business actors in West Java that represents horticulture business actors (Purwanegara et al., 2014) found several related problems such as: farmers' business problem, collector problems, retailer problems, exporter problems, agriculture's input problems, and supporting institutions problems.

The farmers' business problem is categorized into three: lack of capital and economy ability, lack of production field, and lack of knowledge and market information. These problems are led by related problems in the business ecosystem such as collector problems, retailer

problems, exporter problems, agriculture's input problems, and supporting institutions problems (Purwanegara et al., 2014). UNDP has formulated those problems to 5 main obstacles of farmers and business actor around base of economic pyramid people (BOP, people with least economy ability) condition in the market that consists of: limitedness of market information, limitedness of infrastructure, ineffective regulation, lack of knowledge and skills, difficulty of financial service access (Gradl and Jenkins, 2011).

These problems have been rooted and become common problems of BOP business actors in all over the world. The purpose of this study is to find out the model of agribusiness ecosystem network in Indonesia that is successful, sustainable, can survive any pressure and dynamic competition, also brings prosper to the business actor members, especially the BOP.

LITERATURE REVIEW

Inclusive business is the term of 'doing business with the poor', it engages people living at the base of the economic pyramid (BOP) (Gradl, C., Jenkins, B., 2011). Asian Development Bank (ADB) defined inclusive business as profit making companies that bring systemic impact at scale to poor people (Vega, et al., 2013). The BOP people can play the role as suppliers, consumers, retailers, or employees. The players of inclusive business typically include individuals, companies, governments, intermediaries: business associations, cooperatives, unions, standard bodies, NGOs, public and private donors, and academic and other research institutions, media and other trendsetters (Gradl and Jenkins, 2011).

Business model is architecture of the product, service, and information flows, including a description of the various business actors and their roles; potential benefits for the various business actors; and the sources of revenues (Headman and Kalling, 2003). The purpose of business model is to create profitable business (Demil & Lecoq, 2010) and sustainable competitive advantage (Leschke, 2013). There are four elements of business model by Johnson et al., 2008, that are: customer value proposition, profit formula, key resources, and key processes.

H1 :Successful Indonesian food industry's business model requires the suppliers as key resources and processes to deliver required quality raw materials with low price in order to support the industry's value proposition (VP) and increase its profit.

Sustainability has to be pursued in order to create sustainable competitive advantage. Company sustainability is known by the longevity factor which means a company can keep the business process going, through times and condition (Winston, 2011) and also based on three indicators of integrated achievement of social, environmental, economic performance measures (Schaltgger and Wagner, 2006). The social and environmental achievement can be represented by corporate social responsibility (CSR) while economic performance can be represented by financial report. Ceres.org has made a sustainability roadmap using the sustain-analytics indicator for companies. The sustainability scale includes eight roadmap chapters such as: governance, stakeholder engagement, operations, supply chain, transportation & logistics, products & services, and employees.

H2 :Successful and sustainable Indonesian food industry is characterized not only from the profit but also from the impact for environment and social.

- H3a** :Successful and long term Indonesian food industry implements inclusive business model through Corporate Social Responsibility to engage more SME and social enterprise to touch the Base of Pyramid (BOP).
- H3b** :The business model from food companies in Indonesia that are successful, sustainable, and can survive any pressure and dynamic competition cannot increase the economic rate and also fight the poverty of Base of Pyramid (BOP) business actors.

INCLUSIVE AGRIBUSINESS ECOSYSTEM

Business ecosystem defined by James F. Moore from Gradl & Jenkins, 2011, is “an economic community supported by a foundation of interacting organizations and individuals – the organisms of the business world (Gradl and Jenkins, 2011). The economic community produces goods and services of value to customers, who are themselves members of the ecosystem. The member organisms also include suppliers, lead producers, customers, and other stakeholders (investors, trade associations, government agencies, and competitors). There are successful strategies (Purwanegara, et al, 2014) that can be considered as business model that can be implemented to success the inclusive business in Indonesia.

- a. **The Royal Project Thailand** (Chomchalow, dan Songkhla, 2008) is kingdom initiation that has improved villager’s standard of life through farmers’ income in Thailand. Farmers Association shows very high degree of relationship among farmers’ association members that united to make integrated strategy to develop the business together.
- b. **India Business Network Model** has the certainty of contract between company input, retail, and collaboration with irrigation system. With the contract certainty, the variety of risks that maybe faced by Indian farmers can be avoided (Malik, and Rao, 2011).
- c. **Tanzania Agribusiness Network Model** have farmers network with *rice production facilities* processor industry & seeding and university (Amagro and Commissioned, 2011). Farmers associations are duty for packaging, processing, distributing, and selling the commodity to the traders, retails, processors, and exporter, while retailers have to grade and distribute the agriculture commodity.
- d. **Inclusive Business Ecosystem Diamond** for lower producer guided by UNDP in some African countries. (Gradl and Jenkins, 2011), (UNDP, 2006). The ecosystem members are the supplier, producer, competitor, and other business practitioner that are less educated people, the ones that are limited in facilities and infrastructure, and the regulations that don’t side on them in some African countries.

H4 :Indonesian inclusive agribusiness ecosystem model prefers to a certain model.

METHODOLOGY

The methods that were used to fulfill the objective include problem identification, exploratory research to find the indicators for successful inclusive business in Indonesia; literature study; data collection qualitative with qualitative interview to companies that successfully apply inclusive business; data analysis using five phased cycle: compiling, disassembling, reassembling, interpreting, and concluding; data validation using triangulation of the field observation and interviews; and conclusion drew by the data.

EXPLORATORY RESEARCH

The exploratory was executed by searching a lot of information about sustainable companies from Indonesia with Ceres roadmap sustain-analytics indicators adapted from Ceres.org: Gaining Ground: Corporate Progress on The Ceres Roadmap for Sustainability (Ceres, 2014). The companies chosen consist of 11 food companies that are known successfully operated for long time as representative of Indonesia food companies. The companies were explored through website study from their official website, news related to the firm, and other additional online source related to the firm such as sustainability report and market share. The exploratory research also includes the literature review about the successful inclusive business in Indonesia. From exploratory research found that there are some successful inclusive agribusiness companies in Indonesia that supplies fruit and vegetables, chocolate and coffee (Vega, et al., 2013). Researcher also found the broker or retailer (the next supply chain position after supplier) of fruit & vegetable supplier through other researchers' interview, which appears to be two big wholesale retailers: X and Y. Researcher only used the fruit and vegetable supplier and the customer (the big retailers, X and Y) and the agribusiness company, B, to be examined.

DATA COLLECTION

The data collection used qualitative interview to the fruit and vegetables supply chain section officer, buyers and the managers of the section. For X, the interviewee consists of the buyer, division manager, and department manager. For Y, the interviewee only consists of the buyer due to the availability of the managers and considered sufficient. For B, researcher interviewed the owner. The total interviewees are 6 people with face to face interview and recorded in paper. The materials of the interview were guided by The Practitioner Hub for Inclusive Business: Checklist: From Farmer to Supermarket and Inclusive business toolbox: Building supplier capability toolkit. (Inclusive supply chains: Building supplier capability, 2015) (Checklist: From Farmer to Supermarket, 2015).

DATA ANALYSIS AND VALIDATION

The data analysis used the data collected and five phased cycle: compiling, disassembling, reassembling, interpreting, and concluding (Yin, 2011). After the interview data is compiled in narrated notes before being dissembled in Microsoft excel based on the company and the interview topic/question. The data then was reassembled based on the interview topic to be interpreted the whole result and then being concluded. Meanwhile, validity of study uses rich data, from field observation and interviews with very detailed and various data and triangulation, collects converge evidence from different resources (Yin, 2011). The validation of data is done before the data was analyzed. Researcher interviewed the interviewee with his/her subordinates and colleagues that are capable to answer and related to the topic.

RESULT AND ANALYSIS

EXPLORATORY RESEARCH

From exploratory research by studying the financial report, CSR matters, and overall sustainability indicators and roadmaps using the Ceres Roadmap of Sustainability, it has been analyzed and calculated the result as following:

Table 1: Food companies sustain-analytics based on roadmap chapter

Companies/ Roadmap score	Governance 13 indicators	Stakeholder management 3 indicators	Disclosure 6 indicators	Operation 13 indicators	Supply Chain 23 indicators	Transportation & logistic 2 indicators	Products & services 4 indicators	Employees 1 indicator	Total 65 indicators
SA	77%	100%	83%	100%	43%	100%	100%	100%	74%
MA	77%	100%	100%	54%	43%	50%	100%	100%	65%
SI	54%	100%	50%	46%	57%	50%	100%	100%	58%
IO	62%	100%	100%	38%	43%	50%	100%	100%	58%
UA	54%	100%	67%	38%	48%	50%	100%	100%	55%
GO	77%	100%	100%	23%	39%	0%	75%	100%	54%
DI	54%	100%	33%	62%	35%	0%	75%	100%	49%
WI	77%	0%	67%	31%	26%	0%	75%	100%	43%
OA	15%	0%	17%	0%	39%	50%	75%	0%	25%
NO	0%	0%	17%	0%	30%	0%	100%	100%	20%
AI	0%	0%	17%	0%	22%	0%	100%	100%	17%

(Ceres, 2014)

Table 2: Food companies sustain-analytics score, financial condition, and CSR

Company	Sustain-analytics Score	Financial Condition	CSR
SA	74%	Positive	X
MA	65%	Positive	X
SI	58%	Positive	X
IO	58%	Positive	X
UA	55%	Positive	X
GO	54%	N/A	X
DI	49%	N/A	X
WI	43%	N/A	X
OA	25%	N/A	X
NO	20%	N/A	X
AI	17%	N/A	X

(Website studies, 2015)

The highest score was only 48 or 74% of all indicators while the average of the sustain-analytics score is 30.6 or 47% overall indicators. Only 6 of 11 companies have 50% of the indicators. SA that appears to be the most sustainable actually winning because of the joint venture with a foreign company, and have had its sustainability report that mainly focus on the environment. 5 of 11 companies have positive trend of financial condition known by their financial report while the rest were unknown because they don't publish their financial report. All companies also implement good CSR and have external verification.

QUALITATIVE INTERVIEW

The interview with the fruit and vegetable retailers has found that:

- All suppliers have long time contract with retailer to supply the demanded quantity of product with quality standard by retailers. If suppliers violate the contract, there will be penalty to stop ordering for a week, which means they have strong and tight business relationship.
- The problems among the retailer-supplier consist of insufficient quantity and quality that has not met standard also the delayed shipping. However, the retailer and supplier

have good trust and communication since they rarely have problems in quality and quantity demanded while the shipping delay is considered traffic factor that can be concerned.

- Retailer and supplier also have good trust and fewer obstacles in informing the production capacity and demand. This means they have integrated business network system.
- Retailer only train supplier in quality standard and internal system matter. There is no government involvement in training, only some of government programs that involve the retailer to discuss the agribusiness matter with some of the SME supplier. This means retailers have small effort to empower the SME suppliers. Government involvements are really needed otherwise the retailers will do no effort.
- Retailer doesn't invest anything to supplier, only guidance book to set the quality standard. Packaging is provided by supplier, retailer only receive and resell the product. Yet they do the quality control toward the supplier's product. This reflects the good understanding and simpler business process (as they only sell and buy) among retailers and suppliers.
- Pricing is set by negotiation and auction. Supplier proposed the price, and retailer buyer accepted the price or set the price with the quantity demanded to each suppliers. Both retailer and supplier rely on negotiation to earn collective profit and also to have the deal price. Retailers are still the price setter but the business actors negotiate well.
- Quality, quantity or production capacity, and price are the entire factors that affect the retailer's purchasing decision toward supplier. All suppliers are responsible for more than 3 items while all items are handled by minimum 3 suppliers. Suppliers have to compete with other supplier fellow in quality, quantity, and price to get maximum value proposition and profit.
- Most of the suppliers are companies with reliable source of product. There is a very little amount of SME, farmers association, and BOP farmers that become supplier due to the incapability to supply the demanded amount and quality. From the interviewee also known that suppliers rarely rely on BOP farmers or farmers association because of their inconsistency to supply qualified products. Most of the suppliers are considered have their own field of fruit and vegetables or rely on the collector to fulfill their product capacity. This means the BOP hasn't really empowered in fruit and vegetable sectors, even from the firm that was said has implemented successful inclusive business in Indonesia.

HYPOTHESIS TESTING

To prove Hypothesis 1, researcher based on exploratory research found that most successful Indonesian food industry companies require suppliers to deliver required quality raw materials as key resources and processes with low price to increase value proposition and profit. Indofood even had partnership issues with BOP suppliers that disadvantage the BOP suppliers (Saptana, et al., 2005; Saptana, et al, 2007). Retailers interviewed in data collection also stated that the pricing is determined by the retailers through auction and negotiation with the suppliers. They still choose the lowest price and best value proposition from suppliers regardless the BOPs or not.

Hypothesis 2, successful and sustainable Indonesian food industry companies are characterized from profit and impact for environment and social. From 11 companies, four most successful and sustainable companies have high score in sustain-analytics indicator, positive financial condition, and impact to environment and social through CSR. Therefore, Hypothesis 2 is proven.

Hypothesis 3a, successful and long term Indonesian food industry implements inclusive business model through CSR to engage more SME to touch BOP, can't be proven if it's only studied through the CSR verification of the companies. All companies examined have verified their CSR but they may not target the SME to touch more BOP and increase the BOP's welfare through business process as the definition of inclusive business itself. SI has developed the supplier through CSR like partnership to BOP supplier, but most of the companies are still focusing on people (social) and environment empowerment and haven't considered empowering the supplier. NO and AI also implement BOP developing CSR but they are not considered sustainable and successful due to low sustain-analytics score and unknown financial condition. NO even considered almost went bankrupt due to family business problem and AI was issued to be bought by a Hong Kong company. Otherwise, based on the lack of BOP developing CSR as an implementation of inclusive business, Hypothesis 3b, can be proven, that the business model from food companies in Indonesia that are successful, sustainable, and can survive any pressure and dynamic competition cannot increase the economic rate and also fight the poverty of Base of Pyramid (BOP) business actors. Their business model is still considered focusing on value proposition and profit. There is also no training or other effort to empower the BOP farmers.

From four strategies to solve BOP agribusiness problems proposed by UNDP (Gradl & Jenkins, 2011), it has been hypothesized that Indonesian inclusive agribusiness ecosystem model prefers to a certain model. This will be discussed in Chapter 5: Discussion and Conclusion.

DISCUSSION AND CONCLUSION

From the literature review and exploratory research, there has been concluded that the criteria of successful inclusive business are: sustainable (through longevity, economic, social, and environment performance), have good relationship with BOP people (as supplier, customer, employee, or retailer), and have effective CSR to engage more SME to touch BOP people.

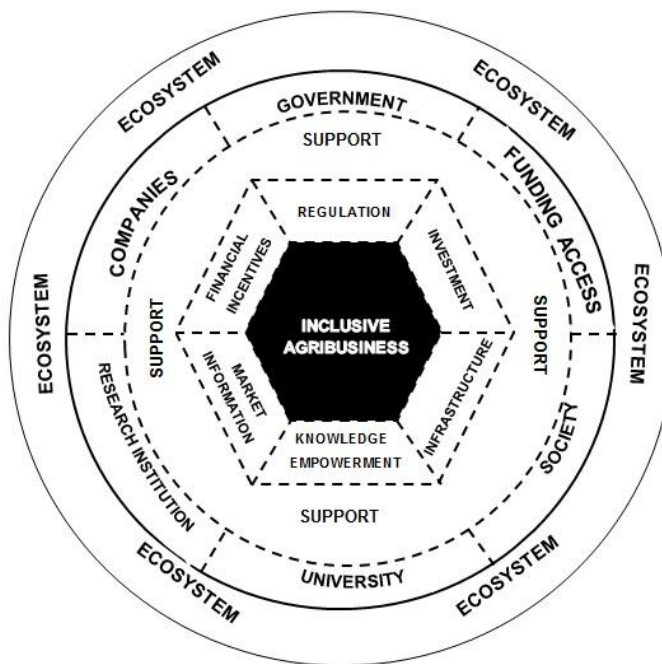
It appears that food companies in Indonesia that are successful, sustainable, and can survive any pressure and dynamic competition cannot increase the economic rate and also fight the poverty of Base of Pyramid (BOP) business actors. Their business model is still focusing on making profit and sustainable competitive advantage and has not been focusing on engaging BOP people and implement the BOP targeted CSR. There has been no significant action to empower the BOP business actors through training or supplier engagement from those food companies. So, Indonesia haven't had any good inclusive agribusiness yet since there has been no companies can fulfilled all the criteria of successful inclusive business.

Researcher formulated the basic needs of Indonesia's inclusive business ecosystem. Engagement between companies and BOP supplier (farmers) is highly needed since there is low engagement and empowerment from companies to BOP supplier. This engagement and empowerment also needs to be supported by government (based on previous interview), researchers, funding, university, and the society. Since the farmer problem consists of lack

of education, limitedness of market information, limitedness of infrastructure, ineffective regulation, lack of knowledge and skills, and difficulty of financial service access (Gradl & Jenkins, 2011), the supporting actors in the business ecosystem is needed.

From four successful ecosystems by Purwanegara, et al., 2014, the ecosystem adopted is the **Inclusive Business Ecosystem Diamond** for lower producer guided by UNDP in some African countries. (Gradl & Jenkins, 2011; UNDP, 2006). This model is suitable because of the match of ecosystem members (the supplier, producer, competitor, and other business practitioner) and consists of the less educated people, limited in facilities and infrastructure, and the regulations that don't side on them. Yet the business model still needs to be improved to suit Indonesia's condition. So, researcher proposed the improved Inclusive Business Ecosystem Diamond to be **Indonesia Inclusive Agribusiness Ecosystem** explained below.

Fig. 1: Indonesia Agribusiness Inclusive Ecosystem



Indonesia Inclusive Business Ecosystem explains six basic needs or main problems/obstacles of inclusive business: regulation, investment, infrastructure, knowledge empowerment, market and research information, and financial incentives. Research institution with university can help farmer to enhance their market information, knowledge and skills, and education while funding access agents can solve the difficulty of financial service access and support the infrastructure. Government can help with education, knowledge, skill, and information support, ease access to infrastructure and regulation, and manage financial incentives and ease access to funding investment. Society can integrate the market information and knowledge and create the healthy business ecosystem for BOP people. Companies have role to push ecosystem members to move forward with the shared vision so that every member will have mutual beneficial role in one business ecosystem. Disregard of the business model purpose to maximize profit and sustainable competitive advantage,

inclusive business model ecosystem needs to empower BOP people and the whole ecosystem to earn mutual benefit.

In conclusion, the proposed business model, Indonesia Inclusive Agribusiness Ecosystem, is believed to be the most effective to bring up the farmers as BOP people as the model make the players working integrated to make mutual benefit for every members. It also helps to handle the obstacle in the BOP people of inclusive agribusiness in Indonesia.

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AN ANALYSIS OF THE CONCEPTUAL EVOLUTION OF THE UNDERLYING DIFFERENCES BETWEEN SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT

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ABSTRACT

This paper examines the conceptual evolution of the terms sustainability and sustainable development. It attempts to distinguish the underlying differences of both terms and argues that they are not entirely synonymous with one another. Through historical analysis, it reveals that sustainability is a precursor to sustainable development in the sense that the former has to exist before the latter can be established. Meanwhile, in relation to the direction for development, sustainability emphasizes stasis while sustainable development highlights a progressive process. Although the concept of sustainable development has been born out of an environmental discourse, with utmost attention to collective policies, it certainly cuts across various disciplines. On the other hand, the concept of sustainability puts a more concrete framework and focuses on individual values. Drawing a clear distinction between the two might be cumbersome and futile, but the increasing popularity and practicability of these terms require closer attention. Despite the subtle differences, this paper concludes that they complement one another and it is unavoidable to speak of one without the other. In the strictest sense, authentic development, whether it be economic, social, or environmental, could not happen without considering a sustainability approach.

Keywords: Sustainability, Sustainable Development, Triple Bottom Line, Corporate Social Responsibility, Environmental Economics, Management

INTRODUCTION

Scientists agree that the earth is about 4.5 billion years old while the modern human beings are said to be more or less 200,000 years old. Yet, in a short span of time, these supposedly rational and highly-capable creatures have amassed so much malevolence towards the environment that nurtured them.

Is our world headed for an ecological collapse? How can man's ever-growing needs and wants be met without compromising the future? Can the catastrophes brought about by human greed be averted?

Nobody knows what the future will bring to each and every one of us, and even more to our environment. Resources are finite and human beings must learn how to conserve them, especially for the sake of the future generations.

With such realization, the term "sustainability" became among the talk-of-the-town which has gained immense importance in recent years. The concept of sustainability is very ambiguous. To begin with, it can draw on a range of disciplines covering ecology, geology, environmental science, environmental chemistry, forestry, anthropology, human geography, development economics, law, architecture, materials sciences, engineering, and public policy,

among others.

In order to truly understand the concept of sustainability and sustainable development, this paper seeks to (1) trace their roots from a historical perspective; (2) clearly distinguish the two terms from each other; and (3) relate them with the highly-utilized Triple Bottom Line approach, specifically as applied in organizations and corporations.

A BRIEF HISTORY OF SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT

In this day and age, most people are familiar with environmental buzzwords such as climate change, global warming, greenhouse gases, and carbon footprint, among others. However, when it comes to the concept of sustainability, most people would often define it in terms of ecological survival or even worse, being clueless at all. Perhaps the closest awareness that most people have when it comes to sustainability can be traced from the concept of sustainable development.

Undoubtedly, the most often quoted definition of sustainable development came from the 1987 publication of “Our Common Future,” or more popularly known as the Brundtland Report. It has been named as such in recognition of former Norwegian Prime Minister Gro Harlem Brundtland’s role as Chair of the United Nations World Commission on Environment and Development (UNWCED). The definition states that: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” In simple terms, the concept of sustainable development challenges human beings to consider how their interaction with the environment would impact the state of the environment for future generations. Hence, it serves as a call for action so that the complex co-existence of man and nature can be further sustained in the long-run.

Most experts on sustainability often mistakenly define the terms sustainability and sustainable development as the same. The confusion stems from the fact that the principles of sustainability as applied in organizations can trace its roots back from the environmentalist movements that led to the birth of sustainable development as defined in the Brundtland Report. Historically, the sustainability movement has emerged through the powerful fusion of environmentalism and ethics (Edwards, 2005).

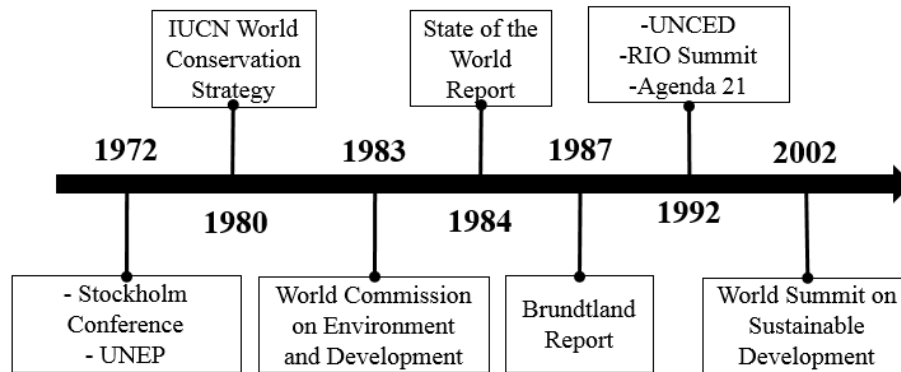
Nevertheless, prior to the modern concept of sustainability, many discoveries and events have happened which shaped the evolution of the planet. From being nomadic hunter-gatherers, human beings have started to learn how to cultivate plants and domesticate animals. Doing so enabled humankind to settle in one place and give up their migratory lifestyle. This development of agriculture was able to address the wildlife scarcity and even more so paving the way to other forms of living that altered nature, including the ideas of wealth, trade, money, and power. Other forms of development in order to address humanity’s needs and wants led to the exploration of energy sources such as coal, which eventually brought in steam engines and other machines that support general material productivity. However, the greater capacity introduced by the Industrial Revolution (1760-1800s) inevitably had tremendous impact on the planet such as the degradation of the natural environment, exploitation of natural resources, and excessive production of wastes (Mebratu, 1998).

Despite of the increased productivity to satisfy the needs of humankind, Thomas Malthus pointed out the limits to growth caused by the scarcity of resources in his celebrated “Theory of Limits.” According to Malthus, the human population must be controlled since if it is not

monitored, it would increase geometrically as opposed to the arithmetical increase of subsistence or the nature's capacity to provide food for mankind. Hence, this theory can be considered as a forerunner of the Sustainable Development concept (Mebratu, 1998).

Another precursor to the concepts of sustainability and sustainable development can be illustrated by the debate between Paul Ehrlich and Barry Commoner in the early 1970s about what causes environmental degradation. Ehrlich blames overpopulation and overconsumption as the main causes of environmental degradation while Commoner argues that the key determinant has something to do with improvements in technology. This debate presupposes the subtle differences in sustainability and sustainable development whereas the former challenges individual responsibility while the latter emphasizes a more pragmatic and collective approach towards the environment (Robinson, 2004).

Figure 1. Key Historical Events that Led to the Concept of Sustainable Development



The issues on the impacts of human activities to the environment gained even more widespread attention at a global scale in the 1972 United Nations Conference on Human Environment or more popularly known as the Stockholm Conference. This event discussed the main issue of striking a balance between economic and environmental development. Thus, the Stockholm Conference has been remarked as a landmark event for it was considered as the birthplace of the Sustainability Revolution. Another significant offshoot of the Stockholm was the United National Environmental Program (UNEP), which served as the arm of the United Nations responsible for examining the issues on environmental and economic development with the aim of making action plans for national governments and other concerned international bodies. Among its major accomplishments is the launching of the International Environmental Educational Program (IEEP) in 1975 and the World Conservation Strategy in 1980 (Edwards, 2005).

It is through the World Conservation Strategy in 1980 presented by the International Union for the Conservation of Nature and Natural Resources (IUCN) that the term sustainable development became prominent (Lélé, 1991). This strategy “aims to achieve sustainable development through the conservation of living resources” (IUCN, 1980). Even though it explicitly used the term sustainable development, critics pointed out that it is essentially restricted to ecological sustainability because it just recognizes “the necessity of maintaining genetic diversity, habits, and ecological processes... It was also unable to deal adequately with sensitive or controversial issues – those relating to the international economic and political order, war and armament, population and urbanization” (Khosla, 1987, as cited in Lélé, 1991, p. 610).

A precursor to the Brundtland Report is the State of the World which was first released in 1984. The report which was published by the Worldwatch Institute provided a global perspective on the relation between economic development and its impact on the world’s natural resources. It is the first report to highlight the importance of taking care of the environment for the future, where it states that, “We are living beyond our means, largely by borrowing against the future.” (Edwards, 2005).

As the most popular source in defining the concept of sustainable development, it is vital to know how the report Our Common Future, or Brundtland Report, was created. On December 1983, Gro Harlem Brundtland, the Prime Minister of Norway, was asked by the Secretary General of the United Nations to chair a special independent commission, the World

Commission on Environment and Development (WCED). The main mission of the WCED is to (1) reexamine critical environmental and development problems around the world and formulate realistic proposals to address them, (2) to strengthen international cooperation on environmental and development issues, and (3) to raise the level of understanding of and commitment to sustainable development on the part of individuals, organizations, businesses and governments (Mebratu, 1998).

Originally, some wanted to limit the WCED with environmental issues only. However, with the understanding that ensuring the good of the environment cannot be done without sustainable development, the two inseparable concepts were forged in this most quoted definition of sustainable development: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” According to Mebratu (1998, p. 501), the conceptual definition of the Brundtland Report contains two key concepts:

- (1) “The concept of needs, in particular the essential needs of the world’s poor, to which overriding priority should be given; and
- (2) The idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs.”

It took three years of public meetings in diverse groups and regions around the world in order to come up with the path for global sustainable development – the main objective of the Brundtland Report. Moreover, it is in this report that the three fundamental criteria for contemporary sustainability has been first established, which is also known in the following forms: Triple Bottom Line: environmental, social, and economic; Three Es: ecology/environment, economy/employment, and equity/equality; or Three Ps: planet, profit, and people (Edwards, 2005).

Five years after the publication of the Brundtland Report, the United Nations Conference on Environment and Development (UNCED), more popularly known as the Earth Summit, took place in Rio de Janeiro, Brazil. It was attended by more than 180 world leaders, delegates from UN agencies and international organizations, media, and nongovernment organizations. Building on the cornerstones set by the Stockholm Conference and the Brundtland Report, the 1992 Earth Summit provided the opportunity for signing international conventions on climate change and biodiversity, which was known as the “Declaration of Environment and Development.”

The Earth Summit also produced the Agenda 21 or the “Agenda for the 21st Century,” which was designed to educate people about the state and dynamics between the environment and development, and to assist them in making decisions that promote sustainability. Secretary General of UNCED, Maurice Strong, summarized Agenda 21 as, a “program of action for a sustainable future for the human family and a first step towards ensuring that the world will become a more just, secure and prosperous habitat for all humanity.” Agenda 21 is considered as the most important agreement related to UNCED since it was adopted by more than 178 states. It covers topics on practically everything deemed vital in developing a sustainable future, ranging from agriculture, biodiversity, hazardous waste, and even eco-tourism.

All in all, the Earth Summit produced the following: (1) Statement of Principles on Management, Conservation, and Sustainable Development of All Types of Forests; (2) the UN Framework Convention on Climate Change; (3) the UN Convention on Biological

Diversity; and (4) a recommendation for an international convention on desertification. A decade after the Earth Summit, in 2002, the World Summit on Sustainable Development (WSSD) was held from August 26 - September 4, 2002 in Johannesburg, South Africa. The conference generated a Plan of Implementation and The Johannesburg Declaration on Sustainable Development. On top of the environmental issues discussed in the Rio Summit, the WSSD also included economic and equity issues (Edwards, 2005).

DISTINGUISHING SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT

The word sustainability can be derived from two words: “sustain” and “ability.” Etymologically, the word “sustain” came from the Latin word *sustinere* which means to “hold up, hold upright; furnish with means of support; bear, undergo, endure”. Meanwhile, the second word “ability” is from the Latin suffix “-abilis” which expresses ability and capacity. Based on the origin of this word, sustainability can be simply defined as the ability to provide support or the capacity to endure. This seemingly basic definition connotes two essential elements of sustainability. On one hand, sustainability enables one to follow the right track and remain upright in its own position. On the other hand, sustainability also suggests the ability to withstand obstacles that one may encounter along the way. In a semantic sense, the first element of sustainability highlights the need for growth while the second element focuses on avoiding, or if possible, eliminating the obstacles.

In his attempt to distinguish sustainable development and sustainability, Gallopín (2003) pointed out that the former clearly expresses progressive change while the latter is quite limited because it may simply pertain to the maintenance of what already exists. In addition, he noted that the “development” in sustainable development should not only be seen in terms of quantitative growth but also with respect to qualitative growth, which can be more complex to measure and often depend on a specific context or situation at hand. Hence, Gallopín (2003, p. 20) concluded that moving towards sustainable development requires the following:

- (1) Removing accumulated rigidities and impediments;
- (2) Identifying and protecting the accumulated foundations of knowledge and experience that are important as a basis upon which to build;
- (3) Sustaining the social and natural foundations for adaptation and renewal, and identifying and enhancing the lost renewal capacity needed;
- (4) Stimulating innovation, experimentation and social creativity.

Similarly, Crowther and Aras (2008) assert that sustainability is concerned with stasis. In other words, unlike the concept of sustainable development, it emphasizes maintenance or stability. Development is not essentially constituted as part of it but only considered as a bonus. Sustainable development goes beyond the concept of sustainability since it presupposes that it is only upon meeting stability that development could come afterwards. In essence, sustainable development is about the progressive process of maintaining sustainability. While being cognizant of maintenance amid possible challenges, it purposively promotes development, thereby giving it a forward and long-term outlook. It is in this vein that the Brundtland Commission’s definition makes sense because it highlights the need for maintenance of the viable conditions for the present in combination with the

foresight that this is done in so far as to promulgate development for the future generation. In spite of the overlapping nature of the concepts of sustainability and sustainable development, it is clear that the two has essential differences. Sustainability emphasizes the governing principles and processes since it is able to provide an explicit framework by which the goal of sustainable development can be realized, that is, the Triple bottom line approach. On the other hand, sustainable development has become more achievable due to the advancements in the sustainability revolution since it is no longer limited to the environmentalist movements which pioneered it but can now be applied at a broader scale including various organizations (e.g., government institutions, NGOs) and even among corporations (see Table 1).

Table 1. Comparative Analysis of Sustainability and Sustainable Development

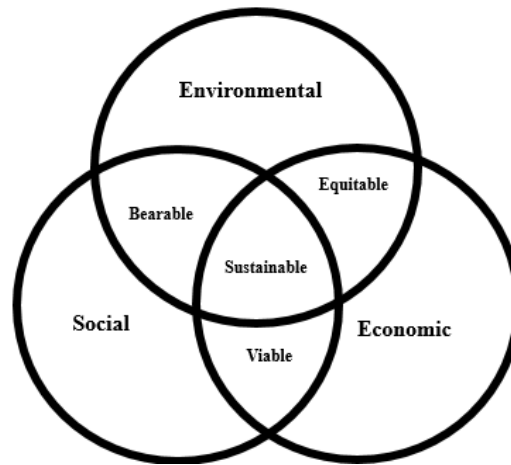
	Sustainability	Sustainable Development
Common Definition	Triple bottom line (i.e., environment, economic, and social performance of an organization)	“development that meets the needs of the present without compromising the ability of future generations to meet their own needs”
Focus	Sustaining environmental, economic, and social bases of human life	Sustaining growth or development of “needs”
Type of Change	Maintenance; Endurance	Progressive change
Direction	Upright; Avoidance of obstacles	Avoid obstacles while continuously improving

THE TRIPLE BOTTOM LINE APPROACH TO SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT

John Elkington (1997), founder of London-based consultancy SustainAbility, defined sustainable development as a goal which requires both the maintenance of what is already good and its continuous improvement. Elkington has allegedly coined the phrase “triple bottom line” (TBL) in 1995 but was only popularized in his 1997 book *Cannibals with Forks* (Vanclay, 2004). Hence, the TBL approach eventually became the distinguishing mark of the principle of sustainability from the concept of sustainable development. Nevertheless, the TBL is also under the bigger umbrella of sustainable development. This is commonly where the confusion lies. It is important to note that sustainable development is not limited to the TBL, which is the main concern of sustainability, because it also encompasses the greater challenge of sustained growth for present and future generations, and highlights the necessity to meet the “needs” (e.g., basic needs) as the essential requirement of development. At any rate, sustainable development has to use the TBL lens of sustainability in order to achieve its

goal.

Figure 2. Dominant Model of the Triple Bottom Line



Incidentally, the TBL has various versions which may sound confusing but essentially pertain to the same concept such as the Three Es (Ecology/Environment, Economy/Employment, Equity/Equality) or the Three Ps (Planet, Profit, People). In any case, the TBL fundamentally emphasizes these three areas of development: environment, economic, and social (i.e., environmental stewardship, increased economic development, and improved social equity, respectively). These three aspects of development are commonly represented by three overlapping circles with each circle representing an area for development. The point of intersection among the three is considered as the “sustainability sweet spot” or the area where sustainability is achieved (Savitz, 2006).

Nowadays, sustainability and sustainable development are often used in describing the ways individuals, organizations and societies promote development that meets economic, environmental and social goals. In an organizational context, the principles of sustainability as seen in the TBL framework showcases the idea that organizations should not only report on their economic or financial performance, but also their social and environmental performance. Elkington (2004, p. 3) describes TBL as “an inevitable expansion of the environmental agenda [that] focuses corporations not just on the economic value that they add, but also on the environmental and social value that they add – or destroy”.

CONCLUSION

There are already many discussions on the concepts of sustainability and sustainable development. Some may argue that it would suffice not to put a clear distinction between the two terms since after all, one cannot fully speak of one without the other. However, moving forward to make sustainability and sustainable development would be difficult if the basic conceptual underpinnings and principles, at the very least, will not be properly laid out. Satisfying the needs of the present without compromising that of the future go beyond the need to ensure the sustainability of the environment. At the end of the day, the fact that the environment and human beings are interdependent means that both ought to continue to live

in harmony in order to attain the promise of a true sustainable development.

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THE ACCEPTANCE OF HOUSING TECHNOLOGY IN INDONESIA AN EXPLORATORY FACTOR ANALYSIS STUDY

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ABSTRACT

The use of housing technology is important but most Indonesian people still don't realize about it. This study aims to know the acceptance of Indonesian people with housing technology. Using exploratory factor analysis, this study explains the important factors of housing technology in Indonesia.

Keywords: Acceptance of technology, Exploratory, Factor Analysis, Housing Market, Housing Technology, Indonesia.

INTRODUCTION

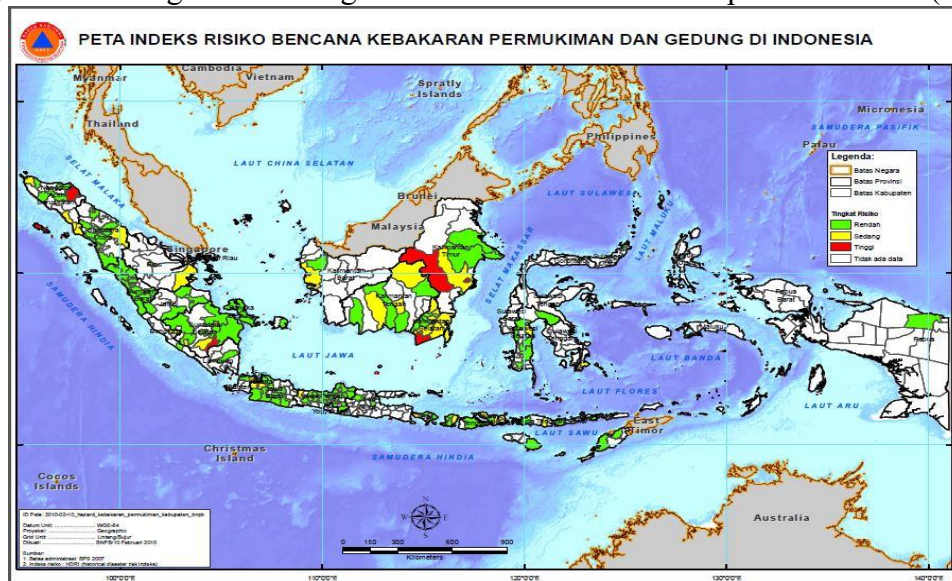
Indonesia is one of country that has the biggest population in the world. The need of housing in Indonesia is increasing along with the growth of population. The main problem of housing development in developing country like Indonesia is a huge population in urban areas without offset habitable housing availability (Kunheruhardjo, 2013). To face this challenge, many developers try to provide the need of housing for Indonesian people. This developer come from inside as well outside Indonesia.

Safety, is the most important factor in housing. Unfortunately, none of the developer tries to provide housing in Indonesian market with the safety as the important concern. Earthquake resistant technology is one of the most important safety needs for Indonesian housing. Approximately 90 percent of the world's earthquakes occur within the Circum-Pacific Belt, more commonly referred to as the "Ring of Fire". Indonesia lies firmly within the Circum-Pacific Belt (IUDMP, 2001). The effect of earthquakes, while ordinarily devastating, can be particularly catastrophic because many buildings are not designed and constructed to be earthquake resistant (CEEDEDS, 2004). There are two reasons why Indonesian people still not using the earthquake resistant: first, lack of producer of earthquake resistant housing and the second is the acceptance of Indonesian people toward the new technology.

The other important safety factor for Indonesian housing is the fire resistance. Figure 1 shows that most of Indonesian cities have a change to suffer from housing and building fire. Although most of it is still in low rates, a few of them have medium and high rates in housing and building fire. This map is taken from Badan Nasional Penanggulangan Bencana (BNBP)

and this survey conducted in 2009.

Figure 1 Housing and Building Fire Disaster Risk Index Maps in Indonesia (2009)



Considering the disaster that have high potential to be happen in Indonesia, the housing technology must be applied in Indonesian housing product. But seems like as any other technology commercialization case, the housing technology cannot easily enter the market, especially in Indonesia.

Other consideration in housing technology is the sustainable building and environmental friendly that implemented in houses. The technology in the construction area also the other subject that can be added in the housing technology area. The construction industry and particularly residential construction have been noted for low levels of innovation and path dependency (Lutzenhiser 1994; Xue et al. 2014; Lovell and Smith 2010). However, innovation in construction is increasingly important to meet the challenges of energy conservation and climate change, particularly since buildings consume a substantial portion of energy consumption. In 2013, the residential and commercial sectors accounted for 40% of total U.S. energy consumption, with residential alone accounting for 22% (US Energy Information Agency 2014). Based on the most recent survey data available, residential buildings accounted for 11% of total energy consumption (2009 Residential Energy Consumption Survey) while commercial buildings accounted for 7% (2003 Commercial Buildings Energy Consumption Survey) and office buildings only 1%. Very clearly, housing is the most important building related consumer of energy.

LITERATURE REVIEW

HOUSING TECHNOLOGIES CHARACTERISTICS

Housing technologies is a term that describe about all technologies that used for housing construction, safety, security, healthy, and comfortability. This including the prefabrication construction, earthquake resistance, fire resistance, CCTV on house, healthy septic tank, green-roof and wall, insulation, double shade window, etc. In this paper, the housing technologies are limited on the housing technologies that already available in Indonesia.

Prior study about housing technology is very rare. Mostly previous studies more focus on building technologies and focus on the high-rise building. This is because the fact that high-rise/commercial building will accommodate more people than housing. This paper will discussed more about housing than high-rise/commercial building because house is the most important building in life. Furthermore, unlike in developed country, Indonesian people tend to spend more time in their house.

Systematic studies of decision making for innovation adoption in housing construction are rare (Slaughter, 1993; Toole, 1998; Koebel et al. 2004; Koebel and Cavell, 2006) and generally involve case studies or small surveys. Case studies provide depth of context but limited generalibility and it has become difficult to obtain voluntary participation by businesses in even major governmental surveys (Duncan, 1994).

HOUSING TECHNOLOGIES IN INDONESIA

There are no previous papers that consist of what is the characteristic of Indonesian housing market want and need for a housing technology. The previous paper studied about the characteristic of house that own by Indonesian people from the economical point of view, environmental point of view, or urban development point of view. Rahadi, Raden Aswin (2013) studied about the housing product factor that can affect the housing price in Jakarta. Because there are no characteristic from housing technology point of view, this research will fill the gap study about Indonesian housing technology.

From economical point of view, two characteristics towards the shelter for Indonesian people are the size of households and the income of the households. In Indonesia, average households size is 4.78 persons per house, and mostly Indonesian level of income still in lower-income (Struyk et al, 1990). This characteristic is based on economical point of view for Indonesian people.

From environmental point of view, access to safe and improved domestic water is an important attribute of a house and a major policy issue in developing countries, where existence of such access is not guaranteed (Yusuf et al., 2005). According to Yusuf et al., location of the house is having so much impact on the price of the house itself. The location will have value, when it can be easy to access and the water affordability is good. From the urban development point of view, the urban households were stratified by income group, urban size and urban location; in these respects, this study is unique (Shefer, 1990).

Indonesian government provides a regulation about Housing and Settlements (Perumahan dan Pemukiman) that described in UU no. 1 Tahun 2011. But this regulation mainly describes about the provision of housing from the government and did not mention about the minimum specification of the housing construction, safety, security, healthy, and also comfortability. This is different from the developing countries cases. In Japan for example, they have a certain regulation that set the minimum specification of the quality of household waste water,

therefore every houses in Japan must have a certain processing technology for their household waste water so that their house will be healthier and also environmental friendly.

METHODOLOGY

DATA COLLECTION

The sample included 128 Indonesian people without any specific requirement, such as: gender, economical class, jobs, academic background, etc. The sample obtained from at least one of Indonesian people that have domicile in one of 34 provinces of Indonesia. But it turned out that this study can not cover for five province, which are : Gorontalo, Banten, North Kalimantan, Jambi, and Papua. The choices of the respondents are random, with assumption that every people need and want their own houses. The respondents consist of 55 male and 73 female, with mostly have the age range between 21-30 years old and have a bachelor's degree. The occupation of the respondents are vary, from college students and worker. Mostly they have monthly expenditure between 1.2 million - 3.0 million rupiah.

The questionnaire basically asking about what the respondents want for their own houses. The data were gathered from the online questionnaire using googles forms, and it was collected from March, 28 2015 to July, 14 2015. The questionnaire were consist of 30 questions, with 17 of it is about the variables, and the rest are the respondent identities. To strenghten the argument and complement the data, some secondary data were gathered from an extensive archival search of academic, industry, and government sources.

VARIABLES

A set of variables were defined in this study. Since this study using exploratory factor analysis the dependent variable were not clearly defined. But if the study will be developed in other statistical methods, then the dependent variable can be the willingness of Indonesia people to use the housing technology. In this study however, just focus on the exploratory factor analysis. There were 17 variables that used in this study. This variables were gathered from the empirical study of current housing market in Indonesia (the housing technology that already enter in Indonesian market) that conducted by professional practitioners and academicians, also from previous studies. The 17 variables are :

1. The fastness in construction process
2. The cost of construction process
3. The safety from earth-quake
4. The safety from fire
5. The safety from storm
6. The easiness of mechanical (plumbing and electricity) maintenance
7. The healthiness of septic tank
8. The weatherproof and easy to clean material
9. The environmental friendly material
10. The security with CCTV
11. The comfort with soundproof wall
12. The comfort with thermal insulation
13. The comfort with dust and mosquito filter
14. The enviromental-friendly of solar cell as renewable energy source
15. The sustainable technology using rain-harvest system

16. The application of 'biopori' in the garden
17. The application of green-roof and green-wall

STATISTICAL METHOD

To know about the most important factor of housing technology from Indonesian people perspective, exploratory factor analysis statistical methods were used in this study. The previous study about housing technology are really rare, and there was no prior study about basic definition of housing technology itself. Thus, this study used exploratory factor analysis instead of confirmatory factor analysis, since there were no theory that need to be confirmed.

FINDINGS AND DISCUSSION

The exploratory factor analysis conducted using SPSS software program. The first analysis conducted and have the KMO value as seen in figure 2 below.

Figure 2 KMO test results

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.866
Bartlett's Test of Sphericity	Approx. Chi-Square	991.555
	df	136
	Sig.	.000

It can be seen that KMO score is 0.866 more than 0.5 with significance score 0.000 below 0.05. It can be concluded that all those variables can be analyze using factor analysis. But to make sure about it, Anti-Image matrices must be viewed. The MSA value must be more than 0.5, but the Anti-Image matrices table showed that the numer 14 variables (the aolar cell technology) only has 0.479 score, so it is is better to delete variable 14. As for the other variables, all the variables have MSA score more than 0.5.

Figure 3 Total Variance Explained Table

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.892	40.539	40.539	6.892	40.539	40.539	3.938	23.163	23.163
2	1.808	10.636	51.174	1.808	10.636	51.174	3.492	20.539	43.702
3	1.375	8.089	59.264	1.375	8.089	59.264	2.284	13.437	57.139
4	1.241	7.300	66.563	1.241	7.300	66.563	1.602	9.425	66.563
5	.868	5.107	71.670						
6	.642	3.776	75.446						
7	.584	3.437	78.883						
8	.547	3.217	82.100						
9	.491	2.891	84.991						
10	.473	2.782	87.773						
11	.399	2.348	90.120						
12	.368	2.166	92.287						
13	.346	2.036	94.322						
14	.300	1.765	96.087						
15	.283	1.666	97.753						
16	.210	1.234	98.988						
17	.172	1.012	100.000						

Extraction Method: Principal Component Analysis.

The Table above showed that the result of the factor analysis group the variables into 4 factors, because the 5th factor have eigenvalues below 1. To make sure that the component matrix show the best factor loadings result, the analysis tried to be rotated using varimax method. The results are shown in figure 4.

Figure 4 Rotated Component Matrix Result Table

Rotated Component Matrix ^a									
	Component								
	1	2	3	4					
Pembangunan rumah Anda berlangsung cepat	.092	.208	.270	.791	Material yang digunakan pada rumah Anda adalah material ramah lingkungan	.445	.637	-.081	.022
Pembangunan rumah Anda tidak menghabiskan biaya besar	.182	-.034	-.002	.871	Rumah Anda memiliki CCTV dan kamera depan untuk melihat tamu yang datang	.104	.128	.816	.183
Rumah Anda memiliki teknologi tahan gempa	.740	.161	.088	.153	Rumah Anda memiliki sistem dinding kedap suara	.284	.175	.786	.054
Rumah Anda memiliki sistem perlindungan terhadap kebakaran sehingga Anda dapat memiliki cukup waktu untuk menyelamatkan diri ketika kebakaran terjadi	.795	.105	.233	-.037	Rumah Anda memiliki sistem dinding dengan insulasi sehingga dapat menjaga kehangatan saat dingin dan menahan agar panas dari luar tidak masuk saat udara panas	.424	.551	.442	.003
Rumah Anda memiliki sistem perlindungan terhadap badai / angin ribut	.695	.279	.262	.001	Rumah Anda memiliki sistem yang dapat menjaga agar debu dan nyamuk tidak masuk ke dalam rumah	.527	.170	.561	.057
Sistem pemipaan dan pelistrikan di rumah Anda mudah dalam perawatannya	.659	.034	.223	.249	Terdapat Solar Cell dalam rumah Anda sebagai sumber energi alternatif	.259	.548	.327	.070
Septic tank di rumah Anda sehat, mudah dalam perawatannya, serta sisa pembuangannya sangat bersih	.722	.280	.190	.043	Terdapat Rain-Harvest System dalam rumah Anda	.160	.839	.059	.129
Material yang digunakan pada rumah Anda tahan terhadap cuaca dan mudah dalam perawatannya	.639	.312	-.019	.246	Pengaplikasian lubang biopori dalam rumah Anda	.154	.876	.106	-.022
					Pengaplikasian Green-Roof dan/atau Green-Wall di rumah Anda	.083	.774	.269	.087

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

The results of the rotated component matrix shows a better factor loading than the unrotated one, therefore the results from the rotated will be used. From the rotated component matrix table the factored variables are already known. Table 1 will summary the results of the factor analysis. The tables above shows that factor 1 will have the variables below :

3. The safety from earth-quake
4. The safety from fire
5. The safety from storm
6. The easiness of mechanical (plumbing and electricity) maintenance
7. The healthiness of septic tank
8. The weatherproof and easy to clean material

Therefore factor 1 will be labeled as “Safety and Easy to Maintain” factor, because factor 3,4,and 5 are describe the the safety of a house, and factor 6,7, and 8 are more describing the easiness to maintaining the house. Factor 2 will consist of :

9. Environmental-friendly material
12. The comfort with thermal insulation
15. The sustainable technology using rain-harvest system
16. The application of ‘biopori’ in the garden
17. The application of green-roof and green-wall

Therefore factor 2 will be labeled as “Sustainable and Environmental-Friendly” factor. It is because all of the factors above are more concern on sustainable building concept and also environmental-friendly design. Factor 3 will consist of:

10. The security using CCTV

11. The comfort with soundproof wall
13. The comfort with dust and mosquito filter

Factor 3 will be labeled as the “Sophisticated Technology” factor, because all the factor above have a high quality of technology. Factor 4 will consist of the rest of the variables, which are :

1. The fastness in construction process
2. The price for construction process

Factor 4 will be labeled as the “Construction Process”, because the two variables are more concern in construction process. To make it easier table 1 will show the results of the analysis.

Table 1. Exploratory Factor Analysis Results Table

Safety and Easy to Maintain	Sustainable and Environmental-Friendly	Sophisticated Technology	Construction Process
The safety from earthquake	The environmental friendly material	The security with CCTV	The fastness in construction process
The safety from fire	The comfort with thermal insulation	The comfort with soundproof wall	The cost in construction process
The safety from storm	The sustainable technology using rain-harvest system	The comfort with dust and mosquito filter	
The easiness of mechanical (plumbing and electricity) maintenance	The application of ‘biopori’ in the garden		
The healthiness of septic tank	The application of green-roof and green-wall		
The weatherproof and easy to clean material			

The main research question in this study, which is to know the most important factors of housing technology in Indonesian people’s perspective, is already answer with the results of the analysis. The analysis shows that the most important thing from housing technology is to accomodate the safety and also the easiness to maintain for the occupants. Perhaps its because, Indonesian people already aware about the need of safety for their own house. In addition, the participant in this study most of it have a bachelor degree background, therefore they already have the ability to know what is the risk to live in Indonesia and they know that such a technology can safe them from the disasters. The easiness to maintain also come as first factors. This is perhaps because Indonesia is a country in tropical area. It will affect the maintaining routine of the house, because mold, mildew, and rodents can easily come to the house. Therefore, the need of easiness to maintain is urgent in Indonesia.

The second factors is the “Sustainable and Environmental-Friendly”. The need of environmental-friendly and sustainable housing already a huge concern all over the world. This also affect the perspective of Indonesian people about the need in housing.

The “Sophisticated Technology” factor comes in the third place perhaps due to the facts that Indonesian GDP are not in the high list. Most Indonesian people still live under the standard

of World Bank, thus to have a sophisticated technology like CCTV or soundproof wall still not in their consideration. The use of CCTV maybe a huge significant for people from developed countries. This is because most people in developed countries have the behaviour of individualistic and also the fact that they also spend much time outside the house. This is contradictory with Indonesian case. Indonesian is a communal countries, therefore for something like houses security Indonesian people still can relay to their neighborhood, because they maintain their relationship with their neighbor so it will still be in a good terms. The last factor is the “Construction Process”. Due to the importance of other needs, Indonesian people tend to neglect the construction process, both in terms of speed and the cost that need to be paid.

CONCLUSIONS AND IMPLICATIONS

The important factor in housing technology can make the housing business in Indonesia easier to developed. As the development of housing technology is run fast, the Indonesian developer and architect must be consicous about it and try their best to provide as many technology that can make their business marketshare greater and also make a better quality of life for Indonesian people.

As mentioned before, the limitation of this study is that the respondent of this study mainly are high educated Indonesian people, therefore the 128 respondents still can not represent the Indonesian people in common. Also, this study didn't have any specification of the respondents, thus future research can be make some spefication for the respondent, so the results can be more reliable and also can make a consideration for market segmentation to the housing developers/producers.

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PULL FACTORS AND TURNOVER OF ACADEMICIANS IN MALAYSIAN CONTEXT: CAREER ANCHOR AS MODERATOR

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ABSTRACT

It has been observed that the retention of a professional and qualified staff has become a challenge in the education industries as the turnover rate has been significantly increased in recent years. This is due to the drastic changes in the work environment that have caused an impact on the employees' perception of the chosen career. The loss of knowledge, talent and skill of an employee is a potential threat to an organization in an academic field. The main objective of this paper is to investigate the relationship between the pull factors and academicians turnover ;the effect of career anchor and to determine the dominant career anchor possessed by academicians in the Higher Learning Institutions. The population sample was drawn among the employees of the Higher Learning Institutions to identify the independent factors within organizations for this study. Moderated regression analysis and hierarchical multiple regression analyses were performed to detect the main effects and interaction effects of pull factors and moderator (Edgar's career anchors) on turnover of employees. The empirical results of the study are discussed in detail. It is hoped that the present study will bring an insight to the Higher Education Institutions and the Ministry of Higher Education in addressing the turnover issue and ensuring a fit between the jobs and career anchors. Recommendations have been discussed and proposed for future use to any research in this field of academic

Keywords: Employee Turnover, Pull Factors, Training and Career Development, Working Conditions, Compensation, Career Anchors , Higher Education Institution

INTRODUCTION

Organizations have become more flexible and adaptive to the changes of the turbulent environment due to the competitive pressures and transformation in the execution of work at workplace. Retention and motivation of employees are important as they contribute to the organizational effectiveness, business objectives and sustained development of a country (Pienaar & Bester, 2008; Marshall & Bonner, 2003; Guest, 1987). This has somewhat impacted the employees perspective on emphasizing their careers and individual quest for self-realization through integrative and unifying elements within his or her life (Beechler & Woodward, 2009; Coetzee & Schreuder, 2013; Tladinyane & Ferreira, 2011; Spagnoli & Caetano, 2012). Importance should be placed on career orientations to guide proper practices in terms of retaining employees as it may result in higher turnover if there is no fit between the employee's inner career orientation and the job context (Ramakrishna & Potosky, 2003; Jiang, Klein & Balloun, 2001; Jiang & Klein, 2000; Feldman & Bolino, 1996). Hiring and training a replacement employee costs approximately 50 per cent of the employee's annual salary (Owence, Pinagase, & Mercy, 2014) which in turn incurs a lot of cost and time to the organization (Ampomah & Cudjor, 2015). Employees who are unable to define their career anchor may be tempted by external incentives to accept situations or occupations that are not satisfactory (Schein 1993). Hence, an employer would grab these opportunities to pull an employee from one organization to another which could lead to loss of skill and talented employees' in an institution. The education industry is undergoing drastic changes and competition among universities in the higher education industry has pressured them to review their current management methods and performances in the local and international level (Popli, 2005; Saygi, Tolon and Tekogul, 2011). Malaysia currently has 20 public universities, 24 polytechnics schools, 37 public community colleges, 33 private universities, and 500 private colleges. This dramatic change in the number of institutions has transformed Malaysia as an education hub (Grapragasem, Krishnan, & Mansor, 2014). However, the employee turnover rate in higher education has increased recently especially in the private universities (Herbert and Ramsay, 2004; Morris, Arzmi, and Wood, 2004; Hanushek, Kain, and Rivkin, 2005) with an increase of 14 per cent in 1997, 29 per cent in the 1998, and 37 per cent in 1999 in one of the private universities (Arokiasamy, Marimuthu, Woon, & Balaraman, 2014). High turnover intention rate of employees in universities signifies a negative image to the society thus disrupting the flow of teaching and future graduates in the higher learning institutions. In this respect, the quality of academics should not be compromised (Sam, Effah & Osei Owusu, 2014; Tetey, 2006; Aytaç & Bayram, 2001). Since academicians play an important role in the productivity of an organization, addressing the pull factors (Ali Shah, Fakhr, Ahmad, and Zaman, 2010) and knowing their career anchors can create a comprehensive motivation for both the employees and employers of higher learning institutions thus reducing employee turnover (Mamatha & Nandini, 2014; Barth, 1993). Many academic researchers have explored the relationship between push and pull factors and turnover; career anchors and turnover in different context and industries (Theron, Barkhuizen & Du Plessis, 2014; Ramnath, 2013; Negrin & Kirschenbaum, 1999; Ramakrishna & Potosky, 2003; Tan, Tan, and Tiong, 2006; Zhou, Long, and Wang, 2009; Mohammad, Taylor, and Ahmad, 2006; Nauta, Vianen, Heijden, Dam, Willemsen, 2009; Coetzee, Bergh & Schreuder, 2010) but to the knowledge of the researchers, the study on career anchor, pull factor and employee turnover in higher learning institution have not been researched especially in Malaysia. Moreover, according to (Gianecchini, 2014; Coetzee et al., 2010),

little attention has been given on the study of career anchor in the present time. Therefore, the current endeavour is an effort to address and fill the gap in the literature review by focusing only on the pull factors that can attract employees to stay and at the same time identifying the dominant career anchor(s) of academicians and the effect of moderating variable in relations to turnover in the context of higher education industry in Malaysia.

LITERATURE REVIEW

PULL FACTORS AND TURNOVER

Employee turnover is believed to be one of the continuing problems within organizations (Armstrong, 2009). Turnover is a procedure where the workers leave the organization and have to be replaced (Lim, Mathis, & Jackson, 2010). Employee turnover takes place when an employee's membership has been terminated in a company and monetary rewards from the particular organization is given to the employee (Shukla & Sinha, 2013). According to Theron, Barkhuizen, & du Plessis, (2014), turnover is a measurement of effectiveness of an organization, with the implied assumption being that a stable workforce is required to meet organizational goals. In a more recent research, Ying Chen, Friedman, and Simons (2014) high turnover rates have been indicated to poorer employee morale. Educators are never satisfied with their work experience and constantly agitating for better conditions (Cobbold & Asmani 2015). Several reasons have been offered to elucidate why employee turnover occurs which includes pull factors. Compensation, training and development, promotional opportunities, and excellent location of company, job security, healthier culture, work-life balance, and extra benefits are some common examples of pull factors (Ali Shah et al., 2010; Ho, Downe and Loke, 2010). Pull factors appear as an outcome of the availability and attractiveness of a destination to develop one's career opportunities on the external labour market. These employees leave and incline to look for a better opportunity due to dissatisfaction with working conditions, low compensation, inadequate training, poor job matching and lack of fit within the organizations and their career anchors or career orientations (Cobbold & Asmani 2015; Nauta et al., 2009; Vianen, Feij, Krausz, and Taris (2004); Ali Shah et al, 2010; Ulschak & Snowantle, 1992; Schein 1996). Moreover, it can also demotivate employees if their expectations are not met by their organization (Kim & Cha, 2000). Pull motives, are particularly dictated by peoples' upward career ambitions and relate to opportunities outside their current job or organization (Van Vianen et al., 2004). These factors can attract and lure employees from one organization to another as an alternative job opportunities. This situation occurs when an employee resigns and joins in a new organization to gain more benefits compared to the previous organization. (Griffeth, Hom, & Gaertner, 2000). A substantial investment in human resource practices may change the inclination of employees to look for opportunities available outside the organization which lead to turnover. The investment can be training, compensation, reward system and assignments providing opportunities to career advancement (Ladelsky & Catană, 2013; Moore, 2000; Igarria & Chidambaram, 1997). Therefore in this study, the pull factors comprise of Training and Development, Compensation and Working Conditions will be examined and it is expected to reduce turnover if these factors are met by the organization.

TRAINING AND CAREER DEVELOPMENT AND THE RELATIONSHIP BETWEEN EMPLOYEE TURNOVERS

In the academic setting, training and development programmes can influence personal work fulfilment, which in turn may impact an employee's high turnover decision. It is also believed to be one of the predominant variables for the development of the academic profession and universities (Arokiasamy et al, 2014; Joarder, and Sharif, 2011; Altbach and Knight, 2007). This is because, training and development can boost and advance one's capacity, and it supports workers to accomplish long haul profession improvement and competency at work (Pare, Trembley, and Lalonde, 2000). Training is perceived as a competitive advantage and important approach to support an employee by increasing new knowledge and abilities needed to keep up the standard performance in order to stand out from competitive environment (Mapelu, and Jumah, 2013; Joarder, and Sharif, 2011; Colarelli & Montei, 1996). According to Branham, (2015), employees are always prepared to leave when comparisons are made in terms of better career development opportunities being provided and available between their rival institutions and their current institutions. Hence, it is believed that the less the training and development programmes are provided by an organization, the higher the turnover. This supports the claim of Theron et al., (2014) where employees leave due to inadequate career development opportunities available to academic staff. Therefore, the study suggests:

H1 : Training and Career Development has an influence on turnover of academicians

WORKING CONDITIONS AND THE RELATIONSHIP BETWEEN EMPLOYEE TURNOVERS

Better working conditions involve productive opportunities which deliver a fair income; providing comfortable workplace and social protections for workers and their families (Dan, 2012; Handelsman, 2009) stated that insufficient working conditions with poor facilities should be avoided by employees in the long term as the workplace is inconvenient for them to work. According to Ying et al, (2014); Noor, (2011), employees are quite concerned about positive working environment and workplace flexibility in order to have a quality life. It is supported by Skinner & Chapman, (2013) that there is direct connection among work-life conflict and long working hours. Croucher, Stumbitz, Quinlan, and Vickers, (2013) opined that a flexible work time such as shorter hours could show positive outcomes for individual and organization levels. Academicians in the higher education give a very important priority in balancing the workplace and personal needs (George, 2015). Many young graduates are being recruited in higher education industry, and for these professional beginners, family support and work-life balance variables are critical (Arokiasamy et al, 2014). Hence, employees tend to leave their current organizations when a rival organization offers them a better flexible working time, medical benefits, transport, day care centres and manageable workload (Noor, 2011; Booth & Hamer, 2007) and these are perceived vital to the academicians and employees. Thus, an employee's personal suitability and sufficient working conditions should be met in order to avoid turnover (Ampomah & Cudjor, 2015; Croucher et al, 2013) and it is expected that working conditions could create a large employee turnover in higher education industries. Therefore, the proposed hypothesis is as follows:

H2 : Working Conditions has an influence on turnover of academicians

COMPENSATION AND THE RELATIONSHIP BETWEEN EMPLOYEE TURNOVERS

According to Armstrong (2010) and Hillmer (2004), wage and salary is the strong predictor of turnover intentions. Whether the employee is paid straight salary, straight commission, or a combination of these two will impact an employee's turnover intention (Wren, Berkowitz, & Grant, 2014). A study by Bergmann (1994) revealed that a well-designed employee compensation package is an effective tool to motivate employees to stay. For instance, academics whose salaries fall short of the prevailing salaries in the higher education industry may feel undervalued by their current employers (Hassan & Hashim, 2011). In other words, when his or her colleague gets higher compensation for the similar work done and inequality is perceived, it will create dissatisfaction and eventually drive them to leave the job (Blomme, Tromp, & Van Rheede, 2008; Owence et al. 2014; Ghosh, Satyawadi, Joshi, & Shadman, 2013). On the other hand, A lower turnover is apparent when bonus is offered as an additional incentive compared to a pay increase (Salamin & Hom, 2005). Numerous researches stated that there is a relationship between attractive salary and employee turnover in higher educational institutions (Theron et al., 2014; Chiboiwa, Samuel, & Chipunza, 2010). Van Dick et al. (2004); Abdali (2011) supports that discontentment in salary and pay strongly motivate employees decision to stay or leave. Thus, the following hypothesis was formulated.

H3 : Compensation has an influence on turnover of academicians

CONCEPT AND THE ROLE OF CAREER ANCHOR

The concept of career anchors was discussed within the sphere of career anchor theories and its application related mainly to examining career progression. According to Schein (1978, 1996, 2006), an individual career anchor is determined not only by one's self perceived talents that reflect success in a variety of work settings, but also by one's perceived motives and needs, attitudes and values within the context of organization and work settings. Scheins (2006) emphasized that employees are being forced to make choices when individuals become aware of what is important to them in terms of self development, family or career. Schein identified and clustered five career anchors over the period studied which are ;Technical –Functional competence, Managerial competence, Security and stability , Creativity , Autonomy. Schein (1996) subsequently proposed Eight anchors upon further investigation in a collaborative study with DeLong (1982) by adding three extra categories to the original five which are Service/Dedication to a Cause, Pure Challenge, and Lifestyle (Schreuder & Cotezee, 2006). Ironically, although Scheins career anchor theory (1996) have been proven empirically, (Igbaria ,Greenhaus & Parasuraman, 1991; Petroni, 2000), yet several researchers have questioned and critiqued the core assumption underlying Schein's career anchor theory which insists an individual to have only one single career anchor throughout his life which reflects decisions in one's career that would not give up despite facing difficulties. These researches have provide evidence that individuals can develop and internalize more than one dominant career anchor or multiple important career anchors (Afam Ituma Ruth Simpson, 2007; Coetzee & Schreuder 2008; Feldman & Bolino 1996; Martineau, Wils and Tremblay, 2005; Ramakrishna & Potosky, 2003; Suutari and Taka, 2004; Tan and Quek, 2001). The discovery of Career anchor in certain occupational groups is revealed when there is motivation for a particular type of job (Schein 1990). Based on this premise, many researchers have linked and revealed a relationship that different dominant

career anchor exist for different occupations in various fields where it can be the catalysts for individuals to seek for their choice of occupations and their reactions to their work setting. (Mamatha & Nandini, 2014; Steele and Francis-Smythe ,2010; Coetzee, Schreuder and Tladinyane ,2007; Erwee,1990; Igbaria et al., 1991; Igbaria,1993; Jiang & Klein, 2000; Nordvik, 1996; Boshoff, Bennett and Kellerman ,1994). Managerial competence anchor and pure challenges anchor were found to be the most distinctive anchors among the rest of the career anchors (Suutari &Taka ,2004). As for the education field the career anchors of lifestyle, service and dedication to a cause, entrepreneurial creativity and functional competence, autonomy, and security were found to be more significant than the rest of the anchors. DeLong ,1982; Erwee, 1990; Custodio, 2000; Tan & Quek 2001; La Lopa ,Beck and Ghiselli,2009; Cobbold & Asamani,2015 ;McCoy ,1984). In the present study, we are focusing on the academicians in the higher learning institutions as very few studies were done in this area (Meiliani, 2014; La Lopa, Beck and Ghiselli, 2009; Custodio, 2000) .Therefore, it posits the following hypothesis.

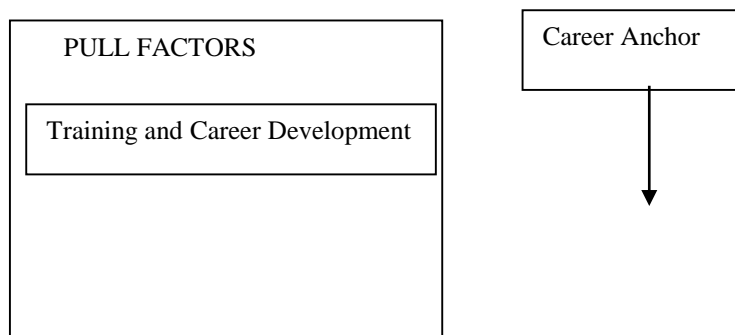
H4: The dominant career anchor which is perceived important among the academicians in the higher learning institution

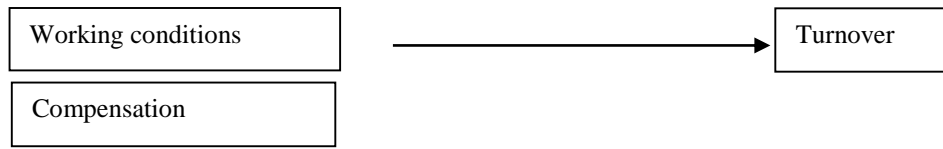
Many researchers have indicated satisfaction of self perceived “fit” between an individual’s career anchor and their work environment must be taken into consideration by the organizations in the perspective of organizational policies in order to have positive outcomes. Coetzee&Schreuder, 2013 ; Chang, Chen,Klein and Jiang,2011;Ellison & Schreuder 2001; Feldman and Bolino ,2000 ;Shin, 2004; Feldman and Bolino, 1996; Schein, 1990) .This in turn will have significant implications in the issue of labor turnover (Igbaria and Greenhaus 1991). Relating employee’s career anchors to their jobs can contribute to the understanding of the foundation of pull factors and employee turnover. Moreover, research has proven that incompatible employee job fit with the job setting can lead to turnover (Cobbold &Asamani ,2015; Feldman & Bolino 1996 ; Jiang & Klein 2001; Shin, 2004 ;Igbaria et al.,1991) .A few empirical studies have highlighted the use of career anchors as a moderating role (Wen & Liu,2015 ; Coetzee,Schreuder,& Tladinyane,2014; Herrbach & Karim, 2012). To our knowledge, no prior study has examined the moderating role of career anchor on the relationship between pull factors and turnover. Therefore, in this present study, career anchors effect is examined as the moderator and it is expected that there will be interaction effects between the relationship of pull factors and career anchor which will significantly influence an employee’s turnover with the dominant careers of academicians. Therefore, the study suggest:

H5 : Career anchor will moderate the relationship between Pull Factors and turnover of academicians

RESEARCH FRAMEWORK

Figure 1: Proposed Framework





METHODOLOGY

In this study, the participating respondents were the academicians from the higher learning institutions in Malaysia. Questionnaires were distributed to 310 academicians in the above mentioned and subsequently 220 questionnaires were completed used in the statistical analysis. This represents an effective response rate of 70% and above from the sample. A non probability sampling method, under which convenience sampling technique, was used in terms of the selection of respondents. The questionnaires were filled up anonymously and confidentiality was assured. Respondents of the study comprised of 144 women and 76 men. As regards to educational qualification, 40% of them are post graduates and the rest were master's level. The researcher developed the questionnaire items for pull factors consisting of training and career development, working conditions, and compensation and turnover based on self administration and adaptation from previous empirical studies (Ali Shah et al., 2010; Hong & Abdul Hamid, 2013; Javed, 2014; Michaels & Spector, 1982; Hom and Griffeth, 1995; Joarder, et al., 2011). These independent and dependent variables were measured using a five point likert scale ranging 1-5 (strongly disagree to strongly agree).

On the other hand, the Career Orientation Inventory (COI) questionnaire consisting 40 items, measuring eight career anchors (technical/functional competence, managerial competence, entrepreneurial creativity, security/stability, autonomy/independence, lifestyle, dedication to a cause and pure challenge) that Schein posited was adopted in this study as a moderator. The Career Orientations Inventory or COI instrument was developed and measured based upon the Career Anchor theory which is used to assess an individual's primary career anchor (Schein, 1990). Based on the statements from Schein's (1990) revised 40-item questionnaire, COI was used for most of the career anchor studies and this is in line with other researchers (Tan and Quek, 2001; Ramakrishna & Potosky, 2003; Kniveton, 2004, Danziger, 2008; Chapman & Brown, 2014; Jane Yarnall, 1998; Steele & Francis, 2007).

A cross sectional descriptive study has been adopted in this study. The Statistical Package for Social Sciences (SPSS) version 20 was used to carry out the statistical analysis. Descriptive, correlation and inferential statistics (stepwise hierarchical moderated regression analysis) were used to analyse the data. Regression analysis was conducted to examine the effect of pull factors (independent variable) and turnover (dependent variable). Multiple hierarchical regression was used to analyse the moderating effect of career anchors. Simple slopes were used to understand the level of moderator effects.

FINDINGS AND DISCUSSION

Table 1 presents the results of the impact of training and career development, working condition and compensation on turnover. Based on the model summary above, the R square value is 0.68 which indicated 68 percent of the variance in the dependent variable (Turnover) can be explained by the three independent variables (training and career development, working conditions and compensation.). The F-value is the Mean Square regression divided by the Mean Square Residual, yielding $F=56.081$. The p-value associated with the F value is very small (.000). These values are used to understand the relationship between the dependent variable and the predictor variables. Here the significant value (.000) is less than the standard value of 0.05 that statistically establish the relationship between independent variables (training and career development, working conditions and compensation) and the dependent variable (Turnover). It is indicated that B value for working conditions is -.261 and for

compensation is -.353. As for beta coefficients, working conditions indicates -.290 and compensation is -.428 which establishes the fact that the independent variables are negatively regressed with turnover (Dependent variable). Nevertheless, it is revealed from the B value for Training and career development: -.001 and Beta value for Training and development: -.001 are not significant and this shows that the model does not linear in nature. Therefore it is understood that training and development does not have a linear relations on turnover while working condition and compensation do have a linear effects on turnover. Thus ,it is concluded that although training and development is negatively correlated with turnover, it may have an impact on turnover conditionally. Therefore, the following hypotheses are accepted based on the findings above.

Table 1:The Impact of training and development , Working conditions and Compensation on Turnover

R Square : .680						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	5.352	.134		39.839	.000
	Training and Career development	-.001	.067	-.001	-.008	.994
	Working conditions	-.261	.086	-.290	-3.048	.003
	Compensation	-.353	.071	-.428	-4.944	.000

a. Dependent Variable: Turnover

H1: The hypothesis is accepted since training and development is negatively correlated with turnover but it is revealed that the change of training and development is not linear so training and development may have an impact on turnover conditionally. This could be due to the effectiveness of training and career development programmes being offered in an organization. Jehanzeb, Hamid & Rasheed ,(2015) highlighted similar findings where effective training programs provided by organizations can reduce turnover. In addition ,Cheng and Waldenberger (2013) argues that employees expectation and needs on the trainings provided and its outcome plays a significant role for an employee to leave an organization. Besides, our findings are also supported by Farris (2004) where training and career advancement is negatively linked with employee turnover. Overall, training is the essential part of HR variable which can give a critical effect of employee turnovers (Connie, and David, 2010).

H2: The hypothesis is accepted since the working condition is negatively regressed with the equation of ($Y = 5.35 - 0.261X$). The changes in working condition negatively impact the changes in turnover. The hypothesis is accepted since the working condition is negatively regressed with the equation of ($Y = 5.35 - 0.261X$). The changes in working condition negatively impact the changes in turnover. When the academicians perceive their current working condition comfortable and acceptable, it will reduce employee turnover. When these conditions are not met, it will demotivate employee to work as the atmosphere is not conducive, and questionable occupational health issues may arise as the ergonomics would have not been met. This will eventually lead to turnover where the current employees will try to find external opportunities. The result of this study is similar with the past studies of (Billah, Prince and Islam, 2009; Joader and Sharif, 2011; Jehanzeb, et al., 2015) where supportive working condition is found to be negatively correlated with employee turnover. Higher education industry employees' mostly prefer a positive, flexible and constant working condition as it could satisfy them and vice versa.

H3: The hypothesis is accepted since compensation is negatively regressed with the equation of ($Y = 5.35 - 0.428X$). The changes in the compensation negatively impact the changes in turnover. When academicians perceive compensation as adequate and they are paid based on their skills and qualification, it will reduce turnover. This findings are supported by Salden, Schimmoeller, & Thompson, 2013; Ovadjie, 2009) found that pay was negatively connected with an employee turnover. Moreover, it is proven that there is a difference in paying a lecturer a higher and low salary (Reelika, 2012). It shows that when lecturers are paid low, employee turnover will take place. Rehman, Khan and Afzal (2010) stated that high effort and being compensated low in professional jobs can lead to employee turnover since these employees have skills and knowledge where they can easily obtain a job at another organization.

H4: Lifestyle was found to be the most dominant anchor among the academicians.

Table 2: Academicians career orientations/anchors

Career Anchors	Mean	Std. Dev
Life style	29.214	3.8730
Dedication	29.168	3.9314
Autonomy	29.118	3.8906
Technical –Functional,	28.673	4.2353
Creativity	27.364	5.7342
Security and stability	27.482	5.6021
Managerial competence,	26.855	5.9255
Pure Challenge	26.418	6.3121

*An average score = 20 ; Any score above 20= above average

To identify the dominant career anchors, we have used the mean value (Cobbold & Asamani 2015) . The findings of the result from the above Table 2 indicates 29.214 ,29.168 and 29.118 respectively based on the total respondents results of 220 academicians. It was found that Lifestyle is the most dominant career anchor, followed by Service /Dedication and Autonomy anchors. Maximum of the respondents belonged to these three career anchors influencing the academicians which supports the existence of multiple career anchors .These findings are consistent with the assertions where one can hold more than one primary anchor (Meiliani, 2014; Fieldman and Bolino's 1996; Cobbold & Asamani ,2015; Tan & Quek 2001;).

The Lifestyle oriented anchors among academicians is consistent with the previous researchers (Tan & Quek ,2001; La Lopa et al,2009; Custodio ,2000). Employees who hold this anchor tend to appreciate company policies and benefits like maternity leave, flexible hours, sabbatical leaves and part time work (Scheins ,1978,1990; Ellison & Schreuder, 2000) and go extra miles to overcome challenges faced in in their teaching profession (Tan & Quek,2001). However, in Erwee ,(1990); Meiliani, (2014)findings among the academicians, lifestyle anchor was not categorized as an important anchor. This is due to the contemporary style of work being done at the present time(Coetzee & Schreuder, 2013) and the social and economic backgrounds of countries that contribute to the individual's perception(Meiliani, 2014).Therefore based on the findings above, Lifestyle anchored emerged as the most dominant career anchor among the academicians and it reflects the importance given to worklife balance in terms of flexible hours schedule, in the current changing work environment. Accommodating them to such benefits, motivates them to be more involved in the research activities and simultaneously allowing them to balance their personal life and career related values in the long run.

Service and dedication was found to be the second dominant career anchor among the academicians in this study. Findings from recent studies (Tan and Quek ,2001;Schreuder & Coetzee, 2006). Meiliani, 2014; Cobbold & Asamani 2015;) supported the results of this study. It is found that lifestyle anchored among education profession is normal due to its dedication for the welfare of others (Schein 1978).Therefore, it is not surprising that academicians are known for their determination and involvement of service and dedication especially to students by improving their lives and surroundings. They find their job very meaningful and very much likely to leave the organization as they feel obligated and responsible for their action and work. This anchored academics usually want to express their talent, abilities ,exhibit teaching skills with regards to their expertise especially in research and contribute to the society. Academicians usually yearn for social support and recognition from their organization. This could be in terms of fair compensation and benefits. When this preferred service and dedication anchored academicians do not feel appreciated compared to their skills and contribution, they may leave the organization. Moreover,(Meiliani,2014)argued that service and dedication anchored academicians from the higher learning institutions do not consider promotion as an important parameter in deciding their career development.

The third anchor that was found to be dominant among academicians in the higher learning is Autonomy. The present findings was similar to (Meiliani,2014;La Lopa et.al, 2009; Custodio, 2000, DeLong ,1983) where autonomy is perceived to be important in the

education industry and Chapman and Hutcheson,(1982) who have very high passion for teaching Scheins (1978,1990) theorized that those who preferred this anchor define their work in their own pace and will try to avoid organizational constraints. This supports (Meiliani,2014) argument that lifestyle and autonomy anchors are closely related. Moreover, it was mentioned that academics have the ability to perform duties outside the office hours and at the same time manage their time. On the other hand , autonomy anchor was perceived the least important among high school teachers. This discrepancy could be due to their socializing culture in the particular country (Cobbold & Asamani 2015) and the sample employed in Cobbold's study. This shows educators from different level exhibit different career anchor due to the nature and setting of the job. Overall, academicians regard autonomy as an important element among employees in making decisions and it allows them to rank it as the yardstick for competency when the working environment is more independent.

H5: Career anchors have a moderating impact on the association between the pull factors and the turnover of academicians. The hypotheses was accepted based on the findings below.

Table 3: Moderating effect of Career anchors on the association between Pull Factors and Turnover.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.669a	.447	.439	.749	
a. Predictors: (Constant), Moderator, Pull (X) , Career Anch (Z)					
Coefficients a					
Model	Unstandardized Coefficients		Standardized Coefficients t	Sig.	
	B	Std. Error			Beta
1 (Constant)	-.185	.059		-3.128	.002
Pull (X)	.131	.061	.131	2.136	.034
CareerAnch (z)	.608	.064	.608	9.514	.000
Moderator (XZ)	.330	.055	.317	5.961	.000
a. Dependent Variable: Turnover					

Table 3 presents the Multiple regression model which was tested to investigate the effect of career anchors on the association between Pull factors and turnover. After centering pull

factors and the turnover and computing the turnover by career anchors interaction term (Aiken & West, 1991), the two predictors and the interaction were entered into a simultaneous regression model. Results indicated that greater effect of career anchors ($b = .608$, $SEb = .064$, $\beta = .608$, $p < .000$) and lower level of turnover ($b = .131$, $SEb = .061$, $\beta = .131$, $p < .034$) were both associated with higher need for pull factors. The interaction between turnover and career anchor was also significant ($b = .330$, $SEb = .055$, $\beta = .317$, $p < .000$), suggesting that the effect of pull factors depend on the level of career anchors impact on the individual. The moderator analysis reveals that the career anchor has got an impact on the association between the pull factors and the turnover.

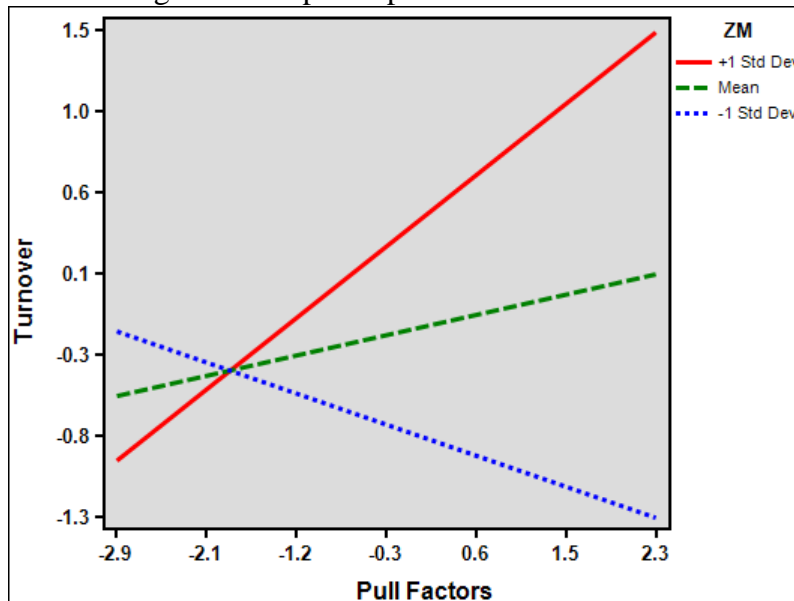
Table 4: Level of interaction of pull factor and career anchor on turnover

Correct Standardized Slope for XZ: .317					
Level of Effect*	Unstandardized Simple Slopes for X		Standardized Simple Slopes for X	t-value	p-value
	B	Std. Error	Beta		
At High	.461	.08	.422	5.721	.000000034
Mean	.131	.061	-0.18	2.135	.033
At Low	-.199	.084	-.79	-2.35	.019

*At High: +1 Std Dev, At mean: mean, At Low: -1 Std Dev

Table 4 presents the Simple slopes for the association between turnover and pull factors were tested for low (-1 SD below the mean), moderate (mean), and high (+1 SD above the mean) levels of career anchors.

Figure 1. Simple slope for interaction effect



Each of the simple slopes of pull factors predicting turnover for 1SD below mean of career anchor , the mean of career anchor and 1SD above the mean of career anchor. The results

revealed that turnover was more strongly related to pull factors for high levels of career anchors ($b = .461$, $SEb = .08$, $\beta = .42$, $p < .001$) than for moderate ($b = .131$, $SEb = .061$, $\beta = -.18$, $p < .001$) or lower levels ($b = -.199$, $SEb = .084$, $\beta = -.79$, $p = .019$) of career anchors.

Findings suggest that employee turnover depends on both pull factors and career anchors of academicians. When the career anchor is high, the lower the turnover of academicians. Therefore, it can be concluded that there is a moderating impact of career anchor on the association between the pull factors and the turnover.

RECOMMENDATION AND CONCLUSION

The issue of turnover in the higher learning institutions has been a continuing source of concern in Malaysia recently. Employees migrate to another higher learning institution when they are offered better opportunities compared to the current job. This study explored how academicians perceive the importance of Pull factors when they leave the organization. It is revealed that inadequate training and career development opportunities, poor working conditions and compensation offered by the higher learning institutions lead academicians to leave the current organization and this reflects on turnover. In other words, Pull factors have significant negative relationship with employee turnover. Calls for future research on career orientations besides high schools and teachers, and few studies being conducted on academicians in higher learning institutions, attempted the researchers to explore career anchor as a moderator between the relationship of Pull factors and turnover. Thus, we have given an insight and add valuable on the importance of congruence and job fit between an individual career anchor of academicians and work settings by identifying the dominant career anchors of academicians, which relatively determines the turnover. Based on our findings, lifestyle, service and dedication and autonomy are found to be the most dominant career anchors among the academicians in the higher learning institutions in Malaysia. These anchored academicians are perceived to be obligated and inclined to stay in the organization which leads to a lower turnover as long their anchors are fulfilled and satisfied. As for the moderating effect, there was impact on the pull factors and turnover of academicians in the higher education institution. The stronger the career anchor, the lower the turnover of academicians. The moderation effect suggest that the management in the higher education institutions should consider in knowing the important or preferred individual career anchor in order to retain and motivate the academicians. Certain strategies should be done or implemented by the management in order to reduce the employee turnover rate in higher education institutions. Management should review salary policies frequently by providing conducive working environment, relevant training and development programmes, lucrative compensation package, supervisory support, flexible working hours, relevant employee assistance programmes and counselling. Since lifestyle has emerged as an important anchor, the management should consider looking into managing and reducing workload and working hours for academicians. This is very important for these academicians to enhance their career and professional development by actively involving in research activities, hence contributing to the society. It was highlighted in La Lopa et al, (2009) that the high turnover of academics is due to the outcome of improper planning by the management where teaching workload of academics are increased when there is an increase in new students. This demotivates the academicians when they are expected to produce the same outcome, hence feeling unappreciated and eventually leading to turnover. Thus, these are some initiatives that can be

adopted by the organizations as a motivation for the employees to stay in the organization. When opportunities and benefits are given in the organizations and well taken care off ,the chances of academicians leaving would be low. Therefore it is imperative for the management to look into the factors that causes turnover in this field as this can help the higher education institutions to build their reputation and expand the loyalty of their academicians. As for the limitations, researchers may strengthen on the sources of respondents required in future studies. In addition, researchers are urged to adopt a very much organized arrangement as far as to focus on respondents and areas by conducting a survey in view of the all the universities around Malaysia to get a more exact, steady, dependable result. In the future exploration, researchers can incorporate more variables to test the pull factors that cause employee turnover such as good climate, more wealth, better service provision, job performance and many other factors become a significant role in shaping employee turnover (Hillmer, Hillmer, and McRoberts, 2004; Mobley, 1982b) in different industries that lead to employee turnover. Further research can be extended by incorporating the concept of commitment in this study.

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BAITUL MAAL WAT TAMWIL (BMT) IMPACT ON MICRO ENTERPRISE IN WEST SUMATERA

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ABSTRACT

Nowadays Islamic banking in Indonesia become more developed. It has good impact to the Islamic Microfinance Institution with more complete supporting facilities. Networks and associations as well as special attention to the banking community makes it easy to set up Islamic banking BMT (Baitul Maal Wat Tamwil). During eighteen years of BMT developments in Indonesia, the growth of BMT is influenced by human resources, working capital and systems. Human resources become the main benchmark for BMT and BMT also has human resources who are capable in their fields, have high integrity, work motivation and good performance so that BMT will grow dynamically. However, growth will be hampered when the owned capital is inadequate.

Working capital is needed to develop BMT. One of the factors which determine the volume of financing that can be issued is working capital. Human resources should be supported by working capital. This could happen if it integrate with each other so that bad impact will not affect the earnings and the certainty in the future. Bad impact may occur to BMT that related to the resignation of trained employees due to welfare issues. The worst problem is the employees become not trustworthy.

This study aims to conduct a study model of the development of BMT, including working capital, human resources and systems that can be applied to BMT.

Models used in this study took samples of BMT in the 50 Kota Regency, Payakumbuh and Padang by taking samples of 2 BMT each location of the observation. Respondents in this study were employees of each BMT and took 6 people through random sampling method through interviews, observation and questionnaires.

Keywords: Capital, Human Resources, Management Information System

INTRODUCTION

BACKGROUND

Islam provides guidance for all human activity, including economy. Therefore, the purpose of Islamic economics is to achieve welfare and safety of both the world and the hereafter, which cannot be separated from Islamic law. The purpose of the Islamic law is to improve the whole human being, which lies in the protection of faith, life, intellect, lineage, and wealth or maal (Chapra, 2000).

Property which provided by Baitu Maal is the things that has emergency factors such as famine, hurricane, earthquake or enemy attack. Right to acquire the grants are not determined by the property. The right is persistent, well at the time the property is available or not. If someone has that property, it must be distributed immediately. When the property is not

available, Moslem people must take the obligations, so that the property must be collected from the Moslems. The property will be placed in Baitu'l maal and distributed to the people who have the right.

Property that has been collected will be developed through a cooperative Baitu'l Tamwil Baitul Maal Wat now named Tamwil (BMT). BMT is a financial institution whose vision of Shari'a board to be part of social activities, whether productive or consumptive. BMT operated with profit sharing principles (Shari'a) that foster micro and small businesses in order to elevate and defend the dignity and interests of the poor people.

The vision of BMT is to build BMT into a professional institution that is able to improve the quality of worship members.

BMT mission is to build and develop the economic order and structure of civil society and a prosperous and fair justice that is based on Shari'a and Islam. BMT is not simply looking for profit and gain but also oriented towards equitable distribution of gains and fair according to economic principles.

BMT did not develop for eighteen years. The growth of BMT is influenced by human resources, working capital and systems. Human resources become the main benchmark for BMT and BMT also has human resources who are capable in their fields, have high integrity, work motivation and good performance so that BMT will grow dynamically. However, growth will be hampered when the owned capital is inadequate.

Working capital is needed to develop BMT. One of the factors which determine the volume of financing that can be issued is working capital. Human resources should be supported by working capital. This could happen if it integrates with each other so that bad impact will not affect the earnings and the certainty in the future. Bad impact may occur to BMT that related to the resignation of trained employees due to welfare issues. The worst problem is the employees become not trustworthy.

This preface is an approach for solving the problem by responding to the following questions:

1. How the influence of human resources to the development of BMT in West Sumatera?
2. How does the effect of working capital to the development of BMT in West Sumatera?
3. How information systems influence the development of BMT in West Sumatera?

THE PURPOSE OF THIS PAPER

The purpose of this paper is to Conduct a study model of the development of BMT (Baitul Maal wat Tamwil) Islamic oriented 50 Kota Regency, Payakumbuh and Padang in 2014 and finding the development model of BMT (Baitul Maal wat Tamwil) oriented shari'a by making a pocket book and information technology in 2015.

Until now only few researchers who conduct research on the development model of BMT (Baitul Maal wat Tamwil) sharia-oriented. This study will be beneficial for BMT to hold a seminar with the use of information technology and handbooks in the future.

LITERATURE SEARCH

1. Human Resources

Human resources play an important role in the face of the business environment. There are four roles that the human resources as strategic partners, the administrative expert, employee and agent of change fighters (Ulrich, 1997). Human resource organization management become barriers to increase the contribution of human resources in improving organizational performance. Many critical issues of human resource management at the corporate level that has not been resolved, the achievement of employee commitment, the fact that the concept of Human Resource Management are many different and even contradictory to the future (Peffe, 1994).

Ulrich (1997) describes a variety of other challenges in the areas of business are the bottlenecks in improving company performance through human resource roles include globalization, increased costs and growth profitability through technology, focusing on capability the value chain for competitive businesses and services in resource humans.

Human resources in an organization always face problems that cannot be solved alone. Still there is a shortage of capacity and skills of workers. Manager can send out workers in a training program that is conducted inside or outside the organization. Increased ability to work can also be done by the managers themselves as part of a leadership function. As leaders, managers responsible for improving the performance capabilities of workers, and one way to do is by coaching through mentoring and counseling. So, managers need to develop the skills themselves so as to act as a coach and mentor that will help employees overcome performance problems and develop performance capabilities.

2. Results of Previous Research

The production process is a process of increasing the added value, by using the factors of natural resources and human resource. Not only education, but training is very important to do as stated in the study that adopts the entrepreneurial human capital accumulation. Human capital accumulation process is basically divided into formal and informal. formal process refers to education and training, while informal process refers to a comprehensive human capital accumulated through knowledge gained from work experience or to do any other business (Z. Skurasa, 2008). According to Hansen in Ervatinda (1999: 16) aims to deliver education and acquire knowledge, skills, habits of thought and behavior that must be owned. Formal and informal education is a decisive factor in supporting economic growth. While the capital is very important factor in many forms of business, in the absence of other forms of capital impossible effort to achieve results as expected.

3. Working Capital

Research Schweidland in Ervatinda (1999: 20) stated capital includes capital in the form of cash or in-kind, while Becker defines capital goods concrete is still there in the company of households contained in the credit side of the balance sheet.

4. Information System and Technology

In this era of globalization is technology important in determining productivity of small industrial production. Results of research conducted by Johansen (1999) using a multidimensional approach stated that the relationship between the user and the information technology industry and the achievement of a significant result.

5. Principles in BMT

- a. Reaching the poorest
The question is the poorest of the poorest people, but they are economically active and have a spirit of entrepreneurship. Internationally they understood a half portion below the national poverty line.
- b. Reaching and empowering women
Women who suffer most are the victims of poverty, therefore they should be the main focus. In addition, experience in some countries shows that women are the borrower. The user and the return of good credit.
- c. Building financially sustainable institution
To be able to continuously serve the poor, so the more the underserved, then financially, the agency must secure sustainable BMT.
- d. Measurable impact
The impact of institutional presence can be measured so that the evaluation can be done, it is done for the improvement of institutional performance.

From the above it is clear that BMT Micro finance institutions have an important role. Regional autonomy is an opportunity for the development of micro-enterprises and to develop the area through the microfinance institutions. Citing formulation Ismawan Bambang (1994) on micro-finance institutions, there are several things that played BMT in regional autonomy, among others:

- a. Support the growth equity
BMT services widely and effectively will serve several groups of micro-enterprises. The development of micro-enterprises will help equity growth.
- b. Reduce the gap in rural and urban area
BMT broad range that could include rural and urban areas will be a breakthrough development. Development has been often less fair in the village community. One indicator is the amount of urbanization and the rapid development of microfinance capable of reaching the village will certainly reduce the gap villages and towns.
- c. Reduce the gap between large enterprises and small businesses
Support small business financing will reduce disparities.
- d. Reduce capital outflow from rural to urban and from the regions to the center
Villagers have the ability to save high enough evident from the accumulated savings reach 21.8 billion U.S. dollars for the BRI Unit Desa. On the other hand, the ability to use only a credit of 9.9 trillion (Bank Indonesia, 2002).
- e. Improving local independence
With the factors of production are owned by regional powers, utilized and empowered fully to exploit the opportunities that exist, then the dependence on investment from outside the region (overseas) will be reduced, as well as regional economic investment will thrive.

RESEARCH METHODOLOGY

- First year in 2014
Based on the purposes of this study are expected in the analysis stage will be carried out as follows conducting studies, human resources, capital and systems BMT (Baitul Maal wat Tamwil).
- Second year in 2015
Preparation of handbook and module.

In conducting the analysis required:

- a. Secondary data were sourced from: Office of the City and County Cooperative of 50 Kota, Payakumbuh and Padang. Kuranji Padang Village Office, Village Betong Payakumbuh Parak and Village Tujuh Koto Talago 50 Kota.
- b. Primary data were obtained directly from the data source with the distribution of questionnaires, interviews and observations.

1. Sampling Techniques

The sampling technique used is random sampling technique. According Bungin (2006: 115) random sampling technique is used to determine the location of BMT which will be used as observation or observation.

2. Methods of Analysis

- a. The survey method to identify the problems faced in the development of BMT and empowerment of its resources problem and look for solutions. For descriptive approach was used in the discussion of the problems facing the business BMT.
- b. Approach used descriptive outlines, depicting and describing the business development model of BMT, especially human resources, working capital and management information systems. Likert scale used consisted of very low to very high, According Arikunto (2006) grouping level of achievement that is 90-100% of respondents are very high, high 80-89%, 65-79, 99% is quite high, 55-64% low and very low from 0 to 54.99%.

RESULTS

1. General Description of Respondents

Based on 36 questionnaires distribution with 100% return level and no broken questionnaire returned.

Table 1
Respondent Profile Based on Age

Age (year)	Frequency (people)	Percentage (%)
20-30	9	25
31-40	22	61,1
41-50	4	11,1
>51	1	2,8
Total	36	100
Respondent Profile Based on Sex		
Sex	Frequency (people)	Percentage (%)
Men	12	33,3
Woman	24	66,7
Total	36	100
Respondent Profile Based on Length of Work		
Length of Work (month)	Frequency (people)	Percentage (%)
<12	2	5,6
12-60	5	13,9
61-120	20	55,6
121-180	5	13,9
>180	4	11,1
Total	36	100
Respondent Profile Based on Education		
Education	Frequency (people)	Percentage (%)
Diploma	27	75
Bachelor	9	25
Total	36	100

Source: Data Processed

Based on Table 1, respondents mostly are 31-40 year old, woman, has Diploma in education background, and worked for 61-120 months.

VALIDITY AND RELIABILITY TEST

a. VALIDITY TEST

Validity test aims to determine the lawfulness of data derived from the item statement. Table 2 shows the validity of test results for Performance variable BMT (KBMT), based on the results of testing the validity of the 15 items found, 3 statement items have a value of corrected item-total correlation corrected item-total correlation greater than 0.30 (Malhotra, 1993). Thus 3 valid statement items and the remaining 12 items is not a valid statement, then the statement is issued or the item is not included in the subsequent analysis. In order to get an accurate test result validity then tested the validity of the following items is not a valid statement issued so that the whole statement is valid proficiency level as proposed Malhotra (1993), and these results can be used for further analysis.

Table 2
Validity Test Result of Variable KBMT (Y)

No	Item	<i>Correted Item Total Correlation</i>	Information
1	kbmt3	0,517	Valid
2	kbmt7	0,471	Valid
3	kbmt12	0,485	Valid

Source: regressed data

Based on the validity of the test results as shown in Table 2 test the validity of the results obtained for variable Human Resources (HR). There are 10 item statements of 29 items are statements that have a value of corrected item-total correlation corrected item-total correlation greater than 0.30 (Malhotra, 1993). Thus it can be said that the 10 items are valid and 19 items are not valid. Then the invalid statement items are removed for subsequent analysis.

Table 3
Validity Test Result of Variable SDM (X1)

No	Item	<i>Correted Item Total Correlation</i>	Information
1	Sdm4	0,401	Valid
2	Sdm8	0,462	Valid
3	Sdm10	0,315	Valid
4	Sdm11	0,310	Valid
5	Sdm17	0,406	Valid
6	Sdm18	0,481	Valid
7	Sdm21	0,422	Valid
8	Sdm24	0,312	Valid
9	Sdm27	0,502	Valid
10	Sdm29	0,377	Valid

Source: regressed data

Table 3 shows the results of the validity test for variable working capital (MDL). There are 2 items out of 7 that have a value statement corrected item-total correlation corrected item-total correlation greater than 0.30 (Malhotra, 1993). Thus 2 items remaining valid statement and is 5 item statement is not valid, then the statement is dropped in the subsequent analysis.

Table 4
Validity Test Result of Variable MDL (X2)

No	Item	Correted Item Total Correlation	Information
1	mdl1	0,429	Valid
2	mdl2	0,429	Valid

Source: regressed data

Validity test for variables Management Information Systems (MIS) as shown in Table 4. Based on the results of the validity test of 18 items found statement turns 6 items that have a value statement corrected item-total correlation corrected item-total correlation greater than 0.30 (Malhotra, 1993). Thus 6 items valid statement and the remaining 12 items is not a valid statement, then the statement is is not included in the subsequent analysis.

Table 5
Validity Test Result of Variable MIS (X3)

No	Item	Correted Item Total Correlation	Information
1	Mis1	0,350	Valid
2	Mis7	0,315	Valid
3	Mis11	0,637	Valid
4	Mis14	0,655	Valid
5	Mis15	0,484	Valid
6	Mis17	0,715	Valid

Source: regressed data

b. RELIABILITY TEST

Reliability test aims to test the reliability of the data or statement items. Techniques used in the reliability test is to Conbrach Alpha with Cronbach alpha value criterion if greater than 0.60 then said to be reliable (Sekaran, 2001).

Based on the results of the reliability test for BMT performance variables as shown in Table 4.6, that the Human Resources, Working Capital, and Information Systems Technology found that all variables have Conbrach Alpha values greater than 0.60 or can be said of all the variables of the study is reliable (Sekaran, 2001), this data can be analyzed then.

Table 6
Reliability Test Result

No	Variable	Cronbach Alpha	Information
1.	Sumber Daya Manusia (X1)	0,731	Reliabel

2.	Modal (X_2)	0,600	Reliabel
3.	Sistem Informasi Teknologi (X_3)	0,772	Reliabel
5.	Kinerja BMT (Y)	0,644	Reliabel

Sumber: Data olahan

2. RESULTS OF DESCRIPTIVE ANALYSIS

Descriptive analysis aimed to describe the characteristics of each study variable. To get the average score of each indicator and statements contained in the questionnaire used formula Achievement Level Respondents (TCR) (Arikunto, 2002).

a. DESCRIPTION OF VARIABLE BMT (KBMT) PERFORMANCE

Variable description assessment of research is measured using the frequency distribution of respondents on each item statement by calculating the level of achievement of the respondents (TCR). Based on data obtained through a questionnaire that was distributed to the description of the performance variable data as shown in Table 7.

Table 7
Variable Frequency Distribution of BMT Performance

No.	Statement Item	Average	TCR	Information
1	BMT has a problem in capital	3,94	78.89	High enough
2	BMT consider about community issues in their work	4,33	86.67	High
3	Competition to improve the quality should be encouraged and rewarded	4.39	87.78	High
	Average of BMT Performance	4.22	84.44	High

Source: regressed data

Based on Table 7 shows that the average value of the variable performance of BMT was 4.22 with a performance level of 84.44% of respondents, and thus the performance variables included into the category of high-BMT. This indicates human resources, capital, and MIS can generate high performance that can be shown by the results of the highest rates of 4.39 km7 with the level of achievement of the respondents is 87.78%. While the lowest mean value was 3.94 with 78.89% of the respondent level of achievement.

i. DESCRIPTION OF VARIABLE HUMAN RESOURCE (HR)

Based on Table 8 shows that the average value of the variable resource manusia is 4.38 with the level of achievement of 87.56% of respondents, and thus human resource variables included into the high category. This indicates HR, can produce a high mean due to the results of the highest rates sdm17 and sdm18 is 4.47 with the level of achievement of the respondents ie 89.44%. While the lowest mean value was 4.25 with 85.00% of the respondent level of achievement.

Table 8
Frequency Distribution of Variable Human Resource

No.	Item Statement	Average	TCR	Information
1	I was able to think analytically and conceptually	4.36	87.22	Good
2	I was able to do a thorough job / not sloppy	4.25	85.00	Good
3	I was able to use the facilities in accordance with the work function	4.28	85.56	Good
4	I am able to communicate effectively match my work	4.42	88.33	Good
5	I understand the work ethic	4.47	89.44	Good
6	Less concentrated when I was working on a task	4.47	89.44	Good
7	Employees feel is the most important asset	4.42	88.33	Good
8	Employees have a responsibility, nimble, and reliable.	4.39	87.78	Good
9	Leaders have a close relationship with the non-managerial employees	4.36	87.22	Good
10	As an innovative problem solver	4.36	87.22	Good
	Average of Human Resource	4.38	87.56	Good

Source: regressed data

ii. DESCRIPTION OF VARIABLE CAPITAL

Based on Table 9 shows that the average value of capital variable is 4.15 with the level of achievement of 83.06% of respondents, and thus capital variables included into the high category. This indicates that the variable capital can generate high performance that can be shown by the results of the highest rates of business origin statement items (mdl2) with values of 4.39 and the level of achievement of the respondents ie 86.67%. While the lowest mean value was 3.94 for items of business with a long statement to the category of high achievement rate 78.89% of respondents with a high category.

Table 9
Frequency Distribution of Variable Capital

No.	Statement Item	Average	TCR	Information
1	Venture Length	4.03	80.56	High

2	Venture Origin	4.28	85.56	High
	Average of Working Capital	4.15	83.06	High

Source: regressed data

iii. Description of Variable Management Information Technology System

Based on Table 10 shows that the average value of the variable of human resources is 4.38 with the level of achievement of 87.56% of respondents, and thus manasia resource variables included into the high category. This indicates human resources, capital, and SIM can generate high performance that can be shown by the results of 4.39 with the highest average achievement level of the respondents ie 86.67%. While the lowest mean value was 3.94 with 78.89% of the respondent level of achievement.

Table 10

Frequency Distribution of Variable Information Technology System

No.	Statement Item	Average	TCR	Information
1	I often do the data processing / information by computer	3.69	73.89	Fair
2	I always use a password to open the store and the data and information	4.19	83.89	Good
3	With the information technology can encourage employees to be more innovative and creative	4.31	86.11	Good
4	With this information system can motivate me to work well	4.33	86.67	Good
5	With the information technology that can both save time, money and minds at work	4.39	87.78	Good
6	With the use of information systems, the time required to get the job done right and fast	4.39	87.78	Good
	Average of Information Technology System	4.22	84.35	Good

Source: regressed data

CONCLUSION

Regarding the results from descriptive analysis we can conclude some points of this research. Descriptive analysis of BMT performance is still not optimal. The result show that average 4, 22 with respondent achievement level of 84, 44% or in high level.

Result of descriptive analysis for variable human resources is still not optimum because the result obtained a mean of 4.38 with 87.56% of the respondent level of achievement or good category. Next, results of the descriptive analysis for the acquisition of capital variable is still not optimal, because the mean value of 4.15 obtained with the value of the level of

achievement of 83.06% of respondents with a high category. Another thing is, the results of the descriptive analysis for variable information system technology is not the maximum, because the results of the study showed a mean value of 4.22 with a value of 84.35% respondents' level of achievement in both categories.

RESEARCH IMPLICATIONS

Based on the research results and conclusions can be made several implications for research in improving the performance of BMT in the following way:

1. The BMT performance can be improved by focusing more on the average value of the lowest statement items from variable human resources. That is statement item about the ability to make good decisions (sdm3) by increasing the ability to take the right decision, but it is also noticed statement items others.
2. Performance can be improved by BMT put more pressure on the mean value of the lowest statement items for which long sought capital variable (mdl1), by way of enhancing the experience by adding or conduct a comparative study on the BMT has been successful outside of West Sumatera, in addition to the statement also for other items.
3. BMT performance can be improved by paying more attention to the mean value of the lowest statement items are for variable information system technology that is how frequently the data processing by computer. Employees need to be given to increasing the training or knowledge to add an information technology system, so as to use a computer to process the data, but it is also for other items that statement.

LIMITATION AND SUGGESTION OF THIS STUDY

Based on the descriptive analysis of the results and conclusions of the study can be made the limitations of the study as follows:

1. Limitation of this study can be seen from the scope of the study. The scope is limited to the area of West Sumatra only, so that the number of population and the study sample was not used much. It is recommended for subsequent studies in order to broaden the scope of research.
2. Limitation subsequent study visits of the independent variables used were human resources, capital, technology, and information systems. While there are many more factors that affect the performance of the company, such as internal and external environmental factors. Internal factors consist of marketing management, operations management and financial management relating to sources and uses of funds. External factors consist of customers or clients, the banking side, the government, economic situation, and technological advances. It is recommended for the next researchers in order to add more independent variables of the study.
3. Another limitation of this research is seen from the analysis method used. In this study the analysis method used is descriptive analysis, where the analysis is just a new look at the general picture is still a qualitative research results and is based on observations obtained from the data collected through the questionnaire. It is

recommended for subsequent studies to use other analytical methods such as multiple linear regression analysis, correlation, etc.

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E-PROCUREMENT IMPLEMENTATION AND MANUFACTURING PERFORMANCE: A PROPOSED FRAMEWORK

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ABSTRACT

Purpose: The purpose of this paper is to examine e-procurement implementation and manufacturing performance.

Rationale: The rationale of this paper is to come up with the valid framework in order to see the impact of e-procurement implementation on manufacturing performance.

Methodology: This paper is based on previous literature and article related to e-procurement implementation and performance.

Keywords: e-Procurement implementation, manufacturing, performance.

INTRODUCTION

The adoption of electronic procurement systems has been a subject of much attention during the past decade, with a large number of studies stressing potential benefits which include reduced procurement costs, higher quality of purchased goods, better supplier relationship and many more (Rahim, 2008; Beukers, Versendaal, Batenburg & Brinkkemper, 2006; Davila, Gupta & Palmer, 2004; Pressuti, 2003; Eyholzer & Hunziker, 2000). Although there has been a large strength of research examines the adoption of e-procurement, the research pertaining to the impact of e-procurement has remain lack.

Despite the electronic data interchange (EDI) have been the most common technology for performing electronic procurement (e-procurement) in the past, its defects in increasing transaction specificity, switching costs and uncertainty, and a lack in partnering flexibility had lowered the intentions of companies to adopt the system (Lee & Lim 2005; Handfield & Nichols 2008).

By using Web-based e-procurement, firms and their suppliers at all levels could integrate their supply chains across the extended enterprise to remove inefficiencies and respond effectively at a lower-cost level (Hung, Lin, Tai, Ho, & Jou, 2014). However, earlier generations of the e-procurement system, such as the EDI, were used to establish only linear links between one buyer and one supplier, whereas a Web-based system can be used to create a vast network in the supply chain (Hung et al., 2014; Tai, 2011; Wagner & Essig, 2006). Moreover, studies by Saleh & Zulkifli (2012) point out that the potential benefits of e-procurement and its impact towards manufacturing performance is important due to purchasing benefit. They also found out that the firm resists changing from old management process to the current update electronic system. Therefore, it is important to the

manufacturers and the firm itself to explore the actual benefits and its impact towards manufacturing performance. To fill the gap, this study examines the relationship between e-procurement implementation and manufacturing performance.

LITERATURE RIVIEW

MANUFACTURING PERFORMANCE

Performance measurement evolves in two phases, first phase in 1880s and the second phase in 1980s. The first phases was focusing on cost accounting orientation meanwhile the second phases is about the aiding manager evaluating relevant operating cost in the organization. This measurement later modified to match with the financial measurement such as return on investment and profit (White, 1994). Manufacturing is considered to be an important element in a firm striving to increase firm performance (Thrulogachantar & Zailani, 2011) . Looking back on the evaluation of performance measurement before 1980s, the performance measurement process was mainly concentrated with cost accounting approach which consists of financial key performance indexes such as return on investment, profit plus earning per share (Gomes, Yasin, & Lisboa, 2007).

However, focusing on the financial indicators alone been exposed to the critics that other non-financial indicator which contribute towards organization performance been neglected and will only lead to short-term thinking. In this study, the measurement will be conducted using financial and non-financial to look overall performance in the manufacturing process as suggested by (White, 1994). Previous study writing about manufacturing performance measurement has emphasized that performance measurement is an important tool to making companies more competitive in the global market (White, 1994). Again White added performance measurement should be focusing on competitive advantage that have been identify as part of manufacturing strategies. In this study, manufacturing performance will be measure by financial and non-financial. Non-financial measurement consist of sales, return on investment, profit and return on asset (Gomes, Yasin, & Lisboa, 2004). Meanwhile for non-financial measurement consist of quality, flexibility, delivery and speed (White, 1994).

E-PROCUREMENT IMPLEMENTATION

The implementation of e-procurement in the organization is due to the benefit of the system and gain the popularity in business practices (Ronchi, Brun, Golini, & Fan, 2010). Panda & Sahu (2012) indicated that cost benefit is the most reasons to implement the system in the companies. Research by Bof, Previtali, & Felice (2010) also found e-procurement can lead to lower the cost and lead time and also enhance transparency. Neef (2001) have given three of this example, firstly is e-procurement system continue the trend of reducing transaction costs by automating process, replacing human labor with information technology. Secondly, e-procurement facilities can breakdown the functional silos toward horizontal process that help to increased integration. Moreover, Neef (2001) stated e-procurements are an important step toward development of the extended enterprise where the supply chain becomes a continuous, uninterrupted process extending from buyer through selling partners.

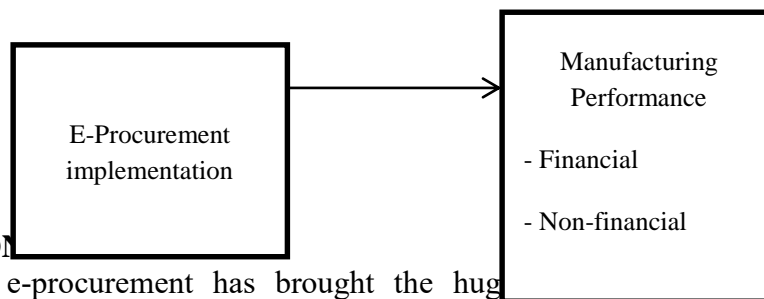
Currently our local governments are moving to be an electronic government in order to enhance the service delivery (Aman & Kasimin, 2011; Maniam & Halimah, 2009). According to Soliman and Affiso (2003) the application of information technology in

government to citizens, improve interaction with business and industry, citizen through access to information or more efficient government. Our Prime Minister in the 15th MSC International Advisor Panel (IAP) meeting in 2012, has announces the important of Digital Malaysia Project and one of the projects is to implement e-procurement.

PROPOSE FRAMEWORK

The research framework was develop from the past literature and presented in figure 1. The independent variable is e-procurement implementation. This is consisting of environment, management and technology factor. For dependent variable consist of financial and non-financial that has been discussed on literature review.

Figure 1: Proposed framework of e-Procurement implementation and manufacturing performance



CONCLUSION

Implementing e-procurement has brought the huge organizations that implement the system especially to manufacturer. E-procurement implementation help manufacturer to minimize cost and to speed time ordering and processing purchase goods from supplier. Manufacturing industries sees as the main contributor in the organization and country in Malaysia. Although e-procurement implementation in Malaysia is still in improvement phase, but the benefit to the organization save cost until 30% of manufacturer expenditure. The important of e-procurement in organization give advantage to the implementer and can increase performance.

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PURCHASE INTENTION OF TRACEABLE MEAT: IMPACTS OF HEALTH MOTIVATION, INFORMATION ASYMMETRY, SELLER OPPORTUNISM, AND UNCERTAINTY

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ABSTRACT

Food safety crises and health-related risk such as mad cow disease and avian flu have affected consumers' confidence in meat consumption and have increased the demand of safety and quality assurance. A traceability system, therefore, has been implemented to reduce the uncertainties originating in meat purchase by providing consumers with transparent information and facilitating the withdrawal of harmful meat products. This study aims to examine the roles of perceived uncertainty and its antecedents on traceable meat purchase intention and to investigate the health motivation as a factor influencing these variables. A survey with 463 participants in Thailand was conducted and data were analyzed with structural equation modeling (SEM). The results reveal that, with meat traceability systems, perceived uncertainty decreased when perceived information asymmetry and fears of seller opportunism have been lessened, which in turn enhanced purchase intention of traceable meat. Furthermore, the results found that consumers' health motivation led to the less perception of not only information asymmetry but also fears of seller opportunism when these consumers decided to purchase meat with the traceability system. These findings are the first to suggest that health motivation is a primary antecedent that can drive other variables in the model. The present study contributes to food marketing literature by demonstrating the impact of health motivation as well as its consequences and mechanism for marketing of traceable meat. In addition, our results also provide some guidelines for effective segmentation and marketing communication strategies for traceable meat.

Keywords: Fears of seller opportunism, Health motivation, Information asymmetry, Purchase intention, Traceability, Uncertainty

INTRODUCTION

The food-related risks such as Bovine Spongiform Encephalopathy (BSE) (or mad cow disease) and avian flu have become a major concern for meat consumers (Menozzi, Darson, Mora, Giraud, 2015). In response to this issue, a traceability system has been established initially in Europe and subsequently also used in many other countries across the world

(Myae & Goddard, 2012) including those in Asia (Wu, Xu, & Gao, 2011). The meat traceability has the ability to target and recall dangerous meat products, and to trace back to the sources that caused the meat problem (Hobbs, Bailey, Dickinson, & Haghiri, 2005). In addition, consumers could access information regarding food origin, processors, and distributors by mobile phone or internet when this information is interesting or important to them (Tsai, Hong, Yeh, & Wu, 2014). In summary, the function of traceability is derived from an effective safety and quality monitoring system stimulated by an increasing consumer demand in food safety and risk protection (Kher et al., 2010). In this sense, the issue of information asymmetry between meat sellers and consumers could be lessened as consumers are supplied with more quality information (Mora & Menozzi, 2008).

Several studies have investigated the effects of food traceability system on consumers' perceptions and behaviors. For instance, traceability was found to be related to both perceived food quality and safety (van Rijswijk & Frewer, 2008). Similarly, the results of Menozzi et al. (2015) study revealed that food scares or safety hazards in a food chain may affect preferences in the purchase of traceable food. Consumers perceived the usefulness of traceability in providing more detailed information on a food product (Mora & Menozzi, 2008). In addition, advantages provided by the traceability may positively influence purchase intention of traceable foods (Zhao, Qiao, & Chen, 2010; Wu et al., 2011; Bradu, Orquin, & Thøgersen, 2014). In Asia, Choe, Park, Chung, & Moon (2009) found that Korean consumers were more likely to purchase greater quantities and pay more for traceable food. Their study results suggest that the mitigated uncertainty caused by the traceability system may play an important role in price premium and purchase intention. In an attempt to revalidate Choe et al. (2009)'s model in Taiwan, Chen and Huang (2013) also found that the traceability system can reduce consumers' perceived uncertainty in the fast food purchasing by providing information of ingredients and decrease consumers' worry in seller opportunism.

In Thailand, some leading Thai food manufacturers have operated a voluntary traceability system to standardize quality and safety of their meat production. At several supermarkets in major cities, a traceability machine at the point of purchase is available for consumers to access the meat details (Piengkhoontham & Ruenrom, 2010). A traceability label with a QR code has been recently launched to help consumers quickly access meat information through their smart phones. In response, Thai consumers tend to accept meat with traceability and be willing to pay more for it because they believed that traceability can help them acquire safer meat (Piengkhoontham & Ruenrom, 2010). However, the specific reasons and psychosocial determinants of Thai consumers' intention to purchase traceable meat still need more investigation.

To build upon the work of Choe et al. (2009) and Chen and Huang (2013) which reveal such key issues as why and how traceability influenced consumers' adoption and purchase intention, the present study aims to contribute to food marketing literature by proposing the characteristics of consumers who are more likely to desire traceability systems. Healthiness is one of the frequently mentioned motivations behind food purchase (cf. Chen, 2011). In the context of meat consumption, although health concern was one of the factors involved in the meat choice due to fear over food safety and production methods (O'Donovan & McCarthy, 2002), consumers' health motivation has not specifically been explored in previous research. This study extends Choe et al.'s (2009) and Chen and Huang's (2013) by examining how health motivation will contribute to fears of seller opportunism and perceived information

asymmetry, both of which are the possible sources of uncertainty in purchase intention. It is possible that health-motivated consumer will be likely to have more perceived uncertainty in their purchase intention and fears of seller opportunism and perceived may represent the mechanism underlying this set of relationships. The findings of this study will provide several theoretical and managerial implications regarding the use of traceability as a food marketing tool.

RESEARCH FRAMEWORK AND HYPOTHESES

THE EFFECT OF PERCEIVED UNCERTAINTY ON PURCHASE INTENTION

Perceived uncertainty reflects to the degree to which the outcome of a transaction cannot be precisely forecasted (Pavlou, Liang, & Xue, 2007). In the context of buyer-seller relationships, perceived uncertainty often occurs when buyers have difficulties in predicting whether the particular sellers will act opportunistically as buyers often cannot completely monitor the seller behaviors (Pavlou & Fygenson, 2006). When uncertainty exists in the purchase decision making, consumers may try to search information that will help them make a more accurate or better informed decision (Laran & Tsiros, 2013).

Research indicates that food purchase intentions are influenced by consumers' uncertainty perception in food safety and quality (Lobb, Mazzocchi, & Traill, 2007). That is, risk associated with meat safety had a negative impact on the intention to consume meat (Angulo & Gil, 2007; Fonseca & Salay, 2008). Information provided by the traceability system is thus valuable and helpful for consumers' decision making for the meat purchase. Food traceability systems could mitigate uncertainty, which in turn leads to stronger purchase intention (Choe et al., 2009; Chen & Huang, 2013). Therefore, consumers are likely to have more confidence in sellers who can provide detailed product information ensuring them about meat safety prior to purchase. In light of this discussion, the current study thus expects the negative relationship between perceived uncertainty and purchase intention. In other words, as consumers' perceived uncertainty decreased, their purchase intention will increase. Thus, the first hypothesis is proposed as below.

H1: With meat traceability system, perceived uncertainty will negatively influence purchase intention.

SOURCES OF PERCEIVED UNCERTAINTY: PERCEIVED INFORMATION ASYMMETRY AND FEARS OF SELLER OPPORTUNISM

In the food traceability system context, consumers' perceived uncertainty may derive from information asymmetry and fears of seller opportunism (Choe et al., 2009). First, information asymmetry reflects the buyer's perception that the seller or firm has a greater quantity or quality of information about the product and its characteristics (Pavlou et al., 2007). Therefore, this information asymmetry increases the critical role of trust in evaluating the labeled information and safety certifications provided by meat producers, retailers, or the third parties (Menozzi et al., 2015). Second, fear of seller opportunism often takes place in the situations where consumers do not possess the ability or opportunity to completely check seller behaviors (Pavlou et al., 2007). As a result, consumers might be worried that meat sellers may become opportunistic by purposely omitting some negative information. Deception in product quality and false advertising (Mishra, Spreitzer, & Mishra, 1998) reflects some examples of this fear which are able to increase perceived uncertainty in a

purchase decision. In this situation, transparent information regarding the seller's practices and product characteristics is necessary for effective communication in order to reduce consumers' perceived uncertainty (Wezemaël, Verbeke, Kügler, Barcellos, & Grunert, 2010). The implementation of food traceability systems may result in an improvement of consumers' confidence in making their food choice when uncertainty occurs in their mind (Bosona & Gebresenbet, 2013). That is, food traceability systems could mitigate uncertainty by reducing consumers' information asymmetry and fears of seller opportunism (Choe et al. 2009). Likewise, Chen and Huang (2013) reveal that consumers' perceived uncertainty in the fast food purchase can be decreased when their perceived information asymmetry and fears of seller opportunism are decreased. In this sense, the traceability system could provide better information of ingredients for fast food and ensure that sellers might not act opportunistically. As a consequence, the current study expects a positive effect of perceived information asymmetry and fears of seller opportunism on perceived uncertainty. Hence, the hypotheses are proposed as below.

H2: With meat traceability system, consumers' perceived information asymmetry will have a positive impact on their perceived uncertainty.

H3: With meat traceability system, consumers' fears of seller opportunism will have a positive impact on their perceived uncertainty.

HEALTH MOTIVATION

Health motivation indicates the degree to which consumers are motivated to engage in preventative health behaviors including, for example, health information acquisition, diet restriction, and diet addition (Moorman & Matulich, 1993). In addition to its impact on the preventive health care behavior per se, health motivation may also influence self-efficacy (the degree to which a consumer believes that target behaviors that alleviate health threats can be successfully implemented) and response efficacy (the degree to which a consumer believes that a specific health care action is capable of lessening a health threat) (Jayanti & Burns, 1998). Consumers' risk perceptions in food safety are affected by personal health (Nganje, Miljkovic, & Ndembe, 2010). Consumers who are concerned with their health are more careful in food selection (Chen, 2011) because they believe that food contributes directly to their health (Mollet & Rowland, 2002). Accordingly, health-motivated consumers are more likely to be interested in acquiring health-related information to use it in their daily life. (Jayanti & Burns 1998). Similarly, Kornelis, de Jonge, Frewer, & Dagevos (2007) indicated that consumers with health concern have more motivation to use information sources about food safety to protect their health.

In meat purchase, O'Donovan and McCarthy (2002) also found that health was a motivating factor in organic meat choice due to fear over food safety, awareness of animal welfare, and production methods. In this situation, traceability is related to consumers' health by qualitatively and quantitatively increasing food chain transparency (van Rijswijk, Frewer, Menozzi, & Faioli, 2008). Traceability system can also provide information which is useful for lowering their health risk. Traceability thus ensures that consumers would obtain safe meat products. In addition, traceability can be regarded as a response to consumers' right to information concerning product origin in such various aspects such as production methods (breeding practices, vaccination etc.), producers, transporters, and retailers (cf., Vaz & Vaz, 2014). The higher level of health concerns or stronger health risk perception (e.g. BSE,

hormone residues, and bacteria) may lead consumers to seek more information from mass media and other sources (Verbeke, Viaene, & Guiot, 1999). The reason is that consumers may worry about sellers omitting some negative information especially in terms of product quality and safety (Pavlou et al., 2007).

Based on discussions, it can be predicted that health-motivated consumers may integrate health concerns into their daily activities especially in terms of information search by traceability system to avoid the negative consequence of information asymmetry and fears of seller opportunism. The current study thus proposes that health motivation will reduce or negatively influence perceived information asymmetry and fears of seller opportunism when consumers buy meat with traceability system. Hence, the hypotheses are developed as below.

H4a: With meat traceability system, health motivation will negatively influence perceived information asymmetry.

H4b: With meat traceability system, health motivation will negatively influence fears of seller opportunism.

METHODOLOGY

SAMPLE AND PROCEDURE

This study collected data from undergraduate business students in the Northeastern region of Thailand using purposive sampling technique. All of the 463 research participants consumed meat and had experience in meat purchase. More than half of them were female (76 %) and between 21-30 years old (55 %). The research participants were first informed of the study description, next requested to complete the measures of health motivation, fears of seller opportunism, perceived information asymmetry, perceived uncertainty, and purchase intention for traceable meat. Finally, they provide their personal data at the end of the survey.

MEASURES

The research model includes five constructs and each construct was measured with multiple indicators in a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The first construct, health motivation (HM), was measured with six indicators (e.g. "I am concerned about common health hazards and try to take action to prevent them.") adapted from Jayanti and Burns (1998). The rest of the measures were compiled and adapted from Choe et al. (2009) and Chen and Huang (2013). Fear of seller opportunism (FSO) was measured with three indicators (e.g. "The producers of meat products who use traceability system will not be able to cheat consumers."). Perceived information asymmetry (PIA) was measured with four indicators (e.g. "The traceability system reduces the information gap in the circulation process of meat products between the producers and the consumers."). Perceived uncertainty (PUN) was measured with four indicators (e.g. "When I am not confident in purchasing meat products, I will use the traceability system to overcome the hesitation."). Purchase intention (PI) was measured with three indicators (e.g. "I plan to purchase meat with the traceability system.>").

RESULTS

ANALYSIS OF MEASUREMENT MODEL

A confirmatory factor analysis (CFA) was conducted to examine the validity and reliability of the measurement model. The standardized loading of indicators, t-value, average variance

extracted (AVE), and composite reliability (CR) were described in Table 1. The two indicators of health motivation (HM) were removed due to poor standardized loading (HM4 and HM6). Finally, all of indicator loadings were highly significant with loadings larger than 0.50. The CRs varied from 0.80 to 0.86, satisfying the criteria of 0.70. In addition, the AVEs varied from 0.50 to 0.67, thus satisfying the criteria of 0.50 (Bagozzi & Yi, 1988; Hair, Black, Babin, & Anderson, 2010). As a result, the measurement model of this study reflected good reliability and convergent validity. For discriminant validity, when the square root of AVE of each construct is greater than the inter-constructs correlation, it presents good discriminant validity (Fornell & Larcker, 1981). As shown in Table 2, the square roots of AVE ranged from 0.706 to 0.821, and were all higher than its correlation with other constructs (ranging from -0.082 to 0.552). Therefore, the measurement models appeared to have decent discriminant validity as well.

Table 1: Results of CFA and convergent validity

Constructs	Indicators	Std. loading	t-value	AVE	CR
Health motivation	HM1	0.71	a	0.50	0.80
	HM2	0.68	11.23		
	HM3	0.68	10.39		
	HM5	0.75	11.67		
Perceived information asymmetry	PIA1	0.77	a	0.54	0.82
	PIA2	0.79	15.03		
	PIA3	0.67	12.87		
	PIA4	0.69	13.41		
Fears of seller opportunism	FSO1	0.85	a	0.65	0.84
	FSO2	0.86	18.38		
	FSO3	0.69	15.50		
Perceived uncertainty	PUN1	0.79	a	0.54	0.82
	PUN2	0.78	16.34		
	PUN3	0.77	16.25		
	PUN4	0.57	11.70		
Purchase intention	PI1	0.79	a	0.67	0.86
	PI2	0.86	18.52		
	PI3	0.81	17.86		

Note: ^a The corresponding parameter was fixed to a value of 1.00 to set the scale of measurement.

Table 2: Means, standard deviations, correlations, and square root of AVE

Constructs	Mean	S.D.	1	2	3	4	5
1 Health motivation	3.68	0.66	0.706				
2 Perceived information asymmetry ⁺	2.19	0.59	-0.082*	0.732			
3 Fears of seller opportunism ⁺	2.52	0.74	-0.183**	0.463**	0.804		
4 Perceived uncertainty ⁺	2.05	0.62	-0.178**	0.552**	0.537**	0.733	
5 Purchase intention	3.84	0.70	0.201**	-0.356**	-0.375**	-0.424**	0.821

Note: The square root of AVE shown as bold numbers along the diagonal.

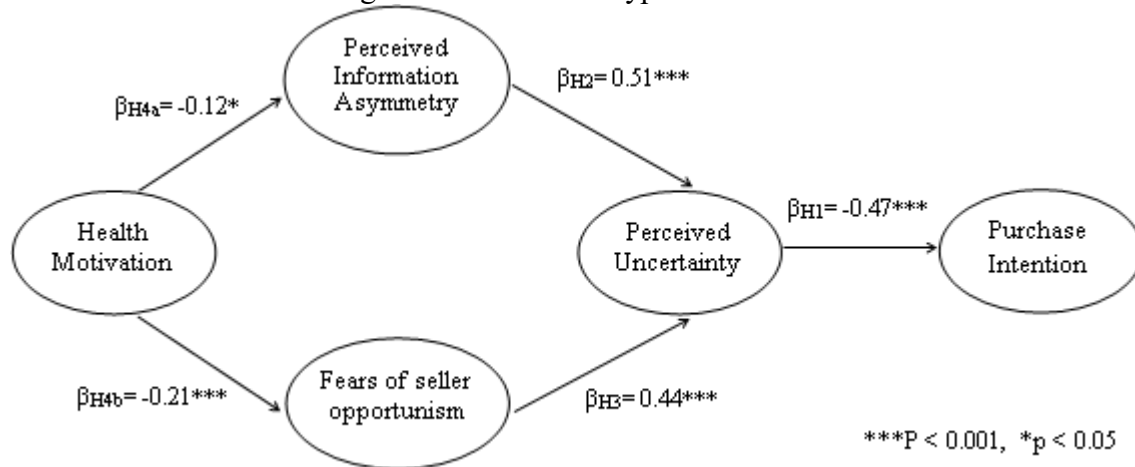
⁺ Items reverse-coded, ** p < 0.01, * p < 0.05

ANALYSIS OF STRUCTURAL MODEL

The raw data of the observed variables retained from the CFA were used for the structural model analysis to test the research hypotheses. The result of structural model showed fit indices as follow: $\chi^2/df = 2.759$, GFI = 0.925, AGFI = 0.900, CFI = 0.940, TLI = 0.928, NFI = 0.909, and RMSEA = 0.062. According to Hair et al.(2010), when χ^2/df is less than 3, GFI, AGFI, CFI, TLI, and NFI are greater than 0.90, and RMSEA is less than 0.08, the results of structural model indicate a good model fit.

The results shown in Fig. 1 reported the standardized path coefficients of the research model indicating the hypothesis testing. First, perceived uncertainty significantly and negatively influenced purchase intention of traceable meat ($\beta_{H1} = -0.47$, $t = -8.52$, $p < 0.001$). As a result, H1 was supported. Next, the path from perceived information asymmetry ($\beta_{H2} = 0.51$, $t = 9.50$, $p < 0.001$), and fears of seller opportunism ($\beta_{H3} = 0.44$, $t = 8.93$, $p < 0.001$) to perceived uncertainty were positively significant. Therefore, H2 and H3 were both supported. Finally, health motivation significantly and negatively influenced the perceived information asymmetry ($\beta_{H4a} = -0.12$, $t = -2.15$, $p < 0.05$) and fears of seller opportunism ($\beta_{H4b} = -0.21$, $t = -3.68$, $p < 0.001$). Hence, both H4a and H4b were also supported.

Fig. 1: Results of the hypothesized model



CONCLUSIONS AND IMPLICATIONS

In summary, this study was conducted in Thailand to examine the roles of perceived uncertainty and its antecedents on traceable meat purchase intention and to investigate the health motivation as a factor influencing these variables. The results conclude that perceived uncertainty for traceable meat decreased when perceived information asymmetry and fears of seller opportunism have been lessened, which in turn enhance purchase intention of traceable meat. Moreover, the results found that consumers' motivation led to the less perception of not only information asymmetry but also fears of seller opportunism when these consumers decided to purchase meat with the traceability system. In terms of theoretical implications, the results of the present study which was conducted in Thailand corroborate with the prior studies in Korea (Choe et al., 2009) and Taiwan (Chen & Huang, 2013). That

is, our results also confirmed that the mitigated perceived uncertainty plays a crucial role in the purchase intention of traceable meat. Consumers' perceived uncertainty is further driven by perceived information asymmetry and fears of seller opportunism. This evidence therefore suggests that a traceability system could help consumers perceive its benefit regarding a reduction in the risk of unsafe food as well as a decrease in information asymmetry as consumers are supplied with more information (Menozzi et al., 2015). This additional information provided by traceability is likely to alleviate consumers' perceived uncertainty and improve consumers' confidence (Kher et al., 2010; Bosona & Gebresenbet, 2013). To the best of our knowledge, this study is the first to suggest that health motivation influences perceived information asymmetry and fears of seller opportunism for the purchase of traceable meat. In fact, relatively few studies have investigated personal characteristics of consumers as antecedents in this context (cf. Myae, Goddard, & Aubeeluck, 2011). Therefore, in addition to identifying the mechanism through which health motivation influences purchase intention of traceable meat, our research results also point out that the health variable can, in fact, function as a main independent variable while previous studies tend to study health variables as moderators in the purchase of safe food (cf. Chen, 2011). In this sense, our study thus contributes to the literature by suggesting that health is a fundamental consumer's characteristic that has a main effect on purchase intention of traceable meat. The effects of health later go through the mechanism of uncertainty-related variables which are consistent with Hobbs and Plunkett (1999) where information asymmetry and uncertainty may arise with consumer's concern in unsafe food (e.g. genetically modified foods, BSE-contaminated meat).

The findings of this study could provide a number of managerial implications for marketers in the meat industry. Our model suggests that traceability system help decrease perceived uncertainty which, in turn, strengthens consumers' purchase intention of traceable meat. Based on this finding, marketers should communicate to their target consumers that a traceability system is a tool to reduce uncertainty which consumers may encounter in meat purchase especially during the food safety crisis (e.g. the period where mad cow disease or avian flu is widespread) (Hobbs et al. 2005; Wezemaël et al., 2010). In this line, a traceability system should be portrayed as being helpful for consumers to be able to more accurately evaluate meat safety than in the case of non-traceable meat which may lacks detailed information in food quality safety. For example, their marketing communication materials may emphasize the system capacity to target and recall risky and unsafe products. Next, our results suggest that health-motivated consumers who practice preventative health behaviors such as health information acquisition and diet restriction (Moorman & Matulich, 1993) and feel anxious about perceived information asymmetry and fears of seller opportunism are likely to be an interesting segment for traceable meat. Marketers could focus health-motivated consumers as their primary target. With this niche market, meat marketers may persuade them by communicating how abundant information on meat they would be given from the traceability system (Mora & Menozzi, 2008). More specifically, because the findings showed that they are concerned with the integrity of sellers and the information gap, marketers may highlight their marketing message by demonstrating the information and product information transparency to improve consumers' confidence in sellers of traceable meat.

Although the present study provides a number of contributions to food marketing research, a

number of study limitations may suggest avenue for future research. First, as actual purchase was not predicted in this study, future research should also examine consumers' actual purchase behavior to determine if this is also influenced by the antecedents identified in the present study. Next, other psychological determinants which may influence perceived uncertainty and/or purchase intention (e.g. trust, perceived usefulness) be also examined to gain further insights into the motivation towards meat traceability system.

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MAJOR RESEARCH AREAS IN MARKETING AND ADVERTISING VIA MOBILE PHONE: A SECONDARY ANALYSIS

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ABSTRACT

The current study is primarily concerned with reviewing and analyzing about 58 scientific researches in different countries from 2004 to 2014. There was a great balance between the American studies and the European studies in the nature of research trends, but American studies focused on measuring the impact of important variables on consumer response such as timing of sending the ads and location of the consumer while receiving a message. The European studies also focused on the field of viral marketing via mobile phone. Moreover, the Asian researchers dealt with new areas in comparison with European and American studies like adopting Islamic banking services via mobile phone. There were a few studies that conducted on Arab society such as Egypt, Jordan, Morocco or on the African community like South Africa, Kenya and Ghana, but the research topics varied between attitudes toward advertising messages and adopting mobile marketing and adopting financial services through mobile phones. A few surveys were also conducted in Australia to measure the perceptions about advertising and the attitudes toward mobile coupons and how they use them.

Keywords: Mobile advertising, Mobile marketing, consumers' attitude, purchase intention, the adoption of mobile marketing and mobile advertising.

INTRODUCTION

Mobile phone is no longer a way to make personal contacts only, but also a way to take advantage of the multiple applications attached to it such as the ability to receive broadcast television, shopping, conduct banking services, playing games as well as surfing the Internet, receiving e-mail and accessing social media sites. Thus, it is clear that the mobile phone as one of the new media can be used as a selling, marketing and advertising tool, and it increases the ability of institutions to face competition and establish long-term relationships with their customers. In this context, academic researchers all over the world found mobile phone as a rich area for researches. Therefore, the researcher realized the importance of aggregating and analyzing the studies conducted in various countries around the world about how to use the mobile phone in the field of marketing communications and hoped to introduce a future vision of researches in this field to encourage researchers to develop this new field.

RESEARCH OBJECTIVES

1. Identifying the different research areas in mobile marketing studies
2. Identifying and comparing the most important results in each research area
3. Offering some future research trends in the field of mobile marketing and mobile advertising.

RESEARCH METHODOLOGY

The researcher at first collected, as much as possible, a number of studies whether on the Google search engine, in "All Academic" site, in databases such as Elsevier's Emerald Group Publishing Limited & ScienceDirect, or in scientific periodicals in the Faculty of Mass Communication and the Faculty of Commerce, in Cairo University. The keywords were "Mobile advertising," "Mobile marketing," "Wireless advertising," "Wireless marketing" and "Mobile Commerce." The Researcher has reached a small number of Arabic studies, while there are an increasing number of foreign studies, whether published in scientific journals or conferences. The current study is based on Secondary Data Analysis, which allows a qualitative analysis for the scientific studies as well as monitoring and reviewing the diversity in the research issues related to the phenomenon under study. At the end, there were 58 studies in the period from 2004 to 2014.

FINDINGS

The studies that dealt with marketing communications via mobile phone can be divided into eight research trends or areas which are: studies on regulating the marketing and advertising services via mobile phone; perceptions about marketing and advertising via mobile phone; the attitudes toward advertising or coupons via mobile phone or toward marketing in general through the mobile phones; audience acceptance for marketing and advertising via mobile phone; cultural influences on the adoption of marketing and advertising via mobile phone; the public response to the mobile advertising or purchasing via mobile phone; and the impact of advertising via mobile phone on brand and viral marketing toward mobile phone. But, in this research we will concentrate on five research areas as follows:

PERCEPTIONS ABOUT MARKETING AND ADVERTISING VIA MOBILE PHONE

Haghirian et al. (2005) examined the perceived value of the marketing and advertising through mobile by a survey which was conducted on a quota sample of 815 persons in Japan [19]. Unni and Harmon (2007) conducted an experimental study on 153 respondents to answer two essential questions: Do consumers find greater value in the ads based on their location (Location based advertising) that were sent to them without prior permission than the ads they receive according to their request? Will consumers see greater value in Location-based advertising which is related to the brand from those ads related to promotional offers? [50]. Jayawardhena et al (2009) also conducted a survey to examine the influencing factors on giving permission to receive promotional messages via mobile phone. Data were collected from 727 students in universities in Finland, Germany, and Britain [22]. Roach in 2009 used Rogers' model for the diffusion of innovations to measure perceptions of a sample of 254 students in university in Australia about marketing via mobile phone [43]. Andrews, Drennan and Russell-Bennett (2012) examined consumers' perceptions toward the values resulting from the daily consumption of mobile phone and discussed how the mobile marketing strengthens these values. This study is based on the theory of Sheth et al in 1991 and relied on Q methodology including screening or classification of a set of statements that have been prepared through 15 qualitative interview on a sample of males and females between the ages of 18 and 50 years [3]. Under this area, findings indicated the following:

(A) The privacy considerations and taking prior permission to allow the reception of ads

across mobile increased the perceived value of the ads.

(B) The more the advertising messages via mobile phone are related to the interests of the individual, the more the perceived value of the ads via mobile phone.

(C) The perceptions of individuals toward the characteristics of innovative object according to model of diffusion of innovations played an influential role in the adoption of mobile marketing. The perceived relative advantage and the complexity of mobile marketing are the most important variables in adopting mobile marketing.

THE ATTITUDES TOWARD ADVERTISING OR COUPONS VIA MOBILE PHONE OR TOWARD MARKETING IN GENERAL THROUGH THE MOBILE PHONES

Several studies agreed in their findings that the entertainment and available information were the most important factors in affecting the attitudes toward the ads via mobile phone. Some of these studies are Okazaki's study in Japan [34]; the study of Tsang et al. (2004) who collected data through a survey of 380 respondents [49]; and the study of Baur et al. (2005) who used the models of technology acceptance and technology adoption and by a sample of 1028 individuals [10]. Results could be summarized according to other studies in different countries such as Bangladesh, China, Scotland, Turkey, Finland, Athens, Egypt and USA as follows:

(A) Gender, age, income and education did not have any effects on the attitude toward mobile advertising or Internet advertising via mobile or the use of digital coupons, but younger respondents and the most educated have more positive attitudes than the older and less educated toward downloading ringtones and games via mobile phones.

(B) The results of studies also differed on the extent of the impact of the credibility of the mobile advertising on the positive attitude toward advertising via mobile phone.

(C) Material incentives play a positive impact on the attitude toward advertising via mobile phone.

(D) There is a relationship between the attitude toward advertising via mobile phone and the intention to use a mobile phone in shopping. [15, 55, 17, 8, 23, 16, 14, 51, 44, 39, 1, 11].

(E) Surprisingly, Wong & Tang (2008) found that there was no relationship between taking permission to receive mobile ads and the attitude toward it [54].

Broeckelmann (2010) used a new technique in conducting marketing research. They were the cartoon tests which were applied on a sample of 221 students at a university in Germany. The study found that 40.2% of the study sample rejected ads via mobile phone, despite its benefits. The place where the individual received the message and its relation to the content of the message is one of the important factors that affect the response to the ad message [12]. In addition, Megdadi & Nusair (2011), through a survey on 389 individuals from Jordan found a relationship between the attitude toward mobile marketing and the attitude toward advertising via mobile phone [29]. Murad (2013) found through a survey on 500 persons in Egypt that females are more interested in mobile ads than males and that females want to learn more about marketing offers and new services and discounts [32].

AUDIENCE ACCEPTANCE FOR MARKETING AND ADVERTISING VIA

MOBILE PHONE

Acceptance means the desire to receive advertising messages via mobile phone. Results according to many studies in different countries such as Scotland, England, Finland, USA, Japan, Pakistan, Canada, Spain and China could be summarized as follows:

- (A) There is a difference between the studies about the impact of perceived behavioral control on the acceptance of mobile advertising.
- (B) There is also a difference between the studies about whether perceived risk represents an obstacle for accepting ads via mobile phones.
- (C) There is a relationship between confidence in the advertised brand and the acceptance of the ads for this brand via mobile phone.
- (D) Material incentives play a positive impact on the acceptance of ads via mobile phone.
- (E) The attitude toward the mobile ad is an important component in the mobile marketing research because the attitude has a great effect on the intention to accept the ads via the mobile phone.
- (F) Perceived value, perceived benefit and overall satisfaction have an impact on the intention to receive ads via mobile phones [42, 30, 33, 24, 20, 46, 35, 27, 18, 45, 38, 40, 36, 21].

THE PUBLIC RESPONSE TO THE ADVERTISING MESSAGES VIA MOBILE PHONE OR PURCHASING VIA MOBILE PHONE

Some studies showed that there was a relationship between the attitude toward advertising messages via mobile phone and behavioral intention toward adopting marketing via SMS [31]. Other studies indicated that there was a negative relationship between privacy concerns and the intention of purchasing [9, 41]. Getting free offers or discounts affected positively consumers' adoption of mobile coupons [7, 2]. Bacile & Goldsmith (2011) showed that the timing of sending advertising message played an influential role in the attitude toward the advertised company, the advertising message, the product, and then toward the intention of purchasing the advertised product [4]. Many studies showed that the individuals' location where they received the advertising message through their mobile phones had an influential role in the intention of purchasing the advertised product [13, 5, 56, 6]. Many studies examined the adoption of banking services via mobile phone and they found that the economic factor, perceived usefulness, the perception of ease of use and trust were the influencing factors in the adoption of banking services via mobile phone [26, 25, 57, 28, 48]. Sun et al. (2012) examined the impact of religious affiliation on adopting Islamic banking services via the mobile phone. The study found that Muslims' intentions were more influenced by perceived usefulness, the opinions of reference groups and the need for the ability of self-expression, while non-Muslims' intentions were influenced by perceived usefulness only [47].

VIRAL MARKETING TOWARD MOBILE PHONE

Results could be summarized according to this area as follows:

- (A) Confidence and the perceived risk have an impact on the individual's decision to open the advertising message via mobile phone.
- (B) Perceived usefulness such as material incentives, the perception of ease of use and

perceived entertaining of advertising message have an impact on how the individual uses the advertising message after it was opened.

(C) Both the interests of the receiver and social norms have a significant impact on the process of selecting the target audience.

(D) There is a difference between the studies on the impact of the perceived cost on the viral marketing via mobile phone [52, 53, 58].

Pescher et al. (2014) designed a model about consumers' decisions in the process of viral marketing. The model consisted of three stages which are reading stage, interest stage and decision to refer stage [37].

DISCUSSION

Most studies relied on theories of planned behavior, reasoned action, uses and gratifications, diffusion of innovations, and technology acceptance model, but there are few studies that have used different theories such as the theory of Sheth et al. 1991 about the value of consumption and adoption technology model. These studies varied between surveys, qualitative studies and experimental studies. Online questionnaire was the most common tool in collecting data in quantitative studies, while in qualitative studies the focus group discussions and in-depth interviews were the most common tool in collecting data. One of the studies used the technique of Q methodology, whereas another study used a new method, namely cartoon tests. Marketing communications via mobile phone have received a great interest from various researchers in many countries such as Finland, Germany, Britain, the United States, Turkey, China, Korea, Japan, Taiwan, Singapore, Kazakhstan, Scotland, Athens, Australia, Spain, Pakistan, Bangladesh, Jordan, Morocco, Ghana and South Africa. There is a great balance between the American studies and the European studies in the nature of research trends but American studies focused on measuring the impact of important variables on consumer response such as timing of sending the ads and location of the consumer while receiving a message. The European studies also focused on the field of viral marketing via mobile phone. The Asian researchers, too, dealt with new areas in comparison with European and American studies such as adopting Islamic banking services via mobile phone. There were a few studies that were conducted on Arab society and their topics were varied between attitudes toward advertising messages and adopting mobile marketing and the adoption of financial services through mobile phones. The researcher hopes for the Arabic studies to deal with the new trends such as adopting banking services via mobile phone, viral marketing and the impact of the forms of reduction in advertising message on the response and the adoption of intermediaries or vendors to mobile phone as a marketing tool and selling ... etc. Few surveys were also conducted in Australia to measure the perceptions about advertising and the attitudes toward mobile coupons and how they use them. A large number of studies were conducted on a small age groups such as adolescents and university students, while few studies covered different age groups. So, we should put into consideration the age variable especially those people in different ages who use the mobile phone.

Studies results highlighted many considerations for marketers and designers as follows:

- Although many of the studies agreed on the importance of consumer's place where receiving the ad message via a mobile phone, we should first take the prior permission and message content should be appropriate for the individual's interests and should satisfy his/her needs

and desires.

- Many studies confirmed the importance of the timing of sending advertising message to the individual (work time vs. leisure time), and so we recommend that individuals should determine the appropriate times to receive mobile ads when taking their prior permission.
- Many studies have agreed that perceived entertainment is an important element in affecting positively attitudes toward advertising via mobile phone and the intention of purchasing. Hence, the researcher suggests that marketers can display the advertising message inside the games or what is called Advergame to increase the perceived entertainment, especially for teenagers and university students or young people. In addition, marketers can add some features in the advertising message, such as sound and video, in order to look entertaining and enjoyable.
- Material incentives (discounts - special offers) have a positive impact on the attitudes toward advertising via mobile phone as well as on the intention of purchasing.
- Interactive elements raise the responses of consumers by allowing them to search for more information through the link of the product site over the Internet.
- Several studies have agreed on the importance of perceived credibility of the advertiser in affecting attitudes toward advertising via mobile phone and the intention of purchasing.
- The importance of personalization in the design of advertising messages via mobile phones.

SUGGESTIONS FOR FUTURE STUDIES

We need more studies on the following topics:

- The relationship between the general attitude toward advertising and the attitude toward advertising via mobile phone.
- The impact of ad formats via mobile phone on the intention of purchasing the advertised product.
- The role of mobile phone in political marketing campaigns.
- How advertising agencies use the mobile phone as a means of advertising in the marketing plan and the promotional plan for companies and determine how its role differs according to the type of the product and its life cycle.
- How companies use the mobile phone besides communication and marketing activities during product crisis.

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TARGET MARKET FOR HIGH QUALITY TOMATO AND CHILI BY COLD STORAGE: CASE STUDY IN BANDUNG AND JAKARTA, INDONESIA

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ABSTRACT

This study showed the target market for cold storage with a view to reducing food loss. To analyze it, as a first step, consumer preference toward tomato and chili has been confirmed. Based on the result, from the view point of the economic aspect, cold storage should be promoted for supermarket in Jakarta and Bandung.

Keywords: Conjoint analysis, willingness to pay, high quality products, tomato, chili

INTRODUCTION

Agriculture is essential for inclusive development (Toledo & Burlingame, 2006) and food sustainability is unquestionably a major issues for the years to come (Esnouf et al., 2013). Especially, Growing population by 4.3% from 2012 to 2013 in Indonesia (Indonesian Statistic, 2015). This means demand of food is being increased and will be increased in the future.

Simultaneously the issue of food losses is of high importance in the efforts to combat hunger raise income and improve food security in the world's poorest countries (Gustavsson et al., 2011). This means that food loss has an impact on economic development. In developing countries, food losses reduce income of small farmers and result in a higher price for consumers who cannot afford to pay for the food (United Nations Regional Information Centre for Western Europe, 2015). Also, environmental effect will be affected by wasting foods (Putri et al., 2014) and food disposal causes environmental impact and it is getting bigger by increasing food loss. Food loss problem will be increased in the future because population are increasing and will be increased (Lee & Tuljapurkar, 2008) and developing countries have food loss problem and it caused the barrier to develop (Pretty, 1999; Pretty et al., 2003). Therefore, food loss problem can be regarded as serious problems especially in developing countries. Indonesia has 5.8% of gross domestic product (GDP) from 2010 to 2014 (The World Bank, 2015), which means Indonesia is a fast-growing country, also it is known as a developing country (Martin, 2015). Therefore, food loss problem in Indonesia has to be solved as soon as possible.

Cold storage system plays an important role in reducing food loss (James & James, 2009), which means refrigeration stops or reduces the rate at which changes occur in food. These changes can be microbiological (growth of microorganisms), physiological (e.g. ripening, senescence and respiration), biochemical (e.g. browning reactions, lipid oxidation and pigment degradation) and/or physical (e.g. moisture loss) (Coulomb, 2008). It is important

for people to use cold storage as a countermeasure for food losses (Murray, 2015). However, less than 10% of perishable foodstuffs are in fact currently refrigerated (Coulomb, 2008). Especially, in developing countries, food loss tends to cause after farmers harvest their products and food loss problem is becoming serious due to the lack of cold storage system (International Institute of Refrigeration, 2009; United Nations Regional Information Centre for Western Europe). Indonesia as a developing country is also lack of cold storage system, which makes economic loss and environmental effect. Therefore, for the purpose of sustainable development, we need to promote cold storage in Indonesia.

But, from the view point of the environmental aspect, previous study explained that 40% of all food requires and 15% of the electricity consumed worldwide is used for refrigeration (Coulomb, 2008). Thus, it has a possibility that cold storage also accelerates global warming by using electricity. So, renewable energy is needed to operate cold storage for reducing environmental impact. Especially, geothermal energy is known as a promising renewable energy. This is because life cycle CO₂ emission of it is 13.0g-CO₂/kWh, which is lower than wind power and photovoltaic power and capacity factor of it is 45%—90%, which is higher than the others (Fridleiffson, 2003; Imamura & Nagano, 2010).

For the purpose of promoting geothermal based cold storage in Indonesia, consumer opinions have to be focused on understanding because consumer of products can do ultimate judge when it comes to successful promoting products (Brown and Eisenhardt, 1995). In this case, agricultural products have to be focused on because they are bought by consumers and it is difficult to promote cold storage if consumer's opinion toward agricultural products as an output from cold storage. Furthermore, understanding consumer needs must be considered as a priority for consumer research (Copper, 1985).

Conjoint analysis is seen as a rigorous and reliable method for measuring consumer preference (Bryan et al., 2000) and it has become a widely applied technique for the marketing of commercial goods (Carroll & Green, 1995). Conjoint analysis is a research technique by which the trade-off relationship between providers would be identified. Conjoint analysis is product-driven, which means products or product concepts are represented by their attributes, where each attribute can have two or more alternative levels. Furthermore, willingness to pay (WTP) of attribution can be analyzed as a value of attributes (Hiwatani et al., 2008). It's shown by conjoint analysis. Also it plays an important role in designing profit-max products (Verma et al., 2001) and pricing decisions (Green and Krieger, 1992).

As a result of explanation, consumer preference toward high quality agricultural products is needed to understand. In this study, tomato and chili are chosen as a target product because tomato is consumed very much and many farmers tend to plant chili with tomato. Then, we need to show the willingness to pay (WTP) for especially for product quality to promote cold storage system. Then, we need to seek some relationships to specify the target consumers for the purpose of promoting cold storage. To accomplish them, we answered the following research question (RQ).

RQ1: What kinds of attributions do Indonesian people focus on buying chili and tomato?

RQ2: How much do Indonesian people have WTP for tomato or chili quality?

RQ3: What kinds of characteristics can be promoted to buy high quality tomato and chili in Indonesia?

LITERATURE REVIEW CONJOINT ANALYSIS

Conjoint analysis has played an important role in helping make a number of operations management decisions including product and service design, supplier selection, and service operations capacity (Karmarkar, 1996). There are three kinds of conjoint analysis methodologies; full profile rating conjoint analysis, ranking conjoint analysis and choice based conjoint analysis (Pavloni et al., 2004). However, choice based conjoint analysis has several advantages. First, data collection involves simulated purchase decisions, which is a more realistic and relatively simple task for respondents than are rating or rankings (Desarbo et al., 1995)

Sianiapr et al., (2013) explained four aspects for making sustainability: Technical, economic, environmental, and social. Technical and economic are basic aspects that should be achieved. Environmental is 2nd level that should be achieved, then social aspect is the ultimate goal that should be achieved for making sustainability. In the previous study, as a technical aspect, Putri et al. (2014) analyzed the consumer preference of green beans in Indonesia. This shows that Indonesian people have a concern about high quality products. However, authors didn't analyze the WTP of attributions because they used multiple regression analysis and they just showed word of "quality", which means that it has a possibility that people have different image of quality. Also, Putri et al. (2012) analyzed the consumer preference of paprika using ranking conjoint analysis in Indonesia. The result shows that Indonesian people have a WTP for low CO₂ emission products as an environmental aspect. However, it didn't have a quality as an attribution. Furthermore, they used ranking conjoint analysis to show WTP for factors. As a social aspect, previous study analyzes the effect of availability on purchasing decision (Kumar & Babu, 2014). But, this study was conducted in India. People's decision was affected by their living environment (Scarr & McCartney, 1983). So, we need to confirm how much Indonesian people have a WTP for availability. Furthermore, purchase places have an important effect for purchasing products (Martínez et al., 2006). However, this has been proved in Spain case and the difference among purchase places did not analyze yet. So, in this study, it will have to be analyzed for showing target market of high quality tomato and chili.

STATE OF THE ART AND RESEARCH HYPOTHESIS

Based on literature review, choice based conjoint analysis is needed for showing both consumer preference and WTP. Also, production photo is needed to show as a quality index. Furthermore, we need to confirm the following hypothesis (H):

- H1. Time distance for purchasing tomato and chili is considered by Indonesian people.
- H2. Availability is concerned for buying tomato and chili by Indonesian people.
- H3. WTP of quality for tomato and chili is influenced by purchase places.

METHODOLOGY

In this study, to understand the consumer preference, questionnaire has been distributed. The survey overview is shown in Table1. 263 respondents have been gathered by web survey from 12 January, 2015 until 7 April, 2015. Target persons must live in Bandung or Jakarta because people who live in Jakarta, Bandung, and Surabaya have concerned about both

environmental problems and product quality (Putri et al., 2014).

For the purpose of understanding respondents, respondents profile have to be asked. In this study, gender, age, living place, monthly household income, and status about marriage have been asked. Also, consumer behavior has to be asked. As a consumer behavior toward vegetable, at first, frequency to buy vegetables have been asked. This is because respondents who do not buy vegetables have to be removed from the other questions about consumer behavior. It means that it has a possibility that respondents who don't buy vegetables make bias for the other questions about consumer behavior. In this study, likert-scale has been used for analyzing the frequency to buy vegetables (Garland, 1991; Putri et al., 2014). Then, methods of transport to go to the place for buying vegetables and the place to buy vegetables have been asked.

Table 1 Survey overview

Term	12 January, 2015-7 April, 2015
Respondent	262
Distribution method	Website
Study area	Bandung and Jakarta
Contents	1. Respondent's profile 2. Consumer behavior toward vegetable 3. Consumer preference toward tomato and chili

With a view to understanding consumer preference toward tomato and chili and WTP for attribution, choice based conjoint analysis has been done. Attribution data of preference survey of tomato and chili is shown in Table2. As a technical aspect, quality of products have been used. To show the same criteria, production photos have been used for showing product quality (Figure1). The photo and price of them have been gathered by field work in November, 2014 and interview to wholesaler company in January, 2015. About the CO₂ emission, there are three attribution levels: Conventional, low, and high. In this paper, CO₂ emission is the environmental effect of tomato production. Conventional means CO₂ emission from current tomato supply chain until tomatoes are arrived at retailer. Low and high mean that tomato has low and high CO₂ emission compared with conventional one. Furthermore, availability and time distance of products have been adopted as a social aspect. Availability means the production stock in retailers. Attribution of availability consists of conventional and high. Conventional means production stock condition by current food supply chain condition and high means there are better stock conditions than current condition. Time distance means the time to go to buy vegetables. In this study, low and high of time distance have been adopted as attributions. The criteria between low and high can be regarded as 20minutes based on the preliminary survey done from December, 2014.

Table 2 Attribution and levels of tomato and chili preference.

Product	Attribution			
Tomato	Quality	High	Middle	Low
	Price	9000[IDR/kg]	10000[IDR/kg]	11000[IDR/kg]

	CO ₂ emission	High	Conventional	Low
	Time distance	High	Low	
	Availability	High	Low	
Chili	Quality	High	Middle	Low
	Price	8000[IDR/kg]	10000[IDR/kg]	13000[IDR/kg]
	CO ₂ emission	High	Conventional	Low
	Time distance	High	Low	
	Availability	High	Low	



High quality



Middle quality



Low quality

(a)



High quality



Middle quality



Low quality

(b)

Fig. 1 Production photo of (a) tomato (b) chilli

RESULTS

RESPONDENT'S PROFILE

As a result on the basis of survey, at first, respondents profile was obtained. Table3 shows the respondent's profile. The rate of below 29 years old is 71.7%. However, a ratio of less than 34 years old in Indonesia (The World Bank, 2015). Therefore, there are more young people than general in this survey. Next, concerning monthly household income, a ratio of

more than 4.8millions is about 45.0%. About 50.0% of Indonesian people have less than 4.8 million IDR of monthly household income (Cabinet Office, 2015). Therefore, respondents could explain the real situation of monthly household income to some extent. Regarding educational background, about 84.8 respondents graduated from bachelor or master course.

Table 3 Respondent's profile.

Category		Frequency	Percentage
Gender	Male	111	42.4%
	Female	146	55.7%
	No answer	5	1.9%
Age	Less than 20 years	15	5.7%
	20years-29years	173	66.0%
	30years-39years	46	17.6%
	More than 40 years	22	8.4%
	No answer	6	2.3%
Monthly household income	Below 480000 IDR	137	52.3%
	480001IDR-14500000IDR	82	31.3%
	Over 14500000IDR	36	13.7%
	No answer	7	2.7%
Educational background	High school	28	10.7%
	Diploma	2	0.8%
	Bachelor	150	57.3%
	Postgraduate	72	27.5%
	No answer	10	3.8%
Living city	Bandung	161	61.5%
	Jakarta	84	32.1%
	No answer	17	6.5%
Status	Single	90	34.4%
	Married	148	56.5%
	No answer	24	9.2%

CONSUMER BEHAVIOR TOWARD VEGETABLES

As a result of survey, consumer behavior toward vegetable was asked. Table4 shows the consumer behavior toward vegetable. Concerning buying frequency of vegetables, 92.0% of respondents answered seldom, often, or always, which means that people buy vegetable at

least once per week and concern about vegetables. Regarding transport method for buying vegetables, 38.5% of respondents use car, 19.5% of them use motorcycle, 12.6% of them go by walking, and 2.3% of them go by others such as bicycle. Last, in relation to retailing place, about 88.6% respondents go to traditional market or supermarket. About 6.1% respondents go to the other places to buy them such as using delivery service.

Table4. Consumer behavior toward vegetable

Category		Frequency	Percentage
Buying frequency	Never	20	7.6%
	Seldom	102	38.9%
	Often	88	33.6%
	Always	51	19.5%
	No answer	1	0.4%
Transport method	Private car	101	38.5%
	Motorcycle	51	19.5%
	Public transport	33	12.6%
	Walking	67	25.6%
	Others	6	2.3%
Place	No answer	4	1.5%
	Traditional market	79	30.2%
	Convenience store	13	5.0%
	Supermarket	153	58.4%
	Others	16	6.1%
	No answer	1	0.4%

CONSUMER PREFERENCE

Based on the survey, result of consumer preference by choice based conjoint analysis is shown in Table5(a) and Table5(b). As Table5(a) shows, price, quality, CO2 emission, and time distance have significance of 1.0%. In contrast, availability has 8.0%. This means that quality, price, CO2 emission, and time distance have significance for choosing tomato but availability is not considered as an attribution (Sano et al., 2011). This means that they want to buy high quality products with cheap price at near places even though retailer does not have enough production stock. Especially, respondents focus on price, which means that they prefer to buy cheap one. Regarding Table5(b), all of attributions have significance of 1.0%. Especially, respondents care about availability rather than other attributions. Based on their result, concerning H1 and H2, Indonesian people who live in Jakarta or Bandung have concern about time distance for both tomato and chili and availability for chili.

Table5. Consumer preference toward
(a) tomato

	Coefficient	Standard error	t	P value
Price	-5.52×10^{-4}	2.98×10^{-5}	-18.53	3.24×10^{-68}
Quality	1.01	0.06	17.16	1.16×10^{-59}
CO ₂ emission	0.52	0.07	7.70	2.74×10^{-14}
Time distance	1.34	0.11	12.16	2.63×10^{-32}
Availability	0.14	0.08	1.77	0.08
N	1307			
Log likelihood	-1483.78			

(b) chili

	Coefficient	Standard error	t	P value
Price	-1.80×10^{-4}	2.04×10^{-5}	-8.80	3.24×10^{-68}
Quality	0.61	0.05	11.67	1.16×10^{-59}
CO ₂ emission	0.25	0.06	4.32	2.74×10^{-14}
Time distance	0.55	0.09	6.20	2.63×10^{-32}
Availability	0.66	0.07	9.07	4.19×10^{-19}
N	1307			
Log likelihood	-1636.05			

Furthermore, based on the survey, WTP of attributions was calculated. In general, there is a gap between measured WTP and real transaction. Added value in the transaction would be 1/3.05 times of the measured WTP (List & Garret, 2001). Based on this, the measured WTP divided 3.05 equals to marginal WTP. Table6 (a) and (b) shows the marginal WTP of tomato and chili, respectively. As Table6 (a) shows, respondents have a more WTP for time distance than WTP for the others. People have a WTP for availability, however it is noted that availability does not have significance as an attribution of tomato. Regarding Table6 (b), people have WTP for all attributions because all of attributions could be regarded as significant. Especially, availability and quality have more important for respondents than the others.

Table6. Marginal WTP of
(a) tomato

Attribution	WTP [IDR/kg]
Quality	600.61
CO ₂ emission	306.73
Time distance	797.40

Availability	84.96
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(b) chili	
Attribution	WTP [IDR/kg]
Quality	1111.23
CO ₂ emission	464.12
Time distance	999.27
Availability	1212.35

DISCUSSION

EFFECT OF PROFILE ON CONSUMER PREFERENCE AND WTP RESULT

For testing the H3, WTP result should be compared between respondents who buy vegetable in different places. In this study, people who buy tomato and chili in traditional market have been compared with people who buy them in supermarket because about 88.6% of respondents buy vegetables in traditional market and supermarket shown in Table4. The result of consumer preference toward tomato and chili are shown in Table7 (a) and (b). They show that people who use supermarket have more t-value for quality, price, time distance, and availability than people who use traditional market. This is because there are many kinds of tomato and chili with different quality and price, which means that people who use supermarket have more concern for choosing them based on the field work done in December, 2014. However, people who use traditional market have more concern about CO₂ emission than people who use supermarket. This can be assumed that supermarkets use more electricity than traditional market such as refrigerator, freezer, light, and machine. So, compared with people who use traditional market, people who use supermarket tend not to concern about CO₂ emission. Next, for the purpose of understanding the target market of high quality tomato and chili by cold storage, WTP between people who use supermarket and traditional market was checked. The result is shown in Table8 (a) and (b). As they are shown, people who use supermarket have 658.94 [IDR/kg-tomato], which is higher than WTP which people who use traditional market have. This is because there are many refrigerators for keeping quality in supermarket compared with traditional market, which means that people who use supermarket care about quality. Therefore, about H3, people who use supermarket have more WTP for quality than people who use traditional market.

Table 7. Preference result toward tomato and chili in
(a) traditional market

Product	Attribution	Coefficient	t value	p value
Tomato	Price	-6.38E-04	-1.24E+01	2.37E-30
	Quality	1.00E+00	9.49E+00	1.46E-19
	Emission	8.07E-01	6.81E+00	3.18E-11
	Time distance	1.41E+00	7.26E+00	1.70E-12
	Availability	7.59E-02	5.56E-01	5.79E-01
	Number of data	450		
	log likelihood	-507.75		
Chili	Price	-1.56E-04	-4.55E+00	6.99E-06
	Quality	4.57E-01	5.04E+00	6.91E-07
	Emission	3.66E-01	3.79E+00	1.74E-04
	Time distance	4.75E-01	3.28E+00	1.13E-03
	Availability	7.33E-01	5.91E+00	6.72E-09
	Number of data	455		
	log likelihood	-571.13		

(b) supermarket

Product	Attribution	Coefficient	t value	p value
Tomato	Price	-5.13×10^{-4}	-13.05	4.41×10^{-35}
	Quality	1.03	12.91	1.91×10^{-34}
	Emission	0.40	4.44	1.02×10^{-5}
	Time distance	1.28	8.88	5.16×10^{-18}
	Availability	0.18	1.59	0.11
	Number of data	722		
	log likelihood	-826.39		
Chili	Price	-1.84×10^{-4}	-6.99	6.13×10^{-12}
	Quality	0.65	9.80	1.85×10^{-21}
	Emission	0.13	1.69	0.09
	Time distance	0.60	5.16	3.16×10^{-7}
	Availability	0.59	6.26	6.32×10^{-10}
	Number of data	773		
	log likelihood	-969.32		

Based on this result, cold storage should be promoted for supermarket rather than traditional market from the view point of WTP. This is because WTP can be regarded as additional profit for investor of cold storage. However, people who use supermarket have also concern about CO2 emission, time distance, and availability. Especially, people have concern about time distance for both tomato and chili. This means that people want to buy them near places. So, if cold storage for tomato and chili wants to be promoted in the future, many retailing places should be used. However, people also concern about CO2 emission, if tomato and chili have to be transported to many retailing places, transportation distance will be increased, which will cause an environmental effect by consuming fuel for transportation. Also, people have concern about availability for chili, so supply chain management should also be improved if cold storage wants to be promoted with including end-user's opinions. Therefore, if cold storages want to be promoted, they should be promoted for supermarket which have high supply chain management system or supermarket which will have high supply chain management system in Bandung or Jakarta.

Table8. WTP of tomato and chili for
(a) traditional market users

Production	Attribution	WTP [IDR/kg]
Tomato	Quality	515.17
	Emission	414.54
	Time distance	726.92
	Availability	39.00
Chili	Quality	956.61
	Emission	766.20
	Time distance	995.98
	Availability	1535.46

(b) supermarket users

Production	Attribution	WTP [IDR/kg]
Tomato	Quality	658.94
	Emission	252.93
	Time distance	817.01
	Availability	112.97
Chili	Quality	1162.33
	Emission	234.28
	Time distance	1068.65
	Availability	1058.06

CONCLUSION

This study analyzed the potential market for high quality tomato and chili by cold storage from the view point of end users. With a view to understanding potential market of it, choice based conjoint analysis was adopted. To promote cold storage, four aspects should be considered: Technical, economic, environmental, and social. So, product quality, price, CO₂ emission, time distance, and availability have been considered as four aspects. Results show that people who use supermarket have higher WTP than people who use traditional market. However, supply chain management should also be improved for promoting cold storage for end user's point of view. There are three limitations of this research. At first, only people who live in Jakarta and Bandung have been targeted. So, people who live in another places should be considered such as Surabaya because people who live in Surabaya have concern about product quality (Putri et al., 2014). At second, environmental effect of supply chain of tomato and chili was not explained. So, in the future research, environmental effect of tomato and chili supply chain will have to be included. Concerning it, quality loss change by cold storage should also be considered. At last, requirement for installing cold storage from the other social groups related to tomato and chili supply chain have not been considered.

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IMPORTANT ASPECTS TO BUILDING BRAND LOYALTY

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ABSTRACT

As one of the requirements to be able to compete at the global level is the mastery of English as an international language. However, Indonesia is among the countries that mastery level relatively lower compared to other ASEAN countries, such as Malaysia and Singapore. These conditions make more institutions English language courses started popping up in Indonesia to capture these opportunities. But some people do not get the results as expected and are still looking for other colleges that are considered to have high quality with affordable prices. English village situated in Pare, Kediri. About the qualifications of teaching staff, infrastructure, and management colleges in big cities is better than the village colleges in the Pare, Kediri. Some participants still chose Kampung Inggris, Pare, Kediri as a place to learn English. The purpose of this research to determine how to analysis about the important aspect to buliding brand loyalty. Based on the results of research that has been done, brand trust has a positive and significant impact on brand loyalty institute courses, either simultaneously or partially. Similarly, brand Affect positive and significant effect on brand loyalty both simultaneously and partially. These results demonstrate how analysis about the important aspect to buliding brand loyalty able to explain the course of the institution. So that every marketer needs to give attention to both these variables.

Keywords :Brand trust, brand affect, brand loyalty , English language colleges

INTRODUCTION

Nowadays, the communication needs on a global level guide every individual to able in mastering a foreign language, especially English. However, the ability of Indonesian people to communicate in English is still under from Malaysia and Singapore. But, it is still higher if compared with others ASEAN countries, such as Vietnam. As those condition, this is a chance to both public and business organization in Indonesia, either owned from private or state requisite English proficiency by requiring their aplicant worker to attach the certificate of English proficiency, either TOEFL, GMAT, or IELTS. With the existence of needs, increase English language proficiency in order to encourage the opening of course institutes

in various cities in Indonesia. Various offer is given to catch the market chance. Even some course institution has opened an English language course services using franchise systems (franchising) such LIA, The British Institute (TBI), Real English dan English First (EF).

There are some of students who learning English have not been able to resolve their problems then choose Inggris village, Pare - Kediri as a place to learn English. They wish that by learning English in Inggris village, their English speaking ability experienced a significant increase. Pare is a district in Kediri, East Java. If it viewed from the geographical location of the region, Pare is a small town as well as other small town. But the interesting thing in this area is a lot of migrants from various regions in Indonesia who living in Pare. With the number of migrants from various regions in the small town then attracted many investors to invest in that area, including the lodging business, travel agencies, rental of motor vehicles and bicycles, laundry, souvenir center and souvenirs from kediri, restaurant and catering. So, the increase of the lodging business in that area can be seen from the increase in land area in the region which is builded for lodging in Tulungrejo and Palm Village. Travel agency give a package travel deals to Kelud and Bromo mountain, Yogyakarta, Bali and other tourist destinations to immigrants who stay for a while in the Inggris village. Rental services of motor vehicles and bicycles is given to immigrants who lived in the Inggris village for a while. Laundry service provided to course participants who did not have enough time to clean and tidy up the clothes. Center shopping and souvenirs in Kediri is provided to facilitate the migrants when they return to their places. Restaurant and catering services to facilitate newcomer with a variety of food, even typical food from East Java, Central Java, Minang and other areas.

Thereby, the town of Pare here has an open appeal to business institutions, especially English language training courses. This can be seen on the development of courses institution in the Inggris village of Pare region. According to Hidayat (2011: 12) there are 124 courses institution in the Inggris village. Meanwhile, according to the Chairman of the Language Communication Forum, there are 148 course institutions is registered in the Inggris village. However, based on the observations made, only seven course institutions (Global-E, Elfast, Daffodils, Krishna, Mahesa, Mr.Bob, and BEC), which controls more than 80% market segment in the area of English courses institutions, Pare, Kediri. The condition shows that course institution who opened in Inggris village area did not make the participants trust to the brand of course institution to use Inggris village area. This phenomenon explains from morethan 100 courses institutions in the Inggris village there were only 7 course institutions which controls more than 80% English courses of segment market in Inggris village. It shows that the opening of the courses institute in the area of Inggris village does not automatically make the market has credence to the brand (brand trust) course institutions in Inggris village. Brand trust deal with cognition aspects of consumers to the brand, in which the functional benefits of a brand is more dominant consideration. Meanwhile, brand affect regarding to the aspects of affection which is inherent at the consumer, so that Jahangir et al. (2009: 21-23) argues that affect brand and brand quality are positively and significantly associated with brand loyalty. Iglesias (2011) in Kabadayi (2012: 85) also states the importance of brand affect in creating brand loyalty. Therefore, if the brands affect participants English language courses are not good, it will have an impact on the loyalty of the brand. Every course participants still rely on English language training institution is able to fulfill the promises offered. In addition, the agency of English language course institution in Inggris village is

expected to solve the problems and meet their needs in obtaining the services of a quality English language courses. The researchers also found that every participants gave a negative opinion on the English courses institutions in the Inggris village, but received a positive opinion on a particular course institution (including Elfast, Daffodils, Krishna and Access) on a certain program. However, the participants still have trust to make Inggris village, Pare, Kediri as the best place to learn English rather than in their own regions. Those indicate that although the general course participants perceive brand trust of English course institution in that village is not enough good, they still chose Inggris village as a place to study English. The purpose of this study is to analyze the important aspects of how to build brand trust for participants with English language colleges through a customer survey participants of various institutions of English language courses in Inggris village of Pare districts, Kediri city, East Java.

LITERATURE REVIEW

The determination of brand create mental structures that help consumers organize their knowledge about the products and services by explaining their decision-making, and in that process give value to the company (Kotler and Keller, 2012). According to Martin et al. (2005) in Kabadayi and Alan (2012: 80) states that, *"In a growing environment competences; Becomes most valuable brand, strategic and critical assets of a company and receives Considerable attention "*. By looking at the various roles of the brand, then the marketers put the brand as an intangible asset of the company, so the existence of determination of brand will show the trust.

According to Morgan and Hunt (2004) in Afsar, Ur Rehman Qureshi and Shahjehan (2010: 1042) "Trust has been defined as the willingness to Rely on an exchange partner in Whom one has confidence". Thus, the trust of consumer is the main thing for the company or institution so it needs to be maintained, this similar with Aaker (1996); Lasser et al. (1995) in Tan and Rasiah (2011: 129) states that, "brand trust as the consumers' readiness in believing on a particular brand of its capability of promised functionality and its attributes" According to Ballester and Aleman (2005: 188) "Brand trust is defined as the confident expectations of the brand's reliability and intentions ".

Ballester and Aleman (2005: 188) reveals that, Brand reliability or reliability of the brand which based on the confidence of consumer, means that the product is able to meet the value promised or in other words, the perception that the brand is able to meet the needs and provide the satisfaction. Brand reliability is a essential thing for the creation of trust to brand because of the brand ability meet the value which is promised would make sense of consumer to get what they needs, in this case, the needs to act out from their feeling threatened. While the intention brand is based on consumer confidence that the brand is able to prioritize the interests of consumers when problems arise in the consumption of the products unexpectedly. There are two componen of brand trust (brand reliability and brand intension), is able to prioritize the interests of consumers when problems arise in the consumption of the products unexpectedly. Thus, the brand trust consumers who rely on subjective assessment or are based on each consumer's perception of the benefits that can be provided product or brand. But in fact, according to Lantieri and Chiagouris (2009: 83) porpose that there are some things that have been created the mistrust of brands, which are more cynical consumers to the brand, the consumer has a bad experience with the brand, how the structure of the

company, the quality is uneven or stable, decline the quality of brand, and too many choices offered by the company. Meanwhile, according Mc.Allister (1995) in Jahangir et al. (2009: 22) expressed the confidence to the brand is how far a person believes, and is willing to act on the basis of words, actions, decisions of others and, uniquely in the domain of consumers, the average consumer willingness to rely on the brand's ability to carry out the other functions. Consumer understanding of the brand product that make a difference from the other brands (Tjahyadi, 2006: 73).

According to Geçtidan Zengin (2013: 114) brand trust is measured by three following statement "I trust his brand", "This brand is safe" and "This is an honest brand". Based on the study of the concept of brand trust, for the purposes of this study, the measurement of brand trust using dimensions, as follows: brand reliability, brand intention (Lin and Lee, 2012: 312; Ballester and Aleman, 2005: 188). However, Lin and Lee (2012: 309) noted the importance of studying the affective factors on consumer self as a human being, because affection is more influence the decision-making compared with cognition.

Therefore, we can see that the research which is conducted by Chaudhuri and Holbrook (2001: 81) reveal that the attitude of the brand can be measured through brand trust and brand affect. This study can be used as the basis framework on how the brand trust affects the loyalty. Aaker (1991: 39) states that brand loyalty is the core of a brand equity. If different customers for a brand in fact purchased in relation with the features, price, and convenience of trademarks. On the other hand, they continue to buy the brand even in facing the competitors with superior features, price, and ease, there is substantial value in the brand and perhaps it exist in symbols and slogans.

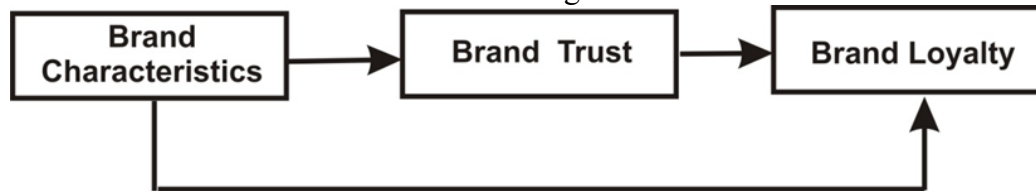
According to Bannet and Bove (2002: 2), "The concept of loyalty has long been considered by academics and marketing practitioners as a valuable tool for developing an effective marketing strategy". Loyalty is considered to be a multi-dimensional concept which is complex (Dick and Basu 1994; Ha 1998; Javalgi and Moberg, 1997; Mellens et al. 1996; Bennett and Bove, 2002: 3). The various studies above show that, there was a relation between brand affect to brand trust. In addition to the research above also illustrates the relationship between brand trust on brand loyalty. The researchers intend to replicate the research model of Kabadayi and Alan (2012: 81) where the researcher intends to test empirically, how far the relationship of three variables (brand trust, brand affect and brand loyalty) at the courses institute in the area of Inggri village, Pare, Kediri.

Thereby, the brand affect has an important role in service industry, especially if it is connected in this research that education services of English language courses. Therefore, a marketing manager courses institutions need to know how the level of trust to the brand which consumers have to be able to increase the loyalty of brand. In addition marketers need to understand how factors of brand affect that capable to shape brand trust. The marketers who success to build the trust in the brand (brand trust) are expected to have an impact on brand loyalty. Various studies indicate that brand trust has a positive and significant impact on brand loyalty.

The various studies above indicate that, there is a relationship between brand affect on brand trust. In addition to the research above also illustrates the relationship between brand trust toward brand loyalty. The researchers intend to replicate the research model Kabadayi and Alan (2012: 81) where the researcher intends to test empirically, the extent of the relationship of three variables (brand trust, brand affect and brand loyalty) at the institute courses in the

area of Ingggris village in Pare, Kediri. Thus the paradigm of this research can be described as follows:

Picture 1. The Paradigm of Research



METHODOLOGY

The research method is a scientific method which is used to obtain the data with intended purposes. This research uses descriptive analytical method, which describes a phenomenon that occurs at the object of research and explanatory method, to determine the relationship between one variable with another variable. Model testing of relationship model from latent variables using path analysis. While the unit of analysis in this study were the participants of English language colleges courses in Ingggris village, Tulungrejo village at Pare, Kediri. Unit analysis / research subjects of this study were students of English courses at various institutions in the course of Ingggris village, Pare, Kediri, namely Course Institution of Global-E, Kresna, Mahesa, Elfast, Mr.Bob, Daffodils dan Basic English Course (BEC). While the observation unit which studied is customer perception to brand trust, brand affect and brand loyalty in Ingggris village, Tulungrejo village, Pare District, Kediri Regency.

According to Jogiyanto (2008: 67) the numeric differential scale gives the extreme values on both sides, where the value of the one side is given a positive value and the other side is given a negative value. This scale is same as the scale semantic difference (semantic differential) which uses two extreme values and subject to determine the response between the two extreme values, the space which is provided to responds, is called semantic space (Jogiyanto, 2007: 67). On the scale of these numerical differences, semantic space is replaced with numerical digits. Condising the model in this study is causality (causal-effect relationship), then, in order to test the hypothesis of the study empirically will be used *Multivariate Data Analysis*, by using *path analysis* test tools. Path analysis is a statistical analysis technique that is developed from multiple regression analysis. In the regression model, a model that is formed is used to predict (predicting) the endogenous variable if the exogenous variables are known. While the path analysis, the model that has formed is used to describe the magnitude effect (not predict) exogenous variables on endogenous variables (Malhotra, 2010: 748).

RESULT & DISCUSSION

After conducting an analysis to the research instruments and an descriptive analysis on the statement of research variables, furthermore the test of hypothesis will be conducted. In the research, hypothesis testing is very important because it is essentially aimed to answer the problems of research and validate the research hypothesis. The statistical test equipment used is the path analysis (path analysis). As well it is described in the previous section, the testing of research hypothesis which states that *brand trust* (X1) and *brand affect* (X2) toward *brand loyalty* (Y) either simultaneously or parsial. By looking to the correlation coefficient can be

known there is influence, either simultaneously or partially from three variables of the research that consist of *brand trust*, *brand affect* and *brand loyalty*.

In testing the following structure, it is better first to see what are level of the relationship and the influence between both independent variables that is *brand trust* and *brand affect*. In order to find the value of how much influence between the variables X1 and X2 searched statistically using Pearson correlation formula. Statistical analysis tools have been chosen based on the shape data to be processed in the form of interval scale, with the following results:

Table 1. The Correlation between Variable

	Brand Trust	Brand Affect
Brand Trust	1,000	0,589
Brand Affect	0,589	1,000

After testing the significance relationship of *brand trust* and *brand affect* then analyzing the path (*path analysis*) to see how much influence of two variables to another variable. The structural equation in this study are as follows: $Y = \rho_{xy1}X_1 + \rho_{xy2}X_2 + \varepsilon$, then as the first step is to calculate a simple correlation coefficient between the variables X1, X2 toward Y. After knowing the correlation coefficient subsequently calculate path coefficients. These process using SPSS version 17, so that the path coefficient can be obtained as follows:

Table 2. The Value of Coefficient Path

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-3.700	3.847		-.962	.339
x1	.536	.093	.491	5.742	.000
x2	.311	.071	.373	4.363	.000

a. Dependent Variable: y

$$\begin{pmatrix} \rho_{YX_1} \\ \rho_{YX_2} \end{pmatrix} = \begin{pmatrix} 0,491 \\ 0,373 \end{pmatrix}$$

Based on the table 4.35, the result of data processing, acquired regression equation as follow:

$$Y = -3,700 + 0,491 X_1 + 0,373 X_2 + e$$

Based on equation of multiple regressions above, then it can be interpreted as follow:

1. The value of the coefficient b_0 is -3.700 which means if X variables is equal to zero, the estimated *brand loyalty* has a negative value / disloyal.
2. The value of the coefficient $b_1 = 0.491$ showed a direct relationship between brand trust with *brand loyalty* in various courses institutions in the Inggris village, Pare - Kediri, East Java. It means that, if the *brand trust* has the effect of 49.1 percent on *brand loyalty* in the course of various institutions, in the Inggris village, Pare - Kediri.

3. The value of coefficient $b_2 = 0.373$ showed a direct relationship between the brand Affect with brand loyalty. This means that if the *brand affect* has the effect of 37.1 percent on *brand loyalty* various institutions is considered as the good course, so it is expected to increase brand loyalty as the course institution in the Ingggris village.

Based on result of data processing can be known that whole variable which is entranced in the model as it shown at regression equation above have positive influence (unidirectional) so if these variables support it is expected to cause an increase in the *brand loyalty*. After that, then coefficient determination of multiple regressions (R^2) is calculated. The result of data processing is shown as follow.

Table 3. The Value of Coefficient Determination

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.797 ^a	.636	.628	4.49996

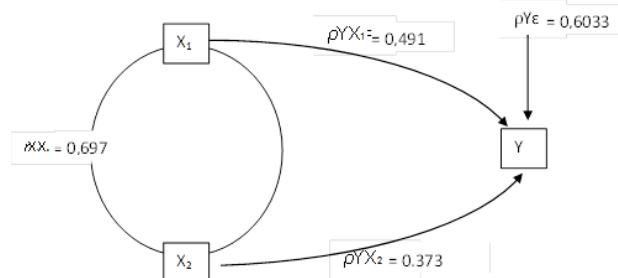
a. Predictors: (Constant), X_2, X_1

Based on table 3 above, the coefficient determination of *multiple* regressions (R^2) are 0,636 (R^2 that already adjusted). From R Square can be calculated the coefficient lines of other variable outside from the model such $\rho_{Y\varepsilon}$

$$\rho_{Y\varepsilon} = \sqrt{1 - 0,636} = 0,6033$$

So, the application of calculation result more clearly can be seen at this following picture.

Picture 2. The Path Analysis of Brand Trust and Brand Affect toward Brand Loyalty



To test the influence of brand trust and brand affect toward brand loyalty. The hypothesis test of research can be formulated as follows:

Null Hypothesis (H_0): there is no positive and significant influence of brand trust and brand affect toward brand loyalty.

The alternative hypothesis (H_a): there is no a positive and significant influence brand trust and brand affect toward brand loyalty.

Hypothesis Statistics:

H_0 : $\rho_{YX_1} = \rho_{YX_2} = 0$, simultaneously there is no influence of brand trust and brand affect toward brand loyalty

Ha : At least there $\rho_{(YX_i)} \neq 0$, simultaneously there is a positive and significant influence of brand trust and brand affect toward brand loyalty

The test statistic which used is F test on alpha of 5% with the following results:

Table 4. Simultaneously test of brand trust (X1) and brand affect (X2) toward brand loyalty (Y)

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	3426.534	2	1713.267	84.607	.000 ^a
Residual	1964.216	97	20.250		
Total	5390.750	99			

a. Predictors: (Constant), X₁, X₂

b. Dependent Variable: Y

Based on the result of SPSS calculation above is obtained F count = 84.607 and p-value = 0.000 means that Ho is rejected. This means that there is simultaneously a positive and significant impact on brand loyalty (p-value <0.05). So therefore, it can be concluded that the hypothesis can be forwarded to the partial test to examine the differences in the effect in the large form of n coefficient value. The total value of the coefficient of determination (R²) is 0.636 or 63.6% of brand loyalty factor and after adjusted into 0.628 or 62.80% influenced by factors of brand trust and brand affect. While the rest is 37.20% which is influenced by other factors that not examined. The research that is conducted by Chaudhuri and Holbrook (2001: 81) described the effect of brand and brand trust affect toward brand loyalty.

Based on the results above, it can be served that there is a positive and significant impact both partially and simultaneously variables of brand trust on brand loyalty. Then manager courses institutions can measure their ability to fulfill the promises of promotion, so that customers will perceive brands as a honest course of brand agency. There is a participants' perceptions to the brand loyalty from various brands of course institution in the Inggris village, Pare, Kediri is considered as positive thing by the participants of the course. It shows that the participants of the course is considered loyal to the brand of course institution.

CONCLUSION

After the explanation in the previous chapter, this research can be concluded that there is a positive and significant influence of brand trust and brand affect toward brand loyalty. Total value of the coefficient of determination (R² adjusted) of 0.636 or 0,628. It is clear that brand loyalty is influenced by brand trust and brand affect jointly by 62.8 percent in the 5% significance level.

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BUILDING TOURISM IMAGE THROUGH INTEGRATING MARKETING COMMUNICATION AND TOURISTS EXPERIENCE (Survey On Marine and Culture Tourism Object in DTW of Ambon Island, Indonesia)

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ABSTRACT

Marine and cultural attraction of tourism object in DTW of Ambon Island. But also there are complaints from tourists who come to visit have an consequence at tourism image in DTW of Ambon Island, who cannot match the tourism image in other provinces. The purpose of this research is to examine : the influence of integrating marketing communications and tourists experience toward the tourism image of maritime tourism object and culture in the tourist destination. The type of this research is descriptive-verification with *survey* method. This research was conducted on maritime tourism object and culture in the tourist destination of Ambon Island. The study was conducted by using 210 samples using *accidental technique*. For data analysis and hypothesis testing used *path analysis* models. The results of research and the hypothesis testing showed that: integrating marketing communications and tourist experiences were significantly influence tourism image.

Keywords: Integrating Marketing Communication, Tourists Experience, Tourism Image, and Tourists Trust.

INTRODUCTION

Tourism sector is an economic sector that is able to improve the welfare of the community and has a high *multiplier effect*. The tourism industry developed along with the development of technological advancements, however, Indonesia's tourism industry faces the dilemma of *high investment, not a quick yield*, meaning that the investment in tourism requires substantial investment with a long of reversion level (long term).

This condition is not interest to most stakeholders of tourism who still have a *instant* and *shortcuts* culture that they prefer to invest that can immediately provide an advantage. In this context, the integration of tourism industry (*tourism business integration*) is needed and

become a synergy of tourism actors horizontally or vertically and provide the benefits for each party. By pointing out the fact above, it can be argued that the strength of tourism development in Indonesia is a wealth of cultural, natural attractions, life community (*living culture*) which unique, the number, diversity and friendliness of society, while weakness is the packing of tourist attraction, limited product diversification, management of tourism destinations which is still weak, the quality of tourism services, the weak of marketing planning, quality of human resources and safety conditions (the ministry, 2008).

The development of tourism in the area, especially in Maluku province as an archipelago with an area of 581 376 km² that consists of 527 191 km² seas and 54 185 km² land. Maluku province divides tourism activities in 4 (four) activities, namely: 1) The nature tourism activities which consist of nature tourism, caving, water tourism, waterfalls, hot springs, lakes, and exploration of *adventure* tourism of flora and fauna, 2) cultural tourism activities, consists of archaeological or historical relics tour, and 3) tourism activities is the development of infrastructure or artificial tourist activities, and 4) activities of the *event (special of the event)* is an annual event like yacht race event.

The data of tourist visits to Maluku for 5 (five) years from 2004 to 2008, but the fluctuations in 2006 and 2008 were marked by a decline in tourist arrivals to the province of Maluku. It is anticipated, if not quickly and accurately will impact on the decrease in revenue from the tourism sector in particular, because the service sector including tourism is ranked as the second biggest contributor to PDRB of Maluku (BPS of Maluku).

Until now Maluku Provincial Tourism image has not been able to match the image of another famous Provincial tourism in Indonesia, such as Tourism of Bali Province as a whole or the famous of Bunaken Marine Park, for example. There are some basic constraints such as infrastructure weaknesses (lack of supporting tourism facilities, lack of transportation and transportation lines), limited human resources, and lack of tourism planning including programs and strategies of tourism marketing. On the one hand, tourists who had visited tourism object in Maluku Province, especially tourist destination in Ambon Island praised the beauty and the harmonization of tourism object but the other tourists also complained about a lot of things that they encountered in this area. The number of complaints from both local and domestic or international tourists who delivered either directly or indirectly to the tourism office or the manager of the tourism object, as well as from the observations of researchers as the part of Maluku people and initial interviews with tourists and Tourism Office of Maluku Province. Tourists complaints based on the visiting experience in tourism object in Maluku besides from infrastructure weaknesses, which is more specific in terms of marketing, especially regarding integrating marketing communications is the lack of advertising appeal on various media promotion, there is no price cuts, extra product on object, lack of *events* promotion, publicity, lack of information about the *hotline service* of object, lack of availability of tourist guides (*guide*), program package from the travel or the travel agency which is still inadequate, the cleanliness level of the tourism object are still less and less available complementary facilities such as children toys in the tourism object and the sights and diving equipment as well as public awareness about tourism object that are still low. Coupled of the conflicts issue of humanity that have occurred in Maluku few years ago, then it is estimated have greatly affect the image of tourism. Therefore, the government's efforts to attract the tourists return to Maluku province requires a harder effort to restore the tourism image in Maluku Province which is famous for marine and culture tourism. This is

in order to restore the tourism image in Maluku province requires the integration of tourism businesses that provide the synergy for tourism actors horizontally or vertically and provide benefits for each party.

Integration of tourism businesses can be done through integrating marketing communication ideas that focus on 1 (one) goal is to change consumer behavior through a variety of communication approaches or to integrate existing channels of communication (Anonymous, 2008). Therefore this research has the concept of integrating marketing communications that are used to produce a positive image of tourism in the tourist destination on Ambon Island. A positive image is formed through a long process needs to be maintained while maintaining the quality of products and services and also supported by the role of *public relations* (PR) that is effective to maintain the positive image (*image*). Grönroos (2001) used a variety of research on service organization, he found that the quality of services and customer experience with the products and services as the most important factor that can influence the customer thinking with respect to the image. This research is in line with Hu and Ritchie (1993) and Milman and Pizam (1995) that the experience that has elapsed or the previous behavior by an entity or object (such as an event or goal) was found to be significant predictors of the image of the destination. Further he stated that *travelers* or tourists who have previously visited a place have a positive image of the destination than you've never been. In the context of *post-trip* (trip after it), satisfaction was found to be a significant predictor of the intention to come back (Petrick et al., 2001). According to Tony Greener in Hadiono, (2005), the image is a most valuable asset of a company's that is a major part of *Public Relations*. PR job is to support the management function by increasing public awareness of the products or services quality as well as it benefits. PR do that by building and maintaining the image of products and services it self. The Image of a company is influenced by the experience of consumers / communities.

LITERATURE REVIEW

Tourism is the interaction of tourists, business suppliers, *host governments*, dan *host communities*. Tourism is defined as a combination of activities, services, and industries that deliver a tourists experience: transportation, accommodations, food and beverage establishment, shopping, *entertainment* and activity facilities plus a range of other services (Goeldner et al., 2000: 73). Based on these definition, the marketing of tourism services include a combination of diverse activities that produced, communicated, and delivered to provide the value for the *customer*. This activity involves various parties and a variety of communication *channels*.

Products travel services in the tourism environment includes six (6) elements according to Smith (in Lumsdon, 1997: 141), namely: (1) *Physical Plant* is an element in the form of natural resources or the place, climate and infrastructure as well as the application of design standards for building environment. (2) *Service* is an element that consists of tasks necessary to reconcile the needs of tourists such hotel or airline facilities as conditions of technically service. (3) *Hospitality* refers to ways to deliver services as the extra things to make tourists feel better. (4) *Freedom of choice* is an idea that shows tourists have several free options to get a satisfactory experience. This encourages them to be more relaxed and act spontaneously. (5) *Involvement* that is the aspects such as the involvement of service marketing principle of continuous performance or consumption easier, including the participation of tourists. (6)

The tourism product process that is the resource of 5 (five) elements above is used in creating tourist infrastructure and tourist facilities as a commodity. Late changes that provided for tourists, the result is *personal experiences* yang dikatakan sebagai *recreation, business, and social contacts are intangibles but highly experienced*.

The tourism industry is made up from environmental component of tourism as a model which describes the potential tourists's decision to choose a tourist destination based on image, perception, available information, transport and communication, financial capability and tourists attitudes. To build up the tourism industry of an area it is necessary to apply integrating marketing communications or (IMC) is a strategic of marketing communication process in business that integrating various functions in the management of both the internal and external audiences and its '*cross function*' and focuses on the integration of '*channel of communication*'. According to Kotler and Keller, 2009: 526-529, '*marketing communications mix*' consists of 7 (seven) mode of communication, namely: (1) *Advertising*, a form of payment for non-personal presentation and promotion of ideas, goods, or services through a designated sponsor. (2) *Sales promotion*, a variety of short-term incentives to encourage the desire or the purchase of a product or service. (4) *Events and experiences*, the company that sponsored activities and programs designed to create interactions associated with a particular brand or every day interactions. (5) *Public relations and publicity*, a variation on programs designed to promote or to maintain the image of a company or individual product. (6) *Direct and interactive marketing*, using mail, telephone, fax, e-mail, or the internet to communicate directly with, or collecting responses or dialogue from certain customers and prospects. As well as on-line and programs activities are designed to engage prospects or consumer and directly or indirectly to encourage awareness (consciousness), to enhance the image, or bring products and services of sales. (7) *Wordofmouth marketing*, communication person to person, orally, in writing or electronic which connect the benefits or the purchase experience or the use a product or service. (8) *Personal selling, face to face* interactions with one or more prospective buyers with the purpose in making presentations, answering questions, and getting the *order*.

The concept of integrating marketing communications (IMC) which is one aspect of a marketing strategy that basically describes the collection of all elements of the mix marketing organization that facilitates exchanges with clients of a company. Integrating marketing communications consist of: (1) *Promotional elements* of IMC, (2) *Non-promotional elements* of IMC (Shimp, 2007: 4). In business, *promotional elements* of the IMC has a meaning, a set of tools for that purpose in the marketing communication mix (advertising, etc). While *non promotional elements* of IMC are: (1) *Product, package and brand symbolism*, (2) *Price, and place communication* (Shimp, 2007:4). Clow and baack also proposed the components of IMC is *the foundation (mission and market targeting)*, *advertising tools (money, media, and massage)*, *promotional tools (mix)*, and *integrated tools (measurement and manage)*.

IMC is an integration of the components of IMC itself which includes 8M (*mission, market targeting, massage, media, money, mix, measurement, and manage*). Clow and Back opinion is same as proposed by Kotler and Keller (2009: 516), only to 8M appear above Kotler et al used the term the development steps of effective communication. This research using the opinions from Shimp, Clow et al dan Kotler et al *Promotional elements (marketing communication mix)* described through *common communication platform* of Kotler and Keller, and included in the mix of components. *Non promotional elements* (product, package

and brand are translated according to the characteristics of tourism services, namely *product lines* = ex, *historic building*, *outdoor related*, etc, and *product item* = ex, marine parks, and travel packages. For the *brand* associated with a reputation / images). (Yoeti, 2006: 77-78). *Price*, *price* and *place*, location, availability of transport and security facilities (Bernarto, 2008: 110). *Promotional* and *nonpromotional elements* will be combined in 8M components / steps of IMC.

It can be concluded that the purpose of the IMC is a blend of promotional elements (marketing communication mix) and non promotional elements (product, package and brand, place and price) through 8M components or steps, namely (mission, market targeting, money, media, massage, mix, measurement, and manage). Marketing experience shows not only the characteristics of the communication but also connect a product or service with a unique and interesting experience (Kotler and Keller, 2009: 563). Experience is the result of interaction and the considerations are made concerning the quality of services that occurred at the time of purchase decisions, both technical and functional quality of the services offered so that consumers can re-buy or not (Palmer, 1994: 161).

The images is some of belief, ideas, and one impression of someone about an object. Attitudes and actions of an object is determined by the image of the object (Kotler & Keller, 2009: 659). Image strongly influenced by the quality of goods services and service providers, and therefore management should continue to improve the quality and attention to physical appearance, behavior of employees, and reputation of services provider to consumer loyalty (Suhartanto and Priyatiningsih, 2004: 204).

According to Kennedy (in Nguyen and LeBlanc, 1998: 55) there are two (2) basic components of the image that is functional components associated with tangible sign that can be measured easily, and intangible emotional components that are combined with psychological statement in the form of feelings and attitudes. For measure the images can be used three indicators of opinion towards service providers, opinions of the contribution of service providers in the community, and a good impression of the service provider (Andreassen and Lindestad, 1997: 11-16). Image of tourist services is the incorporation of intangible factors into tangible factors of tourist services (hours of operation, access, uniqueness, tradition value, comfort, reliability, physical appearance, behavior of employees, and reputation services provider) through the quality of services received by tourists in communication by service providers and memorable experience as a tourists consideration decision so that tourists are interested to come to visit and want to repeat his visit. In measuring image using three indicators namely tourists opinion toward *recognition*, *reputation*, and *affinity*.

RESEARCH METHOD

The method used in this study is *verificative*. As for the independent variable is integrating marketing communications that consist of promotional elements and non promotional elements, mission, market target, money, media, massage, mix, measurement, and manage, as well as the tourist experience. While the dependent variable is the tourism image and tourist trust.

The population in this study is the domestic tourists who visit maritime and culture of tourism object in DTW of Ambon island. The sampling technique using accidental techniques (accidental sampling) or incidental sampling, that is, the sampling technique based on chance,

that is everyone who by chance/incidental meet the researchers at tourism object that it can be used as a sample, if it is deemed that the accidental person who found is suitable as the data sources (Sugiyono, 2009: 85). The sample size used in this study, can be seen from the number of average data from the tourists who visited tourism object in Maluku as many as 48 850 people (data of tourist visits in 2004 - 2008 is divided by 5 = 48 850 people. If precision used is 7% then the number of samples examined from this population is $n = 203,23$ or **204 respondent**.

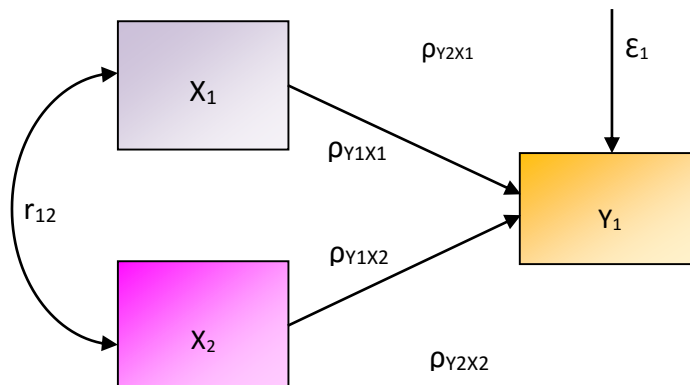
Thus, the total sample size in the research are more than 204 that is 210 respondents to be divided equally into ten (10) maritime and culture tourism in DTW of Ambon Island by potential rating which assigned by RIPPPA Maluku 2005. The criteria for the respondents to be sampled:

- Preferably have ever visited tourist object more than 1 (one) time
- Having ability to answer the questions in the questionnaire
- Preferably for foreign and domestic tourists (who are not domiciled in Ambon). But it is also possible for domestic tourists who are domiciled in Ambon also be the respondent if the amount is not sufficient yet.

Henceforth, verificative analysis used in this study is an path analysis tool (*path analysis*), which is to analyze the pattern of relationships between variables in order to determine directly or indirectly influence, a set of independent variables (exogenous) on the dependent variable (endogenous) (Suwarno, 2007: 2). Path analysis is used to determine the effect of integrating marketing communications (X_1) and tourists experience (X_2) toward the image (Y_1) at maritime and culture tourism object.

Furthermore, the data obtained from the questionnaire subsequently incorporated into the excel program. After that, the data is entered into the program SPSS for tabulated. Then testing the hypothesis by using path analysis (path analysis). Here is a figure of the relationship structure between variables (Figure 1):

Figure 1 Structure Relationship of X_1 , X_2 , toward Y_1



Explanation:

X_1 = Integrating Marketing Communications

X_2 = Tourists Experience
 Y_1 = Image

RESULT AND DISCUSSION

Regarding to result and discussion, the data measured with the interval measuring scale which obtained from the questionnaire of further research, scores for each variable used in the data analysis. The scores for each variables is the total score of the item. To determine the influence of integrating marketing communications and tourists experience toward the tourism image of the tourist destination area of Ambon Island used path analysis. Variable of integrated marketing communications and tourist experiences as the cause variables (exogenous variables) and variable of tourism image as the effect variables (endogenous variable).

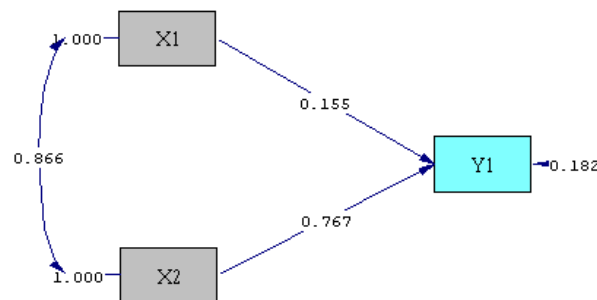
To calculate the amount of direct and indirect influences from the variables of integrating marketing communications and tourists experience toward the tourism image in the tourist destination area of Ambon Island, first coefficient influence with path analysis (path *analysis*) should be calculated. The calculation of Path coefficient causal relationship between variables is done by using *software* of Lisrel Ver 8.7. From the calculation of the path coefficients as shown in structural equation of Lisrel results and track structure diagram are obtained below:

$$Y_1 = 0.155 \cdot X_1 + 0.767 \cdot X_2, \text{ Errorvar.} = 0.1822, R^2 = 0.818$$

(0.05933)	(0.05933)	(0.01791)
2.611	12.925	10.174

The equation model above is the structural model which does not describe the changes of predictive value from the exogenous variables towards the endogen variables. The equation can be described in the following structural models:

Figure 2. Path Diagram Variable of Integrating Marketing Communications and Tourist Experience Towards Tourism Image in Tourism Destination Area of Ambon Island 2010.



Path coefficient is obtained from integrating marketing communications toward the tourism image ($\rho_{Y_1X_1}$) as 0.155 and a path coefficient of tourist experience toward the tourism image ($\rho_{Y_1X_2}$) as 0.767.

TESTING FIRST STRUCTURE HYPOTHESIS OF $X_1, X_2 - Y_1$

To test whether the integrating marketing communications and tourist experiences influence toward the tourism image is then performed statistical hypothesis test. Hypothesis testing

was done in two stages, namely simultaneous testing to determine the significance of the influence simultaneously of integrating marketing communications and tourists experience toward tourism image and partial testing to determine the significance influence of each variable is the influence of integrating marketing communications toward tourism image and the influence of tourist experience toward the tourism image.

THE INFLUENCE TEST SIMULTANEOUSLY WITH F TEST

To test the influence simultaneously, the test was done with F test. Statistical hypothesis tested were:

- $H_0: P_{yx1} = P_{yx2} = 0$
(There is no influence of integrating marketing communications, and tourists experience toward tourism image).
- $H_1: P_{yxi} \neq 0$
(There is influence of integrating marketing communications, and tourists experience toward tourism image).

The determination of test results (acceptance or rejection of H_0) can be done by comparing F_{count} with F_{table} the provisions reject of H_0 if F_{count} larger than F_{table} .

The results of statistic test for testing the overall influence are:

$$F = \frac{(n-k-1) \times R^2_{YX_1X_2}}{k \times (1-R^2_{YX_1X_2})}$$

$$F = \frac{(210-2-1) \times 0,818}{2 \times (1-0,818)} = 464.241$$

From the table the value of F table is obtained for degrees of freedom (df_1) = the number of eksogen variables = 2 and degrees of freedom (df_2) = $n-k-1 = 210-2-1$ as $F_{(0,05;2;207)} = 3,040$.

Table 2. The Hypothesis Testing of The Influence of Integrating Marketing Communications And Tourists Experience Toward Tourism Image in DTW of Ambon Island

Variable	F_{count}	F_{Table}	Explanation
Integrating Marketing Communication and Tourist Experience	464.241	3,040	Significant

Source : data processed (2009)

Because of the value $F_{count} = 464.241 > F_{table} = 3,040$ thereby test decision is null hypothesis is rejected. The test result can be concluded that for the variables of integrating marketing communication and tourists experience simultaneously influence the tourism image.

THE INFLUENCE TEST PARTIALLY WITH T TEST

After the result of overall significant path testing acquired, so it can be resumed by testing each significant path coefficient.

- a. The Influence of Integrating Marketing Communication Toward Tourism Image

To see the significant influence of X_1 partially toward the effect variable (Y_1), so it can be done by testing partial hypothesis with t test. The statistical hypothesis which tested were

$H_0 : \rho_{YX1} = 0$	There is no influence of integrating marketing communication partially toward tourism image.
$H_1 : \rho_{YX1} \neq 0$	There is influence of integrating marketing communication partially toward tourism image.

The statistic test of t test is obtained for X_1 (t_{count} integrating marketing communication) from 2,611. Furthermore, these values are compared with the value of t_{table} . Based on distribution table of t-student for $\alpha = 5\%$ and degrees of freedom (210-2-1) are obtained the value ($t_{0,05/2, 207}$) = 1,971.

The comparison result of t_{count} which obtained with the value of table is t_{count} is larger than t_{table} (2,611 > 1,971). The result of test is based on sample data which conducted reveals the rejections toward H_0 or in the other words, accepting H_1 . So, it can be concluded that the result of test acquired is there are significant influence (significant) of integrating marketing communication toward the tourism image.

b. The Influence of Tourists Experience Toward Tourism Image

In order to see the significant influence of X_2 partially toward variable effect (Y_1), so testing partial hypotheses was conducted with t test. The statistic hypothesis which tested are

$H_0 : \rho_{YX2} = 0$	There is no influence of tourist experience partially toward the tourism image
$H_1 : \rho_{YX2} \neq 0$	There is a influence of tourist experience partially toward the tourism image

The t test is obtained for X_2 (t_{count} Tourists experience) as 12.925. Furthermore, the value is compared with the value of t_{table} . Based on student distribution table of t-student for $\alpha = 5\%$ and degrees of freedom (210-2-1) values obtained ($t_{0,05 / 2, 207}$) = 1.971.

The comparison result of t_{count} which obtained with the value of the table is t_{count} is bigger than t_{table} (12.925 > 1.971). The test results based on sample data that conducted reveal the rejection of H_0 or in the other words accept H_1 . So it can be concluded that the test results obtained are contained the significant influence (significant) of the tourists experience toward the tourism image..

THE INFLUENCE RATE OF RESEARCH VARIABLE

Based on the test results as a whole and partially it can be concluded that the proposed hypothesis can all be accepted, because the path coefficient based on testing of integrating marketing communications to the tourism image and the tourists experience to the tourism image statistically significant. These results provide an indication that the variable of integrating marketing communications, and tourists experience variables influence the tourism image.

THE INFLUENCE OF INTEGRATING MARKETING COMMUNICATIONS TOWARD THE TOURISM IMAGE

After testing the path coefficient of integrating marketing communications to the tourism image statistically significant then be known the rate of directly and indirectly influence from integrating marketing communications towards tourism image.

The direct influence of X_1 toward Y_1

$$= P_{yx_1} \times P_{yx_1} = 0,155 \times 0,155 = 0,024 (2,4\%)$$

From the result of calculation above obtained by the direct influence of integrating marketing communications variables towards the tourism image as 2.4%. Indirect influence of X_1 toward Y_1 through $X_2 = P_{yx_1} \times r_{x_1.x_2} \times P_{yx_2} = 0,155 \times 0,866 \times 0,767 = 0,103 (10,3\%)$. From the above calculation results obtained indirect influence of integrating marketing communications variables through tourists experience variables on tourism image provide additional influence as 12.7%. The total influence (direct and indirect effect) of integrating marketing communications variables towards tourism image was obtained as $2,4\% + 10,3\% = 12,7\%$.

THE INFLUENCE OF TOURIST EXPERIENCE TOWARDS TOURISM IMAGE

After testing the path coefficient of tourists experience to tourism image statistically significant then be known directly and indirectly of influence from the tourists experiences toward tourism image. The direct influence of X_2 toward $Y_1 = P_{yx_2} \times P_{yx_2} = 0,767 \times 0,767 = 0,588 (58,8\%)$. From the result of calculation above obtained the direct influence of tourists experience variables toward the tourism image as 58.8%.

a. Together/simultaneous influence (total influence) of integrating marketing communication and tourists experiences toward tourism image

Indirect influence of X_2 toward Y_1 through $X_1 = P_{yx_2} \times r_{x_1.x_2} \times P_{yx_1} = 0,767 \times 0,866 \times 0,155 = 0,103 (10,3\%)$.

From the result of calculation above obtained indirect influence of tourists experience variables through integrating marketing communication variables toward tourism image provide additional influence as 10.3%. Total influence (direct and indirect) of tourists experience variables toward tourism image obtained as $58.8\% + 10.3\% = 69.1\%$.

The result of direct and indirect influence which obtained can be summarized in the following table :

Table 3. The Influence Rate of Integrating Marketing Communication and Tourists Experience Toward Tourism Image in Tourism Destination Area of Ambon Island 2010

	Path Coefficient of P_{yxi}	Direct influence	Indirect influence	Total Influence
Integrating Marketing Communication	0,155	2,4%	10,3%	12,7%
Tourists Experience	0,767	58,8%	10,3%	69,1%
Total				81,8%

Source : data processed (2010)

In the common influence of integrating marketing communications and tourists experience toward tourism image in tourist destination of Ambon Island as 81.8%, while the remaining amount as $(100\% - 81.8\%) = 18.2\%$ influenced by the other factors, which needed to conduct the further research about these other factors. Partially the major influence of integrating marketing communications toward the tourism image is 12.7% and the tourist experience toward the tourism image is 69.1%. Partially a great influence toward the tourism image is the tourist experience.

Integrating marketing communications consists of promotional elements (*promotion*), and non-promotional elements (*product—package* and *brand symbolism—, product, and place*) through 8M component of integrating marketing communications such *mission, market target, media, message, money, mix, measurement*, and also *manage* of IMC and tourists experience (technical quality of assessment—*tangible* and functional quality of assessment—*intangible*) significantly influence toward the tourism image (*recognition, reputation, affinity*) and also for tourists trust (*capability, assurance, perceived quality*). In order to make tourists have a good or enjoyable experience through ‘*channel of communication*’ or the elements and components that exists in integrating marketing communications. The effectiveness of integrating marketing communications and good or fun tourists experience will affect significantly or convincing the tourism image. The results of previous studies (Brakus et al, 2009) also show the same thing. Communication activities such as *word-of-mouth communication* and advertising have an influence on the image of companies that are considered of consumers (Kurtz and Clow, 1998, in Priyatingsih, 2005: 38). From the studies at tourism industry that was conducted by Echtner and Ritchie 1991, showed that a recreation area that communicated in good and interesting way will shape a positive image of a tourism spot and encourage tourists to come and visit that area. In making purchasing decisions, *experiences* be used as one of the promotion concepts from the recreation groups that have already made such as family, friends, or group (Witt & Moutinho, 1994: 373-374).

CONCLUSION

The result of analysis and discussion about integrating marketing communications, tourists experience, tourism image and tourists trust, found that the decrease of tourists trust also happened because of the low tourism image. Tourist trust is also influenced by the image of tourism. The tourism image have a positive and significant influence toward the trust of tourists. It means that, if the tourism image is good thereby the trust of tourists will be good, conversely. From the result of research, the dominant indicator of tourism image is the overall impression toward the tourism object and the value/use, whereas less dominant is the professionalism of management and the introduction of a tourism object.

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A STUDY ON CUSTOMER EXPECTATIONS ON RETAIL SERVICES: A CONSUMER SURVEY FROM HYDERABAD, INDIA

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ABSTRACT

Retail service is a series of activities designed to enhance the level of customer satisfaction. The purpose of this study is to find out the highly expected retail services by the customer from the retailers. This study observes the existing retail services in practice and then finds out the highly expected retail services by the customer, thereby offering recommendations to the retailers to concentrate on those retail services which are highly expected by the customers. But each and every retail service is an independent activity that will enhance the level of customer satisfaction. For this purpose, Multivariate Analysis is adopted to know the proprieties of customers regarding retail services for better shopping experience.

Key words: Retail Services; Customer expectations; Shopping expectations and Priorities: Multivariate Analysis

INTRODUCTION

Retail service is a series of activities designed to enhance the level of customer satisfaction. Retail Service activities mainly includes providing product inform, providing information on current offers, door delivery service, after sales services like alteration of cloths, processing guaranties and warranties on consumer electronics and furniture, attending customer complaints, announcements of current offers, instant billing without waiting, parking facility for all vehicles, sales people availability in each department, availability of all required products, providing exchange facility on some goods etc.

As a part of the Indian government's strategy to gradually open up the retail sector to foreign competition, the 2005 budget allowed 26 percent foreign direct investment (FDI) in the sector. Indian government recently reopened its gates for global retailers by increasing FDI up to 51 percent in retail sector for both single branded and multi branded retailing. Some of the global retail giants like Wal-Mart already started their operations with joint ventures with Indian corporate whereas others are in plans to enter into Indian retail sector with their brands. When compared to Indian retailers, International retailers are equipped with advanced managerial concepts, latest technology, research base etc. Here the biggest challenge is how Indian retailers can compete with international retailers in pulling the customer towards the retail outlets. With this recently changed scenario in Indian retail sector, an attempt has been made

to provide assistance for the Indian retailers by informing them about the highly expected retailer services by the customers.

According to Srivastava (2008), Consumer choice of shopping malls over traditional market stores is influenced by various factors like ambience, assortment, sales promotion schemes and in-store services. Jain and Bagdare (2009) determined that the major determinants of modern retail formats are Layout, ambience, display, self service, value added services, technology based operations and many more dimensions with modern outlook and practices. Sinha and Uniyal (2005) stated that on one hand impulse buying and brand switching behavior has become more evident and on the other hand unnecessary shopping has increased leading to consumers buying goods which are non-essential. The Malls, convenience stores, department stores, hyper/supermarkets, discount stores and specialty stores are the emerging retail formats that provide different shopping experience to consumers (Sinha and Uniyal, 2005). Further Sinha and Uniyal (2005) in their study found that The Malls, convenience stores, department stores, hyper/supermarkets, discount stores and specialty stores are the emerging retail formats that provide different shopping experience to consumers.

OBJECTIVES OF THE STUDY

- [1] To study the existing retail services in the retail sector.
- [2] To study socioeconomic characteristics of the customers in the study area.
- [3] To know the customer expectations on retail services offered by the customer for better shopping experience.
- [4] To identify highly expected retail services by customers using multivariate analysis.

METHODOLOGY OF THE STUDY

The methodology of the study is designed in unique way to know the highly expected retail services by customers. The study is mainly an empirical one and the variables used are both quantitative and qualitative in nature. The study is based on both primary and secondary data. The secondary data was collected from various in-house magazines of corporate outlets, retail and marketing journals etc. The primary data is collected from 600 customers shopping in different leading organized retail outlets in Hyderabad like Big Bazaar, More, Spencer's, Pantaloons, Central etc.

- Sampling technique: Simple Random Sampling
- Sample Size: 600
- Study Area: Hyderabad
- Retail format: All-in-one shopping malls, Hypermarkets

Research Instrument: A structured questionnaire has been designed specifically to elicit the opinions of respondents depending on objectives of the study. Firstly the questionnaire concentrates on analysing socio-economic characteristics of the customers shopping in organised retail outlets in Hyderabad, secondly asking the customers to provide their expectations on a five point likert scale regarding twenty identified retail services in the study area. Questions in the questionnaire are framed in such a manner that the respondent gives their opinion mostly for questions on a five point likert scale, in some cases with given options and also open-ended questions sometimes. Scaling technique used to quantify the variables is explained in detail the forgoing analysis. The following statistical methods are

used in the analysis.

STATISTICAL TOOLS

Cronbach's Alpha: The value was calculated for the questionnaire administrated in order to determine the reliability of the data where the alpha value is greater than .70 is the recommended level: (Bernardi 1994). For this study, Cronbach's Alpha value is calculated as .782 for 600 cases/sample which indicates that the data have relatively higher internal consistency. **Multivariate Analysis:** Multivariate analysis (MVA) is based on the statistical principle of multivariate statistics, which involves observation and analysis of more than one statistical outcome variable at a time. In design and analysis, the technique is used to perform trade studies across multiple dimensions while taking into account the effects of all variables on the responses of interest (T. W. Anderson, 1958). Statistical procedure for analysis of data involving more than one type of measurement or observation. It may also mean solving problems where more than one dependent variable is analyzed simultaneously with other variables (businessdictionary.com).

Factor Analysis: In social sciences and especially in behavioral studies, variables cannot be measured directly. Such variables are usually referred as "latent" variables and can be measured by qualitative propositions to reflect the perceptions of the respondents. The factors generated are used to simplify the interpretation of the observed variables. Hair et al. (2006) well defined the meaning of factor loadings and scores in words. Factor loadings are the correlation of the original variables (retail services) and factors and loadings indicate the degree of correspondence between the variable and the factor. It is a statistical technique used for determining the underlying factors or forces among a large number of interdependent variables or measures (Krishnaswami and Ranganatham 2007). Therefore, higher loadings make the variable representative of the factor and loadings are the means of interpreting the role of each variable in defining each factor.

Eigen values: A factor's Eigen value may be computed as the sum of its squared factor loadings for all the variables. The ratio of Eigen values is the ratio of explanatory importance of the factors with respect to the variables. The Eigen value for a given factor reflects the variance in all the variables, which is accounted for by that factor. Eigen Value or Latent root is the sum of squared values of factor loadings relating to a factor (Krishnaswami and Ranganatham 2007).

PROFILE OF THE STUDY AREA: HYDERABAD

Hyderabad is the capital city of the southern Indian state of Andhra Pradesh. Occupying 650 square kilometres (250 sq mi) on the banks of the Musi River, it is also the largest city in the state. Historically, Hyderabad was known for its pearl and diamond trading centres. Industrialisation brought major Indian Manufacturing, R&D, and Financial Institutions to the city, such as the Bharat Heavy Electricals Limited, the Defence Research and Development Organisation, the Centre for Cellular and Molecular Biology and the National Mineral Development Corporation. The formation of an Information Technology (IT) Special Economic Zone (SEZ) by the state agencies attracted global and Indian companies to set up operations in the city. The emergence of Pharmaceutical and Biotechnology industries during the 1990s earned it the titles of "India's pharmaceutical capital" and the "Genome Valley of India". The Telugu film industry is based in Hyderabad. As of 2011, the Hyderabad Urban

Agglomeration has a population of 7,749,334, making it the sixth most populous urban agglomeration in the country. There are 3,500,802 male and 3,309,168 female citizens—a sex ratio of 945 females per 1000 males, higher than the national average of 926 per 1000. Among children aged 0–6 years, 373,794 are boys and 352,022 are girls—a ratio of 942 per 1000. Literacy stands at 82.96% (male 85.96%; female 79.79%), higher than the national average of 74.04%.

Table 1: Socioeconomic Profile of Respondents			
Variable	Categories of variable	Frequency	%
Gender	Male	346	58%
	Female	254	42%
Age	13 - 19 years	24	4%
	20 - 30 years	384	64%
	31 - 40 years	94	16%
	41 - 50 years	80	13%
	above 50 years	18	3%
Occupation	Unemployed / Students	32	5%
	Employed	429	72%
	Business people	139	23%
Education	Primary Education	9	2%
	Secondary Education	27	5%
	Higher Secondary / Diploma / ITI	108	18%
	Graduation (UG)	240	40%
	Post Graduation (PG)	189	32%
	Higher than PG	27	5%
Income	Less than Rs.15,000/-	152	25%
	Between Rs.15,000/- and Rs.30,000/-	170	28%
	Between Rs.30,000/- and Rs.50,000/-	139	23%
	More than Rs.50,000/-	139	23%
Size of Family	Two	144	24%
	Three	162	27%
	Four	238	40%
	Five	47	8%
	Six	9	2%
Source: Field Study			

In this section an attempt has been made to analyse the socio-economic characteristics of respondents as presented in table 1. Out of total 600 sample respondents, 58% are male and 42% are female. The respondents are categorised into five groups basing on their age. Out of total sample, 4% are teenagers (13 – 19 years), 64% are from young age (20 – 30 years), 16%

are from early middle age (31 – 40 years), 13% belong to late middle age (41 – 50 years) and 3% are from old age (above 50 years). Based on occupation, the respondents are categorised into three groups, unemployed/students (5%), employed (72%) and business people (23%). Basing on the education, 2% respondents completed primary education, 5% have secondary education, 18% completed higher secondary education, 40% are graduated, 32% have post graduation qualification and 5% are higher post graduates. Basing on the income levels, the respondents are categorised into four groups. 25% are having monthly income less than Rs.15,000/-, 28% have income between Rs.15,000/- and Rs.30,000/-, 23% have income between Rs.30,000/- and Rs.50,000/-, another 23% respondents have income more than Rs.50,000/-. The family size of respondents are also analysed, 24% have family size two, 27% have size three, 40% are having family size four, 8% have five and 2% of respondents are having size six.

ANALYZING HIGHLY EXPECTED RETAIL SERVICES USING FACTOR ANALYSIS APPROACH

Since all the expected retail services are dependent variables, multivariate analysis is applied on the data of expected retail services. One of the tools in multivariate analysis i.e. factor analysis was applied on the data to know the highly expected retail services by the customers. In this section an attempt has been made to analyze highly expected retail services to be measured. The customers were asked to respond on a five point likert scale (Highly-Expected [5], Expected [4], Slightly- Expected [3], Unexpected [2], Highly- Unexpected [1]) regarding 20 variables which were identified on the basis of previous studies and interviews. To determine the data reliability, Reliability test was performed on the data of expected retail services. The value of the Cronbach's Alpha is found to be .803, which shows the data of expected retail services is 80.3% reliable which ensures to proceed for further analysis. Reliability of Data: Kaiser Meyer Olkin (KMO) and Bartlett's Test for Highly Expected Retail Services

Table 2: KMO and Bartlett's Test for Highly Expected Retail Services		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.782
Bartlett's Test of Sphericity	Approx. Chi-Square	5437.628
	Df	190
	Sig.	.000
Source: Factor Analysis Data Reduction (SPSS 16.0)		

To determine the appropriateness of factor analysis on the identified customer expected retail services, Kaiser Meyer Olkin (KMO) and Bartlett's Test was performed as shown in table 2. The KMO measure is observed to be 0.782 which is higher than the threshold value of .5 (Hair et al. 1998). So it can be interpreted that there is no error in 78.2% of the sample and remaining 11.8% there may occur some sort of error. Bartlett's Test of Sphericity ($\chi^2 = 5437.628$) is found to be significant ($p < .001$, df 190). Finally it can be concluded that the data collected on expected retail services is appropriate for factor analysis.

Table 3: Factors – Expected Retail Services			
Factor	Eigen Values	% Total variance	Cumulative %
Information	5.21	24.54	24.54
Layout & Design	2.81	14.31	38.85
Packing Services	2.21	12.21	51.06
Post Purchase Services	1.45	6.45	57.51
Return Policy	1.35	5.21	62.72
Credit Facilities	1.11	5.12	67.84
Source: Factor Analysis Data Reduction (SPSS 16.0)			

Factor analysis was used to remove the redundant variables from the survey data and to reduce the number of variables into a definite number of dimensions. The application was done in SPSS 16.0. The factor analysis was performed using principle component extraction method with varimax rotation. After performing factor analysis, the twenty variables were reduced to six factor dimensions, which explained 67.84% of cumulative variance which is indicating that the variance of original values was captured by these six factors as shown in table 4. The six factors are suitably named as Information, Layout & Design Facilities, Packing Services, Post Purchase Services, Return Policy and Credit Facilities. The factor scores of highly expected retail services are presented in the table 3. All these six factors are formed with eighteen variables i.e. highly expected retail services. Each formed factor is provisionally named depending on the variables it is formed. Two variables, Baby Care Services and Mail Order Delivery are eliminated while performing factor analysis with statistical package SPSS. Factor Scores Matrix - Highly Expected Retail Services

Table 4: Factor Scores Matrix – Highly Expected Retail Services						
Attributes	Information	Layout & design	Packing	Post Purchase Services	Return Policy	Credit facility
Available stock	0.83					
Call centre	0.81					
Help desk	0.75					
Information of offers	0.62					
Rest rooms		0.79				
Parking Facilities		0.75				
Interiors and Layout Design		0.63				
Accessibility		0.50				
Gift Wrapping			0.80			
Quick Packing of purchased			0.73			

Right delivery		0.53		
Alteration Services			0.81	
Processing Guarantees & Warrantees			0.62	
Installation Services			0.50	
Exchange of purchased			0.80	
Return Timings			0.70	
Credit to customers				0.74
Acceptance of Credit Cards				0.62
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				

FACTOR 1: INFORMATION

The first factor is named as Information with an Eigen value of 5.21, variance of 24.54% and four associated variables. The associated variables are Available Stock (factor score 0.83), Establishment of Call Center (0.81), Help desk (0.75) and Providing Information of Offers (0.62).

FACTOR 2: LAYOUT & DESIGN

The second factor formed is Layout & Design related services with an Eigen value of 2.81, variance of 14.31% and four associated variables. The associated variables are Provision of Rest rooms (0.79), Parking Facilities (0.75), Interiors and Layout Design (0.63) and Accessibility (0.50).

FACTOR 3: PACKING SERVICES

The third factor is named as Packing with an Eigen value of 2.21, variance of 12.21% and three associated variables. The associated variables are Gift Wrapping (0.80), Quick Packing of purchased goods (0.73) and Right delivery (0.53).

FACTOR 4: POST PURCHASE SERVICES

The fourth factor formed is Post Purchase Services with an Eigen value of 1.45, variance of 6.45% and three associated variables. The associated variables are Alteration Services (0.82), Processing Guarantees & Warrantees (0.62) and Installation Services (0.50).

FACTOR 5: RETURN POLICY

The fifth factor is named as Return policy with an Eigen value of 1.35, variance of 5.21% and two associated variables. The associated variables are Exchange of purchased goods (0.80) and Return Timings (0.70).

FACTOR 6: CREDIT POLICY

The sixth factor formed is Return Policy with an Eigen value of 1.11, variance of 5.12% and two associated variables. The associated variables are Credit to customers (0.74) and

Acceptance of Credit Cards (0.62).

SUGGESTIONS AND CONCLUSIONS

The factor scores in the factor scores matrix, shown in table 4 represent the priority of Highly Expected Retail Services. The Retailers have to provide the retail services as per the priority given by the factor scores matrix. That means, any retailer when they are providing retail services to the customers, as per the findings of the study, first the retailers should concentrate on information services to the customer. Information Services include providing information to the customers on available stock in the outlet. Then the outlet must operate in-house call center to make and take calls from the loyal and target customers. Establishment of Helpdesk inside the outlet is another highly expected service from the customers. The customers are expecting that the current offers and benefits in the outlet are to be conveyed to them. For this Information related services, the retailers can take the help of advertising and other promotion mix elements to inform about current stock and to create awareness levels about the current offers and benefits. The local media like local televisions, local news papers, distributing pamphlets and displays/hoardings can be better media.

When the retailers are designing the Layout and Design of the outlet, according to this study, provision of rest rooms in the outlet will be highly expecting from the customers. Since the customers may spent long shopping hours this facility may be highly required. Provision of parking facilities and Accessibility to each and every product in the outlet are other expected things in the outlet.

As far as packing services are concerned, gift wrapping, quick packing of the purchased goods and right delivery of goods are highly expected services by the customers. Highly Expected Post purchase services are alteration services for the clothing brands, processing Guarantees & Warrantees and Installation Services for Consumer electronics.

The Customers have certain expectations on return policy also. The Exchange of purchased goods and Return Timings are expected to be comfortable to the customers. Credit to Customers and Acceptance of Credit Cards are other expected services by the customers from the retailers.

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CONSUMER ACCEPTANCE OF MOBILE MARKETING: A STUDY OF THREE GENERATION COHORTS IN JAKARTA

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ABSTRACT

This research aims to examine the factors influencing mobile marketing acceptance in three generation cohorts in Jakarta, Indonesia, and to confirm the influence of risk acceptance and personal attachment as antecedent factors toward mobile marketing acceptance with the support of marketing-related mobile activities. This study employs Cronbach's alpha to test reliability and confirmatory factor analysis (CFA) to test the validity of the questionnaire. Furthermore, this study used simple and multiple regression analysis and mediating analysis and analysis of variance (ANOVA) to examine whether there are any significant differences between three generation cohorts towards risk acceptance, personal attachment, and mobile marketing acceptance. The results show that risk acceptance and personal attachment significantly affect mobile marketing-related activities, and mobile marketing-related activity has a significant influence toward mobile marketing acceptance. However, among all the variables, only mobile activity related to accessing content significantly mediates personal attachment to mobile marketing acceptance.

Keywords: Mobile Marketing, Marketing Communication, Generation Cohort, Risk Acceptance, Personal Acceptance, Indonesia.

INTRODUCTION

Mobile devices have become one of the basic human needs in contemporary life. Starting from the expansion during the Internet Era (Archibugi and Coco, 2004; Odlyzko, 2001), the number people that can connect and access the Internet via mobile devices has kept growing exponentially. With the astonishing growth of Internet users and the popularity of mobile device subscription to stay connected, some researchers believe that the development of technology in mobile communication creates new ways for brands and customers to interact with each other (Shankar and Malhotra, 2007). Many companies consider the power of mobile devices as strong, new tool to directly communicate and interact with their consumers through wide marketing activities such as location-based promotion and television-style advertising (Gao, Sultan, and Rohm, 2009). Previous research in the same context has investigated the scope of the Internet (Novak et al., 2000) and mobile devices (e.g. Carrol et al., 2007; Peters et al., 2007) and the mobile phones is seen as a viable commercial and advertising medium.

In this research, the authors examine personal factors that contribute to marketing-related

mobile activity (providing information, sharing content and accessing content), and whether marketing-related mobile activity affects mobile marketing acceptance, and how marketing-related mobile activity mediates the relation of risk acceptance and personal attachment to mobile marketing acceptance. Finally, this research focuses on three generation cohorts (generations X, Y, and Z), based on the theory of multi-generational marketing which stated that promotional messages and products targeting generational groups or cohorts can reflect their generational values which in turn can drive their consumption behaviors (Hernandez, Page, Petrosky & William, 2000). We believe that each generation will have different responses towards risk acceptance, personal attachment, and mobile marketing acceptance.

LITERATURE REVIEW

RISK ACCEPTANCE AND MARKETING-RELATED MOBILE ACTIVITY

Adapted from Gao, Sultan and Rohm (2009), risk acceptance refers to the willingness of individuals to give their personal information to an online-party such as a web site. It is the willingness of consumers to give personal information to register for online marketing promotions, to enter contests, get future discounts, or receive gifts. There is significant amount of literature that focuses on risk acceptance; risk acceptance and mobile privacy has shown spamming and privacy invasion as central issues related to consumers' willingness to receive mobile advertisements (e.g. Barnes and Scornavacca, 2004; Grant and O'Donohoe, 2007; Leppaniemi and Karjaluo, 2005). Hence, the researchers considered the role of risk acceptance in the hypotheses below:

- H1. Risk acceptance positively and significantly affects mobile activity related to providing information to firms for marketing-related purposes.
- H2. Risk acceptance positively and significantly affects mobile activity related to sharing content to firms for marketing-related purposes.
- H3. Risk acceptance positively and significantly affects mobile activity related to accessing content in the mobile setting.

PERSONAL ATTACHMENT AND MARKETING-RELATED MOBILE ACTIVITY

Personal attachment refers to the scope of consumers seeking to customize their mobile phone with unique content, wallpaper, and ringtones as ways to show their phone as an extension of their own idiosyncracies (Gao, Sultan, and Rohm, 2009). Research conducted by Peng and Spencer (2006) showed a positive connection of mobile phone personalization on personal attachment towards mobile advertising. Numerous studies have examined the main effect of personal attachment related to the usage of mobile phones, including studies of children and teenagers in Finland (Kasesniemi and Rautianinen, 2002), studies of teens in Norway (Skog, 2002), the usage of mobile phones among Korean consumers (Kim, 2002). Thus the researcher created the following hypotheses:

- H4. Personal attachment positively and significantly affects mobile activity related to providing information to firms for marketing-related purposes.
- H5. Personal attachment positively and significantly affects mobile activity related to sharing content with others in the mobile setting.
- H6. Personal attachment positively and significantly affects mobile activity related to accessing content in the mobile setting.

MARKETING-RELATED MOBILE ACTIVITY AND MOBILE MARKETING ACCEPTANCE

Adapted from Sultan et al., (2009), marketing-related mobile activity is the model that will inform this study in explaining the effects of marketing-related mobile activity. This model includes the regular usage of mobile devices for providing information, sharing content, and accessing content in the mobile marketing acceptance context. The mediating model was developed from the Technology Acceptance Model (TAM) and gratifications perspectives that affect the usage factors on behavioral intent (Gao, Sultan, and Rohm, 2009). Based on this literature, the researchers believe that the mediating factors will alleviate the paucity of previous research about mobile marketing acceptance. The mediating factors include (1) providing information (2) accessing content (3) sharing content. Based on previous studies, therefore:

- H7. Mobile activity related to providing information positively and significantly affects mobile marketing acceptance.
- H8a. Mobile activity related to sharing content positively and significantly affects mobile marketing acceptance.
- H8b. Mobile activity related to sharing content positively and significantly affects providing information to firms for marketing related purposes.
- H8c. Mobile activity related to sharing content positively and significantly affects mobile activity related to accessing content.
- H9. Mobile activity related to accessing content positively and significantly affects mobile marketing acceptance.

THREE GENERATION COHORTS 'X', 'Y', AND 'Z' AND MOBILE MARKETINGACCEPTANCE

The theory of multi-generational marketing stated that promotional messages and products targeting generational groups or cohorts can reflect their generational values which in turn can drive consumption behaviors (Hernandez, Page, Petrosky & William, 2000). There are many sources that roughly group the age or describe the age in each generation cohorts, but researchers decided to take the newest published and academic source from socialmarketing.org (Schroer, W.J, 2012) and use this source as the main benchmark to describe the ages in each generation cohort; Generation X is referring to the people who were born in 1966-1976, aged 36-46 in 2012. Generation Y or Echo Boomers or Millennials is referring to the people who born in 1977-1994, aged 18 to 35 in 2012, and Generation Z is referring to the people who were born in 1995 – 2012, age 0 to 17 in 2012. Researchers believe that the different characteristics of the members of Generations X, Y, and Z will cause them to respond to mobile marketing differently due to the levels of involvement in using internet via mobile devices, thus:

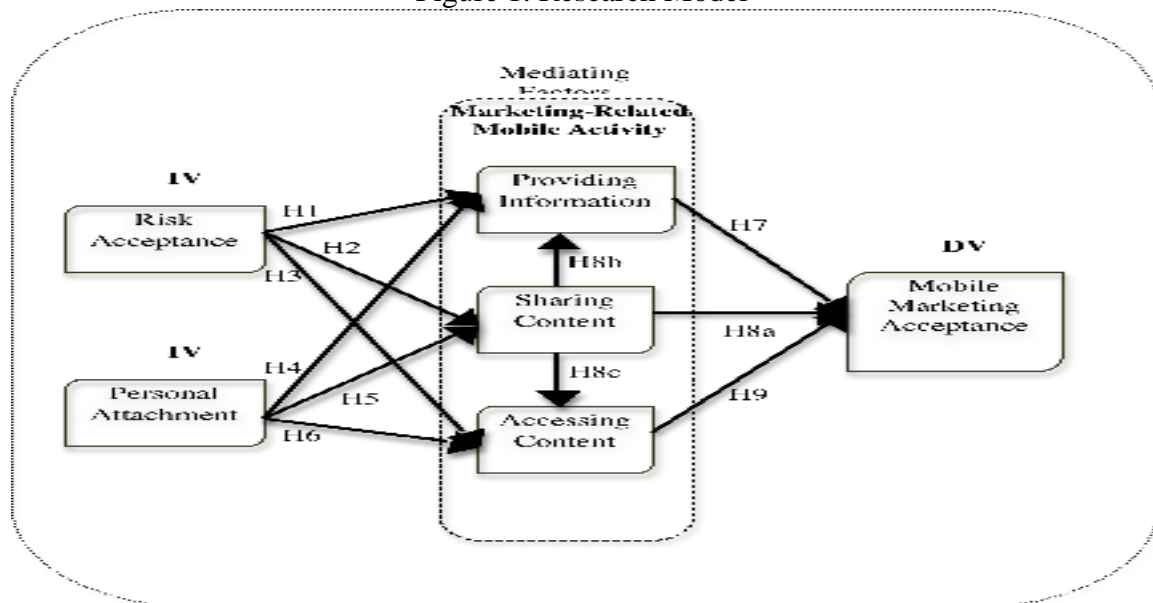
- H10a. There is a different response between each generation cohort in Generation X, Y, and Z towards risk acceptance.
- H10b. There is a different response between each generation cohorts in Generation X, Y, and Z towards personal attachment.
- H10c. There is a different response between each generation cohorts in Generation X, Y, and Z towards mobile marketing acceptance.

MARKETING-RELATED ACTIVITY AS A MEDIATING VARIABLE BETWEEN RISK ACCEPTANCE AND PERSONAL ATTACHMENT TO MOBILE MARKETING ACCEPTANCE

Following a previous study conducted by Tao Gao, Fareena Sultan, and Andrew F. Rohm (2009), marketing-related mobile activity providing information, sharing content, and accessing content are the mediating factors that will help this study in explaining consumer acceptance towards mobile marketing in Jakarta. Based on the aforementioned theoretical framework in the subtitle, several hypotheses are made by the researchers:

- H11. Mobile activity related to providing information positively and significantly mediates risk acceptance to mobile marketing acceptance.
- H12. Mobile activity related to sharing content positively and significantly mediates risk acceptance to mobile marketing acceptance.
- H13. Mobile activity related to accessing content positively and significantly mediates risk acceptance to mobile marketing acceptance.
- H14. Mobile activity related to providing information positively and significantly mediates personal attachment to mobile marketing acceptance.
- H15. Mobile activity related to sharing content positively and significantly mediates personal attachment to mobile marketing acceptance.
- H16. Mobile activity related to accessing content positively and significantly mediates personal attachment to mobile marketing acceptance.

Figure 1. Research Model



METHODOLOGY

RESEARCH AND SAMPLING PROCEDURES

This study employed descriptive quantitative data analysis. Hypotheses were developed from theoretical reviews and empirical studies. Subsequently it followed a confirmatory strategy of research in which a process of confirming or disconfirming hypotheses is employed to answer previously identified research questions. A non-probability sampling was employed, and the sampling method used was convenience sampling. The questionnaires were distributed using two type of approaches; a self-administered survey, by sending the online questionnaire through email to specific respondents in the Jakarta area and the personal approach by conducting face-to-face structured interviews. To gain responses from three generation cohorts, the samples were gathered consisting of high school students which represented Generation Z, university students for Generation Y, and employees for Generation X. The researchers obtained 225 valid responses from 75 respondents in each generation cohorts. Prior to conducting a full-scale survey, the researchers conducted a pre-test survey to 30 individuals to determine whether the items for each construct were reliable and valid.

MEASUREMENT

All data was generated from questioners and was designed, based and modified from previous studies. The risk-acceptance construct was measured using 3 items and personal attachment consisted of 3 items, both adapted from Davis (1989). Marketing related mobile activity consisted of three constructs, namely: providing information (3 items), assessing content (3 items), and sharing content (2 items) adapted from Davis (1989). Finally, mobile marketing acceptance was measured using 3 items and was also adopted from Davis (1989). All questions were measured with a six-point Likert scale, where 1 = strongly disagree, 2 = somewhat disagree, 3 = disagree, 4 = agree, 5 = somewhat agree and 6 = strongly agree. Finally, to obtain respondent profiles, the questionnaires also included several demographic questions such as age, gender, education, and occupation.

Using the survey data, the descriptive statistics procedure in SPSS 17.00 was employed for validating the outcome of the questionnaire. Cronbach's alpha was used to validate the consistency of the measurement and Confirmatory Factor Analysis (CFA) was used to identify the degree of construct-validity. Moreover, simple and multiple linear regression were performed to test the hypotheses followed by Baron and Kenny Mediation Analysis. Finally, analysis of variance (ANOVA) was conducted to determine differences in means between the three generation cohorts.

RESULTS AND DISCUSSION

The authors tested the realibility for each variable used in this study both for the pre-test data and the full-scale survey data. The Cronbach's alpha values for those variables are greather than 0.6 (Maholtra, 2012), thus all variables are reliable. The results for the validity test show that all variables are exceeding the acceptable value of 0.5 for KMO and less than 0.5 for Bartlett test, it shows that the entire questions are valid since the component matrices are greater than 0.7 (Maholtra, 2012). The results from simple and multiple regression indicates that we accept H1-H9 with various values R^2 and with sig. level below 0.05 (table 1).

In addition the results from the ANOVA test show risk acceptance has a significant value of

0.000, which is lower than $\alpha = 0.05$ and therefore it is concluded that risk acceptance has a significant difference between the three generation cohorts. Meanwhile, personal attachment has a significant value of 0.000, which is lower $\alpha = 0.05$ and therefore it is concluded that personal attachment also has significant difference between the three generation cohorts. Mobile marketing acceptance as a dependent variable in this study has a significant value of 0.009, which is lower than $\alpha = 0.05$ and therefore it is concluded that mobile marketing acceptance has significant difference between the three generation cohorts. Therefore, we accept H10a, H10b, H10c.

Meanwhile, the result of the Baron and Kenny Mediating Analysis (table 2) shows that providing information (Beta coefficient of -0.070 and significant value of 0.320, which is greater than $\alpha = 0.05$) insignificantly mediates risk acceptance and mobile marketing acceptance. It is also shown that sharing content, accessing content, sharing content have an insignificantly mediates risk acceptance to mobile marketing acceptance, thus we reject H11-H15. The findings also suggest that providing information insignificantly mediates personal attachment mobile marketing acceptance, whereas accessing content partially mediates personal attachment and mobile marketing acceptance, therefore we accept H16.

Table 1. Hypotheses Results from Simple and Multiple Regression

Hypotheses	R ²	Sig. level	Result
H1: Risk acceptance positively and significantly affects mobile activity related to providing information to firms for marketing-related purposes.	0.501	0.000	Accepted
H2: Risk acceptance positively and significantly affects mobile activity related to sharing content to firms for marketing-related purposes.	0.095	0.000	Accepted
H3.: Risk acceptance positively and significantly affects mobile activity related to accessing content in the mobile setting.	0.232	0.000	Accepted
H4: Personal attachment positively and significantly affects mobile activity related to providing information to firms for marketing-related purposes.	0.168	0.000	Accepted
H5: Personal attachment positively and significantly affects mobile activity related to sharing content with others in the mobile setting.	0.203	0.000	Accepted
H6: Personal attachment positively and significantly affects mobile activity related to accessing content in the mobile setting.	0.276	0.000	Accepted
H7: Mobile activity related to providing information positively and significantly affects mobile marketing acceptance.	0.214	0.000	Accepted
H8a: Mobile activity related to sharing content positively and significantly affects mobile marketing acceptance.	0.054	0.000	Accepted
H8b: Mobile activity related to sharing content positively and significantly affects providing information to firms for marketing related purposes.	0.027	0.013	Accepted
H8c: Mobile activity related to sharing content positively and significantly affects mobile activity related to accessing content.	0.132	0.000	Accepted
H9: Mobile activity related to accessing content positively and significantly affects mobile marketing acceptance.	0.073	0.000	Accepted

Table 2. Mediating Analysis Results

Relationship	R ²	Unstandardized B coefficient	Sig.
Risk acceptance to mobile marketing acceptance	0.490	0.812	0.000
Risk acceptance to providing information	0.501	0.780	0.000
Risk acceptance to sharing content	0.095	0.366	0.000
Risk acceptance to accessing content	0.232	0.535	0.000
Personal attachment to mobile marketing acceptance	0.070	0.301	0.000
Personal attachment to sharing content	0.203	0.524	0.000
Personal attachment to assessing content	0.276	0.591	0.000
Providing information to mobile marketing acceptance	0.214	0.487	0.000
Sharing content to mobile marketing acceptance	0.054	0.227	0.000
Accessing content to mobile marketing acceptance	0.073	0.273	0.000
Providing information controlling for risk acceptance to mobile marketing acceptance	0.492	-0.070	0.326
Sharing content controlling for risk acceptance to mobile marketing acceptance	0.490	0.017	0.727
Accessing content controlling for risk acceptance to mobile marketing acceptance	0.073	0.273	0.000
Providing information controlling for personal attachment to mobile marketing acceptance	0.220	0.447	0.000
Sharing content controlling for personal attachment to mobile marketing acceptance	0.086	0.138	0.051
Accessing content controlling for personal attachment to mobile marketing acceptance	0.094	0.183	0.016
Beta for risk acceptance (1)		0.897	0.000
Beta for risk acceptance (2)		0.806	0.000
Beta for risk acceptance (3)		0.860	0.000
Beta for personal attachment (1)		0.103	0.163
Beta for personal attachment (2)		0.229	0.006
Beta for personal attachment (3)		0.193	0.025

CONCLUSION AND MANAGERIAL IMPLICATIONS

The findings show that risk acceptance, sharing content, and accessing information are proven to have a significant and positive relationship to providing information, sharing content, and accessing content. It can be concluded that risk acceptance is an antecedent variable affecting each marketing-related mobile activity, thus it is considered an important driver for mobile marketing-related purposes.

Moreover, personal attachment positively and significantly affects providing information, sharing content, and accessing content. Personal attachment also serves as a significant factor affecting marketing-related activity. Furthermore, providing information, sharing content, and accessing content are found to influence mobile-marketing acceptance. The three marketing-related activities are considered as significant drivers toward mobile marketing acceptance.

Meanwhile, from the results of mediating analysis, it is shown that providing information, sharing content, and assessing content do not significantly mediate risk acceptance and mobile marketing acceptance. Furthermore, providing information, and sharing content are insignificantly mediated by personal attachment and mobile marketing acceptance. The only variable that is significant in mediating personal attachment and mobile marketing acceptance is accessing content. In addition, sharing content is found to have a direct relationship towards providing information, accessing information, it also significantly affects providing information. From the research findings, we compare the means between the three variables namely task acceptance, personal attachment, and mobile marketing acceptance to three generation cohorts. It is found that there are significant differences among generation X, Y, and Z towards those three variables. As we looked in more detail on the means of each generation cohorts, we can see that the youngest generation tends to accept

risk, have more attachment, and have more acceptance towards mobile marketing compared with the older generations.

Managerial implications can be drawn from the results of this study. Firstly, it is shown that mobile marketing is accepted if consumers can have more attachment to accessing content. Managers should focus on designing and delivering more content such as wallpapers, ringtones, or games. Secondly, each of the generation cohorts has different response towards risk acceptance, personal attachment, and mobile marketing acceptance. Therefore, a mobile marketing strategy should target the younger generations as it is seen as more effective compared with the older generations.

LIMITATION AND FUTURE RESEARCH

This study only focuses on a limited geographical area which could hinder the generalization of the results. Future research should broaden into different geographical locations as well as to increase the sampling size. Future research should examine other factors other factors that are relevant to mobile marketing strategy.

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INFLUENCES OF SUBJECTIVE NORM, TRUST, AND PERCEIVED USEFULNESS ON INTENTION TO PURCHASE TRACEABLE MEAT

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ABSTRACT

Risks associated with meat crises such as mad cow disease and avian flu have stirred consumers' concern for food safety. In response, a traceability system has been implemented within the meat supply chain to enhance consumers' confidence in meat safety. Detailed product information through QR-code labels offered by the traceability system is thus valuable and helpful for consumers' purchase decision. This study aims to investigate determinant factors influencing intention to purchase traceable meat in Thai consumers. Drawing from Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM), the model of present study examines trust, subjective norm, perceived usefulness, and purchase intention. A survey with 244 consumers was conducted in the Thailand. Data were analyzed with structural equation modeling. Results reveal that subjective norm significantly affects both purchase intention and perceived usefulness. Similarly, trust significantly affects both purchase intention and perceived usefulness. Finally, perceived usefulness also affects purchase intention. The present study contributes to literature in traceable meat marketing by incorporating the predictors from both TPB (trust, subjective norm) and TAM (perceived usefulness) to provide a more specific model for explaining consumers' intention to purchase traceable meat. Moreover, this research has found the mechanism through which subjective norm and trust have an indirect impact on intention to purchase where perceived usefulness acts as a central mediator. Subjective norm is also identified as a strong predictor of customers' intention and perceived usefulness among Asian consumers, which possibly suggests the cultural influence of individualism-collectivism. These findings also provide a number of guidelines on marketing communication strategies for traceable meat.

Keywords: Intention to purchase, Perceived usefulness, Subjective norm, Traceability, Trust

INTRODUCTION

Food safety has become a worldwide problem after the emergence of serious food risks from mad cow disease in Europe (Sans, de Fontguyon, & Giraud, 2008) and avian flu in Asia (Burgos & Burgos, 2007). Consumers have lost their confidence in government's ability to

manage food safety (Tsai, Hong, Yeh, & Wu, 2014). As a consequence, many countries especially those in Europe and North America have set up a traceability system within the meat supply chain to regain consumers' trust in meat safety and quality (Myae & Goddard, 2012). Traceability is defined as the ability to trace the history of food products and withdraw the harmful ones (Hobbs, Bailey, Dickinson, & Haghiri, 2005). It is an information technology where information of all production stages including farming, processing, packing, distribution, transportation, and sales processes can be provided (Choe, Park, Chung, & Moon, 2009). This information is usually recorded as a quick response (QR) code labels which allow consumers to readily access the detailed product information via smart phone (Qian, Yang, Wu, Zhao, Fan, & Xing, 2012) when making their purchase decision.

Consumers can benefit from the traceability system when they lack the capability to accurately evaluate the product safety. For example, a number of credence attributes or characteristics of meat quality may be difficult to evaluate by the consumers' naked eyes (Loureiro & Umberger, 2007). Traceability can help consumers to come up with informed product assessment or "get a real feel" of the meat for its quality and safety (Choe et al., 2009). Information offered by the traceability system is thus valuable and helpful for consumers' purchase decision (Golan, Krissoff, & Kuchler, 2004). As a result, consumer research in food traceability has often emphasized its effects on consumers' perceptions and intention to purchase traceable food (e.g. Menozzi, Darson, Mora, & Giraud, 2015) as well as willingness to pay (e.g. Mora & Menozzi, 2008).

Although many studies have been conducted with consumers in Europe and other Western countries (e.g., Dickinson & Bailey, 2005; van Rijswijk, Frewer, Menozzi, & Faioli, 2008; Kher et al., 2010; Bradu, Orquin, & Thøgersen, 2014), relatively fewer studies have focused on developing countries in Asia such as Thailand where the use of meat traceability as a marketing tool is still in its infancy. In recent years, a number of leading Thai meat manufacturers have operated a voluntary traceability system to manage issues of quality and safety in their production (Piengkhoontham & Ruenrom, 2010). In major cities, a traceability machine at the point of purchase in selected supermarkets is available for consumers to retrieve meat details by scanning traceability barcode. Furthermore, a QR code on meat packages has been recently used to facilitate data access through mobile phone. It seems that Thai consumers have developed a positive perception with meat traceability and tend to buy and pay more for traceable meat (Piengkhoontham & Ruenrom, 2010). However, specific reasons for the positive feedback from Thai consumers remain unclear and thus exists a research gap that needs more investigation.

Based on literature review, the present study has attempted to examine the determinants of consumer's purchase intention of traceable meat and its underlying mechanism. Consumers' intention to purchase or willingness to purchase traceable food has been studied in the past; however, relatively few studies have specifically investigated psychological antecedents of Asian consumers' intention to purchase. Therefore, this current study aims to investigate this topic in Thai consumers. Thailand was chosen as a country in focus because it has recently applied meat traceability to supply chain. Comparatively little is known about consumer's response to meat traceability in this country. Drawing from Theory of Planned Behavior (TPB) (Ajzen, 1991) and Technology Acceptance Model (TAM) (Davis, Bagozzi, & Warshaw, 1989), the model of present study examines traceability trust, subjective norm in purchasing traceable meat, perceived usefulness of traceability system, and purchase intention of

traceable meat. The findings of this study are expected to provide several theoretical and managerial implications regarding the use of traceability as a strategic marketing tool for food marketing researchers and industry.

RESEARCH FRAMEWORK AND HYPOTHESES

Based on the TPB framework, behavioral intention reflects an individual's decision to perform a behavior (Ajzen, 1991) and it is regarded as an unbiased predictor of future behavior (Bagozzi, Baumgartner, & Yi, 1989). Behavioral intention, therefore, has been used to explain of food-related behaviors such as chicken consumption choices (Mazzocchi, Lobb, Traill, & Cavicchi, 2008) and halal food purchasing (Alam & Sayuti, 2011). TPB also has been used in information technology (IT) research including online purchasing behavior in general (Pavlou & Fygenson, 2006) and online food-buying behavior in particular (Liang & Lim, 2011). A great deal of research has adopted the TPB framework to specifically examine consumer behaviors in traceable food. For example, to study motives for traceable food choice, Menozzi et al. (2015) predicted the intention to purchase traceable food in Italy and France by using traditional TPB factors (attitude toward the behavior, subjective norms, and perceived behavioral control) and adding other psychosocial determinants (trust and habits) to their model.

Although the TPB framework has been used to predict intention to purchase in several contexts, it may not sufficiently describe a complex behavior when a new information technology, i.e. traceability system implemented in food market. In response, TAM was proposed to explain behavioral intention in a technology context (Davis et al., 1989). TAM includes two key predicting variables: perceived usefulness and perceived ease of use. Perceived usefulness, however, has been identified as a better predictor of behavioral intention because the perceived ease of use of a technology does not per se reflect an intrinsic quality of a product (Gefen & Straub, 2000; Gefen, Pavlou, Rise, & Warkentin, 2002). Interestingly, TAM overlaps with TPB in some core constructs, i.e. subjective norm, and trust. These constructs have been applied in numerous food-related studies (e.g. Menozzi et al., 2015) and technology adoption studies (e.g. Zhang & Mao, 2008). Furthermore, research in online purchasing incorporated subjective norm and/or trust into TAM by linking perceived usefulness with intention (e.g. Pavlou, 2003; Kim, Kim, & Shin, 2009). Subjective norm and trust are the external variables of the TAM and their robustness in predicting customers' intention has been confirmed (Kim et al., 2009). In light of this discussion, the current study has developed a model derived from both TPB and TAM where independent variables include subjective norm, trust, and perceived usefulness and a dependent variable is intention in order to investigate determinants of intention to purchase traceable meat in Thai consumers. The hypothesized relationships based on the literature review are discussed in the following section.

SUBJECTIVE NORM, INTENTION, AND PERCEIVED USEFULNESS

Subjective norm is defined as a person's perceived social pressure to perform a behavior and is one of the important influencers of consumer purchase intention (Kim & Chung, 2011). A consumer may be motivated to comply with the views of such significant referents as family members, friends or colleagues in order to meet their expectations and thus earn their approval in performing a certain behavior (Chen, Yen, & Hwang, 2012). Lee and Green (1991)

argued that consumers in Asia are more likely to be motivated towards conforming to the group norms and several consumption decisions are made under the influence of their family members and friends with whom they are interacting. As interpersonal networks are important sources of information about an innovation (Muk, 2007), numerous studies in information technology adoption have consistently revealed social influence as a critical determinant of intention and behavior (e.g. Venkatesh, Morris, Davis, & Davis, 2003; Kim et al, 2009). For instance, in the food traceability context, consumers are more likely to have a stronger intention to purchase traceable meat when the third parties approve or promote the use of traceability (Mora & Menozzi, 2008; Menozzi et al., 2015).

For the relationship between subjective norm and perceived usefulness, numerous studies suggested that subjective norm is an important determinant of perceived usefulness (e.g. Yi, Jack son, Park, & Probst, 2006; Kim et al., 2009). Perceived usefulness reflects the degree to which an individual believes that using a particular technology would enhance his or her performance. Accordingly, when a superior suggests that a specific technology might be useful, a person may come to believe that it actually is useful (Venkatesh & Davis, 2000). In this sense, opinions of important referents could form the basis for a person's feelings or perception about the benefit of technology. Therefore, the following hypotheses are proposed.

H1a: Subjective norm in traceable meat purchase will positively influence intention to purchase traceable meat.

H1b: Subjective norm in traceable meat purchase will positively influence perceived usefulness of meat traceability.

TRUST, INTENTION, AND PERCEIVED USEFULNESS

Trust is generally defined as a belief where a person may rely on a promise given by another person (Pavlou, 2003). The implementation of food traceability systems is expected to increase transparency throughout the food supply chain, thereby resulting in the development and maintenance of consumers' trust (Van Rijswijk et al., 2008). Accordingly, in this context, trust, refers to the degree to which consumers are willing to believe that the information disclosed from traceability is trustworthy, transparent, and accurate (Chen & Huang, 2013). If consumers trust in traceability, their intention to purchase is likely to be higher. This hypothesized relationship is consistent with the evidence provided by Menozzi et al. (2015). That is, their results revealed that Italian consumers believe that traceable chicken is safer than standard products, thus encouraging them to purchase traceable meat.

Trust is also found to play a key role on perceived usefulness, for example, when consumers need to use internet or IT in purchasing (Kim et al., 2009). Pavlou (2003) argued that trust positively influences perceived usefulness. That is, trust allows consumers to become vulnerable to an online retailer so as to ensure that they receive the expected useful interaction. If the online retailer is not worthy of their trust, consumers may suffer as the retailer behaves opportunistically. Similarly, traceability allows consumers to access detailed information through a website by QR-code label (Qian et al, 2012) which can provide quantitatively and qualitatively useful information to facilitate the buyer in learning more about the seller's practices and product characteristics (Choe et al, 2009). In this sense, if the traceability system proves trustworthy, it is more likely that consumers trust it as a useful and helpful technology for purchasing. Few studies so far have attempted to specifically investigate the

effect of trust on perceived usefulness of traceability. Therefore, the present study proposes trust in meat traceability as a determinant of perceived usefulness. The set of hypotheses are developed as follows.

H2a: Trust in meat traceability will positively influence intention to purchase traceable meat.

H2b: Trust in meat traceability will positively influence perceived usefulness of meat traceability.

PERCEIVED USEFULNESS AND INTENTION

Perceived usefulness is one of the main constructs to predict intention to use technology (Davis, 1989). For example, perceived usefulness of websites can predict online purchase intention (e.g. Ha & Stoel, 2009). In the present study, perceived usefulness of meat traceability reflects consumers' belief that traceability can augment their decision performance in purchasing meat products. The usefulness of traceability is perceived to offer consumers with more information on meat product before making a purchase decision as well as the possibility of recalling a flawed product (van Rijswijk & Frewer, 2008). Information offered by the traceability system is thus helpful in improving consumers' decision making for their purchase (Golan et al., 2004). Recently, Tsai et al. (2014) has applied TAM to study consumers' adoption of food traceability in Taiwan. Their findings indicated that the usefulness of traceability is a primary reason for consumers' stronger intention to use this technology. In this sense, the higher level of perceived usefulness of traceability technology can lead to consumers' heightened intention possibly because consumers believe that this technology can increase the effectiveness and efficiency of their purchase decision. As a result, this study proposes the following hypothesis.

H3: Perceived usefulness of meat traceability will positively influence intention to purchase traceable meat.

METHODOLOGY

SAMPLE AND PROCEDURE

A survey with 244 consumers was conducted in the Northeastern region of Thailand using purposive sampling technique. All of research participants consumed meat and had experience in meat purchase. The profile of the research participants consisted of female (67%), between 21 to 30 years old (62%), bachelor's degree holders (70%), public and private sector workers (33% and 30%), and with a monthly income of 10,001-20,000 baht (57%). The research participants were first informed of the study description, and then requested to complete the measures of subjective norm in traceable meat purchase, trust in meat traceability, perceived usefulness of meat traceability, and intention to purchase traceable meat. Finally, they provided their personal data at the end of the survey.

MEASURES

The research model included five constructs. Each construct was measured with multiple items in a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The first construct, subjective norm (SUB), was measured with three items (e.g. "Most people

who are important to me would encourage me to purchase traceable meat.”) adapted from Pavlou and Fygenon (2006). The second construct, trust (TRU), was measured with three items (e.g. “I expect the traceability system to provide accurate information trustfully.”) adapted from Choe et al. (2009). The third construct, perceived usefulness (PUS), was measured with three items (e.g. “Traceability system would enhance my effectiveness of purchasing meat products.”) adapted from Pavlou and Fygenon (2006). The last construct, intention to purchase (INP), was measured with three items (e.g. “I intend to increase the size of purchases for meat with the traceability system.”) adapted from Choe et al. (2009).

RESULTS

ANALYSIS OF MEASUREMENT MODEL

A confirmatory factor analysis (CFA) was employed to examine the validity and reliability of the measurement model. Table 1 displays the standardized loading of indicators, t-value, average variance extracted (AVE), and composite reliability (CR). All of indicator loadings were highly significant with loadings larger than 0.50. The AVEs varied from 0.63 to 0.70, thus satisfying the criteria of 0.50. In addition, the CRs varied from 0.86 to 0.88, satisfying the criteria of 0.70 (Bagozzi & Yi, 1988; Hair, Black, Babin, & Anderson, 2010). As a result, the measurement model of this study reflected decent convergent validity and reliability. For discriminant validity, when the square root of AVE (\sqrt{AVE}) of each construct is greater than the inter-constructs correlation, it reflects the evidence of discriminant validity (Fornell & Larcker, 1981). As shown in Table 2, the \sqrt{AVE} ranged from 0.796 to 0.838, and were all higher than its correlation with other constructs (ranged from 0.271 to 0.609). Thus, the measurement model appeared to have decent discriminant validity as well.

Table 1: Results of confirmatory factor analysis and convergent validity

Constructs	Items	Std. loading	t-value	AVE	CR
Subjective norm	SUB1	0.77	a	0.69	0.87
	SUB2	0.88	13.53		
	SUB3	0.83	13.13		
Trust	TRU1	0.87	a	0.68	0.86
	TRU2	0.92	16.71		
	TRU3	0.67	11.81		
Perceived usefulness	PUS1	0.64	a	0.63	0.87
	PUS2	0.78	13.31		
	PUS3	0.89	11.11		
	PUS4	0.85	10.84		
Intention to purchase	INP1	0.80	a	0.70	0.88
	INP2	0.89	16.10		
	INP3	0.82	16.64		

Note: ^a The corresponding parameter was fixed to a value of 1.00 to set the scale of measurement.

Table 2: Means, standard deviations, correlations, and square root of AVE

Constructs	Mean	S.D.	1	2	3	4
1 Subjective norm	3.61	0.72	0.828			

Constructs	Mean	S.D.	1	2	3	4
2 Trust	3.64	0.75	0.271**	0.827		
3 Perceived usefulness	3.97	0.67	0.523**	0.523**	0.796	
4 Intention to purchase	3.76	0.74	0.564**	0.418**	0.609**	0.838

Note: The \sqrt{AVE} shown as bold numbers along the diagonal.

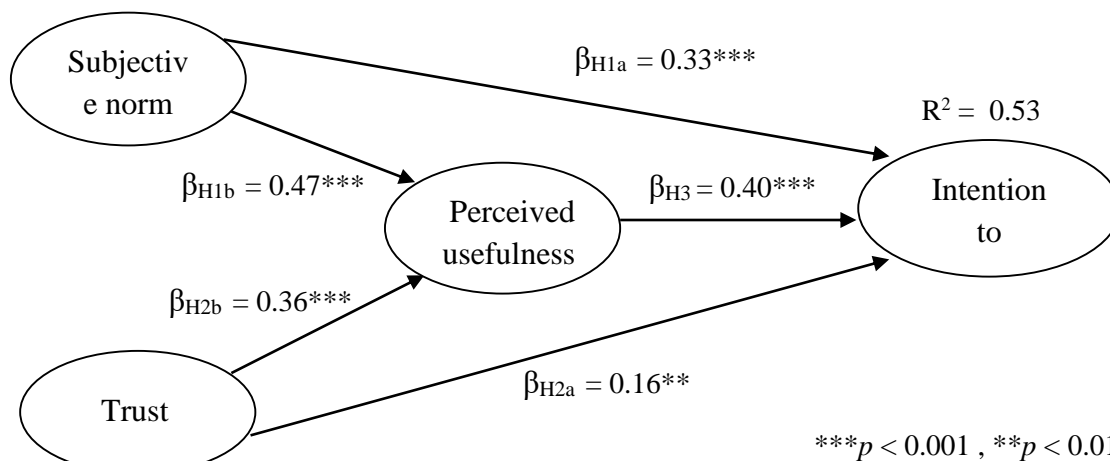
** $p < 0.01$

ANALYSIS OF STRUCTURAL MODEL

The raw data of the observed variables retained from the CFA were used for the structural model analysis to test the research hypotheses. The result of structural model showed fit indices as follow: $\chi^2/df = 1.823$, GFI = 0.943, AGFI = 0.904, CFI = 0.980, TLI = 0.971, NFI = 0.957 and RMSEA = 0.058. According to Hair et al.(2010), when χ^2/df is less than 3, GFI, AGFI, CFI, TLI and NFI were greater than 0.90, and RMSEA was less than 0.08, the results indicated a good model fit between the proposed model and the data. Figure 1 presents a summary of the structural model and hypothesis testing. The results of the hypothesis testing revealed that:

First, subjective norm in traceable meat purchase significantly and positively affected both intention to purchase traceable meat ($\beta_{H1a} = 0.33$, $t = 4.66$, $p < 0.001$) and perceived usefulness of meat traceability ($\beta_{H1b} = 0.47$, $t = 6.20$, $p < 0.001$) Therefore, H1a and H1b were both supported. Second, trust in meat traceability also significantly and positively affected both intention to purchase traceable meat ($\beta_{H2a} = 0.16$, $t = 2.59$, $p < 0.01$) and perceived usefulness ($\beta_{H2b} = 0.36$, $t = 5.41$, $p < 0.001$). Hence, both H2a and H2b were also supported. Finally, perceived usefulness of meat traceability significantly and positively affected intention to purchase traceable meat ($\beta_{H3} = 0.40$, $t = 4.85$, $p < 0.001$). As a result, H3 was supported as well.

Fig. 1: Results of the hypothesized model



CONCLUSIONS AND IMPLICATIONS

In summary, this study aims to investigate the determinant factors of intention to purchase traceable meat in Thai consumers. Drawing from TPB and TAM, the model of present study

examined subjective norm in traceable meat purchase, trust in meat traceability, perceived usefulness of meat traceability, and intention to purchase traceable meat. The results reveal that subjective norm significantly affects both intention and perceived usefulness. Trust also significantly affects both intention and perceived usefulness. Finally, perceived usefulness affects intention. In terms of theoretical implications, this study contributes to literature in traceable meat marketing in several ways. First, the model of present study combined the predictors adopted from TPB (trust, subjective norm) and TAM (perceived usefulness) to provide more specific model for specifically explaining consumers' intention to purchase traceable meat. Based on our results, subjective norm and trust demonstrate both direct and indirect impacts on intention to purchase through perceived usefulness which acts as a central mediator (c.f. Pavlou, 2003; Kim et al., 2009). This reflects that in the context of meat with traceability, perceived usefulness, which is the core construct of TAM, should be incorporated in TPB to gain a better understanding of consumers' intention. Second, although the TPB identified subjective norm as a main determinant of behavioral intention, several studies of information technology adoption did not include subjective norm in their model. The current study shows that subjective norm is a strong predictor of both customers' intention to purchase traceable meat and perceived usefulness, which is consistent with the previous studies of extended TAM (c.f. Yi et al., 2006; Kim et al., 2009). Finally, while a previous study (i.e. Menozzi et al., 2015) conducted in Italy indicated a stronger effect of trust than subjective norm on intention to purchase traceable meat, our study conducted with Asian consumers in Thailand demonstrates the opposite. Our finding, however, is consistent with that of Lee and Green (1991) who argued that social pressures play a major role in influencing Asian consumers' behavioral intentions than Western consumers and this may suggest the cultural influence of individualism-collectivism.

For managerial implications, marketers may pay special attention to social media as subjective norm plays a strong role on intention to purchase. Next, as the indirect impact of perceived usefulness appears to be significant and meaningful, the marketers must incorporate its role into their marketing plan. For example, marketing communication message must convey how helpful traceability is in facilitating the decision making in meat purchase. In addition, when a marketer wants to communicate the benefits of meat traceability, the target audience of the message should not cover only meat end users but also their family members and friends as these groups of people could be a source of subjective norm in using meat traceability. Similarly, for building trust in traceability system, marketers should advocate how useful the traceability system is for providing accurate and trustworthy information. If consumers trust or believe that information given by the traceability system is reliable, they will perceive the benefits of traceability, resulting in a stronger intention to purchase traceable meat.

Although the present study provides several contributions to food marketing research, a number of study limitations may suggest avenue for future research. First, as actual purchase was not covered in this study, future research should verify the extent to which actual behaviors may be influenced by the antecedents identified in the present study. Second, other psychological variables (e.g. attitude toward the behavior, and perceived behavioral control) and socio-demographic variables may influence purchase intention of traceable meat. Future studies are therefore necessary to examine these variables to gain further insights into the determinants of consumer behaviors. Finally, since this study was conducted on the basis of

quantitative survey data solely, such other research methods as in-store observation or in-depth interviews should be employed.

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CONSUMER SHOPPING MOTIVES IN POP UP STORES IN INDONESIA

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ABSTRACT

Since consumers nowadays are craving for unique shopping experience, pop up stores phenomenon are booming in several cities in Europe, America, and Asia. One of them is in Indonesia. Ever since the first pop up store popping up in Jakarta, capital city of Indonesia, the pop up stores waves spread to every big cities in Indonesia, as people can find many pop up store events almost every month yet it still attracting thousands and more consumers in Indonesia. Thus this study is aim to see what are the consumer shopping motives at pop up stores in Indonesia. This study was using an exploratory factor analysis. It was started with literature review then continued with interviewing 20 people who ever visited more than one pop up store in Indonesia. The result of the interview was generated in to 24 items questionnaire-based survey. Some of the statements are already the same with previous study in consumer shopping motives, but couples of them were not, like the local product and social media update. The survey was distributed online and received 299 responses with mean age 25 and 70,6% female. The data was able to analyze using factor analysis (KMO: 0.818, Bartlett sig: 0.000; MSA>0.5). Factor analysis using rotated varimax showed six factors in consumer shopping motives: Recreational motives, convenience motives, product oriented motives, hedonic motives, social motives, and uniqueness motives. A confirmatory factor analysis is suggested for further study

Keywords: Consumer, Motives, Pop-Up stores, Shopping Motives

INTRODUCTION

As consumer behavior is always changing, the competitive strategies are also continues to develop. Therefore, when the marketers have realized that traditional marketing and focusing on customer satisfaction only were no longer relevant, they turn into another marketing approach called experiential marketing (Niehm *et al.*, 2007). The term experiential marketing came up when consumers became no longer looking for services and goods only, but also want to engage in an experience (Kim *et al.*, 2009). As (Chen *et al.*, 2011) cited Schmitt (1999) in their study:

“People focuses more than functions and benefits of a product, instead they are concerned with the experience and environment while spending”.

The needed of this unique experience in consumer behavior are existed in all of the aspect in consumers live, including in retail shopping. As Kim *et al* (2009) stated in their study that the retailers and marketers have already concerned on their experiential strategy. One of the existing strategic called Pop Up Store.

Pop up store, or also called temporary store, is the term for the stores that are only open in one location for a limited of time (Niehm *et al.*, 2007; Kim *et al.*, 2009; Surchi, 2010;

Pomodoro, 2013; DeLassus&Freire, 2014). It is aim to provide an experiential environment, make consumers feel surprise, enhancing the brand image, and use to promote a new brand/line (Kim *et al*, 2009; Surchi, 2010; Pomodoro, 2013). The phenomenon of the pop up store started to be recognized when Levi's open its pop up store for six weeks in London. Then in 2003, it was heard again in Great Britain and continued to spread to the USA and then Europe in 2005 (Koch, 2006; Pomodoro, 2013). Then nowadays in several cities in Europe, America, and Asia, pop up stores phenomena are flourishing (DeLassus & Freire, 2014), one of them is Indonesia.

In Indonesia, the fourth biggest country in term of population in the world, the pop up stores started to catch the attention when it was popping up in Jakarta, the capital city of Indonesia, in 2009. This phenomenon then followed by several pop up stores held in big cities in Indonesia and seems will not come to an end any time soon. As people can find many pop up store events almost every month yet it still attracting thousands and more consumers in Indonesia. However, in contrast with the great development of pop up stores in Indonesia, there were only few studies talk about it, especially in term of consumer motivation when going to pop up store. Even though there were already some studies about pop up stores in other countries, but as far as researcher found, there were no studies talking about the consumer shopping motives in pop up store. Beside, most of these previous studies were conducted in Western context and talking about a single global fashion brand pop up store like Levi's, Chanel, Louis Vuitton, Calvin Klein, etc. Whereas for Indonesia, the pop up stores is more likely to held for promoting the various local products in one place

LITERATURE REVIEW

POP UP STORE

The pop up store's name came from the term of pop up window, which is a window that usually popping on the screen of the computer (Lassus & Freire, 2014). Surchi (2010) stated that the main characteristic of pop up stores could be seen from the location and the limitation of time. It is usually popping up on urban location, specifically in the area where the shopping traffic is high and only open for the short period of time.

Pop up store can be use for a big global fashion brand until a new local brand. For the global brand, it is aim to increasing their brand image, as a promotion tools when they were launching a new line/collection, offering their limited edition, and testing the new international market (Pomodoro, 2013). While for the new local brand, beside it is help in promoting their products, it also helping them in term of monetary. Since the venue is small and only in a short period of time.

In Indonesia, the pop-up stores are more for local brand. Every pop up stores in Indonesia is aimed to help the local entrepreneur with high quality product yet having limited resource in promotion. The development of pop up stores in Indonesia is promising. People can find at least one pop up store event per month at the same city yet still attracting thousands and more consumers. Thus finding what are these consumers motivation when visiting pop up stores is interesting.

CONSUMER SHOPPING MOTIVATION

Consumer shopping motivation is an urge that shapes behavior in order to satisfy personal need (Schrodera & Zahariab, 2008). Early published study in consumer shopping motives

was from Tauber (1972). He explored what are consumer motives when they shop, beside for purchasing something, and he found two motives: personal motives and social motives. Then many studies followed to find out the consumer shopping motivation in different shopping contexts like: retail shopping (Westbrook&Black, 1985); mail catalog shopping (Dawson *et al.*, 1990); outdoor craft market (Eastlick & Feinberg, 1999); factory outlet (Karande & Ganesh, 2000); discount store in Korea (Byunghou & Kim, 2003); online shopping (Rohm & Swaminathan, 2004); food and non-food product (Wagner & Rudolph, 2010); youth shopper (Wong *et al.*, 2012); hypermarket (Mehta *et al.*, 2014).

Table 1: Previous Studies in Consumer Shopping Motives

Authors	Shopping context	Shopping Motives
Tauber, 1972. Why do people shop? Journal of Marketing, pg.46	General	<ul style="list-style-type: none"> - Personal motives: <ul style="list-style-type: none"> • Role playing • Diversion • Learning about new trends • Self gratification • Physical activity • Sensory simulation - Social motives: <ul style="list-style-type: none"> • Social experience outside the home • Communication with others who have a similar interest • Peer group attraction • Status and authority • Pleasure of bargaining
Westbrook&Black. 1985. A motivation-based shopper typology. Journal of Retailing, Vol.1, No.1.	Retail	<ul style="list-style-type: none"> - Anticipated utility of prospective purchases - Enactment of an economic shopping role - Negotiation to obtain price concession from the seller - Optimization of merchandise choice in term of matching shoppers needs and desires - Affiliation with reference groups - Exercise of power and authority in marketplace exchange - Sensory stimulation from the marketplace itself
Dawson et al., 1999. Shopping motives, emotional states, and retail	Outdoor craft market	<ul style="list-style-type: none"> - Product oriented motives. - Experiential oriented motives.

Authors	Shopping context	Shopping Motives
outcomes. Journal of Retailing. Vol.66, No.4, pg.408.		
Eastlick&Feinberg. 1999. Shopping motives for mail catalog shopping. Journal of Business Research. No.45, pg.281-290.	Mail catalog shopping	<ul style="list-style-type: none"> - Functional motives : <ul style="list-style-type: none"> • Perceived value • Order services • Convenience
Karande&Ganesh. 2000. Who shops at factory outlets and why?:An exploratory study. Journal of Marketing Theory and Practice. Pg.29.	Factory outlet	<ul style="list-style-type: none"> - Price/value - Merchandise (quality&selection) - Time saving and deal seeking - Recreation
Arnold&Reynolds. 2003. Hedonic Shopping Motivation. Journal of Retailing, vol.79, pg.77-95.	Hedonic motivation in retail	<ul style="list-style-type: none"> - Adventure shopping. - Social - Gratification - Idea - Role - Value
Jin <i>et al.</i> , 2003. A typology of Korean discount shoppers: Shopping motives, store attributes, and outcomes, vol.14, pg.396.	Discount store in Korea	<ul style="list-style-type: none"> - Socialization - Diversion - Utilitarian
Rohm&Swaminathan. 2004. A typology of online shoppers based on shopping motivations. Journal of Business Research, No.57, pg.748-757.	Online shopping	<ul style="list-style-type: none"> - Convenience motives - Variety seeking motives - Physical store orientation - Information use in planning and shopping
Wagner&Rudolph. 2010. Towards a hierarchial theory of shopping motivation. Journal of Retailing and Consumer Services, Vol.17, pg.415-429.	Food and non-food	<ul style="list-style-type: none"> - Purpose specific shopping motivation: <ul style="list-style-type: none"> • Task fulfillment. • Recreation - Activity- specific shopping motivation : <ul style="list-style-type: none"> • Efficiency Shopping • Sensory Stimulation • Inspiration • Gratification • Gift Shopping • Socialization • Bargain Hunting - Demand-specific shopping motivation <ul style="list-style-type: none"> • Service convenience

Authors	Shopping context	Shopping Motives
		<ul style="list-style-type: none"> • Store atmosphere • Assortment innovation • Assortment uniqueness • Personnel friendliness • Prices
Wong <i>et al.</i> , 2012. Shopping motives, store attribute and shopping enjoyment among Malaysian youth. <i>Journal of Retailing and Consumer Services</i> , Vol.19, pg. 240-248.	Youth shoppers in Malaysia	<ul style="list-style-type: none"> - Anticipated utility. - Role enactment. - Negotiation. - Choice optimization. - Affiliation. - Power and authority. - Stimulation.
Mehta <i>et al.</i> , 2014. A typology of Indian hypermarket shoppers based on shopping motivation. <i>International Journal of Retail & Distribution Management</i> .	Hypermarket shoppers in India.	<ul style="list-style-type: none"> - Convenience motives - Functional motives - Social motivation - Relational motives - Recreational motives

RESEARCH METHODOLOGY

The aim of this study is to explore what are consumer motivations in shopping at Pop Up Stores in Indonesia, thus this study using an exploratory factor analysis.

INSTRUMENT DESIGN AND DATA COLLECTION

In order to explore more, this study started with literature review and then conducted personal interviews to 20 researcher's acquaintance who ever visited more than one pop up stores in Indonesia. The respondents were ask to recall their visits to pop up stores and researcher asked what are their motives for visit. From the interview, several items were found. Some of them are already existed in literature review and couples of them are new items, like value the local product and updating the social media. The result was generated in to a questionnaire-based survey with 24 items then distributed online. All the responses were measured on a four-point Likert scale (1=strongly disagree, 4=strongly agree) and only people who ever visited pop up stores in Indonesia could fill the survey. A 299 responds were received in this study.

DATA ANALYSES

In order to find the dimension of shopping motivation at pop up stores, the varimax rotation was used to analyse the data. The suitability of the data was checked first from the KMO and Bartlett's test score as well as the anti image matrices.

RESULTS

DEMOGRAPHIC

The number of female and male in this study were not balance, female are 70,6% of the total

respondents. While for the age, the mean age was 25.09 years old.

CONSUMER SHOPPING MOTIVES

Before conducting the factor analysis, the appropriateness of the data was tested first. The KMO measure of the sample had 0.818 value, which is greater than the minimum value (0.5). Then the Bartlett's test significance value was 0.000 which means the data was appropriate to use in conducting the factor analysis. The last was checking the MSA score of each variable. All the scores were higher than 0.5 so the data was continue to be analyzed using factor analysis. The factor analysis resulted in extraction of six factors with eigenvalues higher than one. These six factors explained 58.8% of the total variance (Table II).

Recreational Motives

The first factor of shopping motives was labeled as "recreational motives" since shopping to pop up market considered as an activity to reduce the stress, spending time, and looking for entertainment. Some studies also have stated that recreation is one of consumer motives in shopping (Mehta *et al.*, 2012; Wagner & Rudolph, 2010; Tauber, 1972).

Convenience Motives

The second factor was labeled "convenience motives" because the statements were related with the efficiency of time and monetary thing like the suitable price. The convenience statements that related with the place and time were also have stated that in previous studies (Rohm & Swaminathan, 2004; Mehta *et al.*, 2012), while for the convenience in term of price have not found in the previous study.

Product-oriented motives

The third factor was labeled "Product-oriented motives" because all the statements were related with the product itself.

Hedonic Motive

The fourth factor was named "Hedonic Motive" which is related with hedonic value like looking for various brands, updated stuffs, the new trends, and wanted to update their existence in social media.

Social Motives

The fifth factor was label as "social motives". Numerous studies have stated that people go shop in offline settings for social motivation (Mehta *et al.*, 2014; Jin *et al.*, 2003; Arnold & Reynolds, 2003; Tauber, 1972). This factor was related with the need to socialize statements.

Uniqueness motives

And the last, the sixth factor, was named "Uniqueness motives". This motive was related with the statements that value the uniqueness of pop up stores. There were the uniqueness of the product it self that give inspiration statements like found in previous studies (Wagner&Rudolph, 2010). But for the local product statements, it have not found in previous study in consumer shopping motivation. It might be happened because in this study, the pop

up stores in Indonesia, are focusing its venue to promote Indonesian local brand.

Table 2. Factor Labels of t

Factor Labels and statements	Factor loading	Eigenvalues	Percent of Variance
Recreational motives <ul style="list-style-type: none"> • <i>Reducing stress</i> • <i>To spend the spare time</i> • <i>Having fun</i> • <i>Looking for entertainment</i> 	0,758 0.665 0.765 0.809	2.873	11.970
Convenience motives <ul style="list-style-type: none"> • <i>To shop effectively</i> • <i>Find various products in one place only</i> • <i>Able to buy various products in a short period of time</i> • <i>Getting good quality product with fair price</i> 	0.728 0.783 0.837 0.481	2.762	11.509
Product-oriented motives <ul style="list-style-type: none"> • <i>To shop</i> • <i>To sbuy the product that I have already wanted before</i> • <i>Enjoying the shopping experience with friends/family</i> • <i>Getting the discount that have been proposed</i> • <i>Looking for sales product</i> 	0.540 0.617 0.613 0.638 0.628	2.295	9.562
Hedonic motives <ul style="list-style-type: none"> • <i>Updated on social media about my existence on the pop up stores event.</i> • <i>Finding various brands</i> • <i>To find the most updated products</i> • <i>Looking for the new trend in nowadays society</i> 	0.385 0.490 0.813 0.761	2.111	8.795
Social Motives <ul style="list-style-type: none"> • <i>Enjoying the crowd</i> 	0.750	2.093	8.722

Factor Labels and statements	Factor loading	Eigenvalues	Percent of Variance
<ul style="list-style-type: none"> • <i>Surrounded by many people</i> • <i>Meeting with others who have the same interest</i> • <i>Being an update person by coming to the pop up store event</i> 	<p>0.787</p> <p>0.592</p> <p>0.381</p>		
Uniqueness motives <ul style="list-style-type: none"> • <i>To find unique products</i> • <i>To get new inspiration/idea</i> • <i>To find the local products</i> 	<p>0.690</p> <p>0.728</p> <p>0.669</p>	1.996	8.315
Cumulative percent variance			58.873

CONCLUSION AND LIMITATION

Based on the exploratory factor analysis, we can find six factors of consumer shopping motivation in pop up stores in Indonesia : (1) recreational motives which is related with the activity that reduce stress, to have fun, spending time, and looking for entertainment; (2) Convenience motives in term of place, time, and cost; (3) Product-oriented motives which is related with the product it self; (4) Hedonic motives which is related with hedonic value like looking for various brands, updated stuffs, the new trends, and wanted to update their existence in social media; (5) Social motives, to enjoy the crowd, meet new people, and (6)Uniqueness motives which is related with the product uniqueness and the local product that propose in pop up stores.

This study was an exploratory study to explore the consumer shopping motives in pop up stores in Indonesia. In order to confirm the result, further study using confirmatory factor analysis and more samples are needed.

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THE RELATIONSHIP BETWEEN CONSUMER'S SELF AND PREMIUM COSMETIC'S BRAND REPURCHASE INTENTION

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ABSTRACT

This study was to improve the scarce in previous studies about self-image congruence. Non-probability sampling technique was conducted to 380 premium cosmetics women users from Jakarta and Bandung. The study supported the previous research that beliefs about appearance and self-image congruence did not significantly influence repurchase intention. Whereas, the most influencing factor towards brand repurchases intention was brand preference.

Keyword: self-image congruence, beliefs about appearance, brand personality

INTRODUCTION

Global beauty care can be classified as mass cosmetics and premium cosmetics based on the brand prestige and channel distribution. In terms of cosmetic consumption, consumers express themselves through the brand they desire, purchase, and consume. Furthermore, self-expression for women consumers can be an important driver of consumer preferences. Previous research found that consumers tend to form strong relationships with brands that have an image congruent with their own self-concept (Escalas and Bettman, 2003). In recent years, the demand of premium cosmetics in emerging market, including Indonesia, has been increasing. With an increasing proportion of households belonging to the middle class, the consumption is beginning to go beyond basic needs. It is also stimulated by a relatively young population and rapid urbanization that the demand for cosmetic products has grown by an average annual growth of 10-11%. In 2011, the cosmetics market was valued at nearly 1.6 billion euros (Nielsen Retail Audit Indonesia, 2012). Indonesia is expected to enter the top 10 global skincare markets by 2019 (Barbalova, 2014). However, the increases in demand of premium cosmetics are not in line with the number of literature study about self-image congruence and its implication.

Nevertheless, it is important for brand managers especially for premium industry in the emerging markets to maintain the congruity of brand personality and consumers' self-image. This study examined the relationship between consumer's self and premium cosmetic's brand repurchase intention in order to support the addition of recent study literature.

LITERATURE REVIEW

Brand Personality is a valuable strategic resource that can help companies create a

sustainable competitive advantage. Brand personality scale is a measurement of the personality of a brand by identifying five factors of personality: sincerity, excitement, competence, sophistication, and ruggedness (Aaker, 1997). Related to brand personality, consumer seeks to create between the images they have of a product to their image of themselves (Bree, 1994). Brand personality and self-image are two researches which enlightened the knowledge of the relationships between consumers and brands (Verette, 2003). Moreover, they use brands to have certain attitude and express individuality, to express achievement or to gain social approval (Escalas, 2004; Escalas and Bettman, 2005).

H1: Brand personality is positively influenced Self-Image Congruence

H2: Brand personality is positively influenced Beliefs about Appearance

H3: Brand personality is positively influenced Brand Attitude

Self-Image Congruence can occur with one or more of the four types of self-image; actual self-image, ideal self-image, social self-image, or ideal social-self image (Sirgy et. al, 1997). Aaker and Schmitt (1997) found that consumers used brand that suits to their self-image for self-expression. Other researchers also consider self-image as the thoughts and feelings through which a consumer can express himself (Resemberg, 1979; Sutherland et al., 2004).

H4: Self-image congruence is positively influenced value expressiveness.

Value Expressiveness is believed as an important driver of consumers' brand preference and choice (Aaker, 1999). When consumers use brand for self-expression, a connection is built with the brand (Escalas and Bettman, 2005). Strong brand connections lead to favorable brand preferences that are difficult for competitors to adapt and imitate.

H5: Value expressiveness is positively influenced brand preference.

Beliefs about Appearance is a scale to measure dysfunctional attitudes about facial or bodily appearance. It is believed as a part of facial image. Beliefs about Appearance include the relationship, achievement, self-view, and emotions (Spangler, 1999). McDonald and Eilenfield (1980) figured out that individuals who have higher beliefs about appearance spent more time looking at their reflections and more likely to actively participate in maintaining self-image congruity.

H6: Beliefs about Appearance is positively influenced self-image congruence.

Other researchers, Cash and Cash (1982) and Cash et. al, (1994) found that women who have higher beliefs about appearance tend to increase the number of cosmetic products they applied and the number of situations in which they wore makeup. The previous researches confirming the positive link between facial image and cosmetic use provide strong support for positive relationship between beliefs about appearance and cosmetic use.

H7: Beliefs about Appearance is positively influenced cosmetic usage.

Brand Preference as the result of the consumers' self-image congruence might result to differences in the way the consumer choose a brand and make their purchase or repurchase intention (Mehta, 1999).

H8: Brand preference is positively influenced brand repurchases intention.

Brand Attitude is an individual's overall evaluation of a brand (Mitchell and Olson, 1981).

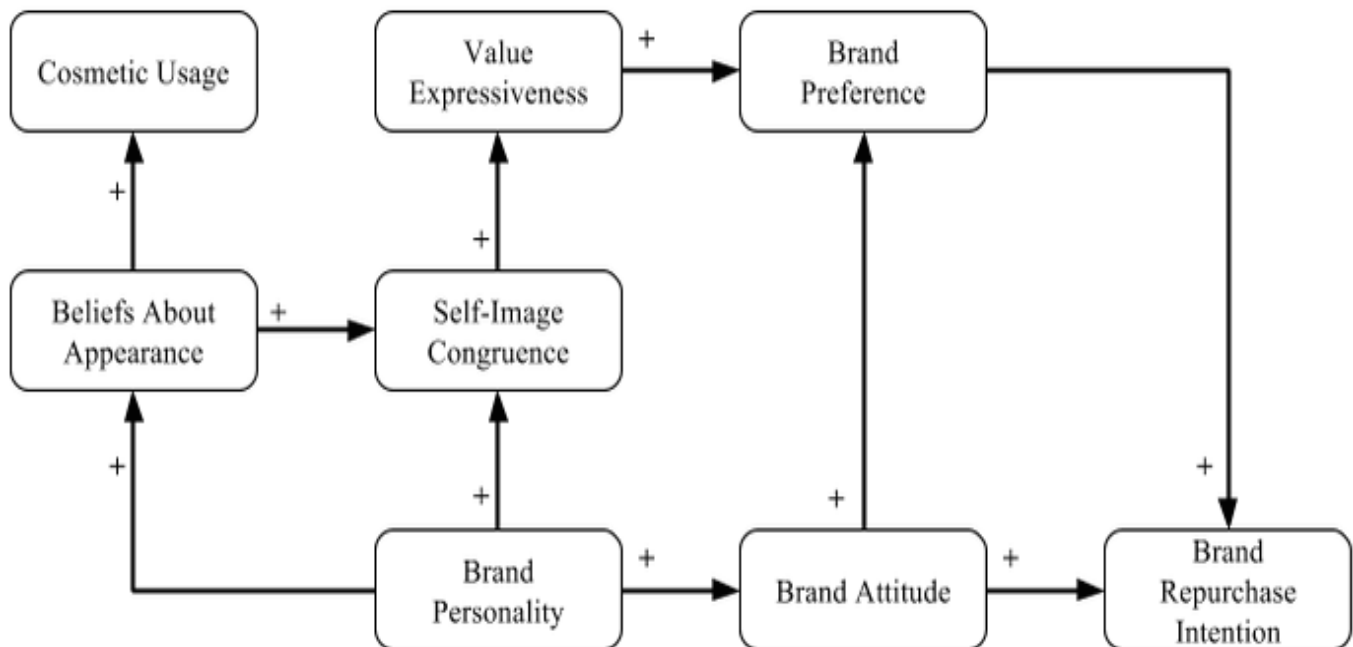
Brand attitude scales include negative or positive and dislike or like towards a brand or product.

H9: Brand attitude is positively influenced brand preference.

H10: Brand attitude is positively influenced brand repurchases intention.

Below is the research framework that summarizes the study and how the study would draw the relationship between the corresponding dependent and independent variables. In the previous research, Beliefs about Appearance relationship with the Brand Personality has not been discussed yet. In this study, brand personality is predicted to influence Beliefs about Appearance because individual's Beliefs about Appearance reflect achievement, self-view, feelings, and emotions. It is predicted that proper brand personality would create higher beliefs about appearance.

Fig. 1: Research Framework



METHODOLOGY MEASUREMENT

There were several steps in this research. First, the information about recent condition related to premium cosmetics usage and premium cosmetic brands in department stores in Jakarta were collected from Internet. The next step was generating literature review from previous research and journals to conduct the research framework (table 1). After that, the measurement and variables were prepared before defining the questionnaire. The questionnaire was using 7 point Likert scale (1= Strongly disagree, 7= Strongly agree) to test all variables on research framework. The questionnaire was also asked about the demographic and premium cosmetics user behavior.

Table 1: Construct and its sources

Construct	Source	Construct	Source
Value Expressiveness Needs	Traylor and Joseph, 1984; Escalas and Bettman, 2005	Cosmetic Usage	Cash et al., 1989; Wood, 2004
Self Image Congruence	Sirgy and Su (2000)	Brand Preference	Sirgy et al. (1997)
Beliefs About Appearance	Cash and Cash, 1982; Cash, 1994; Kim, Hye-Shin et al., 2007	Brand Attitude	Sirgy et al. (1997)
Brand Personality	Aaker, 1997; Vernet, 2003; Escalas and Bettman, 2005	Repurchase Intention	Schlosser et al. (2006)

The questionnaire consists of 66 items from 8 variables and distributed to women respondents that also the user of premium cosmetics with different demographic.

DATA COLLECTION

The questionnaires were distributed via online to women respondents aged 16-50 years old whom the user of premium cosmetics with different amount of expenses, occupation, and education background in Jakarta and Bandung. The online questionnaires were spread via e-mail, online platform messenger, and social medias. The format of questionnaire was made using Google Form using Bahasa Indonesia to ensure the well understanding on filling the questions. The survey covered sixty-six items from eight variables regards the consumption and repurchase intention of premium cosmetics that enters the Indonesian market. By using non-probability sampling technique, there were 380 questionnaires filled. There were 325 questionnaires that valid to be further assessed by statistical analysis. Multiple regressions were conducted to analyze the relationship for each variable. One-way ANOVA analysis was also chosen to see the relationship between demography and consumers' repurchase intention. All the statistical analysis was using SPSS 20 and Microsoft Excel.

STATISTICS AND RELIABILITY TEST

The constructs were evaluated using validity and reliability test. Cronbach's Alpha is commonly used as the reliability test measurement. According to Sekaran (2006:182), the reliable level is when the Cronbach's Alpha ≥ 0.6 . There were indicators from previous research's constructs that were valid based on the factor loading score above 0.5, but some of valid construct has several indicators that need to be discarded because of the factor loading less than 0.5 and the extracted variance less than 50%. Only Brand Personality, Beliefs about Appearance, and Cosmetic Usage construct which had few indicators with factor loading less than 0.5. For Brand Personality, adapted from Aaker (1997) brand personality scale with 15 items, in this study there were 7 out of 15 constructs that were valid and reliable to be used. The discarded items for Brand Personality were down to earth, honest, genuine, cheerful, imaginative, daring, spirited, and tough. This might happened because the indicators did not reflect the premium cosmetics' personality. In Beliefs about Appearance scale, there were 11 out of 20 constructs that were valid and reliable. The discarded items for

Beliefs about Appearance were opinion, influence, thoughts, interest, relationship, success, ability, performance, and opportunity. Whereas, the discarded indicator for Cosmetic Usage was only the usage while doing sport.

Table 2: Statistics, Validity and Reliability Test Result

Construct	Mean	Cronbach's Alpha	Kaisers-Meyer-Olkin (KMO)	Bartlett's Test of Sphericity			% Extracted Variance
				Chi-Square	df	Sig.	
Value Expressiveness	4.317	0.84	0.858	707.884	15	.000	56.244
Self-Image Congruence	4.114	0.938	0.931	2118.346	28	.000	70.234
Beliefs about Appearance	4.741	0.955	0.942	2427.643	55	.000	61.514
Cosmetic Usage	4.462	0.773	0.761	414.917	6	.000	62.965
Brand Personality	4.717	0.925	0.88	1306.412	21	.000	61.048
Brand Attitude	4.983	0.835	0.837	681.185	15	.000	55.035
Brand Preference	4.587	0.92	0.742	755.562	3	.000	86.41
Brand Repurchase Intention	4.433	0.774	0.69	267.882	3	.000	69.088

Based on the Table 2, it can be seen that all variables in this study were valid and reliable based on the fact that the Cronbach's Alpha were ≥ 0.6 and the KMO score were all above 0.5 (Heir et al., 2010).

RESULT AND ANALYSIS

DEMOGRAPHIC PROFILE

Demography profile of the respondents in this study was divided by age, city origin, occupation, and educational background. From the total of 325 respondents, Table 3 summarizes the proportion.

Table 3: Demography Profile

Demography		N	%	Demography		N	%
Age	16-20	126	38.8	Occupation	High School Student	25	7.7
	21-25	162	49.8		University Student	186	57.2
	26-30	12	3.7		Private Sector Employee	65	20.0
	31-35	3	0.9		Civil Employee	4	1.2
	36-40	7	2.2		Entrepreneur	23	7.1

	41-45	3	0.9		Model/Actress/Beauty Expert	7	2.2
	46-50	12	3.7		Housewife	15	4.6
City Region				Last Education	High School	7	2.2
					Senior High School	180	55.4
	Jakarta	194	59.7		Diploma Degree	7	2.2
					Bachelor Degree	121	37.2
	Bandung	131	40.3		Postgraduate Degree	10	3.1

From the table above, the majority of respondents were from Jakarta (59.7%), coming from group of women aged 21-25 years old (49.8%), currently work as university student (57.2%) with last education senior high school (55.4%). This supported by the fact that there are more department stores in Jakarta that have lots of premium cosmetics brand.

PREMIUM COSMETICS CONSUMPTION

In order to support the research, cosmetics consumption behavior and motivation survey was also asked to the 325 respondents. Below are the summary of premium cosmetics consumption behavior (Table 4) and type of premium cosmetics that were mostly bought and the motivation of using premium cosmetics (Table 5).

Table 4: Premium Cosmetics Consumption

Frequencies of Buying	N	%	Expenses on Premium Cosmetics	N	%
Less than once a month	35	10.8	< IDR500.000	61	18.8
Once in 1-3 months	160	49.2	IDR 500.000 - IDR2.000.000	224	68.9
Once in 3-6 months	90	27.7	IDR 2.000.001 - IDR 3.500.000	26	8
Once in more than 6 months	40	12.3	IDR 3.500.001 - IDR 5.000.000	9	2.8
Channels	N	%	> IDR 5.000.000	5	1.5
Department Store	236	72.6			
Online Store	17	5.2			
Cosmetic Retail Store	72	22.2			

Table 5: Type of Premium Cosmetics Mostly Used and Motivation

Type of Premium Cosmetics Used	Valid	Motivation	Valid
Color (make-up)	293	Support Self-Expressiveness	226

Skincare	161	Support Career and Education	18
Fragrance	207	Professional Needs	27
Hair care	53	Maintain social status and prestige	83
Toiletries	40	Gain Self-Confident	246

According to the summary of responses, the respondents are mostly using color cosmetics and or skincare type of premium cosmetics. Their motivations on using premium cosmetics were highly for support self-expressiveness and gain self-confident.

In terms of premium cosmetics consumption behavior, almost 50% of the respondents are buying premium cosmetics once within 1-3 months. The majority of respondents buys premium cosmetics at department store (72.6%) and spends IDR 500.000 – IDR 2.000.000 to purchase premium cosmetics (68.9%). This numbers support the statement of the growing beauty industry in Indonesia.

Moreover, to draw the relationship between demography and intention to repurchase premium cosmetics, One-Way ANOVA was performed to know how significance is demography aspects to the repurchase intention. From Table 6, it is shown that almost all demographic aspects have significance level above 0.05 which means that all the demographic aspects are identical except for Occupation. It means that Occupation has higher influence towards the repurchase intention on premium cosmetics. Based on Post Hoc Test Table, from Tukey and Bonferroni test, it is found that Entrepreneur has the highest significance influence towards repurchase intention.

Table 6: ANOVA Analysis Result

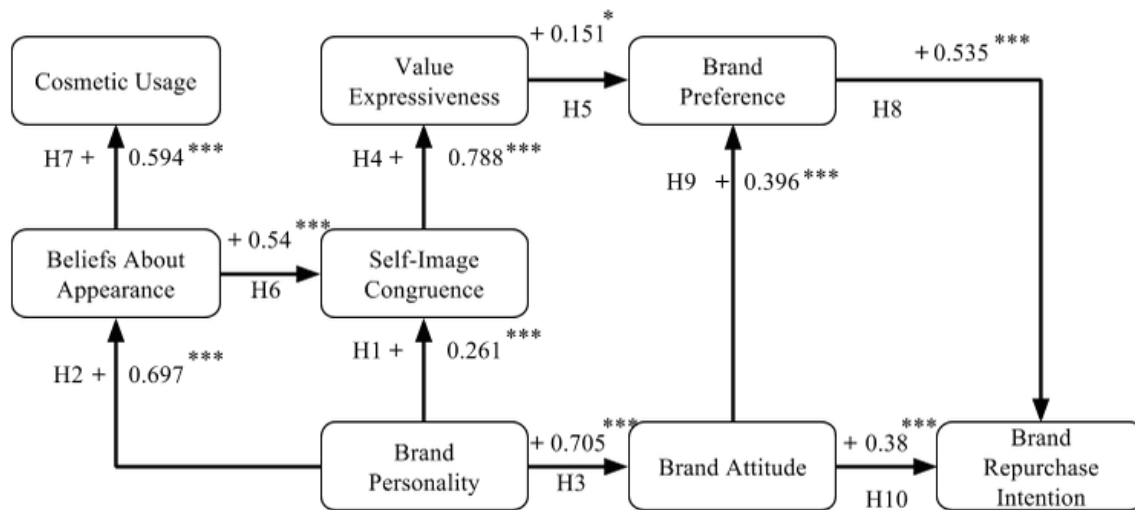
Dependent Variable	Demographic Aspect	Levene's Test Sig.	Mean Square	F	Sig.
Repurchase Intention	Age	0.843	1.475	1.488	0.537
	City Region	1.926	0.155	0.155	0.694
	Occupation	0.738	3.018	3.137	0.005
	Last Education	0.73	3.154	3.241	0.572
	Expenses for Premium Cosmetics	1.881	9.838	11.06	0.114

HYPOTHESES TESTING

To test the hypotheses as presented in framework, linear regression and multi linear regression are performed. The variable that has strong influence to the dependent variable should have significance level below 0.05. Based on the significance level table, all variables has positive relationship and significance level below 0.05 which means that it all have strong influence (***) to each dependent variable. Only Value Expressiveness to Brand Preference

that has lower significance (*).

Fig. 2: Regression Analysis Summary



Note: $* = 0.01 < p \leq 0.05$; $** = p \leq 0.01$; $*** = p = 0.000$

Figure 2 shows the regression analysis summary about the relationship between dependent and independent variables presented in framework. Brand Repurchase Intention is predicted to be influence directly by brand attitude, and brand preference. This study also shows that only brand attitude and brand preference giving significant influences to consumer's premium cosmetic brand repurchase intention. This study strengthens the findings of the previous studies and proves that Brand Repurchase Intention is not affected directly by Self-Image congruence ($\beta=0.088$, $p=0.062$) and Brand Personality ($\beta=0.015$, $p=0.771$). This study supports the previous research by Mehta (1999) which indicated that consumers' self-image congruence caused only small differences in the way the consumer make their purchase or repurchase intention. Indonesian women might perceive their self-image congruity is less important than their brand preferences that have been created in their mind to make their repurchase intention on premium cosmetics.

From Figure 2, it can be seen that Brand Personality has weak relationship with Self-Image Congruence ($\beta=0.261$, $p=0.000$), this might happen because Indonesian women consumers has tendency of low importance on having strong relationship with certain brand personality if they already made their choice of preferences. Value Expressiveness affects Brand Preference weakly also ($\beta=0.151$, $p=0.000$) which indicated that Indonesian women consumers still perceive low importance on value expressiveness need to draw their brand preferences. Lastly, relatively low relationship between Brand Attitude and Brand Repurchase Intention ($\beta=0.38$, $p=0.000$) and between Brand Attitude and Brand Preference ($\beta=0.396$, $p=0.000$) might happened because Indonesian women consumers already have adequate brand attitude towards their favorable brand which caused them to naturally repurchase their favorable brand within certain frequencies.

In terms of brand, the relationship between Brand Personality and Brand Attitude has the strongest with the beta coefficient score of 0.705. This finding underlines the role of brand personality of premium cosmetics to consumer's premium cosmetic brand attitude. Meanwhile, in general, the strongest relationship was between Self-Image Congruence to

Value Expressiveness ($\beta=0.788$) which explained that Indonesian women consumers are likely to maintain their personal image congruity with brand because they have high importance on keeping up their value expressiveness needs in consuming premium cosmetics.

DISCUSSION AND CONCLUSION

This study examines the demography of premium cosmetics users in two big cities in Indonesia, the premium cosmetics consumption behavior, and factors affecting the repurchase intention. Majority of the respondents were from Jakarta and work as university student. The tendency of more user came from Jakarta was supported by the higher number of department stores with premium cosmetics brands in Jakarta. Most of them purchase color (make up) and or skin care premium cosmetics. The highest motives of consumption were to support the self-expression need. The respondents buy the premium cosmetics regularly once within 1-3 months with the amount from IDR 500.000 – 2.000.000. Within the demographic aspects, occupation was the only aspect that has higher significance influence to repurchase intention. Entrepreneur has the highest significance influence to repurchase intention. This indicated that Indonesian women consumers with Entrepreneur career have more freedom to spend some money to fulfill their appearance needs and support their self-expression needs. This research offers several potential contributions, but particularly, improves the lacking of previous studies about consumers' self-image congruity. Also, this study contributes to the scarce empirical investigation for premium cosmetics consumers. This study found that Brand Personality has significant and positive influence to Self-Image Congruence, Beliefs about Appearance, and Brand Attitude. It supported the previous researches in consumer behavior literature which stated by Bree (1994), Vernet (2003), and Escalas (2004).

Not only Brand Personality, Beliefs about Appearance has also become as one of the strong influencing factor towards Self-Image Congruence, the same as the findings by McDonald and Eilenfield (1980) that figured out those individuals who have higher beliefs about appearance spent more time looking at their reflections to ensure their self-image congruity. Talked about a part of facial image, Beliefs about Appearance, it is shown that it has strong and positive relation to Cosmetic Usage. This new findings were impactful to improve the literature studies as it also supported by the previous study by Brown et. al (1986) and lately by Hye-Shin Kim et. al (2007).

In terms of Self-Image Congruence, it has the strong and positive significance influence to Value Expressiveness. The relationship between Self-Image Congruence and Value Expressiveness was the strongest. It was strengthened by the previous findings (Resenberg, 1979; Sutherland et al., 2004). Hence, if the Value Expressiveness were accommodated adequately for the Indonesian women consumer, it would create proper Brand Preference because the study found that Value Expressiveness has positive significance influence to Brand Preference, supported by previous study by Escalas and Bettman (2005). Following the effect, favorable Brand Preferences would create significance influence towards Brand Repurchase Intention, higher than Brand Attitude towards Brand Repurchase Intention even though both of it have positive relationship. These were aligned with the study from Mitchell and Olson (1981), Sirgy et. al (1997), and recently by Ikechukwu et. al (2012). Lastly, the current study found that Brand Attitude has positive significance relationship with Brand Preference that supported Dr. Fang Liu et. al (2011).

To sum up this study, the interesting findings from the result is that Brand Personality gave

more influences to beliefs about appearance ($\beta=0.697$, $p=0.000$) than to self-image congruence ($\beta=0.261$, $p=0.000$). This study became added value to the previous studies that has not discussed the relationship yet. The fact that the Brand Personality has positive and significance relationship towards Beliefs about Appearance and Self-Image Congruence for consumers, both branding and marketing communication strategies should be adjusted to the targeted consumers' thoughts and feelings that create their beliefs and self-image. In terms of Brand Repurchase Intention, Brand Preference became the most influencing factor that can be maintained through the integrated brand-consumer focused strategy.

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INTENTION TO USE OF E-MONEY IN INDONESIA

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ABSTRACT

This paper studies factors of intention to use of e-money in Indonesia. Judgmental sampling conducted to 400 users in Jakarta and Bandung. Influencing factors are design service, perceived usefulness, technology experience, and perceived benefits.

Keywords: E-money, TAM, purchase intention, design service

INTRODUCTION

There are 82.374 million potential banking service users in Indonesia (age above 15 years old). But, there are only 30% of them that enjoying banking services. Based on World Bank survey on Global Financial Development Report 2014 to developing country, the main reason people do not have an account at a formal financial institution is related to amount of money they have relatively small and high administrative costs. So, they do not feel really need to save money on bank account.

Electronic money (e-money) is a new financial innovation for payment transaction in Indonesia removing the usage of real money transaction that reach about 30% of total financial transaction. Bank of Indonesia defines electronic money as the kind of money that is stored on a system like a server or chip. Indonesian government already formulate electronic money regulation that support the development and protect the market itself by Peraturan Bank Indonesia No.16/8/PBI/2014 document. Indonesian people mostly still using cash for their transaction. E-money transaction still reach 30% of total transaction that mean there is still a chance to grow the usage rate of e-money. Indonesian people are already familiar with e-money service, but they do not want to use it.

This study was examined the demographic of user, perception, and usage behavior toward to e-money. The purpose of this study to identify and analyze the most important factor that influence customer intention to use of e-money service on Indonesia market. By knowing the factor that influence customer intention to use e-money, Indonesia E-Money service provider may formulate a better e-money system and approach to customer to grow the number of e-money use.

LITERATURE REVIEW

Technology experience is variable that determine customer familiarity in technology usage. Lai (2012) found that technology experience has positively influence the perception of how useful and how ease the technology will perceive by the customer. The researcher tries to

connecting customer familiarity in technology usage to the e-money adoption by directly positively influence the perceived ease of use and perceived usefulness. Customer who already commonly uses the technology in their life they will more familiar with any technology innovation and accept it easier.

H1: Technology experience positively influences perceived ease of use.

H2: Technology experience positively influences intention to reuse.

Design service define as how convenient a service for the customer determined by information quality and convenience system design (Holloway and Beatty, 2008). Design has a stronger significant relationship with perceived ease of use. It has positive direct relationship with perceived usefulness and perceived ease of use (Chin and Ahmad, 2015).

H3: Design service positively influences perceived ease of use.

H4: Design service positively influences perceived usefulness.

Efficiency system is one of external factor of TAM model that used by Chin and Ahmad (2015) in the previous study. Parasuraman, Zeithaml and Malhotra (2005) define efficiency system as the ease and speed of accessing and using the site and can be defined by easiness of find what customer need, easy to access, well organized information, fast performance, simple to use, and practice. It has strong relationship to perceived ease of use and also perceived usefulness.

H5: Efficiency system positively influences perceived ease of use.

H6: Efficiency system positively influences perceived usefulness.

Perceived ease of use define as the degree of effort involved in learning how to use the new technology that includes: easy to learn, to operate, and to work. Perceived ease of uses determined as a service that easy to use, understandable, easy to access, and trouble free (Lai, 2012; Saleh, 2013; Teoh et al., 2013; Chauhan, 2014). Perceived ease of use has positive correlation to perceived usefulness in the adoption of e-money services (Chin and Ahmad, 2015) and contradicted with found by Chauha, 2014. It also have positive correlation to intention to reuse (Mbogo, 2012; Naiwumbwe, 2012).

H7: Perceived ease of use positively influences perceived usefulness.

H8: Perceived ease of use positively influences intention to reuse.

Perceived risk defined as an assessment of uncertainties and uncontrollably of potential outcomes when customer uses the system (Hamid and Cheng, 2013; Khatimah and Halim, 2014). There are 5 dimensions of risk, which are physical, performance, psychological, time-loss, and financial risk. Miliani et al (2013) found that perceived risk is not significantly influence customer intention to reuse and have negative correlation to towards to customer intention to reuse and perceived usefulness (Chin and Ahmad, 2015).

H9: Perceived risk negatively influences perceived usefulness

H10: Perceived risk negatively influences intention to reuse

Perceived benefit is a level where one believes that the use of a particular technology will enhance the performance of person's transaction. Indriastuti and Wicaksono (2014) identify that there are 5 indicators that make customer perceived a benefit from e-money service,

which are benefit of faster transaction, improve performance, easier to use, more practical, and additional benefit. It also makes the customer feel e-money is more useful because of its benefit. Miliani et al (2013) found that perceived benefit have positive correlation to intention to reuse.

H11: Perceived benefit positively influences intention to reuse.

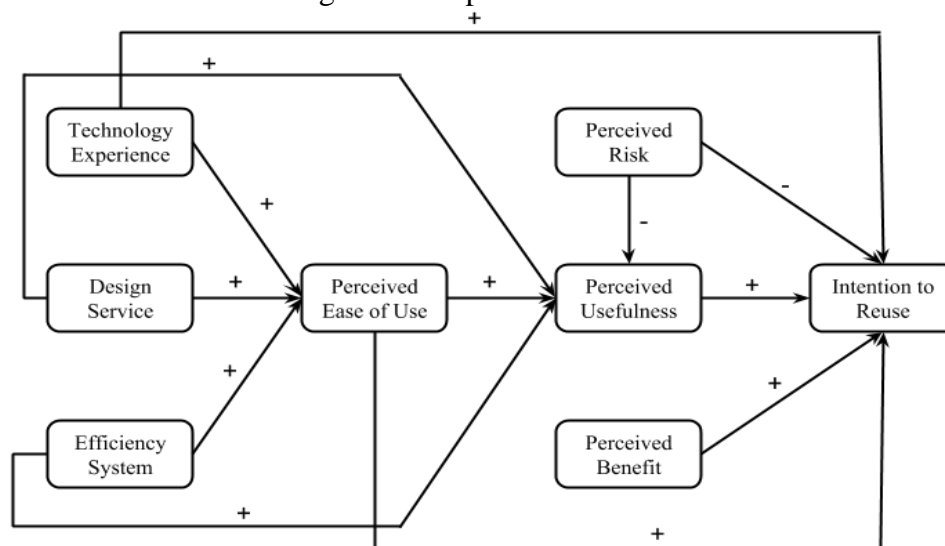
Perceived usefulness can be defined as a level where one believes that the use of a technology will enhance the performance of person's activity. Perceived usefulness can be measured by following factors: saving money, saving time, vast selection of service, and overall usefulness. Perceived usefulness may perceived by customer because it usefulness with efficiency and rapid system in complete transaction, satisfying customer in doing transaction, and reduce customer waiting time in transaction (Lai, 2012; Chauhan, 2014). The more useful and user friendly is a system, it become much easier to learn and increase intention to use the system (Naiwumbwe, 2012). That's why perceived usefulness become an important variable that will directly influenced customer's intention to buy (Khatimah and Halim, 2014; Padashetty and Kishore, 2013; Chin and Ahmad, 2015).

H12: Perceived usefulness positively influences intention to reuse.

Intention to Reuse is a variable used to predict future actual purchase behaviour by customer. In this study, the purpose is to examine important factor that drive customer to reuse the service. The dimension of intention to reuse is about customer interest and intention to immediately buy the service and intention to look for further information about the service (Lai, 2012; Miliani et al. 2013; Chauhan, 2014).

Usage behavior defines as the customer behaviour toward usage of any goods or services (Wang and Liu, 2009). It defines by the usage frequency, accumulated time or amount use, or accumulated dollar amount of transaction. Stylianou and Jackson (2007) define the construct of usage behaviour as the amount of time/frequency that spent by the user on technology.

Fig. 1: Conceptual Framework



METHODOLOGY MEASUREMENT

There were several steps in this research. First was collecting as much information about recent condition related to e-money usage from Internet and interview. Then, conducting literature review of previous research to generate research framework (see table 1). Third was questionnaire measuring 7-point likert-scale (1= strongly disagree, 7= strongly agree) to test all variables on research framework and multiple choice measuring demographic factor and usage behaviour.

Table 1: Construct and their sources

Construct	Source	Construct	Source
Technology Experience	Lai (2012)	Perceived Risk	Hamid and Cheng (2013)
Design Service	Holloway and Beatty (2008)	Perceived Usefulness	Lai (2012)
Efficiency System	Parasuraman et al (2005)	Intention To Reuse	Miliani et al (2013)
Perceived Ease Of Use	Chauhan (2014)	Usage Behavior	Wang and Liu (2009)
Perceived Benefit	Indriastuti and Wicaksono (2014)		

DATA COLLECTION

This study using judgmental sampling technique to 400 e-money user in Jakarta and Bandung via online and distributed via personal email, social media, and online messenger. This conducted since this study want to measure the perception toward e-money service in Indonesia to know what factor that really influence them in using e-money. The questionnaire was made in Google Form using Bahasa Indonesia. Multiple regressions were conducted to analyze relationship between each variable and crosstab chi-square analysis conducted to know the relationship between demography and usage behavior.

RELIABILITY AND VALIDITY TEST

The survey instrument that measured by 7 point of likert scale is evaluated using reliability and validity test. According to Sekaran (2006: 182), measuring instruments said to be reliable when the Alpha Cronbach ≥ 0.6 .

From the table 2, it can be seen that all variables were reliable since the Cronbach's alpha is fulfill. All indicators and scale for all variables were valid and suitable for the study since the all Kaisers-Mayer-Olkin score were above 0,5 and only 1 factor created for each variable. Extracted variance result also shown that all of variable have score above 50% that indicate measurement and indicators are valid to represent the variables on the study. There are only 340 of 400 questionnaires that valid and used for statistical analysis.

Table 2: Statistics, reliability, and validity result

Construct	Mean	Cronbach Alpha	KMO	Bartlett's Test of Sphericity			% Extracted Variance
				Chi-Square	df	Sig.	
Technology Experience (TE)	5,89	0,882	0,727	567.393	3	.000	81,08%
Design Service (DS)	5,15	0,780	0,5	178.177	1	.000	82,02%
Efficiency System (ES)	5,61	0,895	0,745	608.904	3	.000	82,66%
Perceived Ease Of Use (PEOU)	5,21	0,829	0,774	673.276	6	.000	67,8%
Perceived Benefit (PB)	5,42	0,933	0,857	1088.538	21	.000	79,31%
Perceived Risk (PR)	4,82	0,557	0,532	126.019	3	.000	54,34%
Perceived Usefulness (PU)	5,54	0,871	0,909	1514.630	10	.000	57,96%
Intention To Reuse (ITU)	4,82	0,797	0,796	601.020	10	.000	57,10%

FINDINGS

DEMOGRAPHIC PROFILE

Table 3 summarize total of 340 valid responses, which consist of 146 men (42,9%) and 194 women (57,1%). The majority respondents are from Jakarta (75,6%) and currently work as university student (47,4%) age 20-24 years old (37,1%) with educational background of senior high school (44,7%).

Table 3: Demographic profile

Demography		N	%	Demography		N	%
Age	15 - 19	67	19.7	Occupation	Housewives	20	5.9
	20 - 24	126	37.1		University Student	161	47.4
	25 - 29	37	10.9		SEO Employee	18	5.3
	30 - 34	4	1.2		Civil Servants	5	1.5
	35 - 39	8	2.4		Private Sector Employee	79	23.2
	40 - 44	18	5.3		Student (JHS/SHS)	9	2.6
	45 - 59	26	7.6		Pensioner	5	1.5
	50 - 54	46	13.5		Entrepreneur	43	12.6
	55 - 59	8	2.4	Educational Background	Doctoral	3	0.9
Gender	Men	146	42.9		Graduate	54	15.9
	Women	194	57.1		Undergraduate	131	38.5
City Origin	Bandung	83	24.4		Senior High School	152	44.7
	Jakarta	257	75.6				

USAGE BEHAVIOR

Majority of respondents were usually buy e-money in Bank (42,4%) and public transportation ticket booth (16,2%) and usually top up the card at ATM (58,5%) and merchant (34,1%). Respondents were asked where the usually use the card to done a transaction. Toll payment becomes the most transaction that usually done by e-money (272 answers).

Table 4: Usage behavior of e-money

Place To Buy e-money	%	Place To Top-Up e-money	%	Transaction	N
Bank	42.4	ATM	58.5	Daily Grocery	61
Bundling promotion	8.8	Internet/m-Banking	5.3	Monthly Grocery	19
Public Transportation Booth	16.2	Merchant	34.1	Purchase Gasoline	19
Nearby Toll Gate	8.2	Teller Bank	2.1	Toll Payment	272
Minimarket	21.5			Transportation Payment	127
Supermarket	2.9			Purchase Fashion Goods	1
				Pay Restaurant Bill	8
				Pay Entertainment Service	21

This study looks for relationship between demographic aspect and intention to use and also usage behaviour. Demographic aspect was not aspect that influences customer intention to reuse based on ANOVA analysis. Based on homogeneity of variance result, there are only gender and city origin that have sig.>0.05. It means that data is homogen and ANOVA can be performed. But, ANOVA result show that sig. score of both factors are above 0.05. That is why, no demographic aspect are influencing intention to reuse. Demographic aspects are having influence to usage behaviour based on crosstab chi-square analysis (see table 5). Age and education would differentiate the usage behaviour of e-money. City origin and occupation only would differentiate frequency and minimal amount of e-money usage. Meanwhile, gender might not differentiate usage behaviour at all.

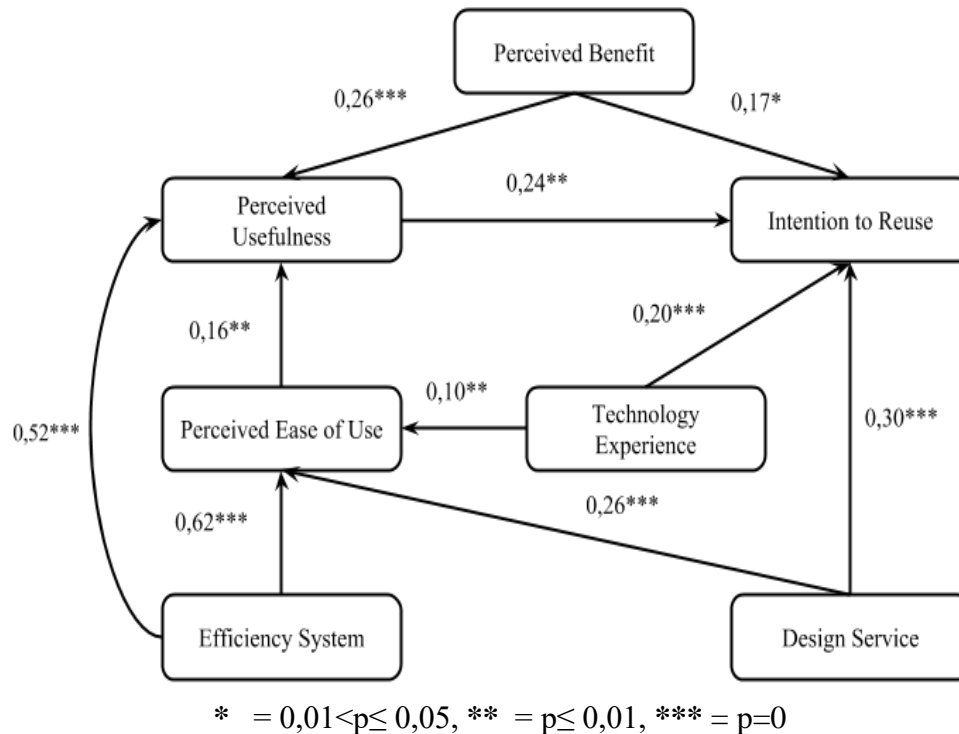
Table 5: Crosstab chi-square analysis result

Demography	Frequency of Usage		Minimal Usage		Total Usage	
	Chi-Square	Asymp. Sig. (2-sided)	Chi-Square	Asymp. Sig. (2-sided)	Chi-Square	Asymp. Sig. (2-sided)
Age	41.598	.014	72.054	.001	67.385	.004
Gender	5.188	.159	2.014	.847	4.235	.516
City Origin	25.958	.000	13.276	.021	2.802	.731
Occupation	39.664	.008	54.253	.020	47.632	.075
Education	24.507	.004	40.041	.000	27.123	.028

HYPOTHESIS TESTING

Multiple regression was performed to test hypothesis. The variables that have strong influence to the dependent variable should have significance level below 0,05. This study use beta coefficient score to measure effect between dependent and independent variables. The bigger beta coefficient score, the bigger influence independent variable to dependent variable.

Fig. 2 Multiple Regression Summary



There are some differences between the results of this study and previous study (shown on Fig.1. Conceptual Framework) about the influencing factors to intention to reuse E- Money, as following:

Based on previous research, intention to reuse is predicted to be influenced by perceived ease of use, perceived benefit, perceived risk, perceived usefulness, and technology experience. But, only 3 factors are proven to affect the intention to reuse of E-Money namely perceived benefit, perceived usefulness, and technology experience. Perceived risk shows a very weak influence to intention to reuse (Beta= -0,13, p=0,002) and could be ignored because the effect is too weak and approaching zero. Initial interview also showing result that Indonesian people usage on e-money is not really affected by perceived risk. It supported by low mean score on each risk that mention on questionnaire, which are physical risk, performance risk, and time loss risk. The overall mean score of variable is 4,8 of 7, which show that customer already perceived lower risk level of e-money. This finding is contradicted with Chin and Ahmad (2015) that mention it has significant influence to intention to reuse. Perceived ease of use also tends not significantly influence the intention to reuse E-Money (Beta= 0,11, p=0,185). This finding is contradicted with the finding of previous research by Mbogo (2012) and Naiwumbwe (2012). This might happen because most of all e-money providers in Indonesia offer similar system that easy to use, understandable, trouble free, and ease to access. So people tend to use it because of it usefulness not because the easiness of use.

In addition, there are some differences between the results of this study and previous study about relationship to perceived usefulness. In the previous research, perceived usefulness is affected by perceived easy to use, design service, perceived risk and efficiency system. In this study we found that perceived easy to use and efficiency system are the only factors

influencing the perceived usefulness of E-Money. Surprisingly the result shows that design service tends to give a significant influence to perceived usefulness but the effect is very weak and approaching zero ($\text{Beta} = 0,09$, $p = 0,01$). By this reason we could ignore the very small impact of design service to the perceived usefulness of E- Money. It is contradicted with previous research done by Chin and Ahmad (2015). Generally, respondents have low mean score on design service. This study also ignores the relationship between perceived risk and perceived usefulness ($\text{Beta} = -0,05$, $p = 0,036$) because it could give only a very small impact to perceived usefulness. This study found that Perceived benefit gives a significant influence to the perceived usefulness of E- Money ($\text{Beta} = 0,26$, $p = 0,000$). It becomes an important consideration for provider to offer financial or non-financial benefit to customer since benefit trigger the usage of e-money.

There are 4 (four) Influencing factors to customer intention in using E-Money as explained above, are perceived benefit ($\text{Beta} = 0,17$, $p = 0,022$), technology experience ($\text{Beta} = 0,20$, $p = 0,000$), perceived usefulness ($\text{Beta} = 0,24$, $p = 0,011$), and design service ($\text{Beta} = 0,30$, $p = 0,000$).

Design service appears as new variable that have strongest and significant influence to intention to use ($\text{Beta} = 0,30$, $p = 0,000$). Design service define as how convenient a service for the customer determined by information quality and convenience system design. Convenient system design has the highest mean score. It show that government and provider should formulate the design as convenient as fit to the target market.

The second influencing factor to the E-Money 's intention to reuse is perceived usefulness. It is important to make the service is useful for the user and giving rapid service to finish the transaction. Based on previous research, perceived usefulness is influenced by design service, efficiency system, perceived risk, and perceived ease of use. This study finds that there are 3 variables that significantly and strongly influence on it, which are efficiency system ($\text{Beta} = 0,52$, $p = 0,000$), perceived ease of use ($\text{Beta} = 0,16$, $p = 0,02$), and perceived benefit ($\text{Beta} = 0,26$, $p = 0,000$). It shows that efficiency system tends to give strongest effect to the perceived usefulness of E-Money. It shows that e-money would be recognized as a useful instrument when it has an efficient system (fast performance, practice, and simple). It is supported by the fact that provider having the highest market share have the most efficient system. People just need to have one card to finish transaction, faster and easy.

Technology experience tends to give influence to the intention to reuse E- Money ($\text{Beta} = 0,20$, $p = 0,000$). It was brought by customer familiarity to computer software, Internet, and email. All indicators have high mean in the descriptive study but familiarity-using email have the highest score. It supports previous findings that mention the more familiar customer with technology, the easier they adopt e-money. It means that, it will a bit harder for provider or government to penetrate Indonesian market that still have low education and usage of technology. They need to educate more about the technology to influence the non-user to use e-money and remove cash for daily transaction.

Perceived benefit has also relationship to the intention to reuse E-Money ($\text{Beta} = 0,17$, $p = 0,000$). It is supported by the fact that all providers mostly offer financial and non-financial benefit to customer to trigger customer to use it. It might be influencing factor for intention to reuse E- Money since Indonesian peoples are basically still habitually use cash. So, benefit becomes important for customer as the reason in using e-money. It is important for provider

to offer financial/non financial benefit since the mean of variable is quite high which indicate customer demanding for it.

CONCLUSION

This study examined demography of e-money user, usage behaviour, and factors influencing customer intention to use. It was important since the usage of e-money in Indonesia still low. Respondents who ever use e-money were mostly came from Jakarta and work as university student and private sector employee. This result might be supported by fact that e-money facility and infrastructure in Jakarta was more developed than in Bandung. Mostly tollgate and public transportation facility in Jakarta already implement transaction system using e-money. Respondents commonly buy e-money card in bank and minimarket (partner merchant) and top up the card in ATM and merchant. The study shown, those demographic aspects are not significantly influence customer intention to use. But, age and educational background become the factors that differentiate the usage behaviour of e-money.

The prediction on factor that influencing perceived ease of use was prove on this study. Technology experience, design service, and efficiency system are significantly influence perceived ease of use. Efficiency system became the most influencing factor on customer to perceive how ease e-money to be used. It means that customers are looking for e-money service that has the efficient system one to help them finish the transaction.

Previously, perceived usefulness predicted to be influenced by design service, efficiency system, perceived ease of use, perceived benefit and perceived risk. Based on conceptual framework, this study found that there are 3 variables that significantly and strongly influence it, which were efficiency system, perceived ease of use, and perceived benefit. Efficiency system became the most influencing factor to intention to use. It shown that e-money will recognized as a useful instrument when it has efficient system (have fast performance, practice, and simple).

As for intention to reuse, the most influencing factors were perceived usefulness, technology experience, and perceived benefit. The most influencing factor is perceived usefulness. This might be important to be perceived by Indonesian customer since they have to perceive that e-money was more useful than cash money to change their behaviour from using cash to e-money. It defined as how useful e-money for their daily transaction, how it make transaction complete easily, efficiently, and rapidly, and also how e-money reduce customer waiting time on a transaction. The lowest mean score of perceived usefulness indicator was about waiting time. E-money offers one tap fast transaction. But, in fact the transaction still require customer to wait for the receipt. Overall indicator means score shown that improvement should worked to improve the mean score of perceived usefulness in all indicator aspects. Technology experience became the second most influencing factor to intention to reuse. It means that, it will a bit harder for provider or government to penetrate Indonesian market that still have low education and usage of technology. They need to educate more about the technology to influence the non-user to use e-money and remove cash for daily transaction.

This study executed with hope of increasing usage of e-money to support cashless society program made by government. By support cashless society it will reduce government cost in producing cash money. Finding what customer perceive about e-money is important to know what to improve to system and how to branding and communicate the marketing strategy to customer.

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ASSESSING THE EFFECT OF COLOR AND BRAND ON UNDERWEAR CHOICE USING ELECTROENCEPHALOGRAM (EEG)

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ABSTRACT

The research examines the influence of several underwear product cues (color and brand) on consumer's choice by using the application of Electroencephalogram (EEG). The results reveal, female consumer prefers red color underwear and brand names, while male prefers white color and brand logo.

Keywords: Underwear, Choice, EEG, Product Cues, Color, Brand

INTRODUCTION

Underwear is everybody basic needs, currently in the apparel marketplace, underwear became one of product category that growing rapidly both in innovative design and technology (Capelaci, 2006). Based on Indonesian Garment and Accessories Supplier Association (APGAI), the growth of underwear in Indonesia is estimated over 20% per year and the increase in underwear demand aligned with the population growth rate, and now Indonesian population is in the 4th position around the world and is expected to increase about 1, 6% per year. Thus in the future this industry still will grow, profitable, and become one of potential product category in the market (Nugrahani, 2013).

Unfortunately, consumer's evaluation and choice in underwear are still unknown. Research of the influence of underwear's product cues on consumer choice has been very limited. However, the effect of underwear product cues, luxury brand and brand country of origin on consumer choice was examined by (Lee, Ian, & Rajat, 2013). Thus this research will extend the previous research by examined the effect of underwear product cues, color and brand elements towards consumer's choice. Colors as one of product's attribute play an important role in affecting our visual perceptions. Color reflects an arousal of the visual system and can increased visual attention. They form an omnipresent part of our daily lives, influencing our interactions with other individuals and objects. According to (Berger & Fitzsimons, 2008), color is probably the strongest and most visible element of any clothing product, also plays

a very important role when consumers evaluate the product quality. While, brand elements present many things about a product and give number of information about it to the customers. It can tell the customer or potential buyer what the product means to and can represent customer's perceptions and opinion about the quality of the product also helps the people to choose the best product according to their need and satisfaction (Leslie & Malcom, 1992). The suitable brand elements can reside in the mind of the consumer and have a high probability to be preferred by the customer (Alamgir, Shamsuddoha, & Nedela, 2010). To making sense of consumer's choice towards underwear products, it is helpful to understand their actions in conjunction with their brain response mechanisms that happened during active evaluation of products and have been found can predict consumer choices (Kushaba, et al., 2013). It will provide strong evidence how is the effect of product cues related with sensory inputs (visual) can affect consumer's perceptions, judgement, and choice, also contribute to marketers knowledge of the "why" behind the consumer's buying decisions regarding underwear product, that can help marketers to reach their target markets more effectively and develop strategies to ensure that the consumer's needs are met.

LITERATURE REVIEW

Consumer choice is defined to mean the process of determining what options are available and then choosing the most preferred one according to some consistent criterion. Based on review of some journals, found that consumers' choice can be influenced by product cues (Chernev A. , 2003; Shapiro & Spence, 2002; Teas & Agarwal, 2000; Kyeong, Sin, & Young, 2003; Idoko, Ireneus, Nkamnebe, & Okoye, 2013; Gutjar, Graaf, Palascha, & Jager, 2014; Fiore, Effects of product display and environmental fragrancing on approach responses towards a product and pleasurable experiences, 2000). The product cues can be any product characteristic inherent in the product itself (fabrics, color, styles or design), while it can be any product characteristic not fundamental to the product itself but externally attributed to the goods (price and brand elements) (Teas & Agarwal, 2000). Many researcher and marketers try to rationalize it and try to imply the pattern of consumer choice precisely by the wide range of alternative models. However, some have argued that in the consumer choice model, many choices are not considered and consumer choice model are quite restrictive, also they are based on intuitive reasoning, heuristics or instinctive visceral desires (judgement), that will made the result can be striking departures from the sort of consumer behavior in reality. Nowadays, there is certainly room for improvement, the electroencephalogram (EEG) as one of neural activity measurement, found can predict choice over consumer products. In this research we focused on specific cues: color and brand elements in underwear product that were exposed towards consumers.

COLOR

Visual perception has been viewed as the dominant modality, self-contained and unaffected by non-visual information. It will affect subsequent willingness to accept a product. Colors as one of product's attribute play an important role in affecting our visual perceptions, because it reflects an arousal of the visual system and can increased visual attention, which leads to aesthetic evaluation of the products (Zurawicki, 2010). Within the context of consumer choice and decision making, color has been defined as an extrinsic cue that color is probably the strongest and most visible element of any clothing product, also plays a very

important role when consumers evaluate the product's quality (Berger & Fitzsimons, 2008). The visual attention to the product has strong association and affected consumer willingness to choose, (Fiore, 2000). One of clothing product that has variety of color is underwear and often sold in different color or with different color of packaging; the first hypothesis was developed as following:

H1. Consumers give more favorable neural response to a certain underwear color rather than others.

BRAND ELEMENTS

Brand elements are trademark or devices that serve to identify and differentiate the brand. The main brand elements are brand names, URLs, logos/symbols, spokespeople, slogans, jingles, packages, and signage. Brand elements can be chosen to both enhance brand awareness and facilitate the formation of strong, favorable, and unique brand associations (Keller, 2002). However in this research we limited our study on brand name and logos/symbols.

BRAND NAME

A brand name is sum of all the mental connections people have around it and become very significant factor in a product because sometimes it captures the central theme or key association of a product in a very condensed and reasonable fashion and can influences the customer decision in product choice (Jacoby, Szybillo, & Busato-Schach, 1977). Research on brand names has been pursued for over 50 years and has led to a wide body of knowledge. Brand name characteristics and their effects on consumer's behavior has been become research object for a long time (Keller, 2002; Kohli, Katrin, & Lance, 2005). To enrich this stream of research, this study investigated brand names as a means of generating positive consumer response to consumer's choice related to their brain response.

LOGOS/SYMBOLS

Logos and symbols show brand identification of the company and can be a very effective way of differentiating the brands from each other. There are different types of logos, which are unique from corporate names or trademarks (Kyeong, Sin, & Young, 2003; Alamgir, Shamsuddoha, & Nedela, 2010). Logos and symbol are easy way for consumer to recognize a product and successful way to get a better place in customer mind, because customers find something that is easily. In addition, logos are very important assets for the companies, thus companies sometimes spend enormous time and money to promote their brand logos and symbols because it can helps companies to develop the brand equity through raised brand identification and brand loyalty.

Based on the notion, that consumer will differ in easiness to recognize and to remember the variety of brand elements in a product. The second hypothesis examined this possibility:

H2. Consumers gives a more favorable neural response to a certain underwear brand element rather than others.

ELECTROENCEPHALOGRAM (EEG)

The electroencephalogram (EEG) is a measure of brain waves that provides evidence of how the brain functions over time (Tong & Thakor, 2009). Nowadays, EEG are increasingly used

by marketing scholars and practitioner to get consumer's deeper reactions to various marketing stimuli (Ariely, Berns, Moore, & Noussair, 2010; Ohme, Reykowska, Wiener, & Choromanska, 2009). The general assumption is that human brain activity can provide marketers objective information that not obtainable via conventional marketing research methods. This is mainly driven by the fact that people cannot fully explain their preferences when explicitly asked in the level of conscious awareness. The EEG records are seen as indicator of consumer's true emotions and feeling because there are several activations in certain regions in the brain that may suggest the consumer's unfiltered response (Davidson, 1992). EEG is possible to gather immediate feedback to presented stimuli as fluctuations in brain signal frequencies to learn more about attention, perception, and emotion (Vecchiato, et al., 2011) and also provides a richer context to understand consumer choice and decision making process in marketing research (Ohme, Reykowska, Wiener, & Choromanska, 2009).

METHODOLOGY

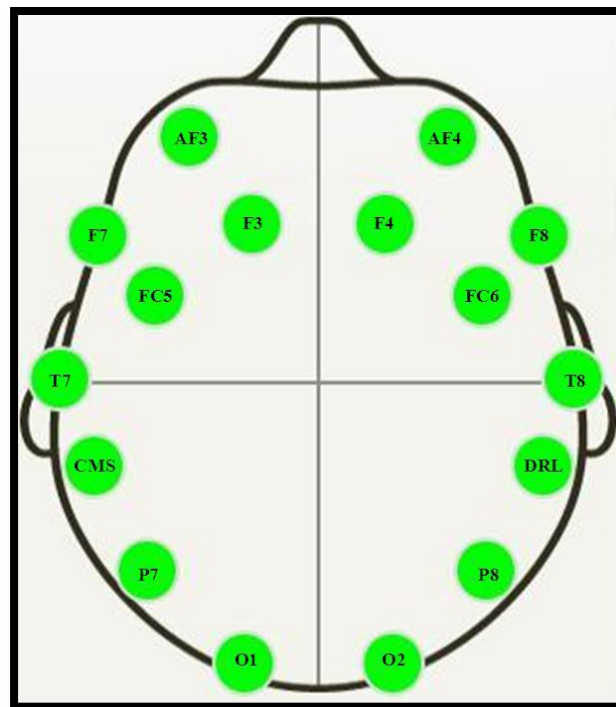
PARTICIPANTS

The participant for this research were selected using judgmental sampling, consists of 10 males and 10 females underwear shopper among 18-25-years-old, have normal vision, not in the process of psychoactive medication, with neither a history of neurological nor psychiatric disturbances, right handed, and have monthly spending \geq Rp 3.000.000.

PROCEDURES

To test brain response of the participants who were conducting two experimental tasks by Emotiv EPOC Neuro Head Set International 10/20 System (Figure 1).

Figure 1 Headset Map of 10/20 system



The participants were asked to evaluate several underwear color and brand elements. Each

data was recorded using OpenVIBE 0.13.0 and EPOC Panel Control software and was analyzed by MATLAB R2009a which complemented with EEGLAB. The procedure for doing those 2 experiments as followed:

UNDERWEAR COLOR EVALUATIONS

Several different colors (with the same style) of underwear photos (stimulus) were shown to the participants in order to know their neural responses (Figure 2).

Figure 2 Underwear color stimulus



The electrodes were placed on F3- F4, T7 -T8 and O1-O2 sites. Each stimulus was shown in 5s with 5s *inter-stimulus-interval* (ISI). This experiment will be repeated 3 times with the *inter block interval* (IBI) 10-15 minutes.

UNDERWEAR BRAND EVALUATIONS

Several different types of underwear brand elements (stimulus) were shown to the participants in order to know their neural responses (Figure 3).

Figure 3 Underwear brand stimulus



The electrodes were placed on F3-F4, T7-T8 and O1-O2. Each stimulus was shown in 5s with 5s *inter-stimulus-interval* (ISI). This experiment will be repeated 3 times with the *inter block interval* (IBI) 10-15 minutes.

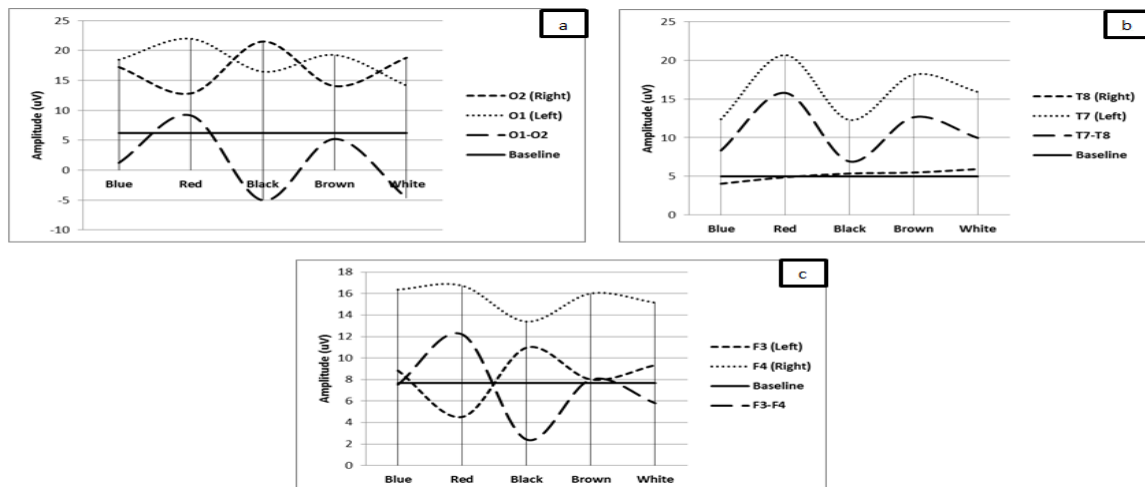
RESULT & DISCUSSION

UNDERWEAR COLOR EVALUATION

Data pooling of beta wave spectrum in channel F3 was compared with channel F4 (Frontal Lobe), channel O1 with channel O2 (Occipital Lobe), also channel T7 was compared with channel T8 (Temporal Lobe) to determine EEG asymmetry for the left hemispheres (F3, O1, and T7) and right hemispheres (F4, O2, and T8).

When the stimulus is given, generally the beta brainwaves amplitude of male and female participants (Figure 4 and Figure 5) increase compared with baseline values in each brain lobe (occipital lobe, temporal lobe, and frontal lobe). It is indicate that underwear color stimulus generally can modulate the activity of neurons in occipital, temporal, and frontal area becomes more active, which is caused due to the transient effects of underwear color stimulus in the visual pathway as natural adaptation towards the environmental conditions (Vandewalle et al., 2007).

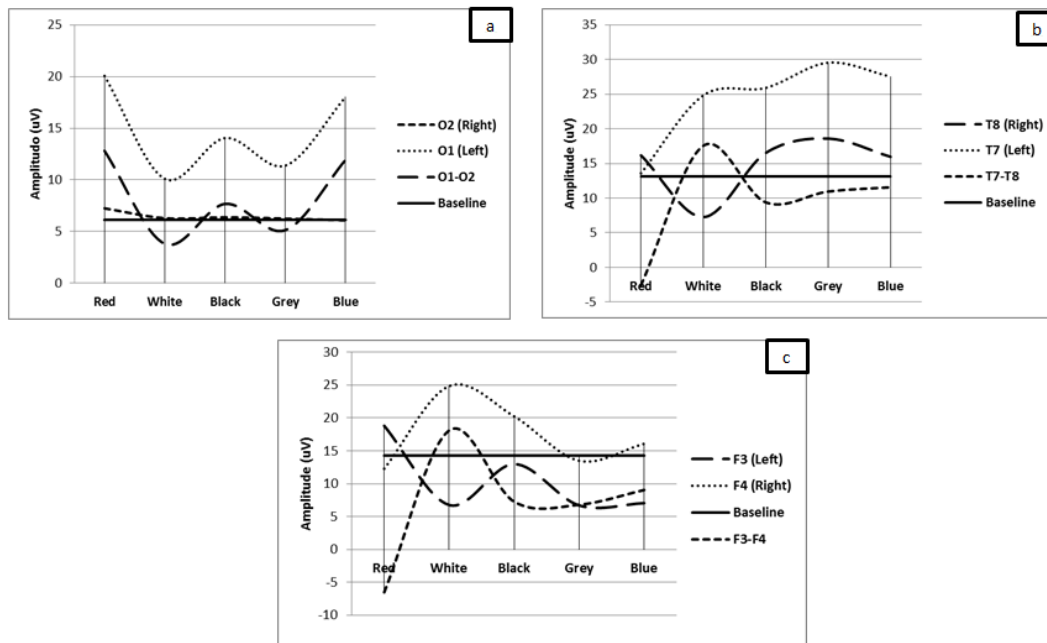
Figure 4 The female Consumer β brain waves mean difference during underwear color stimulus in: (a) occipital channel; (b) temporal channel; and (c) frontal channel



In female participants results (Figure 4), the amplitude value in left hemisphere is higher than right hemisphere, whether in occipital lobe (O1-O2), frontal lobe (F3-F4), and temporal lobe (T7-T8). Based on paired sample t-test in each lobe, there are significant difference between amplitude activity in left and right hemisphere except in occipital lobe, $F3-F4$ $t(8.25) = 6.331$, $p < 0.05$; $O1-O2$ $t(10.71) = 10.551$, $p > 0.05$; and $T7-T8$ $t(5.325) = 15.301$, $p < 0.05$. This situation was explained by Davidson (2004) that larger activations in the left hemisphere are indication of happiness, amusement, and like however larger activations in the right hemisphere indicated disgust. Based on the explanations we can conclude that generally, female participants give positive emotion response towards all underwear color stimulus when the stimulus was given. However, the right hemisphere amplitude was higher than left hemisphere for black and white color stimulus in occipital lobe, blue color in temporal lobe, and black color in frontal lobe. It is indicate that female participants might be unaffected visually by black and white color underwear stimulus related with occipital lobe function as visual stimulus processing center. Furthermore, female participants data in each brain lobe

(O1-O2, T7-T8, and F3-F4) was analyzed using One-Way ANOVA test, the results show there is a real difference between beta waves amplitude value of each underwear color stimulus in O1-O2 $p=0.00<0.05$; F3-F4 $p=0.00<0.05$; and T7-T8 $p=0.00<0.05$. The results indicate female participant response differently towards each underwear color stimulus. In Figure 4, generally the amplitude value in red color stimulus is the highest among all color stimulus, whether in occipital lobe (O1-O2), frontal lobe (F3-F4), and temporal lobe (T7-T8). Based on the results we can conclude, female participant's visual attention in occipital lobe, perception in temporal lobe, and rational decision in frontal lobe most affected by red color stimulus. It is clear that female participants were giving more favorable choice towards red color rather than others. The result is supported by Bagchi & Cheema (2013), who stated the association of red color can give attractive, sensual, powerful, and sexy perceptions. This perception can induce and drive female participants to be attracted and preferred red color underwear.

Figure 5 The male Consumer β brain waves mean difference during underwear color stimulus in: (a) occipital channel; (b) temporal channel; and (c) frontal channel



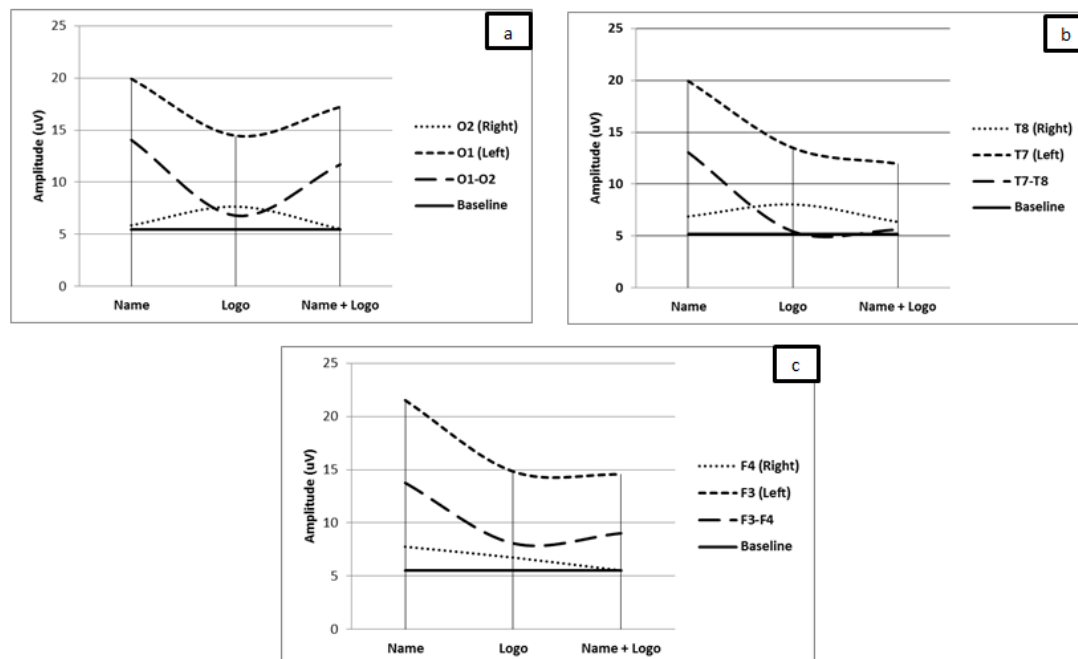
For male participants results (Figure 5), the beta brainwaves amplitude value in left hemisphere is higher than right hemisphere, whether in occipital lobe (O1-O2), frontal lobe (F3-F4), and temporal lobe (T7-T8). Based on paired sample t-test in each lobe, there are significant difference between amplitude activity in left and right hemisphere O1-O2 $t(13.411) = 10.504$ $p<0.05$; temporal lobe T7-T8 $t(10,106) = 22.525$ $p<0.05$, and frontal lobe F3-F4 $t(16.404) = 9.552$ $p<0.05$. So generally, the male participants give positive response towards all underwear color stimulus that were given. Furthermore, the data in each brain lobe (O1-O2, T7-T8, and F3-F4) was analyzing using One-Way ANOVA test. The results show there is a real difference between beta waves amplitude of male participants of each underwear color stimulus in occipital lobe O1-O2 $p<0.05$; temporal lobe T7-T8 $p<0.05$, and

frontal lobe F3-F4 $p < 0.05$ that indicate the male participant respond differently towards each underwear color stimulus. In frontal lobe (F3-F4), and temporal lobe (T7-T8) the beta brainwaves amplitude value of white color stimulus is the highest than another underwear color stimulus, while in occipital lobe red color is the highest. Based on the results we can conclude that male participant's visual attention in occipital lobe most affected by red color. However in frontal and temporal lobe shows that the right hemisphere beta waves amplitude was higher than left hemisphere ($T7 > T8$ and $F3 > F4$), that indicate male participants give negative emotions and perception towards red color stimulus and tend to give more favorable choice towards white color. Based on this situations we can conclude that male participant was most attracted visually to the red color, because the emotion associations of red color is dominance and aggression, which is an innate emotion of males, so that the part of male brain is estimated genetically designed to be attracted towards red color (Pryke, 2009) while also have a preference to white color underwear because white color association tend to give perception that underwear products will be clean and comfortable (Hemphill, 1996).

BRAND EVALUATIONS

Data pooling of beta wave spectrum in channel F3 was compared with channel F4 (Frontal Lobe), channel O1 with channel O2 (Occipital Lobe), also channel T7 was compared with channel T8 (Temporal Lobe) to determine EEG asymmetry for the left hemispheres (F3, O1, and T7) and right hemispheres (F4, O2, and T8).

Figure 6 The female Consumer β brain waves mean difference during underwear brand stimulus in: a) occipital channel; (b) temporal channel; and (c) frontal channel

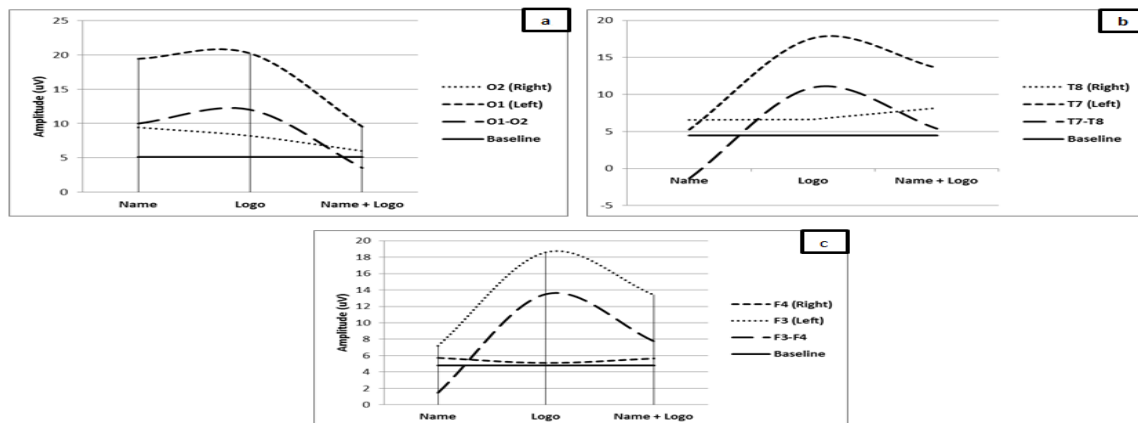


In female participants results (Figure 6), the amplitude value in left hemisphere is higher than right hemisphere, whether in occipital lobe (O1-O2), frontal lobe (F3-F4), and temporal lobe (T7-T8). Based on paired sample t- test in each lobe, there are significant difference between

amplitude activity in left and right hemisphere F3-F4 $t(11.25) = 7.535$, $p < 0.05$; O1-O2 $t(9.11) = 13.252$, $p < 0.05$; and T7-T8 $t(8.515) = 13.253$, $p < 0.05$. We can conclude that generally, the female participants give positive emotion response towards all underwear brand stimulus. Furthermore, the data in each brain lobe was analyzed by using One-Way ANOVA test, the results found that there is a real difference between the beta waves amplitude of female participants of each underwear brand stimulus in F3-F4 $p = 0.01 < 0.05$; O1-O2, $p = 0.00 < 0.05$; and T7-T8 $p = 0.00 < 0.05$. Female respond differently towards each underwear brand stimulus and generally the beta brainwaves amplitude value in brand name stimulus is higher than another underwear brand stimulus (brand logo and combinations of brand name and brand logo), whether in occipital lobe (O1-O2), frontal lobe (F3-F4), and temporal lobe (T7-T8). Based on the results we can conclude that female participant's visual attention in occipital lobe is most affected by brand name stimulus. The information from occipital lobe, then received by temporal lobe and get positive emotion and perception. Furthermore, in the frontal lobe area that carries out rational decision making also most affected by brand name stimulus, so we can conclude that female participants give favorable choice towards brand name stimulus rather than another stimulus. Female participants are more attuned to words cues (brand name) rather than picture cues (brand logo) and can interpret and remember words cues more faster and easily (Spierer, Petersen, Duff, Cordoba, & Martin, 2010; Roalf, Lowery, & Turetsky, 2006), which may be the reason why they then giving more favorable choice and more prefer brand name rather than brand logo.

While for male participants (Figure 5), the beta brainwaves amplitude value in left hemisphere is higher than right hemisphere, whether in occipital lobe (O1-O2), frontal lobe (F3-F4), and temporal lobe (T7-T8) (Figure 7). Based on paired sample t-test in each lobe, there are significant difference between amplitude activity in left and right hemisphere O1-O2 $t(13.21) = 8.604$, $p < 0.05$; temporal lobe T7-T8 $t(9.62) = 13.672$, $p < 0.05$, and frontal lobe F3-F4 $t(16.320) = 15.844$, $p < 0.05$. Based on the results, generally male participants give positive response towards all brand stimulus. However for brand name stimulus in temporal and frontal lobe, the right hemisphere beta waves amplitude was higher than left hemisphere (T7 > T8 and F3 > F4). The results indicate male participants tend to give negative emotions and perceptions towards brand name stimulus.

Figure 7 The male Consumer β brain waves mean difference during underwear brand stimulus in: (a) occipital channel; (b) temporal channel; and (c) frontal channel



Furthermore, the data in each brains lobe (O1-O2, T7-T8, and F3-F4) was analyze using One-Way ANOVA test, the results shows there is a real difference between the beta brainwaves amplitude of male participants of each underwear brand stimulus in occipital lobe O1-O2 $p=0.04<0.05$; temporal lobe T7-T8 $p=0.00<0.05$, and frontal lobe F3-F4 $p<0.01$ that indicate the male participant respond differently towards each underwear brand stimulus. The beta brainwaves amplitude value of brand logo stimulus in frontal lobe (F3-F4) and temporal lobe (T7-T8) is the highest of all; while in occipital lobe is the combinations of brand name and brand logo stimulus. Based on the results, the male participant's visual attention in occipital lobe, the temporal lobe, and the frontal lobe are most affected by brand logo stimulus. We can conclude that male participants give more favorable choice towards brand logo rather than combinations of brand name and brand logo, because rational decision is takes place in frontal lobe area. Male participant tend to visually aroused after viewing the images rather than words, because it can stimulate their fantasies and imagination (Nikos, Logothetis, & David, 1996).

CONCLUSIONS

The result of this study shows that male underwear consumer prefer white color and brand logo as brand elements while female prefers red color and brand name. The current study highlights the applications of neuroscience in order to fully explore the decision-making process from the perspective of underwear consumer's that can give objective information about the inner workings of the consumer brains. It will provide the insight about how underwear consumers choose the product and can give information about design and presentation of products to improve them to be as compatible as possible with consumer choice.

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CORPORATE SOCIAL RESPONSIBILITY AND CUSTOMER LOYALTY A STUDY OF THE AIRLINE INDUSTRY IN INDONESIA

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ABSTRACT

Purpose: The purpose of this paper is to examine the effect of corporate social responsibility on consumer trust, customer-company identification and customer satisfaction and determine how these variables affect customer loyalty in the airline industry in Indonesia.

Design/Methodology/Approach: Primary data was collected through online and offline surveys using 4-point Likert scales in order to ensure definitive answers. A total of 129 valid respondents between 20 to 40 years old participated in this study who had traveled at the minimum twice within two years with the same airline either using a full-service or low-cost carrier. The pre-test was conducted to test the reliability and validity of the analysis. Furthermore, a quantitative research method using simple and multiple linear regressions was applied to test the proposed hypotheses. Simple linear regression was used to test the influence of corporate social responsibility on consumer trust, customer-company identification and customer satisfaction. Multiple linear regression was applied to analyze the effect of consumer trust, customer-company identification and customer satisfaction on customer loyalty.

Findings: The results indicated that corporate social responsibility positively influenced consumer trust and customer satisfaction. However, corporate social responsibility does not positively influence customer-company identification. Furthermore, consumer trust, customer-company identification, and customer satisfaction have a direct relationship with customer loyalty and they positively influenced customer loyalty. Thus, corporate social responsibility program has a positive effect on customer loyalty and the airline industry should continuously support corporate social responsibility activities. Potential customers should be informed about the corporate social responsibility activities through social media and they should be invited by the airline company to participate in corporate social responsibility activities. The airline company could also work together with non-governmental organizations that have similar visions.

Value: This paper adds a new perspective to explore the influence between corporate social responsibility, consumer trust, customer-company identification and customer satisfaction and customer loyalty in the airline industry in Indonesia.

Keywords: corporate social responsibility, consumer trust, customer-company identification, customer satisfaction, customer loyalty, airline industry, Indonesia

INTRODUCTION

Nowadays, consumers are increasingly concerned and knowledgeable about social responsibility issues (Kautsar, Widiyanto, Abdulah, & Amalia, 2012). In 2014, Nielsen conducted a survey in 60 countries among 30,000 respondents in order to better understand customers' perspectives on social responsibility. The results showed that the global average willingness to pay extra for socially responsible products amounted to 55% having increased by about 10% compared to 2011. Around 64% of respondents indicated that the customers in the Asia-Pacific region paid more attention to social responsibility issues connected to products they consumed and they were willing to pay more for the company's product if it had a positive social and environmental impact. One of the reasons for the rise of consumers' awareness of social responsibility was the increase of companies' consideration to implement corporate social responsibility (CSR). This makes CSR a more feasible approach to gain a consumer's trust and satisfaction for the company's product and/or service. For example, from the environmental perspective, the global aviation industry contributes 2 to 3 % of global CO² emissions because of the altitude (Tobias, 2013). Therefore, many airline companies worldwide also implement CSR as part of their business strategy to make sure they have efficient use of fuel, reduce pollution, as well as improve the social welfare of their stakeholders.

In Indonesia, service industries - which include the aviation service - are the second largest GDP contributors, although in terms of market share, the aviation service is in fifth position. The CSR activity is supported by the government of Indonesia. For instance, Garuda Indonesia – the national flag carrier - has a strong CSR program called Garuda Indonesia Care which focuses on three sectors: economic, social and environmental.

The competition in the airline services is increasing not only between the regional and international players but also between the full service and low-cost carriers, and so the customers have many options to choose from. The companies will compete to gain consumer trust, customer satisfaction, customer-company identification (CCI) and customer loyalty.

As there are still few studies related to CSR services, especially airlines, this study intends to fulfill this gap by examining the influence of CSR on consumer trust, CCI and customer satisfaction and how these antecedents influence customer loyalty in the Indonesian context. The previous research "CSR and customer loyalty: the roles of trust, customer identification with the company and satisfaction" conducted by Martinez and Bosque (2011) and "Customer perceptions of airline social responsibility and its effect on loyalty" by Chen, Chang, and Lin (2012) were used extensively as the platform for this research. The research questions of this study are as follows:

RQ 1: Does airline CSR positively influence consumer trust?

RQ 2: Does airline CSR positively influence CCI?

RQ 3: Does airline CSR positively influence customer satisfaction?

RQ4: Do consumer trust, CCI, and customer satisfaction positively influence customer loyalty?

THEORITICAL FOUNDATION

CUSTOMER LOYALTY

According to Oliver (1997), customer loyalty is defined as a deep-rooted dedication to re-purchase a favorite product/service in the future, thus triggering recurring brand or consistent brand-set purchasing. This action should be regardless of situational influence or marketing effort influencing behavior. This shows that loyalty is interdependent to both attitude and behavior. Chaudhuri and Holbrook (2001) describe attitudinal loyalty as the standard of dedication of the average buyer, concerning a specific brand or service supplier, while behavioral loyalty is described as a facet of customer behavior relating to the recurrence of future purchasing intended for a specific brand or service supplier.

CONSUMER TRUST

Trust is an expectation or belief that the product or service owner can operate in a specific way to serve the long-term interests of the consumers (Crosby, Evans, & Cowles, 1990). Morgan and Hunt (1994) identified trust as an essential element for the creation and preservation of long-term relationships between the company and consumers especially in the service business field.

CUSTOMER-COMPANY IDENTIFICATION

Customer-Company identification (CCI) is used to explain the reasons and motivations that associate individuals with a company. This occurs because cognitive categorization processes make an individual a member of an organization by increasing resemblance and distinctness between members and non-members (Hornse, 2008). This sense of connection and belonging could make an individual achieve a positive social identity (Keiner & Ashforth, 2004). This happens because a sense of connection is psychologically accepted as part of that personal identity. Individuals generally go beyond their personal identity to develop a social identity and subsequently their sense of self, even when the individuals are not part of the organization (Lane & Scott, 2000).

CUSTOMER SATISFACTION

Kotler and Keller (2012) stated that satisfaction is founded on a customer's pleasure or disappointment resulting from the comparison of the product or service's actual performance and the customer's expectation of the product. Satisfaction is a post-consumption evaluation which means the respondent could only evaluate and compare the product or service after using it (Levy & Weitz, 2011). Prior research has suggested that if the customers are satisfied with a product or service, the re-purchase tendency of the product or service will increase as well as the number of loyal customers who show a strong and positive attitude to the company (Dick & Basu, 1994).

CORPORATE SOCIAL RESPONSIBILITY

As stated by Mohr, Harris, and Wenn (2001), CSR is defined as the assimilation of business processes and values which are the concern of all stakeholders (customer, employees, investors, and the environment) displayed in a company's guidelines and demonstrated in their actions. Carroll (1991) categorized four types of CSR principles, namely: economic, legal, ethical, and philanthropic. With the increase of social awareness in society, businesses are also

being forced to be more ethical and responsible which means that CSR is the best response for business' long-term strategic plans.

CONSTRUCTION OF HYPOTHESIS

Although CSR is mainly referred to as the relationship and identification of the customer with the company, some studies suggest a link to consumer trust and satisfaction (Swaen & Chumpitaz, 2008). Pivato, Misani, and Tencati (2008) stated that trust is the most certain benefit from CSR activities. To gain trust, the company needs to deliver a consistent business performance in providing their product or service aligned with an economic responsibility in CSR. This demanded the airlines to maximize their business operations to ensure the survival of the company (Carroll, 1991). Therefore, it will demonstrate that the competency and expertise from the service or product provider will affect its credibility (Kim, Lee, & Park, 2014). Airlines also need to fulfill their legal responsibility imposed by the local government. Therefore the researchers propose the following hypothesis:

H1: Airline CSR positively influences on consumer trust.

Studies have shown that CSR has a positive influence on customer identification with the company. CSR activities show a corporate character and identity which allows a stakeholder to assess the similarity between corporate identity and personal identity. This shows that CSR is the key factor in corporate identity that could trigger customer identification with the company and develop a relationship with the company (Bhattacharya & Sen, 2003). Customers, who are aware of a company's effort to develop socially responsible activities, are more likely to develop a greater identification with the company than those that do not conduct CSR activities (Aquino & Reed II, 2002). Moreover, the customer will develop a deeper association with the company that shows a higher level of ethical and social activity that will in turn increase the customer's self-esteem. Therefore, the following hypothesis is proposed:

H2: Airline CSR positively influences the CCI.

Customers are potential stakeholders who not only care about the financial or economical performance of the company but also the overall performance (which includes the social performance) of the company. This will indirectly make a customer more satisfied with the service or product if the provider has a strong CSR program and implements it well. Fornell, Krishnan and Mithas (2005) showed that perceived value is the key to build customer satisfaction. A company that has a strong CSR program will make the customer have higher perceived value and therefore higher satisfaction (Bhattacharya & Luo, 2006). Therefore, the following hypothesis is proposed:

H3: Airline CSR positively influences customer satisfaction.

Trust will lead to a customer's loyalty because the trust forges an interaction that is highly valued (Chaudhuri & Holbrook, 2001). Loyalty determines the continuing process of a meaningful relationship where trust and loyalty should be affiliated (Zehir, Sahin, Kitapci, & Ozsahin, 2011).

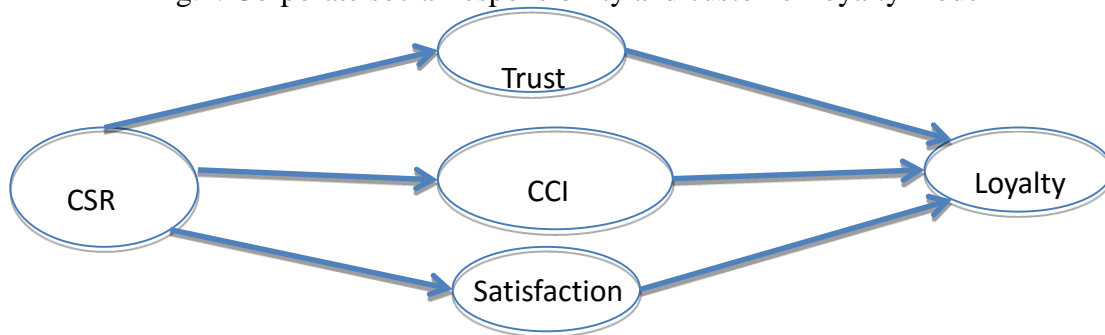
CCI makes consumers more attached to a company. This positively stimulates their loyalty.

According to Bhattacharya and Sen (2003), the customer-company relationship is created by identification and is very stable and durable rendering customers unlikely to switch to the products or services of another brand.

The more customers are satisfied with the chosen brand or product, the more frequently the customer repurchases the product. This will lead to a long-term and committed relationship between the customer and the company (Flint, Blocker, & Boutin, 2011) which will result in a loyal customer with goodwill to the company (Evanschitzky & Wunderlich, 2006). Therefore, the following hypothesis is proposed:

H4: Consumer trust, CCI and Customer Satisfaction positively influences customer loyalty.

Fig.1: Corporate social responsibility and customer loyalty model



METHODOLOGY

To test the hypotheses, the quantitative research method using regression analysis was used in this study in order to examine the associations between a metric of a dependent variable and one or more independent variables. Simple linear regression requires one dependent variable and one independent variable while multiple regressions require one dependent variable and two or more independent variables (Maholtra, 2012). Non-probability sampling procedure was chosen to obtain the data. A valid respondent was 20 to 40 years old, as this criteria should fit with the young adult demographic, should have flown at least twice within two years with the same airline and has watched or read CSR news or an advertorial. Offline and online questionnaires were distributed along with the demographic questionnaire. A set of questionnaires relating to variables in this study was conducted using four-point Likert-type scales. The even number scale was used to avoid a neutral answer ranging from (1) strongly disagree to (4) strongly agree. With the removal of 'neutral' answer, the researcher expected the respondents to answer more truthfully (Tsang, 2012). A 4-point scale was used to give a better data quality result because it reduces bias and makes the respondent more focused on the content than a 5-point scale (Garland, 1991).

FINDINGS

Prior to the full survey, a pre-test was performed to test the reliability and validity of the analysis. There were 30 respondents participating in the pre-test. The reliability was tested for each variable using Cronbach's alpha for which the perfect reliable value is 1.0. However, the minimal value of Cronbach's alpha for the item to be deemed as reliable is ≥ 0.6 (Martinez & Bosque, 2011). In this research, there were two pre-tests conducted. The first pre-test results were invalid because numerous respondents answered 'no' or 'neutral' in the

filter question for CSR awareness. To solve the CSR awareness problem, the researcher added a picture of a well-known CSR program. And to resolve the 'neutral' bias respondents, the researcher decided to remove 'neutral' point and change the Likert scale from 5-point to 4-point). As a result, all respondents passed the CSR awareness filter questions and all variables were reliable and valid.

A total of 129 valid respondents consisting of 79 males (61.2%) and 50 females (38.80%) participated in the study. The majority age group was between 20-25 years old. Most of the respondents were students (69.8%), followed by employees and entrepreneurs (30.2%). The majority of the respondents flew Garuda Indonesia – full service airline (32.6%), followed by Air Asia (27.1%) and Lion Air (20.9%) both of which are low cost carriers. In this study, the researcher used a confirmatory factor analysis (CFA) to test the validity. Simple linear regression was used to analyze the influence of CSR toward consumer trust, CCI, and customer satisfaction. The value of R was used to indicate the level of relationship between variables. The value of R resulting from a simple regression of CSR in consumer trust was 0.181 showed that there was a weak relationship between the variable of CSR toward CCI with an R-Square value of 0.033. R-square was used to show the percentage of variation in a dependent variable that can be explained by the variation in the independent variable. It was noted that only 3.3% of the variation in consumer trust can be explained by a variation in CSR. The ANOVA table above showed that the significant number was 0.41 ($p \leq 0.05$). It can be concluded that the variable of CSR had a direct relationship with consumer trust. From the coefficients table CSR on consumer trust, the variable had a coefficient positive value of 0.262 and the significance was 0.041, which was lower than $\alpha = 0.05$. It was clear that CSR had a direct effect on consumer trust. 'H1: Airline CSR influences consumer trust' was supported.

The second simple linear regression was to test the influence of CSR on CCI. The R value and R-square were 0.128 and 0.016 respectively or only 1.6% of the variation in CCI can be explained by variation in CSR. The coefficients table indicated that the significant value of 0.147, which was higher than $\alpha = 0.05$. Therefore, this shows that CSR had no direct effect on CCI and so 'H2: CSR positively influences CCI' was not supported. The third simple linear regression was to test the influence of CSR on customer satisfaction. The R value of 0.367 showed there was a relationship between CSR and customer satisfaction. Meanwhile the value of R-Square was 0.135. This was showing that only 13.5% of the variation in customer satisfaction can be explained by variation in CSR. The ANOVA table indicated the significant level was 0.000 and from the coefficients table, the coefficient value of 0.514 was a positive value with the significance value of 0.000. The positive value from the coefficient showed that 'H3: CSR positively influences customer satisfaction' was supported.

Multiple linear regression was conducted to test the influence from consumer trust, CCI and customer satisfaction on customer loyalty. The value of R in this multiple linear regression was 0.580 which showed that there was a moderate relationship between the variables of consumer trust, CCI, and customer satisfaction on customer loyalty. The value of R-Square was 0.336. This illustrates that only 33.6% of the variation in customer loyalty can be explained by variations in consumer trust, CCI, and customer satisfaction. Meanwhile from the ANOVA table the significant was 0.000, which was less than $\alpha = 0.05$. It can be concluded that the variables of consumer trust, CCI, and customer satisfaction have a direct relationship with customer loyalty. The coefficients table of this multiple regression showed that the

consumer trust variable coefficient was 0.20 with the significant value of 0.020, which was lower than $\alpha = 0.05$. The positive value from the coefficient verifies that, the higher the consumer trust, the higher their loyalty. The CCI coefficient significant value was 0.006, lower than $\alpha = 0.05$. This shows that CCI had a direct influence on customer loyalty. The variable had a coefficient value of 0.327, which was positive. The positive value of the coefficient explained that the higher the CCI, the higher the customer loyalty. Customer satisfaction had a significance value of 0.030, which was lower than $\alpha = 0.05$. This obviously proves that customer satisfaction has a direct effect on customer loyalty. The variable has a coefficient value of 0.306, which was a positive value. The positive value from the coefficient established that there was positive influence of customer satisfaction on customer loyalty. 'H4: Consumer trust, CCI, and customer satisfaction influence customer loyalty' were supported.

DISCUSSION AND MANAGERIAL IMPLICATIONS

Bhattacharya and Sen (2004) proposed that customers may have a more positive response toward a CSR programme if they directly affected the customers' experience toward the company. To reduce the distance between the company and customers, the company could create a CSR program and include customer participation. Furthermore, CSR news is mostly published on the company website. By using social media the company could inform the potential customer about their CSR activity.

Asian markets have the highest willingness to spend more for products from companies that have a positive social and environmental impact (Nielsen, 2014). Considering both of these facts, the researcher proposes to create a loyalty program that would not increase the initial price of tickets. The loyalty program would require the customer to pay for subscription and could be given freely to loyal customers of the airline. The subscribing fees should be directly used for the CSR cause. Each time the customer uses the airline, he/she would get points. They could use these points to gain some benefits or they could also trade it for donation to the CSR cause. The loyalty program also gives the chance for a customer to pay more for CSR causes, for example to pay for gas emission during travel or give a donation for victims of natural disasters. The company could keep track of loyal customers and customer who want to participate in the CSR program.

The airline company could also support a social activity in the community. The support could be in the form of a free ticket or reduced price. The support would be given to the customers who travel for social reasons like volunteering, in natural disaster areas or areas in need. The airline could also work together with local NGO (non-governmental organizations) that have similar values. The airline could provide for example transportation for the NGO members in return for sponsorship.

LIMITATIONS AND RECOMMENDATIONS

As the current research used the quantitative method, it is recommended that a future study uses the qualitative method by doing observation, in-depth interviews, or focus groups to get a better insight and new variables.

The coverage of this study conducted through offline and online surveys was restricted in Jakarta. Hence it will be more fruitful in the future to include respondents from different

cities and several airports in Indonesia to enrich the research.

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PURCHASE INTENTION TOWARD FASHION BRANDS ON INSTAGRAM

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ABSTRACT

This paper studies factors of purchase intention on Instagram. Method used is questionnaire to 378 female Instagram users and analyzed with regression. Result shows purchase intention is affected by attitude toward Instagram advertising by brands

Keywords: Purchase Intention, Fashion, Social Media, Instagram, Technology Acceptance Model, Social Networking Site

INTRODUCTION

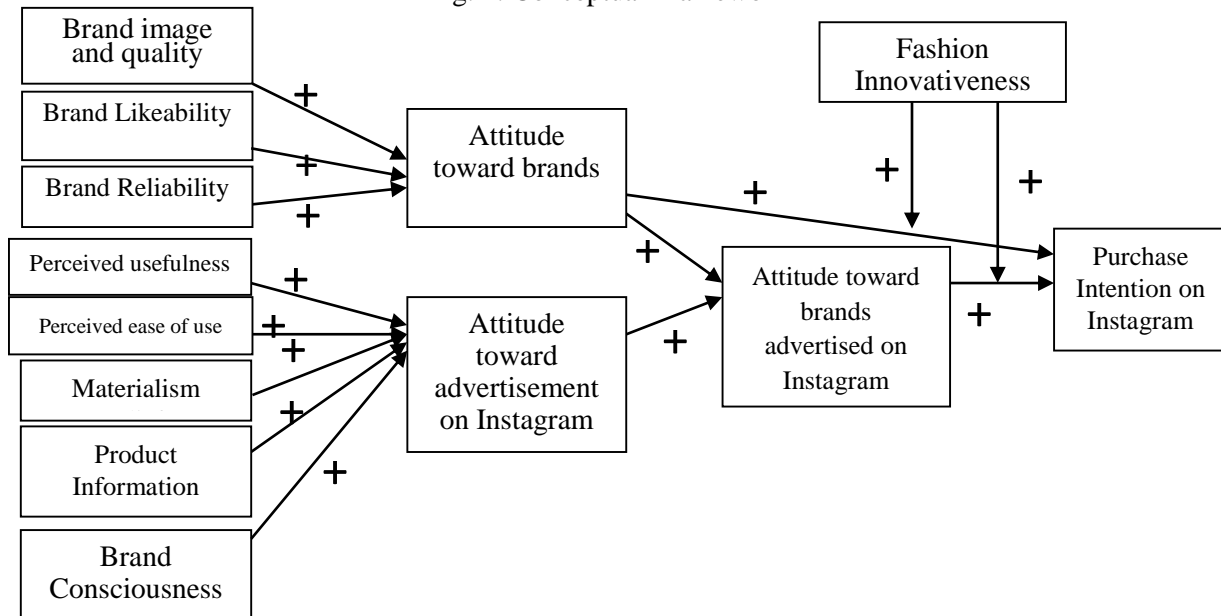
The good use of social networking sites has increased possibilities for fashion brands to penetrate market and engage with consumers even more. Fashion brands utilize social media to engage their consumers more interpersonally. The fast development or increase in users for Instagram becomes an opportunity for brands to make Instagram their marketing channel. In fact, Socialbakers report in December 2014 published its finding that brands gain nearly 50 times more engagement on Instagram than Twitter. Engagement is measured by features in both platforms such as retweets, replies, likes, and favorites.

Even though Instagram does not have as many users as Facebook or Twitter in Indonesia, its growth makes Instagram very potential to be used as marketing channel. As a matter of fact, Instagram's number of users increased by 215% from last year. The increase in users can be beneficial especially for fashion brands. It turns out that Instagram can become a versatile medium for either fashion brands or fashion bloggers to influence people about fashion while also to increase purchase intention. It creates a new question though, what influences consumers to have the intention to buy on Instagram?

The objective of this study is to identify the factors that influence purchase intention towards fashion brands on Instagram. Researcher tries to identify whether Instagram advertisement can trigger purchase intention from customers or not. Furthermore, the research also wants to explore Indonesian Instagram users' behavior related to Instagram and Instagram advertisement. Adapting Technology Acceptance Model (TAM) by Davis (1989), researcher wants to see whether this theory can be applied to Instagram as advertising channel by fashion brands. By knowing consumer behavior and the factors that affect purchase intention, marketers can understand more about how to use Instagram effectively as a marketing channel and what activities can be done to increase their purchase intention.

LITERATURE REVIEW

Fig. 1: Conceptual Framework



ATTITUDE TOWARD BRAND

Purchase intention is determined by the attitude of consumers (Chua, Kamalb and Kim, 2013). When we talk about attitude toward brand, it can be defined as consumers' affective reaction as result of evaluation of a certain brand (Lutz, Mackenzie, & Belch, 1983). However in other researches, attitude toward brand is studied not only influenced by cognitive but also affect. Clore & Schnall (2005) stated that how affect influences attitude is actually the main point (Najmi, Atefi, & Mirbagheri, 2012).

We can see from the framework there are three variables predicted to influence attitude toward brand positively. Previous research by Husic and Cicic (2007), found that brand image and brand quality can be classified into one variable – brand image and quality. The study also found that brand image and quality does not only influence luxury consumption but is also highly possible to influence the attitude toward brand itself. The second factor is brand likeability that talks about consumers' perception based on affective perspective. Previous research by Isobar (2014) about Twitter found that brand likeability does not always correlate with brand consideration but it is related to perception toward the brand itself. The third one, brand reliability, is talking about trust to the brand and how it will affect consumers' attitude in the end.

ATTITUDE TOWARD ADVERTISING

Lutz (1985) stated that attitude toward advertising is defined as predisposition to respond toward advertising in either positive or negative manner (as cited in Yang, 2006). In this current study this construct is examined using affective perspective. The perspective shows the general evaluation or feeling toward advertising on Instagram. As explained above, there are several constructs that are predicted to be factors of attitude toward advertising on Instagram. Using adaptation of Pollay and Mittal (1993) model, other studies also found that

attitude toward advertising is influenced by beliefs regarding advertising (Bauer and Greyser, 1968; Yang, 2006).

Technology Acceptance Model has been used widely since it was found by Davis (1989). Three variables in this theory are perceived usefulness, perceived ease of use, and product information beliefs. TAM was also adapted by Chu, Kamal, and Kim (2013) for attitude toward social media advertising which will be analyzed specifically for attitude toward advertisement on Instagram. Another factor is materialism belief which is adapted from Pollay and Mital (1993). The model is then adapted by Chua, Kamalb and Kim (2013) to examine social media advertising. Brand consciousness is the last factor. In several studies consciousness is found to have positive relation with purchase intention. While in a study by Chua, Kamalb and Kim (2013), this construct was found to be another factor that influences attitude toward social media advertising besides constructs in Pollay and Mittal (1993) model.

FASHION INNOVATIVENESS

According to Park, Burns, & Rabolt (2007), fashion innovativeness is defined as level of willingness to buy or use new fashion products (as cited in Wang, 2012). With the advance development of technology, researchers also found that fashion innovativeness influences online shoppers' behavior. Adapting the framework from Wang (2012), fashion innovativeness was found to be mediating variable between attitude and behavioral intention. This study also predicts that fashion innovativeness will become mediating variable between attitude toward advertising and attitude toward brands advertised on Instagram toward purchase intention on Instagram.

PURCHASE INTENTION

Purchase intention is used to predict actual purchase behavior by consumers. That is why it is important to study this construct. In this study, the purpose is to examine purchase intention as an impact of advertisements by fashion brands on Instagram. Previous study by Kim and Ko (2011) found that there is positive impact of social media marketing performed by luxury brands on purchase intention (Chua, Kamalb and Kim, 2013). Many researchers found that when attitude toward advertising is positive, it will influence purchase intention positively. Chua, Kamalb, & Kim (2013) specifically found that attitude toward social media advertising affects purchase intention of luxury products positively.

METHODOLOGY

METHOD

To achieve the research objective, researcher distributed 378 questionnaires to respondents. There are three fashion brands used as objects in the questionnaire. In choosing the fashion brands, researcher pays attention to number of their following and followers on Instagram. One brand has high follower and low following, another one is the opposite, whereas the last one has moderate following and follower numbers. Sampling method used is judgement sampling where there are several criteria for the respondents. Criteria in choosing respondents are Indonesian female Instagram users between 17 – 35 years old. The main target is people living in big cities because they have more access to social media and internet. Researcher focuses in studying female respondents because in Indonesia female have higher tendency to purchase fashion products online. Age between 17 – 35 years old are chosen to

participate in this study because social media user including Instagram are mostly young adults.

Data gathered from questionnaire is summarized on Microsoft Excel. Each question representing sub-variable is coded before it is copied to SPSS software. The data analysis process takes place in SPSS. Confirmatory factor analysis is performed to reduce data from the sub-variables into variables. To analyze the relationship between each variable in the framework, regression analysis is performed. Multiple regressions method is used following the proposed conceptual framework of the study considering the independent variable is more than one. For intervening variable, path analysis is used to calculate the total effect the independent variable to the dependent. Hierarchical moderate multiple regression is also used to analyze the moderating effect when there is a moderating variable.

MEASUREMENTS

There are 13 variables in total being studied in this research. Rating scale and semantic differential scale are the measurements used in this research. Rating scale is chosen to estimate magnitude of a characteristic. All scales in the questionnaire range from 1 – 10. Each question may have different attribute for the scale, so the description of number 1 – 10 is also included in the table (for example: 1 for strongly disagree until 10 for strongly agree). As for semantic differential scaling is used to rate the bipolar adjectives, such as good – not good and favorable – not favorable.

Table 1: Measurements

VARIABLE	AUTHOR
Brand Image and Quality	Devon DelVecchio, (2000)
Brand likeability	Bang Nguyen, T.C. Melewar & Junsong Chen (2013)
Brand reliability	Delgado, 2004; Delgado et al., 2003
Perceived usefulness	Ko, Kim, & Lee (2009)
Perceived ease of use	Venkatesh, Ramesh, & Massey (2003)
Materialism Belief	Richins and Dawson (1992)
Product Information Beliefs	Ducoffe (1996)
Brand Consciousness	Shim and Kotsiopulos (1993)
Attitude toward Brand	Lutz, MacKenzie, & Belch (1983)
Attitude toward Advertising on Instagram	Pollay and Mittal (1993)
Attitude toward Brands advertised on Instagram	Joe Gladstone, Jon Jachimowicz, Nick Siantonas, James Caig, Stephen Donajgrodzki (2014)
Fashion Innovativeness	Goldsmith and Hofacker's (1991)
Purchase Intention on Instagram	Yoo and Lee (2009)

VALIDITY AND RELIABILITY

To test reliability of data, Cronbach Alpha test is used where each variable must have value above 0.6. Since each variable has several indicators or sub-variables, confirmatory factor analysis is also performed. KMO value needs to be above 0.5 to be stated as valid.

Table 2: Statistic, Validity, and Reliability Results

Construct	Mean	Cronbach's Alpha	KMO	Bartlett's Test of Sphericity			Extracted Variance
				Chi-Square	df	Sig.	
Brand Image Famous	6.281	0.892	0.809	4952.138	55	.000	63.381
Brand Image Not Famous	5.026	0.900	0.809	4952.138	55	.000	11.776
Brand Likeability Famous	7.224	0.890	0.922	12937.334	210	.000	66.436
Brand Likeability Not Famous	5.638	0.900	0.922	12937.334	210	.000	12.818
Brand Reliability Famous	7.006	0.892	0.856	6029.779	66	.000	66.072
Brand Reliability Not Famous	5.298	0.901	0.856	6029.779	66	.000	14.324
Perceived Usefulness	6.624	0.888	0.857	1793.260	15	.000	71.410
Perceived Ease of Use	6.589	0.891	0.742	944.038	3	.000	87.485
Materialism	4.962	0.894	0.861	1397.744	15	.000	67.375
Product Information	6.458	0.891	0.708	458.449	3	.000	75.416
Brand Consciousness	4.803	0.894	0.712	647.917	3	.000	80.922
Attitude toward brand	6.524	0.890	0.677	2057.114	15	.000	69.810
Attitude toward Instagram adv	5.926	0.893	0.511	339.960	3	.000	60.004
Attitude to famous brand on Instagram	7.338	0.892	0.749	1977.208	15	.000	68.801
Attitude to not famous brand on Instagram	5.903	0.902	0.749	1977.208	15	.000	16.679
Fashion Innovativeness	3.824	0.897	0.856	1551.649	15	.000	67.687
Purchase Intention	6.141	0.890	0.618	187.018	3	.000	60.129

From 378 data analyzed, all of them are stated valid and reliable. However, there are four

variables divided into two new components. The components represent type of brand used in the questionnaire, where it turns out that it can be divided into two – famous and not famous brand. This results in slight changes in the framework especially for Attitude toward Brands advertised on Instagram. Two variables predicted to influence Attitude toward Brands advertised on Instagram will be tested twice in the regression analysis.

FINDINGS

CONSUMER BEHAVIOR ON INSTAGRAM

This section explains general consumer behavior related to fashion brands on Instagram. The result shows that only 3.44% of respondents are not familiar with online shopping with Instagram. Furthermore, 81.22% have in fact bought fashion products through Instagram. From this data, we can see that Instagram is a popular marketing channel and people are familiar with the application being used commercially rather than just photo-sharing app.

Table 3: Consumer Behavior

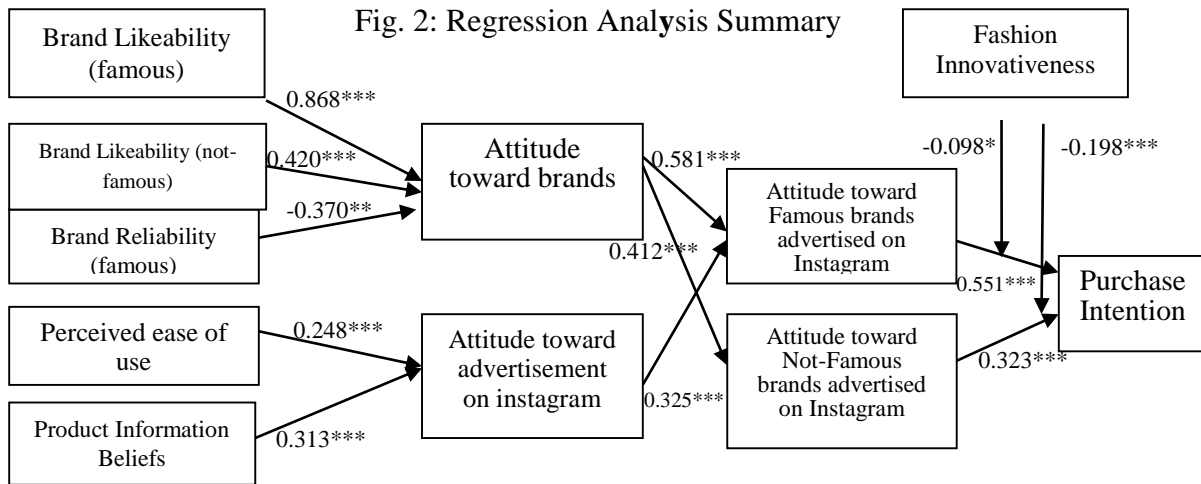
QUESTIONS	CHOICES	PERCENTAGE
Are you familiar with online shopping using Instagram?	Yes	96.56%
	No	3.44%
Do you use Instagram as a medium to search for goods online?	Yes	41.27%
	No	11.64%
	Sometimes	47.09%
How many times have you bought fashion goods promoted on Instagram?	Never	18.78%
	1 time	13.49%
	< 5 times	37.57%
	5 – 10 times	24.60%
	>10 times	5.56%
Do you follow Instagram account of fashion brands?	Yes	74.07%
	No	25.93%
How often do you “Comment” on photos of the brands’ Instagram accounts?	Never	75.13%
	1 time	8.47%
	< 5 times	14.55%
	5 – 10 times	1.85%
	>10 times	0%
How often do you “Like” on photos of the brands’ Instagram accounts?	Never	21.69%
	1 time	11.9%
	< 5 times	27.25%
	5 – 10 times	20.63%
	>10 times	18.52%

As for the interaction behavior between Instagram users and fashion brands’ Instagram account is measured by three categories; follow, like, and comment. From the data, we see that 74.07% of 378 respondents follow fashion brand accounts on Instagram. However, commenting on the brand accounts’ post is not common for them. There are 75.13% of respondents who never comment on the fashion brand Instagram they follow. On the other

hand, liking pictures posted by brand Instagram account is often done by users. So liking pictures can increase the interaction between followers and brand on Instagram. From three features Instagram have (follow, comment, and like), follow and like are the ones that support interaction between followers and fashion brands the most.

RELATIONSHIP BETWEEN VARIABLES

To find the relationship between variables as presented in framework, multiple-regression analysis is performed. Independent variables show significant influence or effect toward dependent variable when the significance is below 0.05. Individual significance is also considered to understand which independent variable individually influences the dependent. Individual beta value represents which independent variable gives stronger effect compared to the others while negative value shows negative effect. Figure below shows the significant relationships where * for $0.01 < p \leq 0.05$; ** for $p \leq 0.01$; *** for $p = 0.000$



Surprisingly there are several different results compared to previous researches. Adapting TAM by Davis (1989), Product Information Beliefs, Perceived Ease of Use, and Perceived Usefulness are predicted to influence Attitude toward Advertising on Instagram. However, Perceived Usefulness shows not-significant result in influencing Attitude toward Advertising on Instagram (Beta=0.128; $p=0.078$). The biggest influence is given by Product Information Beliefs (Beta=0.313; $p=0.000$). It shows that Instagram users really value the information given by brands on Instagram. This is supported by the fact that Instagram offers more space to create caption compared to Twitter which only provides 140 characters. Their attitude is also supported with the easiness of using Instagram as a platform to search for fashion brands and products. Result for Brand Consciousness and Materialism Beliefs supports previous research by Chu, Kamal, & Kim (2013). Brand Consciousness is found not to have significant effect to Attitude toward Advertising on Instagram (Beta=0.082; $p=0.089$) as well as Materialism Beliefs (Beta=0.046; $p=0.338$). Generally respondents do not have high mean in Brand Consciousness and Materialism Beliefs as well. The result shows that Instagram users in Indonesia do not pay attention too much on kinds of brands. Materialistic lifestyle also does not affect on how they perceive Instagram advertising because Instagram is an open

application where everyone can freely use it for searching fashion products.

Attitude toward brands is predicted to be influenced by variables with distinguished perception between famous and not-famous brand. From three variables, the result shows only two significantly influence Attitude toward brands. Brand Likeability Famous brand (Beta=0.868; $p=0.000$) and Brand Likeability Not Famous Brand (Beta=0.402; $p=0.000$) both significantly influence Attitude toward brands. In fact, Brand Likeability Famous brand gives the strongest effect. It shows that famous brand can highly create certain perception and attitude compared to not-famous ones. Brand Reliability Famous Brand is also significant to Attitude toward brands (Beta= -0.370; $p=0.005$) but the result is surprisingly negative instead of positive. It means that the more reliable the famous brand is, it will affect attitude negatively. Indonesia is an emerging country with high low-middle economy and people are not highly brand-conscious. People with low-middle economy mostly still do not understand and believe on famous brand because they think these brands are the same with the not-famous ones. Indicator for brand reliability includes ability to keep promise and intention to maintain consumers' welfare. However, many people in Indonesia do not really pay attention to them and mostly care about price. So even though the famous brands are very reliable, people will still perceive them negatively because other features such as price are more important to them. On the other hand, Brand Reliability Not-Famous Brand is not significant (Beta= -0.049; $p=0.610$). The result actually resembles that Instagram users do not actually care with the fame a brand has. Brand Image and Quality Famous brand (Beta=0.021; $p=0.848$) and Brand Image and Quality Not-Famous brand (Beta= -0.045; $p=0.519$) shows not significant result. It is different from research by Husic and Cistic (2008). Instagram is a social media where people cannot actually measure the quality and this might be the reason on why the construct does not affect attitude.

Attitude toward Famous Brand Advertised on Instagram and Attitude toward Not-Famous Brand Advertised on Instagram shows different result. Attitude toward Famous Brand Advertised on Instagram is proven to be influenced significantly by Attitude toward brands (Beta=0.581; $p=0.000$) and Attitude toward advertising (Beta=0.325; $p=0.000$) whereas Attitude toward Not-Famous Brand Advertised on Instagram is not influenced by Attitude toward advertising on Instagram (Beta= -0.037; $p=0.464$). It means that when it comes to not-famous brand Instagram users only pays attention to their attitude toward brand. They do not really care about the the platform used by the brands where in this case is Instagram. Attitude toward brand gives stronger effect because people will base the attitude from the brand first not the platform brands use. When the attitude toward brand has been formed, the platform – in this case Instagram will increase the influence. Furthermore, one brand can have many platforms as marketing channels but to form certain attitude on Instagram advertising the brand creates people will need the general attitude based on other platforms as well.

Purchase intention is significantly influenced by Attitude toward Famous Brand Advertised on Instagram (Beta=0.551; $p=0.000$) and Attitude toward Not-Famous Brand Advertised on Instagram (Beta=0.323; $p=0.078$). Attitude toward Famous Brand Advertised on Instagram gives stronger effect to purchase intention. So famous brand has bigger chance in increasing purchase intention using Instagram. Appearance on Instagram page is really important. Famous brand has more effort and ability in posting higher quality picture for Instagram. So people's attitude toward the Instagram page will be better hence increasing the purchase

intention. However, Attitude toward brands does not give significant influence to Purchase Intention (Beta=0.0.21; $p=0.851$). This result shows that Attitude toward brands can only give indirect effect to Purchase Intention through Attitude toward Famous Brand Advertised on Instagram and Attitude toward Not-Famous Brand Advertised on Instagram. This means Instagram users do pay attention to fashion brands' Instagram and need to create attitude toward the Instagram advertising first. The attitudes are what will affect purchase intention. They pay attention to not only how they perceive about the brand, but further about the brands' Instagram as well.

Fashion Innovativeness becomes moderating variable in the framework. Actually the prediction is that fashion innovativeness gives positive moderating effect. However the result shows that fashion innovativeness negatively moderates Attitude toward Famous Brand Advertised on Instagram and Attitude toward Not-Famous Brand Advertised on Instagram with purchase intention. So when fashion innovativeness is higher, it will decrease or weaken the relationship between attitude and purchase intention on Instagram. This result is different from previous result by Wang and Cho (2012).

CONCLUSION

Researcher finds that on Instagram fashion brands' fame can be differentiated especially regarding attitude and perception. Variables influencing attitude toward brand advertised on Instagram especially are divided into two categories for famous and not-famous brand. From the analysis, brand likeability both for famous and not-famous brand significantly influence attitude toward brand positively. Surprisingly, brand reliability for famous brand is found to negatively influence the attitude. When a fashion brand is famous and reliable, consumers might have a perception that it will create negative attitude toward the brand.

This research shows different result regarding TAM by Davis (1989). Results show that only Perceived ease of use and product information beliefs of TAM variables are significant to the attitude. This means consumers pay attention to how easy Instagram is for fashion advertising and the information those advertisements can give to them. In this study attitude toward brand is predicted to influence on consumers attitude toward the brands' Instagram advertising. Interestingly, there is different result for famous and not-famous brand. For famous brand, the attitude is both influenced by general attitude toward the brand and attitude toward Instagram advertising. However, attitude for not-famous brand is merely influenced by attitude toward brand. So the general attitude toward brand is really influential in measuring attitude for the brands' Instagram advertising.

As for purchase intention on Instagram, there is only indirect effect from attitude toward brand through the attitude toward brands' advertising on Instagram. So what influences purchase intention on Instagram has to be related to Instagram advertising rather than general attitude. Both attitude for famous and not-famous brand are found to positively influence purchase intention. For moderating effect by fashion innovativeness, the result shows that it negatively moderates the relationship. So this variable will decrease or weaken the relationship instead of strengthening it.

This study is executed with the hope of revealing more about Instagram being a fast-growing social media. Studying about purchase intention and consumer behavior in using Instagram become more important for business owners in order to keep the pace with technological development. Hopefully the results from this study can open people's mind about Instagram

being used as marketing channel and for business owner to understand it more thoroughly on makin it more beneficial to them.

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HEDONIC AND UTILITARIAN SHOPPING VALUE EFFECT ON CUSTOMER SATISFACTION IN GROCERY SHOPPING

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ABSTRACT

This study aims to examine the motivation value in grocery shopping such as hedonic value and utilitarian value effect to customer satisfaction. This study used Confirmatory Factor Analysis (CFA) to measure the model and Structural Equation Modeling (SEM) to confirm the hypothesis. The result confirms that hypothesis of both hedonic and utilitarian shopping value has significant effect on customer satisfaction.

Keywords: Hedonic Value, Utilitarian Value, Grocery Shopping, Customer Satisfacti

INTRODUCTION

Grocery shopping can be considered as a routine, basic and necessary task in consumer's daily lives. Consumers usually buy something that include in the category of Fast Moving Consumer Goods (FMCG) for their daily needs. Marketers and retailers often seek reason of why people go shopping in order to survive in competitive marketplace. Some researchers argue that the motivation of customers go shopping relies on their customers value. Holbrook (1994) suggests that total consumer value emerges from a consumer' experience of consuming a product/service and also, the sources of value is from extrinsic and intrinsic dimension (Kwik, 2002).

Extrinsic value is derived from the task of acquiring and/or using a product. This value is associated with the utilitarian aspect of an exchange (Babin, Darden & Griffin, 1994, Ryu *et al*, 2009). Thus, extrinsic value comes from what a product does and not only what it is or has. Intrinsic value, on the other hand, is associated with the attributes inherent in a product and relates to the hedonic value of a product or the exchange experience to acquire the product (Babin et al, 1994, Kwik, 2002).

According to Kwik (2002), from the sources of customer value, it is clear that value is consist of both functional (extrinsic or utilitarian) sources and also emotional (intrinsic or hedonic) sources. This also similar with other researchers result that found that shopping provides both task-related, product acquisition, and hedonic value through responses evoked during the experience (Babin et al., 1994; Bloch & Bruce, 1984; Bloch & Richins, 1983; Kwik, 2002). Babin et al. (1994 at Hanzaee and Ezaeyeh, 2012) introduced two types of shopping values by developing a scale measuring both hedonic and utilitarian values obtained from the pervasive consumption experience of shopping. According to Batra and Ahtola (1990 at Hanzaee and Razaeyeh, 2012), consumers purchase goods and services and perform consumption behavior for two basic reasons: (1) consumatory affective (hedonic) gratification (from sensory attributes), and (2) instrumental,

utilitarian reasons. In general, consumers perceive utilitarian value by acquiring the product that necessitated the shopping trip while simultaneously perceiving hedonic value associated with the enjoyment of the shopping experience itself (Carpenter, 2008; Hanzaee & Irani, 2011).

Recently, researchers agreed that the shopping experience provides consumers with a combination of utilitarian and hedonic shopping value (Holbrook & Hirschman, 1982; Babin et al., 1994; Babin & Darden, 1995; Babin et al., 2005; Jones et al., 2006; Cottet et al., 2006; Seo & Lee, 2008; Carpenter, 2008; Lee et al., 2009; Hanzaee & Irani, 2011). In Indonesia, consumer usually going grocery shopping to purchase their daily needs in some retails that spread across country. The growth of retail industry in Indonesia increased over year. According to Tradingeconomics.com (2015) stated that “retail sales in Indonesia increased 22.90 percent in June of 2015 over the same month in the previous year”. Moreover, Indonesia now has more than 765.000 retails that will trigger consumers to shop (Trade, 2014).

To measure how two dimensional of value (hedonic and utilitarian) has been experienced and perceived by customer in grocery shopping, it necessary to measures the experience by knowing customer satisfaction. In recent studies, limited research has been conduct to examine two-dimensional value (hedonic and utilitarian value) and its impact on outcome variables such as customer satisfaction, especially in the grocery shopping. Customer satisfaction is important to achieve and also one of the most critical marketing priorities because it is generally assumed to be a significant determinant of repeat sales, positive word-of-mouth and customer loyalty (Ryu and Han, 2010; Hanzaee & Rezaeyeh, 2013). This study aims to fill in these gaps. This study is concerned with value that consumers derive from the grocery-shopping activity since the previous study is mostly about online shopping and other object such as apparel (Anckar et al., 2002; Kervenoael, R. D. et al., 2006; Irani, N., & Hanzaee, K., 2011; Chang, 2002). The value drivers of shopping for a basic need, such as groceries, are distinct from those for other goods. Within the scope of the grocery shopping activity, thus the purpose of this study is to explore the relationship among customer shopping value (hedonic and utilitarian value) to customer satisfaction when grocery shopping in some retails in Indonesia.

LITERATURE REVIEW

Value can be considered to be resultant of a consumer’s overall evaluation process (Kwik, 2002). Fundamentally, consumers buy (or patronize) on value (Gale & Wood, 1994; Kwik, 2002).

HEDONIC VALUE

Hirschman and Holbrook (1982) in Ryu *et al* (2010) described consumers as their “problem solvers” or in terms of consumers seeking “fun, fantasy, arousal, sensory stimulation and enjoyment”. They also added that hedonic value can be distinct as being “more subjective and personal than its utilitarian counterpart and resulting more form fun and playfulness than from task completion” (Hanzaee and Rezaeyeh, 2013). From this definition, hedonic is come from consumer’s mind to fulfilling their needs related to self contentment. This also support what Sarkar (2011) argued that hedonic consumption involves emotional arousal taking place while purchasing or consuming.

Hedonic value will drive to hedonic consumption. Within hedonic consumption, different types of emotional feelings, which are both physiological and psychological, play major roles. Hopkinson & Pujari (1999) have explained how hedonic consumption takes place in a high-involvement situation, where an individual is deeply involved in experiencing a consumption event), the level of hedonism is expected to be higher. (Sarkar, 2011)

UTILITARIAN VALUE

Hanzeee and Rezaeyeh (2013) define utilitarian consumer behaviour as ergic, task-related and rational. Utilitarian shopping value may come when consumers choose to buy/enjoy the product by the benefit that can be obtain from the product itself. Hanzaee and Rezaeyeh agreed that utilitarian shopping value might depend on the situation of consumer itself, “whether the particular consumption need stimulating the shopping trip was accomplished.

Utilitarian shopping value often relate to shop efficiently. Consumers will use wisely their time and money compare to the benefit that found in the product. Ryu *et al* (2010) conclude that “utilitarian shopping value involves the fulfillment of instrumental expectations consumers may have for the product or service and are a means to an end often equated with rational motives of time, place and possession needs.

Previous research by Rintamäki et al. (2006) had decomposed the total shopper/customer value into three value called hedonic, utilitarian, and social. Specifically in utilitarian value, customer experience it when their task-related needs were fulfilled with stresses on functional or product-centric. When customer can find discounted product or has lower prices than competitor retails, the utilitarian value can increase (Rintamäki et al., 2006). In other words, monetary savings and convenience has big contribution to utilitarian value.

CUSTOMER SATISFACTION

According to Oliver (1996) in Ryu *et al* (2010), customer satisfaction is customer fulfillment response. Oliver (1996) also added that customer satisfaction is “a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under-or-over fulfillment.” Customer satisfaction might occur after the evaluation process from product/service that they use before. If the benefit from the product/service they use is greater that what they are expected, the satisfaction may occurs from customer. Hanzae & Irani (2011) and Oliver (1993) concluded that consumption value may enhance satisfaction.

Shopping values are significant to understand how a consumer evaluates shopping (Hirschman and Holbrook, 1982; Babin et al., 1994; Eroglu et al., 2005; Jones et al., 2006; Bridges and Florsheim, 2008; Ryu et al., 2009). Other researchers stressed the impact of shopping values on satisfaction (Babin et al., 1994; Jones et al., 2006; Cottet et al., 2006; Carpenter, 2008). Previous study measures shopping value with how customer evaluates their shopping. Clearly, utilitarian and hedonic values are considered fundamental to understanding consumers’ evaluations of the consumption experience because they maintain a basic underlying presence across consumption phenomena (Babin et al., 1994; Bridges and Florsheim, 2008; Chandon et al., 2000; Childers et al., 2001; Eroglu et al., 2005; Hirschman and Holbrook, 1982; Homer, 2008; Jones et al., 2006; Ryu, 2009).

Thus, in this study we adopted this two-dimensional conceptualization of consumer value: The first dimension is a utilitarian dimension resulting from work aspects, and the fulfillment of intrumental expectation consumers may have for the product and service and the second is a hedonic dimension derived from the fun perspective (Babin et al., 1994; Babin et al., 1994; Eroglu et al., 2005, Ryu *et al*, 2009). Babin et al (1994) showed that both hedonic and utilitarian value obtained from a shopping experience should influence customer satisfaction (Ryu *et al*, 2008). So the hypotheses for this study are:

H₁. Hedonic Value has significant effect on Customer Satisfaction

H₂. Utilitarian Value has significant effect on Customer Satisfaction.

Consumers are influenced by both utilitarian and hedonic shopping value when they make the decision to buy. They prefer some products to satisfy their hedonic desires and some to meet their utilitarian expectations (Westbrook and Black, 1985; Kwik, 2002). So the hypothesis is:

H₃. Hedonic and Utilitarian associate with each other.

METHODOLOGY

The data were collected using a survey methodology. Using online survey, the data was distributed to consumer who often doing grocery shopping in some several area, such as Jakarta, Bandung, Bekasi, Tangerang, Depok, Bogor and some area in Central Java. The sample sizes for this study are 205 respondents. According to Malhotra and Peterson (2005), for market research minimum respondent are 200 respondent and also SEM in general requires a larger sample relative to other multivariate approaches (Hair, 2006). Data was carried out between two weeks in April, 2015.

The survey included demographic characteristics, hedonic shopping items, utilitarian shopping value items and customer satisfaction. Questionnaire items were developed based on origin studies from Babin (1994) and used in some later studies (Babin et al, 1994; Ryu, et al, 2009, Hanzae & Irani, 2011; Bakirtas et al, 2015). The measures consisted of hedonic shopping values (Babin et al, 1994; Ryu, et al, 2009, Hanzae & Irani, 2011; Bakirtas et al, 2015), utilitarian shopping values (Babin et al, 1994; Ryu, et al, 2008, Hanzae & Irani, 2011; Bakirtas et al, 2015) and customer satisfaction (Erouglu ve Machleit, 1990; Li, 2004; Ryu, et al, 2008, Hanzae & Irani, 2011; Bakirtas et al, 2015). This study were used a seven-point Likert scales (1= strongly disagree to 7 strongly disagree). The construct for questionnaire can be seen in Table 1.

Table 1: Construct Variable

Variable	Construct	Estimates	t-values
Hedonic Shopping Value	- Truly a joy	1.04	10.73
	- Like an escape from daily routine	1.15	8.62
	- Truly enjoyable	1.22	12.32
	- Excited finding new products	1.37	13.02
	- Feel the excitement of the hunt	1.36	12.95
	- Shop not because i have to, but i want to	1.12	9.60
	- Forget other problem while shopping	1.54	11.40
	- Feel sense of adventure	1.26	11.76
	- Release stress	1.49	15.15
	- To feel better	1.41	13.87
Utilitarian Shopping Value	- I got what i expected	0.23	13.12
	- Accomplish what i want	1.07	11.44
Customer Satisfaction	- Pleasant experience	0.95	----
	- Makes happy	1.29	12.47
	- Put in a good mood	1.31	12.95
	- Satisfied	1.35	13.02

Structural Equation Modeling (SEM) with a Maximum Likelihood (ML) was used to analyze the hypotheses. SEM provides a comprehensive framework in which to estimate complex sets of relationships and incorporate specific measurements properties of latent construct as well (Hair, 2006). Structural model was performed using LISREL 8.72. The measurement model was

constructed to estimate the relationships between constructs and their indicators before the hypothesized structural models were tested. Measurement model was assessed using Confirmatory Factor Analysis (CFA). CFA is used to eliminate the need to summated scales (Hair, 2006).

RESULT

SAMPLE PROFILE

From 205 respondent, descriptive information of the sample for this study showed that 29% respondent (n=61) were male and 71% were female (n=144). The respondent were mostly live in three big cities, such as Bandung, Jakarta and Bekasi. There are three types of retail store according to the size that they often visit, first is hypermarket. There are two retail store that respondent usually visit to grocery shopping, first is Carefour, Lottemart and Hypermart. For supermarket type, the retail store that they often visit such as Giant, Yogya, Hero, Borma and Lottemart Supermarket. Last, for the minimarket type, the store they often visit are Indomaret and Alfamart.

MEASUREMENT MODEL

Prior to conducting Structural Equation Modelling (SEM), a measurement model was assessed. The items were subjected to a Confirmatory Factor Analysis (CFA) using Maximum Likelihood estimation. The fit statistic showed that the measurement model fit the data well. All standardized factor loading emerged fairly high and were found to be significant ($p < 0.05$). Data also confirmed the scale as the factor loadings are greater than 0.5 and each item contributes to the formation of only one factor that can be seen in Table 2. All of the fit indices were acceptable (RMR = 0.18; SRMR = 0.06; GFI = 0.82; NFI = 0.96; NNFI = 0.97; IFI = 0.97; CFI = 0.97; RMSEA = 0.079]. All standardized factor loadings emerged fairly high and were found to be significant ($p < 0.00$), thus it showed that all of the latent variables were determined by observed variables.

Table 2: Factor Loading Result

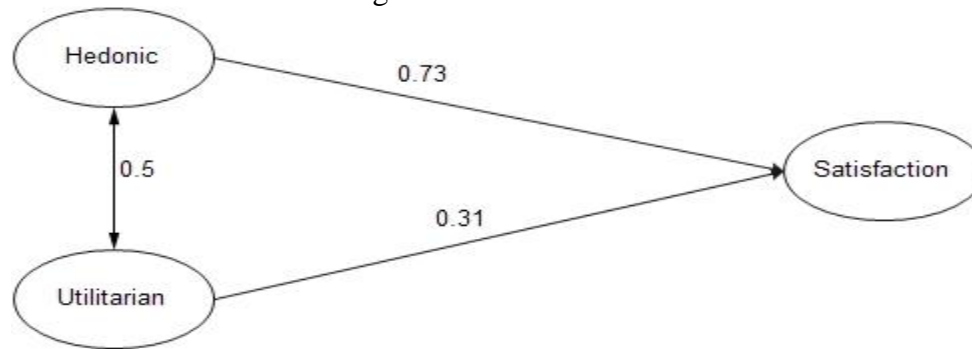
Construct	Questions	Standardized Factor Loading
Hedonic Value	H1	0.81
	H2	0.73
	H3	0.78
	H4	0.79
	H5	0.78
	H6	0.62
	H7	0.71
	H8	0.70
	H9	0.84
	H10	0.80
Utilitarian Value	U1	0.81
	U2	0.64
Satisfaction	S1	0.72
	S2	0.89
	S3	0.93
	S4	0.92

STRUCTURAL MODEL

A structural analysis was analyzed using the maximum likelihood estimation method to examine the hypothesized relationships among construct. Overall, the fit indices indicated a model fit ($\chi^2 = 288.49$, $df = 127$, $p < 0.000$; RMR = 0.045; SRMR = 0.043; RMSEA = 0.079; GFI = 0.87; CFI

= 0.99; NFI = 0.97; NNFI 0.98; IFI = 0.98). The result for structural model can be seen in Figure 1. The relationship between hedonic and customer satisfaction is significant ($y=0.73$, $t\text{-value} = 9.75$, $p<0.000$). It indicates that hypothesis 1 is supported. A direct relationship is also found from utilitarian value to customer satisfaction that supported hypothesis 2 ($y=0.31$, $t\text{-value}=6.11$, $p<0.000$). There are correlation matrix between two independent variables, hedonic shopping value and utilitarian shopping value about 0.50 ($t\text{-value} = 7.51$) and it supported hypothesis 3.

Fig. 1: The SEM Result



DISCUSSION AND CONCLUSION

The purpose of this study was to examine the relationships among hedonic and utilitarian values effect on customer satisfaction. The finding of this study presents new insight and implications for retail stores in Indonesia, especially for market research focus in grocery shopping activities. There are positive relationship between hedonic shopping and customer satisfaction. This confirm that grocery shopping in retail store in Indonesia also consist of hedonic shopping value. Because to date in Indonesia, the ambience and the retail store concept in Indonesia became more convenient to shop. So it makes customer feel joy, enjoyable and makes customer feel better and effect on their satisfaction in grocery shopping activities.

Utilitarian shopping value also found in the grocery shopping activities. But the lower effect found when it compares to hedonic shopping effect on satisfaction. This might be because customer shop for only daily needs and they do not enjoy in their shopping activities. Also, there are correlation between hedonic and utilitarian shopping value. They prefer some products to satisfy their hedonic desires and some to meet their utilitarian expectations.

This study offers new insights into the nature of consumers' utilitarian and hedonic value and their effect on customer satisfaction in grocery shopping. This study have broader theoretical implications to understanding the role of utilitarian and hedonic shopping value and to the development theory itself in the context of customer activities such as grocery shopping. Grocery shopping actually in the blur lines between hedonic and utilitarian, with theoretical validation that these two value can effect customer satisfaction as well.

Besides the theoretical implication, this study also give new insight for market research to understand about consumer behavior by identified their motivation value in shopping. Marketers now should recognize that motivation of people going grocery shopping not because they just need something for daily needs, but also hedonic shopping value play a role that will drive customer to shop because they really enjoy doing shopping.

The limitation of this study is this study only employs one dependent variable, such as customer satisfaction. For the future research, to understand more and exploring more about this value, future research can use other variable such as behavioral intention etc. Second, this study use online survey to distribute the questionnaire. For the future research, researcher can cooperate with

retail companies to gather the data from direct customer.

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BEHIND EVERY SUCCESSFUL WOMAN ENTREPRENEUR IN KELANTAN, THERE IS A MAN?

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ABSTRACT

It is a time-honored proverb that says “behind every successful man stands a woman” usually a supportive wife. This proverb clearly shows man success is not by him alone, but largely contributed and associated by woman who plays significant role factor even one could not be easily see but not necessary not unimportant.

Interestingly in Kelantan, being the cradle of Malay culture and relatively more conservative compared with other states, women gender role identity is more propounding and proactive. Kelantan Malay Muslim women are very economically inclined, as a result Kelantanese males who seem to assist their wives are being portrayed as lazy. This paper investigated the roles of husbands of successful women entrepreneurs in the said state. Using in-depth interviews with a score of entrepreneurs and their spouses, the results of the study found Kelantanese males play significant roles of their wives success. However, their roles have been adjusted to supporting roles as they come to term of their wives superior business acumen. The so-call soft roles that they played, even look trivial by some actually paramount important. The study found that husbands do give supports, emotional and tangible, to their wives’ business endeavors. This study provides justice to Kelantanese males in particular and other males who play the same roles in general.

INTRODUCTION

It is a time-honored proverb that says “behind every successful man stands a woman” usually a supportive wife. This proverb clearly shows man success is not by him alone, but largely contributed and associated by woman who plays significant role factor even one could not be easily see but not necessary not unimportant. In reality success requires co-operation. Conversely, it is also a time-honored norm that man, being a more masculine sex, heads the family can contribute to his wife success even though his role seems trivial, unimportant and easily overlooked by many. As time change, so is the gender relationship. The male gender has to adapt to this new relationship. Being authoritative and ensuring financial security to family is not enough in the current gender-equality world. The husbands are expected to share in household chores as well as to value the opinion of their wives (World Bank Report, 2012)

“Men are adapting, but in many cases not as fast as women are changing their views and ways” reported World Bank Report (2012). Therefore it is not unusual to find the women, actively participating in business undertakings and employments in the developing world, such as Malaysia. In fact, in the developing world, more often than not we will see more women selling produce in the town market than men; more women than men in the factory production line; more women are joining the white-collar employment.

Thus, the notion of seeing husbands behind successful women will not be far-fetch, moving forward. Already there are many successful women manning large corporations they helped found. For example, Diane Foreman, founder and chairperson of Emerald Group that created the ‘NZ

Natural' brand; Wendy Sui Cheng Yap, co-founder and CEO, of Nippon Indosari Corpindo, Indonesia that sells cake and bread; Shireen Ann Zaharah Muhiudee, founder and principal fund manager of Corston-Smith Asset Management, Malaysia manages USD 500 million funds.

In Malaysia male dominate participation in commerce and civil activities. Culturally male is still the head of the family even though Malaysia society. As head of the family, the husband is expected to provide financial stability, and make key decision making for the family, especially in the sphere of children's education, acquisition of major family assets, and children's marriage. Wife is expected to be obedience and be the homemaker. In recent time, the Malaysian government policy on gender equality has encouraged and empowered women. Women participation in commerce and education has increased. Consequently it is not uncommon to find the fairer sex outperforming their male counterpart academically, socially and commercially.

Interestingly in Kelantan, being the cradle of Malay culture and relatively more conservative compared with other states, women gender role identity is more propounding and proactive. Kelantan Malay Muslim women are very economically inclined, this can be observed from the mainly women entrepreneurs in the main wet market of Siti Khatijah in Kota Bharu, and they also played key roles in many family-owned businesses. Even managing hardware business where overwhelmingly suppliers and customers are male.

While roles of each spouse is rather predetermined, it is interesting to note that their respective roles are sometimes intertwine and switched when one capabilities to handle business and financial survival are upmost important. Thus, it is observed that the Kelantan Malay Muslim husbands prefer to 'let' their business-inclined wives to engage in business activities. However, without husband's undivided support it is almost impossible for a successful women entrepreneur to perform their multifarious duties – entrepreneurs, wives and mothers.

It is against the above background, this paper investigates inherent roles played by Kelantanese men as husbands in supporting, or 'standing behind', the successes of their wives. This paper provides in-depth insights, understanding and finding out the 'how' and 'why' the husbands are playing the role they are playing. In addition this paper will also do justice to Kelantan males who are wrongly pictured as lazy and indolent without understanding the truth behind it.

RESEARCH GAP

Many researches had been conducted in Malaysia on women in commerce, and identifying their leadership styles. These are mainly typology-type of research. However, as far as the researchers are concerned no study on women entrepreneur and the roles of husbands behind their ventures (example, Zarina, S. et al., 2007; Chen et al. 2012; Raman, K. et al., 2008; Nurwahidah, F. et al., 2011). Furthermore, this research is timely as not much in-depth qualitative studies on successful women entrepreneur have been carried out (Hoe, et al., 2012), and no research was done on the role plays by the husbands in supporting the successes of their entrepreneurial wives in Malaysia. Looking on the onslaught of modernization and dual roles of husbands and wives which sometimes mixed and intertwined where the delineation of roles of husbands and wives less clear this research can be an eye-opener. It has been identified that family supports are very important for the career and business achievements of successful men. Conversely, it must be also important for the successful women entrepreneurs to have family supports, especially that of the husbands. However, not many have delved deeply and embarked on empirical research, this is why this paper is worthwhile and indeed timely.

Thus, there is a research gap that this research can help filled.

RESEARCH METHODOLOGY

RESEARCH DESIGN & STRATEGY

Research design deals with logic and strategy and not ethical issues of morality (Pettigrew, 1973), there are neither good nor bad methods but only methods that are more or less effective under particular circumstances in answering the research questions. Merriam (1998) cautions that in choosing a design strategy, it is important for the researchers to understand the philosophical foundation underlying the type of research, taking stock of whether there is a good match between the type of research and the researcher's personality, attributes and skills.

The selection of a particular strategy depends upon three conditions, namely, the types of research question; the control an investigator has over the phenomena; and whether or not the focus is on contemporary as opposed to historical event (Yin, 1994). Different strategy will follow different epistemological paradigms (Guba & Lincoln, 1981).

As shown in Table 1, Yin (1994) tabulated the above three conditions and showed how each is related to five major research strategies in social sciences - experiments, surveys, archival analysis, histories and case studies.

Table 1: Relevant Situation for Different Research Strategies

Strategy	Forms of research Question	Requires over behavior events	Focuses on contemporary events
Experiment	how, why	Yes	Yes
Survey	who, what, where how many, how much	no	yes
Archival analysis & History	who, what, where how many, how much	no	yes/no
		no	no
Case study	how, why	no	yes

Source: Yin, R.K.: *Case Study Research, Design and Method*. 2nd Ed. Sage Publication. P 6

Having given due consideration to suggestions by Yin (1994), Patton (1990) and Guba & Lincoln (1981) the preferred strategy for this research shall be the case study methodology employing focus and in-depth interview as the main means of data collection.

RESEARCH INSTRUMENT

Doing a qualitative inquiry that focuses on the meaning in context, the requirement for an instrument that is sensitive to the underlying meaning and responsive to the context is of primary importance (Merriam, 1998).

The researchers were the primary research instrument for data collection and analysis. Since the subjects of this research involved Malay, it is no problem for the researcher as he himself as a Malay, however the same is also applicable for the co-researcher as a Kelantanese Chinese. Since the latter was born and bred in Kelantan; fluent in Kelantan dialect; and understands the local business environment and the Malay culture. Therefore, he is capable to understand the dialect, interviewing and interpreting the conversation on his own, at par with other Kelantanese. Thus,

deemed reliable and acceptable for the purpose of this study.

RESEARCH QUESTIONS

The following research questions were adopted with the hope that they would help to address the objective of this research.

RQ 1: How have the husbands assisted in the success of the wife's entrepreneurial activities?

The question intends to seek answer to the perception of the husband i.e. how they see their roles vis-à-vis the wife's entrepreneurial business activities.

RQ 2: Why the husbands have 'accepted' to play the 'supporting cast' in the success of the wife's enterprise in contradiction to the traditional perception of the 'man of the house' role?

In the chauvinistic male dominant traditional society, it is not common to see husbands playing the role 'house-husband'. They are more often lookdown upon as 'boneless' and subordinated to the whips of the wives. Why then, within the context of the family, the husbands are prepared to go against the flow of the norms?

RQ 3: How the wife perceived the role of her husband in supporting her entrepreneurial business venture?

Holistically, the wives must have done something positive that encourages the husbands to accept the supporting role. How did they do it?

LITERATURE REVIEW

WOMEN ENTREPRENEURS

Participation of women in entrepreneurial activities in Malaysia is promoted as a way to supplement the family income (Ruzy et. al. 2012). Family economic factor was found to be the most important 'push factor' that motivate women to engage in business (Ruzy et. al. 2012; Hoe et al. 2012; Salleh and Osman, 2007). Drago, Black and Wooden (2004) noted that couple of today far less likely to rely solely on the male as the source of earned income.

At the same time, research also found many 'pull factors' that attracted women to business on their own. Notably, fulfilling dreams of financial independence and commanding social respect play a major role in 'pulling' women to join the rank of entrepreneurs (Ruzy et. al. 2012; Hoe et al. 2012; Salleh and Osman, 2007; Kavitha et al. 2008).

Women encountered many obstacles in their desire to be financially independent and realizing the dreams; and be accepted as equal in the family (OECD Report 2004; Kavitha et. al, 2008; Syed Shah et. al, 2011). Notably, they were not being given the opportunity to perform at the level they were capable of because of non-support by their spouses or the immediate family. Cheung and Halpern (2010) noted that women were able to overcome these barriers through their personal characteristics of perseverance and multi-tasking.

In a research by Nikina & Others (2013) they identified three theories that help to explain why husbands lend supports to their entrepreneurial wives. The three supportive theories are (i) Gender Role Ideology (GRI); (ii) Marriage Contract; and (iii) Psychology theory. The understanding and acceptance of the underlying precepts will determine the level of supports, i.e. emotional, business and household, the husbands lend to the entrepreneurial wives (Nikina et al., 2013). Komter et. al (2012) added "social capital theory" to explain why husbands lend support to the wives' entrepreneurial activities.

GENDER ROLE IDEOLOGY AND MARRIAGE CONTRACT

Emotional support from spouse was found to have positive correlation to entrepreneurial success (Nurwahidah and Abdul, 2011; Machado, 2000). Family and partner's support were recognized as playing an important role in the women's achievement (Cheung and Halpern, 2010). The women's leadership role is characterized by interconnectedness of social and family lives. Supports are important means for them to balance their social role, personal role and professional lives. Work and family are not two distinctive spheres but are more permeable in the case of women entrepreneurs as compared to the male counterpart. Family interference with work is significantly higher for women in the 'traditional' family than 'egalitarian' one. This is not the case with the male gender (Rajadhyaksha and Velgach, 2009).

Women entrepreneurs will display more family loyalty when they have spouse and extended family supports (Cheung and Halpern, 2010). The clash of being a wife and an entrepreneur at the same time is unavoidable. In the private and domestic domain, she is still bound by the norms and the culture. Being a Malay Muslim woman and in the conservative Kelantan, she is bound to show respect and obedience to the head of the family, i.e. her husband and serve her roles as the care giver to her children (Ruzy et. al. 2012; Suriani, 2014).

The expectations and obligations of each spouse in terms of marriage contract, more often unwritten, extend beyond financial assets each brings to the marriage. It is the perceptions and expectations of each individual spouse and the interaction between them that set the 'marriage contract'. The extend to which each spouse's expectation is satisfied determines the quality of their marriage (Nikina et al., 2013). By the same token, the success of the entrepreneurial endeavor depends on the understanding and expectation of each individual spouse in the marriage.

The embedded societal and cultural contexts in which Malay Muslim women entrepreneurs operate impacted and shaped their entrepreneurial identity (Suraini, 2014) and thus their marital quality (Nikia et. al., 2013). Suriani (2014) notes "these Malay Muslim entrepreneurial values are largely culturally and locally rooted, embedded in culture, tradition and religion". It is thus, unavoidable that her primary role as wife and mother clashes with her role as entrepreneur. As a Malay Muslim woman she is expected to show obedience to the head of the family, and serve the role of a homemaker (Ruzy et. al, 2012). May be this observation is universal. In a research in Holland, many dual-earner couple family, female still assume a secondary role in the family affair (Drago et. al., 2004). In a more egalitarian family, women will react more negatively to perceived inequalities, compared to women with traditional GRI (Minnotte et al., 2010 in Nikina et al., 2013).

THE WIFE'S BUSINESS AND PSYCHOLOGICAL CONTRACT

Psychological contract was initially used to describe employer-employee relationship. In the context of this research, psychological contract is viewed from the context to which the women entrepreneurs meet the expectation they initially set out to achieve. Women leadership tends to believe that they are democratic in dealing with their employees and display a more 'human side' of the management, at the same time project themselves as more trust-worthy (Chen et al., 2012). Nikina et. al (2013) suggested that husband impacts the psychological contract between the wife and the business through his interaction with his wife. In that, wife's handling of day-to-day management is influenced by husband's support shown and given. Her level of satisfaction and the sense of achievement are thus dependent on the perceived level of support from the husband.

THE WIFE'S BUSINESS AND SOCIAL CAPITAL THEORY

Komter et al., (2012) postulate that "... a partner's socioeconomic resources ... can help to

improve the other partner's socioeconomic position by providing access to personal contacts and information embedded in the network". Secondly, Komter et. al (2012) postulate that a more successful woman would perceive their partners to be more supportive and thus resulting in a more satisfying relationship. Thirdly, male partners egalitarianism in practice and belief facilitates their wives' achievement of success. Komter et al. (2012) further suggest that men who 'stand by' their wives in the sense of helping out at home and been available when needs arise, foster their wives economic success. It is men's supportive behaviors rather than the modernity of their attitude that counts. In another word, regardless whether they are egalitarian or not, the act of support is critical for the positive perception of the wife and the 'health' of the marriage.

FINDINGS

This is an exploratory study precursal to a fuller study being carried out. Three couples were interviewed for the case study. Their responses may represent a wider implication, however, a wider and more implicit conclusion can only be affirmed with a larger pool of case study analysis.

GENDER ROLE IDEOLOGY (GRI)

GRI refers to an individual attitudes and beliefs about the proper roles of men and women. It is conceptualized as falling on a unidirectional continuum ranging from traditional to non-traditional or egalitarian (Rajadhyaksha and Velgach, 2009).

This study found the role of men has indeed changed, despite the traditional expectations of the husbands as 'head of the family'; 'decision makers' and 'bread winner' in the traditional Kelantan culture. Likewise, the social norms and culture dictate that women folks suppose to be obedient and 'stand behind the husbands' have also changed.

When asked who manage the business, all respondents suggest that it's the wife. H1 commented that his wife is "... very motivated. She has better business acumen ... I am not".

While H2 is having his own electrical repair shop, but he knows next to nothing in the frozen food business, so he let his wife (W2), admitted H2, to run the said business.

H3 was 'married into' the business, as he put it. He readily admitted that his wife has a 'business blood' in her.

With respect to managing the business, all husbands take a back seat. Letting their wives to manage the day-today business operation. They have the confidence that their wives can manage on their own without undue interference from them. H2 leaves the operation and managing to his wife, saying that he does not know the business. H1 believes his wife to be a better businesswoman.

On issue of business support to their wives, H1 mentioned that they do discuss business over dinner with the intention of letting their kids to know the trade and getting them to be interested. H3 said although he and the wife do discuss, but it is the wife (W3) that made all major decisions. H2 mentioned that other than discussion on 'hardware aspect' or repair and maintenance of the business with his wife (W2), H2 indicated that he does not discuss business with his wife. This is in contrast to H3, who said that he does provide "option", as he put it, to his wife for consideration. Sometime when he (H3) observed that his wife (W3) is "down" he will try to talk to her and giving her suggestion or "option".

In the course of the interview, it was observed that all husbands felt proud of the achievement of their wives. Accolades and tributes are showered upon their wives. Clearly the husbands display 'open-mindedness' toward their wives' venture into business, and proud of their successes too. In fact H3 indicated that being brought up in Selangor (state), he was more 'open' to work-family relationship.

Although the wives may be running the business, they maintain their role as a caring wife and homemaker. When asked whether he (H1) help out with household chore after work, H1 said that he leave that to his wife (W1) indicating his more traditional thinking. However, H3 display a more egalitarian attitude towards helping with household chores. H3 said “I was brought up in Selangor ... helping out with household chore had been drilled into me since kid ...”. “So, helping my wife with house-work ... no issue lah.” H3 continued.

On their personal feeling about the wife seem to be earning better than them and the perception of the friends and families, H3 said “ada lah perasaan sedikit” (have some feeling), but accepted that is what she (W3) like to do and accept the idea that she (W3) is earning better than him. On the other hand H1 and H2 did not feel pressured nor encounter negative perception.

In conclusion, all husbands display certain degree of egalitarianism, but home-life reality, the husband still retain certain ‘head of the family’ role. It can be observed that Gender Role Identity in these cases had somewhat modified to suit the reality.

MARRIAGE CONTRACT

All sample husbands were found to be comfortable in their supportive role. H1 prefer his wife (W1) to handle the business affair as he finds his wife is better than him. H2 share the mutual understanding with his wife, i.e. he runs his electrical repair business and she her frozen food business. H3 accepted his wife’s ‘business in her blood’.

H2 helps in maintaining the air conditioners, the freezers and any repair need to be done in the shop. He would give her information on the type of freezer to purchase and how many of them to install.

H1 also expressed similar support given to the wife. H1 was the graduate of vocational training of MARA. He was ‘handyman’ for the business maintaining the bakery machineries.

H3, being a primary school teacher, felt that he has some ‘idea’ or ‘observation’ that he actively shared with his wife (W3). H3 indicted that he prefer to discuss and share knowledge with his wife late at night when all the kids have slept.

The study found that each party ‘settled’ down into their own role. And the ‘sharing’ of responsibility in running the business is by mutual consent. Their work-family lives have been time-tested and now each had found their ‘role’ being cut out by mutual understanding and arrangement.

PSYCHOLOGICAL CONTRACT

The theory of psychological contract as postulated by Nikina et al. (2013) that husbands support wife’s management of the business and the human resources.

The research found that husbands in the sample provided emotional and physical supports to their wives. H2 will always open the shop in the morning and will stay back to help to look after the shop while waiting for the employee to come in.

H1 mentioned that they (husband and wife) always invited their employees to have dinner with the family. Getting the employees’ trust is very important to W1. By close family-employee relationship the wife hopes to built trust.

H3 mentioned that he would always “provide an additional hand” during festival time or when worker did not turn up for work. H3 further indicated he would advice his wife (W3) on any labour-relation issue.

SOCIAL CAPITAL THEORY

When Komter et al (2012) suggested this theory in support of their research finding, they were saying in the context of both, husband and wife, are wage earner. The theory suggests that in the dual earner family, the husbands will help with more household chore when the wife is earning more than him. Through his personal networking and social contact he is able to enhance the wife's earning capacity. Taking the context of the theory, we are looking for clue where the husbands will step back and allow the wife to excel in the business knowing that the wives can help improve the financial wellbeing of the family.

We found both husbands (H1 and H2) readily allow their wives (W1 and W2) to manage the business as both admit that their wives have better business acumens than them. H3 mentioned that his wife (W3) had 'inherited' the business from her parents and she is capable of managing the business. Thus, no reason the 'disallow' her!

Being conservative, none of the husband said affirmatively of the positive financial contribution from the business venture, the accolade that they showered on their wives affirmed their satisfaction, especially when the business helps to bring in extra financial well-being.

DISCUSSION & CONCLUSION

The study found that husbands do give supports, emotional and tangible, to their wives' business endeavor. This comes in the form of helping out in the 'hardware' or 'muscle work' aspect of the business, such as assets maintenance and 'jaga kedai' (look after the shop) when there is staff shortage. In terms of emotional supports, the husbands provide understanding and 'lending' their ears to the wives by having discussion and exchanges of ideas.

Major decisions were discussed and agreed upon by the couple more often, informally over dinner. However, there were indications of wife taking lead role in business decision. This reflects the GRI position taken by the wife, i.e. the wife recognizes her ability in business endeavor, nevertheless still seeking 'tacit' approval or support of the husband. Even though, they are successful, they did not display any superiority over their husbands. In fact the women know their role in the GRI. Thus making the 'acceptance' of playing 'supporting cast' easier on the husbands.

The study found that the husbands to be open and modern-minded. There are evidences of their egalitarianism that help ease their wives' transition into the work-family environment. The realization of the fact that the wife is a better businesswoman, the husbands have no qualm of allowing the wife to run the business without interference from them. Presumably the wife can be successful thus, giving the family better financial position. This is in line with the Social Capital Theory as postulated by Komter et. al (2012).

In the course of the case study, the wives were observed to be very satisfied with the help extended by the husbands in 'maintaining' the shop. The wives are happy to be working together with the husbands. The 'togetherness' means a lot to the wives, emotionally. This is reflected in the 'dinner' prepared by wife (W2); inviting staff to have dinner with the family by W1.

There are evidences that the husbands provide three broad types of support, i.e. Emotional Support; Business Support; and Household Support. However, the levels of support are dependent on the level of understanding and perception of each spouse in accepting their role within the family unit, moderated along by the local culture and custom.

It is important to note that the identified theories are mainly derived from western social construct, "to use them to interpret gender construction in non-western contexts may not fully reflect the complexity of cultural values intertwined in the women's social reality" observed Suriani (2014). Suriani (2014) went on to suggest "it is necessary to explore how female Malay entrepreneurs

articulate their identities in the intersection of culture and entrepreneurialship”.

In conclusion this study provides valuable insights of the role of husbands of women entrepreneurs' success in Kelantan. Perhaps on the surface ones will easily see their husband are reactive and subservient to their active wives in business, but in reality they play supportive roles or soft side of their business as their wives are more capable in managing their businesses. Husbands that come to term with this, do not compete with their wives but rather acting as complement with the functions of their wives. Hence, labeling Kelantanese men as lazy is not necessary correct and can be disputed. However, a further investigation with more respondents should be carried out to provide more details and in-depth information.

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INFLUENCING FACTORS AND ATTRIBUTES IN WILLINGNESS OF COMMUNITY TO ADOPT COMPOSTING AND RECYCLING IN HOUSEHOLD USING CONJOINT ANALYSIS AND LOGISTIC LINEAR REGRESSION

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ABSTRACT

Many different types of household waste management systems have been conducted in different countries in order to increasing number of waste recycled, reused, and composted. Increasing number of waste recycled, reused, and composted will lead to decreasing number of waste incinerated or sent to landfill. It will decrease environmental impact that will be faced by communities. Indonesia have been introduced several household waste management system in order to increasing number of waste recycled, reused, and composted such as waste bank (*bank sampah*), Takakura system, simple composting machine, and composting system for excess land. But to implement all system, community involvements are needed. One way to involve community is maintain their preferences about the system that will be conducted by them. This research aims to maintain community perception about factors influencing their willingness to adopt composting and recycling in household waste management system by using conjoint analysis and logistic linear regression. Through several key performance indicators gathered from literature review will be resulted several attributes in conjoint analysis and several factors in logistic linear regression. Qualitative approaches also will be used in order to maintain community perception about household waste management system in Indonesia. This research will be conducted from April to September 2015. Initial results showed that several factors should be considered to complement the system or other attributes which proposed by conjoint analysis.

Keywords: conjoint analysis, logistic linear regression, key performance indicators, waste bank, community involvement, composting, recycling

RESEARCH BACKGROUND

Increasing population had been lead in increasing amount of waste generated by communities. Composting and recycling are several solutions to decrease amount of waste which will be sent to sanitary landfill or final waste disposal. Previous research had been studied about increasing percentage of waste composted and recycled in several developed countries such as several European Union state members, United Kingdom, Scotland, and United States (Scortar et al., 2007). Idea of waste composting and recycling have been occurred in developing countries such

as India (Bose & Blore, 1993) and Vietnam (Thanh et al., 2010). Waste composting and recycling become more important nowadays especially for waste management system in developing countries where recycling activities have large potential since a lot of people get their income from collecting and separating waste (Scortar et al., 2007).

Indonesian government have been introduced several activities in waste composting and recycling. Through Regulation of Environmental Ministry No. 13 Year 2012, they introduced waste bank to maintain recycle, reuse, and reduce activities. The system has been implemented in several areas in Indonesian big cities. Government also introduced several composting system that can be conducted in household level such as takakura system, simple composter, and composting system for excess land. But to maintain this system need participation from society. One way to receive community involvement in this system is some considerations and perceptions from people in community needed to be collected.

This study aims to collect the perception of Indonesian society about composting and recycling systems which have been introduced by their government. Through conjoint analysis, perception of the system from societies can be collected into one or more concept combination that possible to be offered by government. This research also want to measure willingness from societies to conduct composting and recycling system in their house through logistic linear regression. The other objectives from this method also to measure how important each factor which have been considered by societies in order to maintain waste composting and recycling activities.

LITERATURE REVIEW

HOUSEHOLD WASTE COLLECTION SYSTEM

Problems faced in waste management system such as (Damanhuri, 2000).

- Equipment capacity are not suitable
- Equipment are less maintain
- Development for operational personnel especially for daily worker are weak
- Operational method that suitable for each area condition are limited
- Operational cycle in waste management are not completed because different person who responsible
- Coordination among department in government are usually weak
- Operational management are more focused in implementation, but in controlling aspect are weak
- Operational planning often only used for short term period

In Indonesia, through Peraturan Menteri Lingkungan Hidup No. 13 Tahun 2012 about guidelines for implementation in reduce, reuse, and recycle with bank sampah (waste bank), activities for decreasing non organic waste done with waste bank system. In that regulation, waste bank system that dedicated a place for separating and collecting waste which able to be recycled and have a economic values, had been introduced. With waste bank, societies able to exchange their waste for specific type which can be recycled and/or reused with money in savings that can be used in specified term. Price of waste that have decided in this regulation have been consider environmental cost from production processes for recycling waste into specified product until it have no economic value at all.

Nowadays problems that happened in waste bank implementation is there still a scavengers or other parties outside waste bank that doing similar activities and couldn't seen by government in several area. Otherwise, number of waste bank can't accept needs for recycling and reusing

activities in some place. This regulation explained that market price is fluctuate affect changing in price according to market needs and also influencing customer to sell their waste to buyers who offer higher price.

This different among the prices will affect to competition between waste bank and scavengers. Savings system that have a goal for decreasing consumptive behavior from societies will can't be achieved if customers sell their waste to scavengers rather than waste bank. For that reason, societies has a role in this situation that will be very deciding for giving more integrated system and sustainable for reduce, reuse, and recycle implementation in household waste management system.

Beside implementation of waste bank, government also introduced several systems that able to supporting composting activities in household level. There are three system that introduced by ministry of environment include takakura system, simple composter, and composting activities that using empty space or land in household (this system can be done if household have an empty space in their house). Unfortunately, those three systems can be implemented well if there are no active participation from societies. If all systems introduced by government that supporting reuse, reduce, and recycle activities can be run well then process of waste management system will be described as Figure 1.

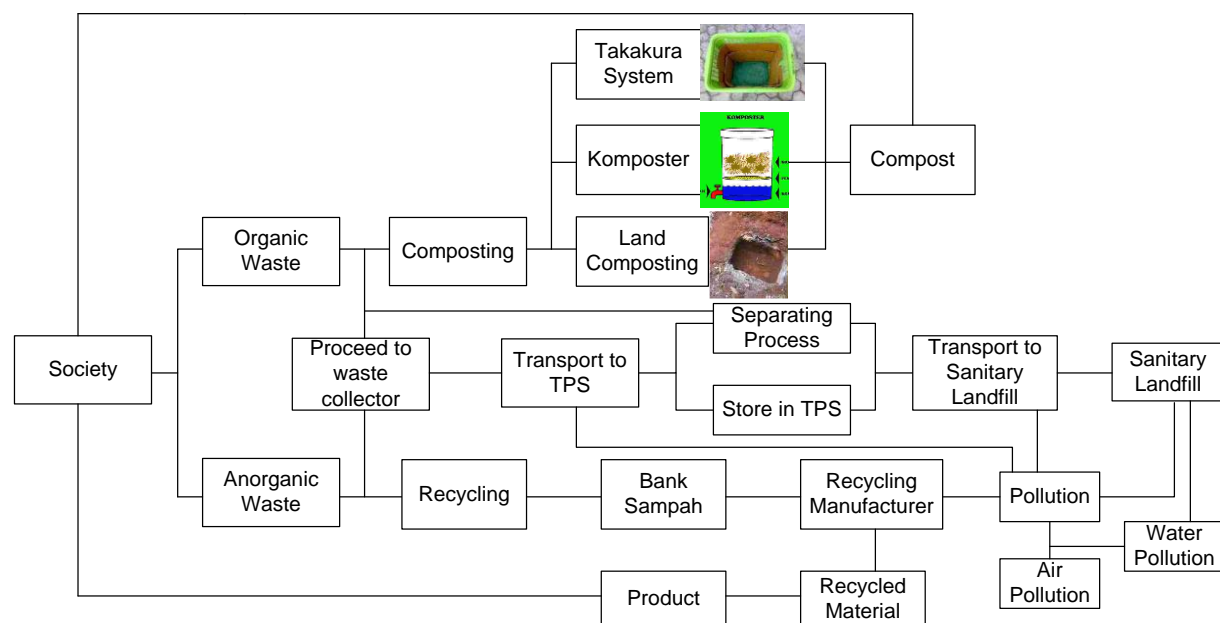


Figure 1 Waste Management System that Consider Waste Bank and Three Way of Composting

WASTE COLLECTION SYSTEM IN OTHER COUNTRIES

Actually waste management system using sanitary landfill like what have been done in Bandung, also implemented in several other countries especially developing countries like India, Vietnam, and Iran. Several previous research in other countries that talked about waste management system focused on implementation of system that can developed an increasing number of waste composted and recycled. These topics were conducted for decreasing number of waste that will be sent to sanitary landfill. Decreasing in number of waste that will be sent to landfill will decrease carbon emission that will resulted and minimize number of land used for landfill.

Similar with Indonesia, waste in India also becoming income source for several peoples in societies.

In India, there were four kinds of occupancies: pickers (scavengers), collectors, dealers, and traders who earn income from separating waste (Bose & Blore, 1993). Several type of waste were material that looked by several specified company in India.

Waste management system which conducted in developing countries are different with what have been conducted in several developed countries like United States of America, Japan, and European countries (non/state members European Union). In European Union for example, there is regulation that prohibit each its state members to processing their own waste outside facilities located in their own state area. Thus affect appearance of limitation of land can be used that caused maximizing level or percentage of waste reused, recycled, and composted become UE member state concern (Scortar et al., 2007).

Meanwhile, waste management system using incineration process conducted by Japanese government. Societies in Japan separate their waste into combustible and non-combustible waste. Even food waste are identified as combustible waste (Matsuda et al., 2012).

Table 1 Other Researches of Waste Management System in Several Countries

Source	State	Findings
(Scortar et al., 2007)	European Union	Based on removal autarchy which is basic rule in policy about environment from EU explained that every member state of EU must able to maintain their waste with their own facilities. This statement conducted to avoid spreading waste into other area outside UE borders. Even each member state can't spread this problem into other member states of EU.
(Scortar et al., 2007)	Germany, USA, France, Italy, Scotland	There is an increasing in percentage of household waste which recycled. Although type or form of policies are different each state, research goals are same: increasing percentage of waste recycled and composted. Several type of waste was allocated for energy purposes by incinerated and started to leave waste management by stored it in landfill. Not all of countries achieved significant improvement. One of the countries which have insignificant improvement is Italy. But still Italy's government also targeted in increasing percentage of waste composted and recycled in their country.
(Scortar et al., 2007)	Several countries in Asia, Africa, and South America	Researchers called a "waste economies" as several peoples in societies who have an income from collected and separated waste. Thousands of people in India, Egypt, and Columbia worked as scavengers, recycling industries, used material market, and others.
(Asari & Sakai, 2011)	Japan	From questioners result that majority of citizens in Japan store its household hazardous waste like used batteries, lamps, spray bottles, etc in their own house after its live time. In several cities, this type of waste are allocated as combustible waste. But not all of waste in this type can be burned as used paint cans and chemical product.
(Matsuda et al., 2012)	Japan	Making life cycle assessment especially for household waste management system that generated from food waste in Japan. Government placed food waste as combustible waste or sometimes food waste processed into compost.

(Thanh et al.,2010)	Vietnam	Collected some information about number and composition of household waste in Vietnam especially plastic waste and identified opportunities to conduct recycling process of household waste. Challenges for conduct this research or waste management strategy for this type in Vietnam is no plastic identification codes (PIC) that will make classification of waste become difficult.
(Bartelings & Sterner,1999)	Sweden	System in Sweden implemented rule of paying based on weight of household waste resulted in each house as 1 kr/kg. This research assessed willingness to pay from each respondent in waste management with considered that there is an ability to composting and recycling waste.
(Monovari et al.,2012)	Iran	Categorized type of waste that resulted by household in Iran and searched the correlation between composition and number of waste resulted with society's socioeconomic parameters as number of family's members, level of education, and level of income.
(Bose & Blore,1993)	India	Waste management system in India using open dumping system. Waste management system in India formally conducted by state company which called as All India Institute of Hygiene and Public Health (AIIHPH). Meanwhile, waste become occupancies sector for several peoples outside AIIHPH as scavengers (pickers), collectors, dealers, and traders or seller of waste collected to industry. This informal parties have a role in waste processing that resulted by India societies. This research focused in that informal system.
(Staudt & Schroll,1999)	Germany	Duales System Deutschland (DSD) used by Germany's government for made standardization in packaging usage in every product which spread in that country. This conducted to making an ease for societies separate their waste.

In several cities, hazardous waste such as lamp also identified as combustible waste (Asari & Sakai,2011). As Japan, Scotland also developed waste incinerator system that changed into electricity but still focused on percentage of waste recycled and composted like another European countries (Scortar et al.,2007). Several researches about waste management system had been conducted in several countries with different focuses and objectives. It can be seen in Table 1. This research is wanted to study household waste management system that able to decrease number of waste sent to sanitary landfill. Composting and recycling household waste become two things that needed to be implemented in household waste management system. But how to make those two system able to used in societies collaboratively become a question for refine waste management system in Indonesia especially in Bandung.

CONJOINT ANALYSIS

Conjoint analysis was used in many researches which wanted to know perception of consumers, publics, patients, and many other subjects about something especially products or services that have many attributes and its combination. Conjoint analysis is a useful tool for design process especially to maintain customer satisfaction (Gustaffson, 1999). In services, conjoint analysis could be used to maintain customer perception about several attributes in educational system (Gustaffson, 1999); information technology (IT) products; airplane service system; tourism products (Krieger et al.,2001); environmental evaluation (Alriksson and Oberg, 2008). From those

all researches, conjoint analysis is not only useful tool for design process but also for evaluation method or offered possible improvement in available products or services.

LOGISTIC LINEAR REGRESSION

Logistic regression may be used to model a relationship between a two category (binary) dependent variable and one or more independent or predictor variables (Roberts et al., 2007). Logistic linear regression is often used in willingness to pay (WTP) or willingness to accept (WTA). One of several researches used logistic linear regression to assessed willingness to accept in environmental system (Han et al., 2010). In that research, logistic linear regression explained factor influencing willingness to pay from communities in order to increase customer satisfaction and decrease environmental impact in environment conservation. WTP is one of method that measured how many expenses accepted by communities in terms of receiving products or services. One of several researches used this method to measure pricing in sustainable housing (Mandell and Wilhemsson, 2011). In this research, logistic linear regression help to measure factors influencing in willingness to accept or adopt composting and recycling system in household waste management system.

Table 3 Standard of Waste Bank Management

No.	Component	Sub Component
1.	Waste Depositors	<ul style="list-style-type: none"> a. Waste Bank socialization conducted at least 1 (one) time in 3 (three) months b. Each depositor is given 3 (three) separated trash can c. depositors get waste bank account books and numbers d. already conducted waste separating e. already conducted waste minimizing effort
2.	Waste Bank Administrators	<ul style="list-style-type: none"> a. using personal protective equipment (APD) during serve waste depositors b. washing hand using soap before and after serve waste depositors c. Waste Bank director have minimum high school/equal educational background d. already followed Waste Bank training e. already conducted monitoring and evaluation (money) at least 1 (one) time in a month with conducting Waste Bank implementer meeting f. numbers of daily administrators at least 5 (five) peoples g. administrators get payroll/incentives each month
3.	Recycled Waste Collectors or Buyers	<ul style="list-style-type: none"> a. not conducting waste incinerating

		b. owning cooperation agreement/MoU with Waste Bank as partners in waste management c. able to keep environment clean such as no wiggler in bottles/cans waste d. have business permit
4.	Waste Management in Waste Bank	a. worthy saved waste taken by collectors at least a time in a month b. worthy recycled waste recycled by manufacturers which are educated by Waste Bank c. worthy composted waste processed in household scale and/or communal scale d. worthy thrown away waste (residual waste) taken by cleaning officers twice a week e. area that covered by Waste Bank at least 1 (one) village (<i>kelurahan</i>) (more than 500 (five hundred) households) f. waste transported to final disposal (TPA) decreasing 30-40% each month g. numbers of depositors increasing at average of 5-10 depositors each month h. there is replication of local Waste Bank to another area
5.	Role of Waste Bank Administrators	a. as facilitator in Waste Bank development and implementation b. provide 'collectors/waste buyers' data for Waste Bank c. provide 'recycling industry' data d. give reward for Waste Bank notes: Facilitators are peoples that facilitate needs in Waste Bank development and implementation, such as: a. help to facilitate funding in corporate social responsibility (CSR); b. provider of infrastructure, tools and equipment for Waste Bank establishment; c. arranger of business license in Waste Bank; d. help to sell recycled waste product (compost, handcraft)

(Source : Regulation of Ministry of Environment No. 13 Year 2012)

KEY PERFORMANCE INDICATOR (KPIS) FOR WASTE MANAGEMENT SYSTEM DI INDONESIA

Peraturan Menteri Lingkungan Hidup (Regulation from Ministry of Environment) No. 13 Year 2012 already gave standard performance measurement system of bank sampah (waste bank). This can be used for measure the performance of waste banks which had been built right now. With that regulation can be known what improvement needed to be done by government or local communities as executors of waste banks. This performance measurement system can be seen in Table 3.

RESEARCH METHODOLOGY

This research are included in one big topic as delivering values of composting and recycling in household waste management system supply chain. Conjoint and logistic linear regression are used to measure how important the attributes and factors in offered household waste management system. Overall research methodology can be seen in Figure 3.

ATTRIBUTES IN CONJOINT ANALYSIS

Attribute that will be used in conjoint analysis is type of composting system, location of waste bank, and composting and recycling tools provider. There are three type of composting system such as takakura system, simple composting machine, or composting system for excess land. There are two alternatives in location of waste bank such as one waste bank for one village (*kelurahan*) or one waste bank for several villages (*kecamatan*). Respondents also will be asked about their perception for recycling and composting tools provider. Is government should provide tools in each household or tools are provided by communities itself. Those attributes and its level can be seen in Table 5.

Twelve combinations will be resulted from all level of attributes. Those twelve combinations will be checked by respondents by ranked it all. Most preferable combination will be scored or ranked as twelve (12) and less preferable combination will be scored or ranked as one (1). It will be asked to 200 respondents.

FACTORS IN LOGISTIC LINEAR REGRESSION

Several factors will be considered in its effect to willingness to adopt composting and recycling from communities. Those factors come from previous research and Regulation of Environmental Ministry No.13 Year 2012. These factors are:

- (a) Availability of separated trash can in household (X1);
- (b) Availability of composting tools (X2);
- (c) Accessible waste bank (X3);
- (d) Socialization from government about composting and recycling activities (X4);
- (e) Availability of legal scavengers (cleaning services) who will pick up household waste (X5);
- (f) Availability of training about household waste composting and recycling (X6).

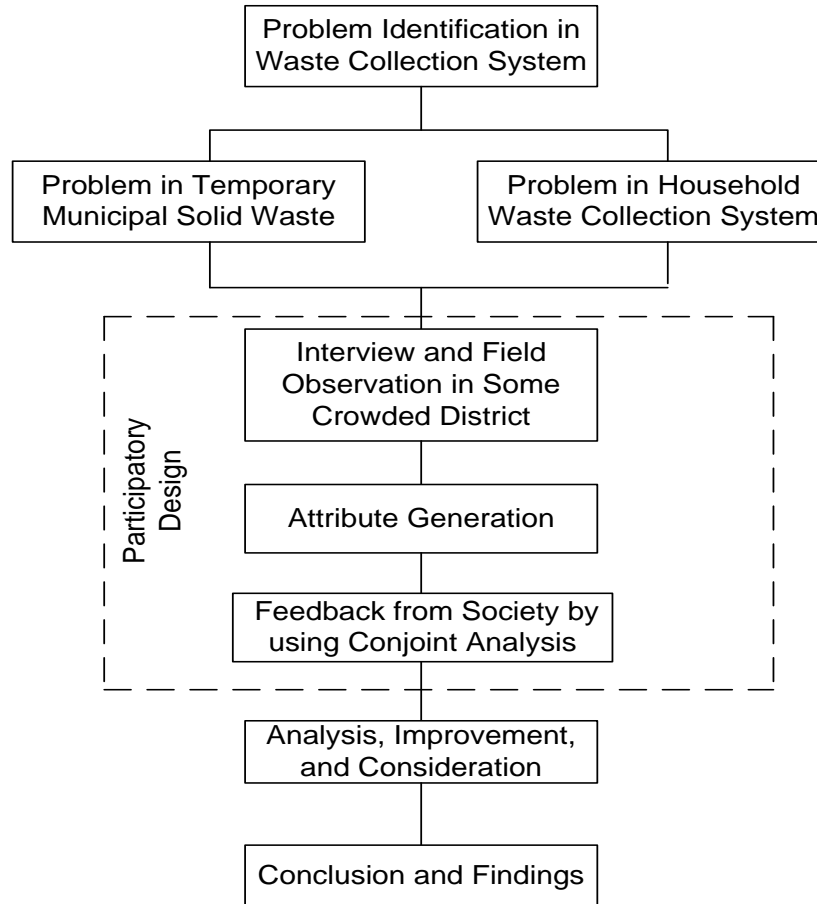


Figure 3 Research Methodology

Table 5 Attributes in Conjoint Analysis

Attributes	Level of Attributes
Type of Composting System	a. Takakura System
	b. Simple Composting Machine
	c. Composting System for Excess Land
Location of Waste Bank	a. One Waste Bank for One Village
	b. One Waste Bank for Several Villages
Composting and Recycling Tools Provider	a. Government
	b. Community

STATE OF THE ART

Previous researches in environmental assessment have been conducted in several countries whether in developed or developing countries. It can be seen in Table 1. Meanwhile, several researches using WTA or WTP have been developed but its combination with conjoint analysis in

order to result acceptable products, services, and systems rare to be happened. Alriksson & Oberg (2008) stated that conjoint analysis can be developed to maintain environmental evaluation. In this research, combination between conjoint analysis and logistic linear regression will be conducted in order to explain factor influencing in waste management system especially in adopting composting and recycling system in there.

Table 6 Several Researches in WTA/WTP, Conjoint Analysis, and Waste Management (Environmental Assessment)

Citation	WTA/WTP	Conjoint Analysis	Waste Management (Environmental Assessment)
Mandell & Wilhemsson, 2011	v		
Han et al., 2011	v		V
Alriksson & Oberg, 2008		v	V
Gustaffson et al., 1999		v	

FINDINGS

There are several findings that can be gained in this research. Number of respondents of this step is 37 respondents (up until 8 May 2015) which will be processed into logistic linear regression. In Hosmer and Lemeshow Test resulted P-Value in 0.873 which mean that H_0 not rejected where :

H_0 : Model explain the data (Goodness of fit)

H_1 : Model doesn't explain the data

It has a meaning that the model is fit and explain the data in logistic linear regression.

Logistic coefficient values of each factor could be seen in Table 7. Availability of separated trash can (X1) has a positive correlation with willingness to accept composting and recycling system. Meanwhile, availability of composting tools (X2), accessible waste bank (X3), socialization from government about composting and recycling activities (X4), availability of legal scavengers (cleaning service) who will pick up household waste (X5), and availability of training about household waste composting and recycling (X6) have a negative correlation with willingness to accept composting and recycling system.

Table 7 Coefficient Variables for Each Factor

Factors Name	B	Exp(B)
Availability of separated trash can in household	1.427	4.167
Availability of composting tools	-20.369	0.000
Accessible waste bank	-0.586	0.557
Socialization from government about composting and recycling activities	-18.746	0.000

Availability of legal scavengers (cleaning services) who will pick up household waste	-1.382	0.251
Availability of training about household waste composting and recycling	-0.390	0.677
Constant	40.534	4.016E+17

Since Exp(B) values of X2 and X3 is near to zero then it means that availability of composting tools and socialization from government is have no significant impact to willingness to adopt composting and recycling system. This model also can predicted willingness to accept composting and recycling system (Y) about 80.6% (overall percentage). Unfortunately, the data were not significant since all variables had Sig. value above 0.05.

This research used all stimuli from all combination from level of attributes which are 12 stimuli. Syntax in conjoint analysis resulted 8 cards and 4 holdouts. In questionnaires will be involved all possible (12 stimuli) attributes combinations as concept that should be analyzed by respondent. This research still process this step up until there are 50 respondents or more filled up the questionnaires.

From conjoint analysis we can conclude that respondents wanted to use composting in excess land, waste bank provides more than one village, and provide composting tools by their own. Location of waste bank is the most important factor in this case.

DISCUSSIONS

The data in logistic linear regression were not significant. Since that, conjoint analysis covered another insight about the factors which are influencing in conduct willingness of community in adopt composting and recycling. Location of waste bank become the most important factors to be prioritized in maintain household waste management system in the future. The data in logistic linear regression were not significant can be affected by less number of respondents which were gathered and/or misinterpretation of questionnaire design.

Logistic linear regression can be assessed other important factors that not included when conducting conjoint analysis. Further research can maintain combination between other types of logistic linear regression beside enter method with conjoint analysis. For example forward stepwise that consider two dependent variables (willingness to buy and willingness to use new product or system) with several factors that influencing it. In conjoint you also can conduct conjoint to result new product that will be proposed in the market and the factors will be assessed by forward stepwise logistic linear regression. It is important to know whether consumer willing to buy your product which resulted by conjoint analysis. So, it is possible to use combination of conjoint analysis and logistic linear regression in the future.

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GLOBALIZATION, STUDENT'S EXCHANGE PROGRAMS AND INTER-CULTURAL COMPETENCIES BY INTERNATIONAL STUDENTS

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ABSTRACT

The study aimed to explore the intercultural competencies of international students due to extending students exchanged program as an affects of globalization. The purpose of the study was to identify how international students adjust themselves in cultural diverse countries and developed inter-cultural competencies. By using qualitative research design, case studies of six students (three foreign students and three Pakistani students) were developed and information was gathered by using un-structured interview schedule. The students were selected on the basis of snowball sampling technique and the selected sample belonged to different cities of Pakistan including Twin cities of Rawalpindi and Islamabad, Lahore and Gilgit. The findings of the study indicate that globalization boost up the trends of students exchange program in different countries around the world especially the developing countries by providing a number of different scholarship to the students to get their education from abroad. The findings illustrated that cultural exchange programs were enhancing the learning and knowledge of the students to have interaction with cultural diverse people and educational system. They were not just sharing their own cultural traits with each other but also learning and adopting some cultural traits of foreign countries as well. The results related to intercultural competencies of international students indicated that at the start of the program when students entered in new culture, they faced number of issues with respect to their strange environment and alien people as well as language barrier, food and accommodation.

INTRODUCTION

Globalization plays a major role in developing exchange programs for the students to go abroad and learn diverse cultures. It enhances the capacities and interest of the students to migrate to other countries to get higher education form different countries. By this, students are not only seeking opportunities to take benefits for their academic purpose but also build up their social and professional networks within a global context (Fleischmann *et al* 2010).

Inter cultural competencies also understood by term “cultural shock”, explain the feelings of anxiety, depression, mood sewing and change of environment by the students when trying to adjust in an alien culture. Most of the studies indicated the following common signs of cultural shock:

- Frustration caused by changing environment
- Homesickness, loneliness and sad feelings
- Sleep disorders because of new place and living environment
- Faced some physical problems and diseased due to change in food and water.
- Feeling lost and alien because of lack of understanding of new culture etc.

Studies also indicated that with the passage of time, the symptoms of cultural shock may reduced

and students learnt to adjust in new environment and after that feel comfortable and build their social networks which give them more ease to stay there. In addition, students may begin to enjoy the challenges and benefits of their foreign culture experience.

The study intended to explore the intercultural competencies by the students who are studying in foreign countries. It helps to be a source of knowledge about the issues faced by the foreign students while staying in other diverse culture and their capabilities to adopt other cultures or preserve their cultural identities. The significance of foreign students in universities and colleges of other countries cannot be undermined, as they bring with them different cultures which adjoin the cultural richness of the institutions as well as individuals.

LITERATURE REVIEW

Globalization is not only providing new opportunities for higher education, but to some extent it is threat as well, due to changing once culture by establishing the dominance of others (Aramewela & Hall, 2006). In the paradigm of globalization, it is vital to understand the real benefits of the international studies in terms of social and financial experiences. Researchers have shown that high quality services significantly countries to profit maximization. Therefore it is crucial to understand the student's perspective and satisfaction with the services provided and their competencies and adjustments with other cultures.

International students face a number of difficulties as compared to native students in terms of their adjustment to new culture, such as food choices, residence, academic pressure and new learning environment as well as teaching strategies, transports and mobility issues etc. beside these, they also have to face the interactional problems with new people whom they don't know and due to language barrier unable to develop their social networks. All tangible and intangible aspects of foreign culture are new and alien for them, due to which they may feel stress, depression, loneliness and financial stress as well (Bocher & Furnham, 1986).

Beasley and Pearson (1999) also stated that international students are different to local students in the context of culture, language and educational experience. The common factors related to their adjustment problem are accommodation especially during the first year of the study particularly in western university. The cultural clash of language or dialect is the major hurdles international student faced worldwide. International students not only tried hard to adjust themselves in new culture but they also have to pay attention to bring some changes in the ways of their thinking and interaction style and patterns.

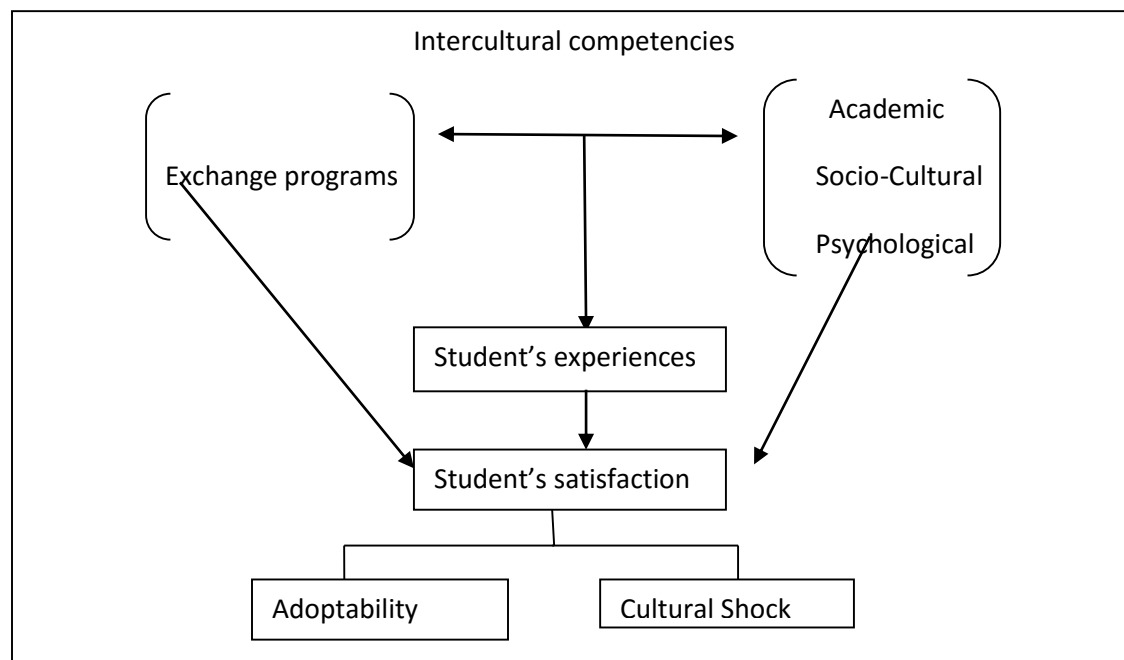
Many researches in different literature shared the international students experience as they feel isolation, unfamiliar approaches of studies, different teaching styles of their mentor and supervisors and home sickness etc. Channel, 1990; Esley, 1990; Aspland & Donghue, 1994, Oatey, 1997). Spencer-Oatey (1997) studies on Chinese and British international students and found that there is relationship of power with the adoption of customs and culture. The international students have to adopt the cultural strategies of origin country where they are living. As the foreign culture and environment is new for them, they sometime feel very difficult to understand how to deal with the new situation, this is because of the fact that may be these student were not ready to accept the changes or not much education and information was provide to them on the matter. In consequences, students are in the state of severe cultural shock and developed the feelings of loneliness, anxiety, depression, homesickness, lack of attention on their studies, inability to meet the deadlines of assignments and sometimes get involved in bad habits like excessive drinking etc. Language diversity is one of the important factors to create hindrances to adjust in new culture. The language incompatibility not only affects their interaction with people in daily routine

activities but also unable to cope with number of problems related to their education. As, this is difficult for the international students to familiarize with the language and delivery of teachers because of language gap and incompetency to understand the foreign language, the learning process becomes difficult for them.

Therefore, it is very crucial for the universities to develop a system and ways to provide counseling and support services to the international students. The universities should try to pair the international students with the students of their own country which make their life easy to adjust and understand in foreign country. In this education institution in most of the western countries have the student's counseling and mentoring centers. They arrange the orientation seminar as well as cultural exchange events which provide the opportunities to intentional students to share their problems with each other's and take guidance from the mentors. In a globalized world, number of resources on different sites also helps the students to learn other cultural specific activities and traits which enable them to adjust with the people of different culture (rodrigo. 2012)

CONCEPTUAL FRAMEWORK

After studying many literature and research studies, the researcher developed the following conceptual model to study the inter-cultural competencies of foreign students.



The conceptual model illustrated the factors that affect the inter-cultural competency of international students. There are number of intervening variables affects the student's satisfaction with the quality and provision of services related to academic and cultural adjustments in foreign country.

METHODOLOGY

Objectives:

- To explore the inter-cultural competencies by international students studying in Pakistan and vice-versa.

- To find out the affects of students exchange programs on the promotion or transformation of cultural identity.
- To find out the relationship between Globalization and students exchange programs and intercultural competencies.

Research Design

Qualitative research design was used, in which case studies method was adopted to meet the objectives of the study.

Sample:

Case studies of six students were developed, three international students studying in Pakistan and three Pakistani students studied abroad.

Sampling Technique:

Snowball sampling technique was used to approach the intended sample.

Instrument of the study:

Unstructured interview guideline was used to take required information from the students.

Procedure:

After selecting the sample, interview guideline was emailed to the respondents and recorded their experience for number of open-ended questions.

Data Analysis:

After narrating case studies, thematic analysis was conducted to describe the study objectives.

RESULTS

The results of the study consisted of two parts; part one deals with the demographical characteristics of the respondents and part two consisted of themes of the study in which the collected data has been described.

Demographics of the Respondents:

Most of the students who are studying in Pakistan belong to Japan and studying bachelors and master level program in different cities of Pakistan. They are living in Pakistan for more than two years.

Reasons to choose to go abroad for study

Most of the respondent wanted to learn other cultural language courses and wanted to gain other countries' experience to get higher education. As one of the respondent said that:

“Because my research area is Pakistan and the accommodation to learn Urdu is arranged. In undergraduate level, I was majoring Urdu and culture of South Asia”.

Another respondent also stated that as “

There are great works in Japan regarding Urdu literature, history, politics, economics and Islam but studies in the light of gender, Anthropology, Arts and Christianity are not so much active. So I though Pakistan is still blue ocean to carry out research”.

One of the students who went abroad from Pakistan stated that:

“As I applied for the scholarship and got it, so I decided to go abroad for exposure and to see the world with different perspective”.

Experiences of cultural exchange program:

Cultural exchange programs gives an opportunity to students to get their education in cultural diverse societies to learn new skills particularly related to other culture and knows each other. As one of the respondent who was studying in Pakistan stated that;

“Such a program can be opportunity to enhance knowledge about other culture, but it depends on the program’s contents or each individual’s interest. In my opinion, it will not reach the extent of transforming identity, though if it will be done against younger generation and make them really experience the difference, it may be possible”.

Another respondent indicated that “

“Cultural exchange program is good to know about other culture. One’s cultural identity is deeply rooted so it will not be change d only through cultural exchange program. Pakistan is very rich in culture; it must be good opportunities for Pakistani people to know other ethnic culture and may heal ethnic conflicts”.

One of another respondents mentioned that student exchange program and very good opportunity for the students who received scholarship and go to abroad for their education. This not only helps them to gain more and advanced knowledge but also provide them an opportunity to interact with number of people belongs to vary different parts of the world.

One of the respondents stated that;

“Cultural exchanges really help people understand other perspectives and help to appreciate diversity. It is indeed promoting each other culture not transforming one’s identity”.

The students who go abroad from Pakistan to developed countries like USA, Europe and Australia, their experiences regarding exchange program also indicated that these types of program boost up the knowledge and professional career of students. As a respondent mentioned that;

“There are lots of opportunities of scholarship and students exchange program to enhance the capacity building of students who belong to poor countries. These exchange program are providing a platform to learn the diversity of culture as well as gain education in an international educational environment”

As far as the question of gaining more knowledge is concern, one if the respondent indicted that:

“It depends on in what kind of environment they passed, but in my case as staying at student hostel in university where no any other foreigners except for Japanese stay, it becomes good opportunity to know differences, and I can say it is also “international knowledge”.

Regarding cultural diverse knowledge based on some international standard, it varies form region to region, such the curriculum and teaching methodologies are different in developing nation like, Pakistan, India etc as compare to highly advanced and developed countries like Australia, USA,

Europe etc. in this point one of the respondent shared:

“We should keep in our minds that most of international knowledge is from the West. I am of opinion that the West also should learn from the East. I think and hope to adjust to other culture is a kind of respect. Of course there is limitation as a foreigner but I never want to upset other culture”

Cultural exchange program enhances your understanding about other cultures, and when you are at intercultural exchange program, you learn and share each other cultural norms, values, traditions and behaviors. “Especially when you are in cultural exchanges, you share everything”.

Another respondent stated that;

“It is very true. With expanded exposure, access to technology, meeting with people from different parts of the world increases international knowledge”.

Inter-cultural competency:

One of the major issues related to adjustment of the students in foreign countries is inter-cultural competency.

Many of the respondents indicated that at the start it is very difficult to adjust in culturally diverse country to cope with different situation like, accommodation, food, dresses, and mobility. As one of the respondents stated that;

“Comparative to my country, Japan, the social interaction is quite frequent and dense; on the other hand, it is quite segregated into different social stratum [ethnicity, class]. In Japan, such segregation’s boundaries are quite low. And, of course, the so called Pakistani culture [family bond, entertaining guest] is based on such a social interaction”.

While staying in foreign culture, sometime you need to adopt the other’s cultural traits along with your native cultural traits. But it is not the universal phenomenon for all students. Its depends on students’ own choice and preferences, but some time due to cultural specific norms and as majority of the population are adopting these cultural specific traits, international students also try to adopt the foreign cultural characteristics.

One of the respondents stated that;

“Regarding the adoption of Pakistani cultural traits, I have no idea, I think one cultural characteristic is related to each other, and I cannot pick its one to make own. The most easiest traits to be able to adopt is food culture, and I will be fond of going to Pakistani/Indian restaurant sometime after back, but it will not be any fundamental change as you expect. As far as sharing my cultural traits is concern, it can be done in quite informal basis such as chatting with friends, but normally, I am following the Pakistani way and have no interest in introducing my background”.

Regarding adoption of certain traits from diverse culture, one of the respondents state that

“I adopted some traits like punctuality from the American culture and their habit to work hard because I think they were important for personal development. People in the States were more open and they would say hello to strangers and even though they are modernized they still celebrate their culture and celebrate it with fun”.

Another respondent indicated that;

“No since I knew from the beginning that I will always have my culture with me. I blend in other cultures as long as I am in that country but when I am back, I am back with my culture”

Cultural diversity: Adjustment and problems:

One of the biggest concerns related to inter-cultural competency is “cultural shock” although globalization enhances the ways to go to any foreign country, but adjustment is the greatest concern of the students at cultural diverse place. Number of issues related to the cultural shock such as language barrier, dress code change, food change, accommodation and living places is new as well as interaction with different language speaking people etc.

In this regard, one of the respondents state in a way;

“It can be tough in diverse country because the interaction medium like language also becomes diverse. Also, I want to comment that the adjusting process is not straight forward way. If the stay becomes longer and longer, the person experiences the different stages of adjustment and non-adjustment. So, against this question, I can answer both yes and no. The shocking matter is the people’s way to behave at table lunch or dinner. Normally, the people rush to the food and drink corner and try to take it as early as possible. Even if the food is plenty, the situation is same, and this behavior is same as the teachers in university. For me, it looks no discipline and no consideration among each other”

One of another respondent, studying in Pakistan also stated that;

“Language is one of the barriers to adjust in foreign country. Because, everyone loves their mother tongues and they will be happy to interact with persons who can communicate in the same language. So, I will keep trying to studying Urdu and if possible, Punjabi also”

Another respondent stated that:

“The cultural diversity when it comes to the religion, it is hard to mange some time but I respect it. It is related to religion and many customs and events such as Eid or Ramadan in Pakistan are dominantly related to Islam. I will follow their way because it is also important for more communications. Actually, the diversity within Pakistan is quite trivial comparative to the difference between Pakistan and Japan. For me, the oneness within diversity in Pakistan is much more important”.

Adjustment with the living condition is another area which puts the students in trouble as each culture and region has its own living standards and style. Therefore many of the students who are living in Pakistan and those who go abroad from Pakistan faces the problems of using toilets, public places and restricted mobility.

As one of the respondent studying in Pakistan clearly mentioned that;

“I faced number of cultural shocks like, washroom without tissue roles, limited mobility, non-punctuality, beggars etc. Limited mobility surprised me a lot. I got surprised to know that all students go home after 6pm. I think minimum language skill is required but to share foods, joy, sports or fashions with native people also means a lot as non-verbal communications”.

Further the respondent also mentioned that

“In terms of maintaining my own cultural values, while living in Pakistan, I have no restriction to fallow my own cultural specific traits like food, dress etc. I cannot compromise about hygienic aspects like going to too much local hospitals or restaurants”.

Another respondent mentioned that;

“Eating Pakistani foods without chopsticks, not going anywhere alone, wearing dhoopatta, not wearing short pants. As a student of Anthropology I am enjoying adopting Pakistani culture. I never want to go for what is not seemed desirable in Pakistan; even it is no issue in Japan. So for me, my friends are good teachers who guide me to behave in right manners”.

One respondent who studied in USA stated that;

“Yes a lot cultural shocks I faced I was new in States. My first cultural shock was that I had to pay for my dinner when a friend invited me for a dinner, but I did not adopt their dressing because it clashes with what I wear in my country and my people are not used to see me in it”.

Another respondent who is staying in Australia stated that;

“Yes language is the biggest barrier. For me it was difficult in the beginning so I would talk less till I get used to it. I would not talk to people until they start the conversation”.

Only one of the respondent stated that adjustment was not a big problem as mentioned that;

“Yes I did adjust easily because I am used to live away from home. Even here in Islamabad I live away from my parents in a culture that is totally different than mine”.

DISCUSSION

The study was conducted to explore the inter-cultural competencies of international students studying in Pakistan and Pakistani students studied in foreign countries. The aim of the study was to find out the importance of exchange program due to growing trends of globalization in education sector and how students able to adjust in new culture to get their education. It was also intended to study the cultural transformation and inter-cultural traits are sharing with each other or its deteriorating once cultural traits. The case studies of three foreign students in Pakistan and three Pakistani students studying in foreign countries were developed in order to fulfill the objectives of the study. Most of the international students who are studying in Pakistan belong to Japan and studying in different cities of Pakistan like, Rawalpindi, Islamabad and Lahore. They are getting their bachelors and master level studies.

The findings of the study indicated that the reasons for most of the foreign students to choose Pakistan for their education were their interest in Urdu Language and to learn Pakistani culture. As one of the respondents mentioned that her interest was to learn the culture of Pakistan and after getting scholarship she love to study in Pakistan and like the Pakistani culture. The Pakistani students who studied and studying in foreign countries also stated that as they get scholarship they decided to go to developed countries to get their education and exposure of the other countries in terms of culture and education. It is fact that globalization increase the cultural exchange programs and educational opportunities for the students all over the world by providing them scholarships and funding. The benefits of the cultural exchange program for the students are good as mentioned by the respondents. They are able to learn diverse cultural traits and their educational system and gaining more and advanced knowledge which is not providing in their native counties.

The student exchange program is beneficial for the students to get their education from other countries to expand their knowledge and horizons of education. But for that as they have to leave their native county, their family and their culture and entered in new and diverse culture which is alien and strange for them, most of the students faced number of problems due to lack of inter-cultural competencies. On one hand, students are exiting to learn new culture and share their own

culture with new friends and new people in a new environment. But on the other hand, due to cultural diversity, they faced difficulty in adjustment in new environment. As most of the students who came to developing countries from developed nation found no counseling and supports services available at university. This is due to the structure of educational system in Pakistan which is not providing specific and appropriate facilities to the international students in terms of counseling and international students' affairs department etc. As one of the previous study by Radrigo (2012) also indicated that as the foreign culture and environment is new for them, they sometime feel very difficult to understand how to deal with the new situation, this is because of the fact that may be these student were not ready to accept the changes or not much education and information was provide to them on the matter. In consequences, students are in the state of severe cultural shock and developed the feelings of loneliness, anxiety, depression, homesickness, lack of attention on their studies, inability to meet the deadlines of assignments and sometimes get involved in bad habits like excessive drinking etc.

The factors related to problem faced by international students were accommodation, changes in food patterns, missing their families and language barrier. Language is one the most important barriers most of the students faced in new country. As they stated that the people in native countries like to speak in their own native language so for the foreign students it was very difficult to interact with them, therefore most the international students studying in Pakistan tried to learn the basic Urdu Language which is necessary for their interaction with local people to fulfill their daily life activities. A study by Beasley and Pearson (1999) also stated that international students are different to local students in the context of culture, language and educational experience. The common factors related to their adjustment problem are accommodation especially during the first year of the study particularly in western university.

CONCLUSION

The study conclude that Globalization accelerated the trends of students exchange programs and students' preferences to study abroad. It enabled the countries especially developing one to build their partnerships with developed nations in education sector, not just to flourish their won education system but develop networking with other countries as well. Although, international students faced some problems related to their adjustment in new country and learning new environment, but they are getting it as advantage to have interaction and learning with cultural diverse people. This enables them to share and learn each other culture which is not enhancing their individual knowledge but also enable their native country to establish inter-cultural dialogue and competencies with each other. Besides maintaining their once own cultural identity, international students have to adopt certain traits of foreign culture to adjust them in new and acceptable environment and cultural traits practiced by the majority of the people. So it is conclude that cultural exchange program due to effects of globalization enhanced the inter-cultural competencies of international students in a way to respect other culture as well as do not alter once own culture. It enables different countries to share their cultural specific traits with each other.

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