Enterprise Risk Management
Are we ignoring the segment with the most critical need?

In the wake of the 2008-2009 Financial Crisis, Enterprise Risk Management (ERM) is ubiquitous in industry and academia. Major insurance companies have designated the position of Chief Risk Officers (CRO) to implement ERM. The science of identifying, measuring and quantifying risks is both supremely difficult and of the utmost importance to companies. Entire departments have been created in major financial institutions which focus solely on ERM. In addition to exclusive ERM departments, large corporations have other departments like Corporate, Internal Audit and Investor Relations to directly or indirectly support the ERM function. It is fair to say that ERM is now a well-established concept for many large corporations.

Meanwhile, there is a separate segment of the economy that is the **largest** and **fastest-growing** in the United States, which desperately needs risk management. Segment failure rates are much worse than large corporations, yet ERM is not part of this group's vocabulary. Any risk management is done informally and without structure. Searching for ERM literature for this particular segment yields next to nothing. Survey ERM professionals in the marketplace, and none seem to pay this segment any attention.

So what is this business segment? This is none other than the **small business segment**.

What constitutes a small business?

The US Small Business Administration (SBA) provides the following working definition of a small business:
"A **small business** is a business that is privately owned and operated, with a small number of employees and relatively low volume of sales. The legal definition of 'small' varies by industry and requires fewer than 500 employees for most industries to qualify for SBA programs. Small businesses can also be classified according to other methods such as sales, assets, or net profits."

How important is this small business segment to the US economy?

The SBA Office of Advocacy Research & Statistics division provides the following statistics on small businesses which demonstrate their importance to the US economy:

- In the US, small businesses account for approximately half the GDP and more than half of the employment
- They represent more than 99% of all the employer firms in the US
- They pay 44% of total U.S. private payroll
- They have generated 64% of net new jobs over the past 15 years
- They create more than half of the nonfarm private GDP

But the statistics on failure rates of small businesses are alarming:

The same Office of Advocacy has determined that about **one-third** of new businesses fail within the first two years of their existence and **over half** of new businesses fail within four years of their existence.

What are some of the key risks that cause small businesses to fail? Jay Goltz in the New York Times article “Top 10 Reasons Small Businesses Fail” (6/27/2011), identifies the following:

- “Key Man” risk, which is the risk of having one or few very knowledgeable employees performing critical functions vital to revenue generation.
- Concentration risk if most of the business revenue depends on a single product or service.
- Lack of competitiveness
- Failure to adapt fast enough to meet new customer demands.
- Antiquated processes and operational inefficiencies, particularly in cash flow management.
- Lack of a cash cushion (reserves).
- Out-of-control growth.

The combination of these two sets of statistics – the importance of small businesses to the economy and their high failure rates – is a wake-up call for our profession and anyone performing ERM work that the segment deserves attention.

So why are small businesses not seeking help from ERM professionals, and why are ERM professionals not marketing their services to small businesses?

ERM for Small Businesses – Why it does not exist?

There is an obvious reason why ERM professionals do not target small businesses. Unlike large corporations, small businesses are not willing to pay for this service. They may be financially unable to do so, or they do not recognize the potential benefit of ERM. It could also be a fear of change or a reluctance to recognize and accept strategic weaknesses in current business practices. In fact, many small business owners would be more willing to pay for a revenue generation or cost reduction idea than a risk management analysis.

As such it is no surprise that ERM principles and literature are tailored to large corporations.

ERM for Small Businesses initiative at the University of Connecticut

The Janet & Mark L. Goldenson Center for Actuarial Research (the Goldenson Center) at the University of Connecticut (UConn) was established in 2009 to focus on exactly this type of non-traditional problem. The Goldenson family provided an initial gift from which annual revenue funds applied actuarial research projects undertaken by UConn students and faculty. As Director of the Goldenson Center, this provided me an opportunity to initiate our ERM for Small Businesses (ERMSB) initiative. In order to encourage small businesses to participate in this initiative, this service is offered **free-of-charge**. The Goldenson Center pays students in actuarial science at UConn a stipend for their efforts. At the end of the project, the students provide a formal written ERM report to the small business owners and share any software tools that may have been developed in the course of their work.

The outcome of this two-year experimental initiative by the Goldenson Center has been truly remarkable. An idea which was not supported by any well formulated theory, has now grown into a well-defined and efficient process that continues to improve.

In the absence of formal literature, the Goldenson Center has generated ERM principles unique to small businesses. The fundamental ERM principles are no different than ERM for large corporations: 1) identify/prioritize risks, 2) model/quantify the risks, and 3) create risk-mitigation strategies. Through our initial experience, we have created the following ERM principles unique to this segment.

ERM for small businesses – Unique principles

- Any risk management analysis for a small business has to incorporate business growth strategies as well
- Risks that receive focus are reasonably likely events with serious consequences (versus low likelihood events with serious consequences)
- Small business owners are very knowledgeable about the risks facing their business as well as business growth strategies. Much of the primary input for analysis is drawn directly from the business owners.
- The consequences of a risk shock are far greater for a small business than a large corporation as small businesses generally lack any surplus cushion or political clout. As a result, a small business may never have a second chance when something goes wrong.
- While every small business is unique, it is generally easier to assess the risks facing a small business and to find ways to mitigate these risks, as compared to large corporations
- Qualitative risks may be just as important as the risks which can be quantified, and should be mitigated to the extent required by their priority/likelihood
- The analysis must be fully understood by the small business owner and provide practical and actionable steps to undertake over a short time horizon of 3 to 5 years

- Beyond this time horizon, the ERM will have to be revisited in order to remain relevant
- A well-developed ERM analysis which incorporates business growth strategies can **materially** improve the sustainability and profitability of a small business

The use of top actuarial science students to do this analysis has created some unexpected positive outcomes as well:

- Strong analytical skills and risk modeling capabilities make actuarial students ideal candidates
- It is a cost effective way to undertake an ERM analysis for a small business
- Students perform best when working in small groups with minimal guidelines and oversight.
- Students are encouraged to generate their own ideas, which produces many non-standardized and creative solutions for each project
- Students are encouraged to think about business growth and risk mitigation strategies that appeal to the younger generation
- Students benefit at many levels, in addition to providing an invaluable service to small businesses.
    - For actuarial science students who have studied complex techniques on how to model insurance and financial risks, these ERM projects force them to think out-of-the box, work in a team environment and adapt each analysis to the special needs of the small business.
    - Since the students work on the entire project from start to finish, communicate directly with the small business owners, and put together the final report and models, the experience they gain on this project is invaluable. This is precisely the kind of experience that companies are looking for when they hire new graduates.

ERM for small businesses - Case study

This case study involves a three-store bagel chain in the Connecticut region. This operation is owned by three people and has been in business for the past 20 years. While the business proceeds in the face of competition from larger regional bagel chains, sales have been relatively flat over the past five years. Some of the risks and opportunities identified include:

- The inability to easily indentify the most profitable sales items
- Insufficient tracking of store growth or unit profits by store.
- A store image which fails to engage the younger clientele

- An out-dated business website and web identification, and the lack of use of other forms of internet advertising
- A sub-optimal Drive-Thru menu that inhibited traffic flow.

The project deliverables included a written report and a formal presentation to the owners, as well as the creation of an Excel model that tracks real-time profitability of individual items as well as individual store performance.

The findings enabled the owners better understand their business performance, and when and where to implement a few **practical** changes that could help the business grow and prosper.

Where do we go from here?

The ERM for Small Businesses initiative that the Goldenson Center has started at UConn is similar to micro-financing and micro-insurance, both of which are globally expanding initiatives. The ERMSB initiative can be considered a form of **micro-risk management**.

The Goldenson Center is committed to the continued support of students to undertake ERMSB projects in the Connecticut region. While the annual budget from the Goldenson Center could sustain funding for about a dozen ERMSB projects per year, this is only a tiny fraction of the nationwide ERMSB culture being sought.

In order to undertake ERMSB projects on a large scale, two important issues need to be resolved:

- Ongoing funding
- A cost-effective delivery system to undertake these projects

Large corporations, private foundations and government agencies have a stake in ensuring that small businesses stay viable and continue to grow:

- A thriving and sustainable small business environment is good for the overall economy
- Small business comprise a market for goods and services developed by large corporations
- A reduction in the failure rate of small businesses has a positive financial impact for banks and other lending institutions which provide loans to small businesses

Large corporations could selectively choose the small businesses to support for this study and engage a university entity like the Goldenson Center to do the work with students. To the extent that ERMSB reduces failure rates, banks could offer preferred lending rates for small businesses which undergo an ERM analysis and establish risk management action plans.

The most effective delivery system to undertake these projects is the utilization of college students in actuarial, finance, economics and related disciplines at universities all over the country. Students would receive valuable experiential learning and businesses would benefit from the creative solutions they come up with.

The Goldenson Center can play a key role in facilitating and coordinating broader scale ERMSB ventures involving a partnership between large corporations and other funding entities and academic institutions. Based on experience from the projects we have undertaken, here are some tools and insights that could be of benefit to other universities and their funding partners:

- A template on how an ERM analysis should be conducted
- Estimated costs and how to keep costs manageable
- The kind of oversight that students should have and how to balance the need for consistency of quality for each project without stifling student creativity
- Minimum standards for every ERM report
- Ongoing tracking of effectiveness of these ERM projects

Concluding remarks

I believe the Goldenson Center has just scratched the surface in demonstrating how an effective ERM culture can be created with small businesses. While the work at the Goldenson Center will continue, for this initiative to truly make an impact, it will require an ongoing partnership between large corporations, foundations, government agencies and academic institutions to fund and implement this on a larger scale.

The payoff would be huge, since any reduction in the failure rate for small businesses could have a positive cascading effect on the entire economy. Similar to micro-financing and micro-insurance, micro-risk management has **global** implications. Since academic institutions exist all over the world, the delivery of micro-risk management services to small businesses using college students can be replicated globally as well.

Henry Ford says this about failure - "**Failure is only the opportunity to begin again, only this time more wisely.**" I believe the Janet & Mark L. Goldenson Center for Actuarial Research at the University of Connecticut has laid the groundwork on how to instill an ERM culture for small businesses and this is indeed the "wise" approach that needs to be followed.

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