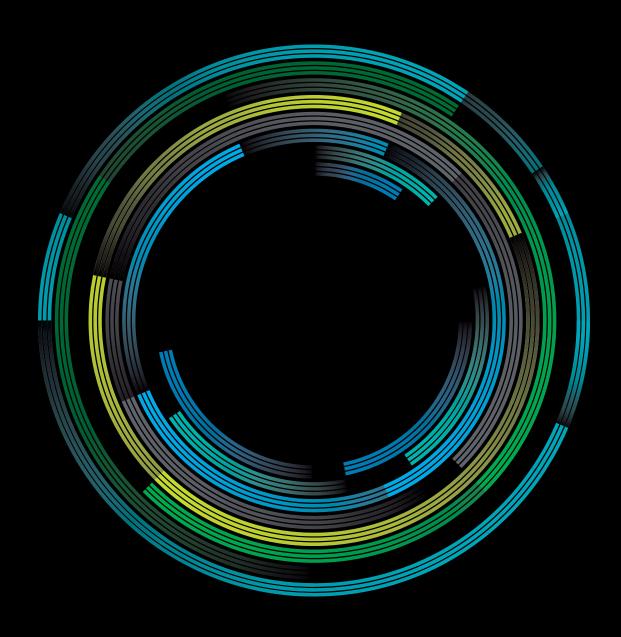
Deloitte.





Contents

Introduction	01
Drivers of misconduct	02
Restoring trust	14
A new approach through innovation	22
Conclusion	27
Contacts	20

Introduction

There has been no shortage of well-publicized and highly damaging misconduct scandals within the financial services industry over the past decade. Conduct is a lens into the culture of organizations, and conduct failings seem to be widespread across several jurisdictions, cut across financial services organizations and involve both the retail and wholesale sides of business. A large number of customers have claimed sizeable loss and there has been significant reputational and brand damage to firms. A raft of new regulatory initiatives, substantial fines and expensive remediation programs have also ensued.

Improving conduct within industry is an essential part of rebuilding trust and supporting future sustainable growth. Further, the regulatory focus on conduct is expected to persist and firms will continue to face pressure to be alert to poor behavior.

To help financial services firms be proactive about misconduct, this paper explores its fundamental drivers. By drawing out the broad themes and drivers, the focus will naturally shift from addressing individual instances of bad behavior to obtaining a broad view of its root causes that will help in the design of enterprise-wide and preventative conduct risk programs. The eight drivers of misconduct that we have identified are summarized in **Figure 1 on page 3**.

We also review the various industry and regulatory initiatives that have arisen in response to conduct failings within financial services firms and provide a summary of approaches that can be considered to address the eight identified drivers of misconduct (see Figure 2 on page 15).

While much has been done to set standards and to restore trust, there is a desire to improve both capabilities and cost effectiveness in meeting expectations around managing conduct. With this in mind, we have set out possible ways in which new innovative technologies might be enlisted to optimize responses (see Figure 3 on page 23). Innovation that can help to improve the effectiveness and efficiency of conduct management programs will in turn create better customer and regulatory outcomes.

Drivers of misconduct

Conduct is a current priority for both the financial services industry and its key regulators. Understanding what has driven poor conduct in the past can help firms design responses to restore trust and prevent problems emerging in the future.

The numerous instances of poor practices within the financial services industry that have been exposed across the globe have resulted in clients' interests being overlooked, unfair and inequitable outcomes, considerable financial impact for customers, and damage to the integrity of the market. Firms are facing enhanced regulation, hefty penalties and substantial remediation costs. The impact has not only been felt on bottom lines and through increased regulation. It has also caused a significant loss of trust amongst customers, and the public more broadly.

Understanding and addressing the drivers of misconduct is an essential step in improving standards of behavior, being able to identify key conduct risks, designing pre-emptive enterprise-wide conduct programs and meeting regulatory and marketplace expectations. As such, we have explored the findings of various conduct related enforcement actions, regulatory and industry reviews, government inquiries and firm remediation programs to discover the common themes that lie beneath poor conduct.

While many of the recent high profile cases of misconduct have occurred within banking (and therefore many examples in this paper are drawn from that sector), conduct is not a bank only issue. Regulatory and community interest and expectations around conduct cut across sectors, and financial services organizations of all types are under scrutiny.

The eight key drivers of misconduct that we have identified are further explored in the pages that follow. The root causes identified in our paper are not behind all recent conduct failings. Rather, we have focused on those drivers that firms are more readily able to control and synthesized these into broader, more manageable themes. The eight drivers often overlap and, because each firm is structured differently, each driver will have differing levels of relevance. The drivers also work together, to create an environment that incentivizes, reinforces and spreads problematic behavior.



Less trust

In 2016 33,000 respondents from 28 countries said banking and financial services is the

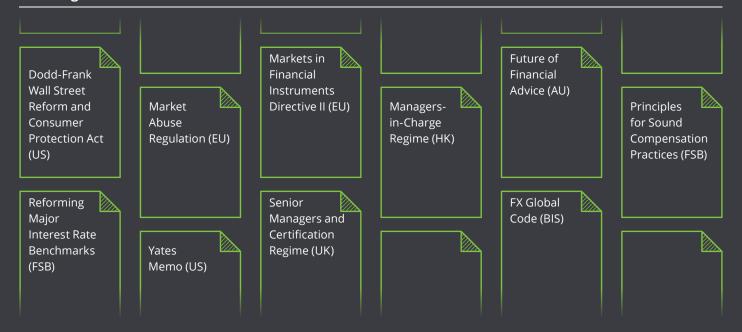
least trusted sector globally...



Banking and financial services has held this position for the past



More regulation



Escalating costs

Costs spent on conduct for 20 major banks:

2008 to 2012

2010 to 2014

2011 to 2015

£197.76bn **£205.84bn £252.00bn**



\$275 billion in legal costs for global banks since 2008 translates into more than \$5 trillion of reduced lending capacity to the real economy[†]



two percentage points higher without fines



Customer needs and suitability not guiding product lifecycle practices

Poor conduct outcomes can arise when product design, marketing, sales and advice, as well as post-sale practices, are driven by concerns about "what will sell the most" rather than what the customer needs and what is most suitable for these needs ("is this right for them?").

Product design dictated primarily by the commercial needs of a firm and that does not adequately integrate the customer perspective can foster poor conduct, in particular mis-selling and irresponsible lending. When the goal, for example, is to attain the highest revenues from the mass market, the result may be generic products that are less likely to be fit for purpose or tailored to individual needs. The pressure to innovate, if not tempered by considerations of customer suitability, may result in overly complex and opaque products whose characteristics and risk profile may be difficult to understand, thereby augmenting the chances of mis-selling. Regulators have also been critical of design strategies that can take advantage of human behavioral biases that may lead to poor choices, such as incorporating hurdles to switching, complex features and price structures, mezzanine fees, products catering to high loss aversion (e.g., insurance for small risks) and free trial periods.

Marketing, advice and sales practices that are similarly driven by maximizing volumes and that do not give sufficient weight to customer utility can also lay the foundation for undesirable outcomes.

For example, quotas or league tables that celebrate sales volumes can encourage customer suitability to be overlooked (or made a secondary consideration) and make inappropriate reporting of transactions seem a reasonable trade-off. Techniques such as teaser rates, insurance add-ons, product bundling, cross-selling and default/ opt-out settings may suit some customers and provide rewards and savings. However, they also tend to increase the possibility that customers will be confused about what they have agreed to and question whether the product they purchase is in their best interest. Again, there has been some criticism of sales and marketing strategies that profit from human mistakes bought about by in-built cognitive biases or information asymmetries, such as poor disclosures, deliberately misleading marketing campaigns or making a product easy to sign-up to, but with difficult cancellation procedures.

Post-sale customer care that is absent or whose purpose is more focused on procuring additional sales rather than, say, ensuring customer satisfaction or ongoing product suitability, can also lead to adverse outcomes. Failure to escalate and investigate customer complaints can do the same. These are other elements that can work to undermine good conduct as they reduce the chance that customer needs and suitability are being heard, filtered through an organization and are guiding future product design, marketing, sales and advice.



Failing to have a "balanced scorecard" for human resource decisions

Recruitment, remuneration, promotion, professional development, and dismissal decisions that value short-term revenue generation over other important aspects of performance can incentivize misconduct.

Hiring decisions that are chiefly guided by an individual's ability to create profits for a firm have been identified as a problematic feature across the financial services industry by regulators worldwide. For example, recruitment that consistently ranks a history of sales or trading success above other key factors (such as customer satisfaction, management skills, technical expertise, integrity or conduct record) will tend to build a workforce whose behavior mimics this ranking (for example by placing profitable conduct ahead of ethical conduct). Conduct goals may also be harder to achieve if the focus is only on recruiting those who have attained the highest academic scores without regard to areas such as diversity of experience and expertise across all levels of the organization. A lack of focus on conduct and compliance history of employees has been critiqued as allowing "bad apples" to be recycled through firms, which in turn can facilitate the perpetuation and spread of unwanted behavior. A 2016 US study, for instance, found that financial advisory firms who hire individuals with misconduct records usually have a higher rate of misconduct themselves.1

How an individual is incentivized, evaluated and compensated also plays a significant role in shaping their professional behavior. Performance-based remuneration structures which peg compensation mainly to sales volumes, revenue generation or profit targets (such as commissions or an annual discretionary bonus) can tend to focus attention on maximizing short-term profit and crowd out other important concerns about longer-term value generation, needs of customers and broader market integrity and ethics. That is, it is easier to sacrifice good conduct and take on excessive risk when faced with the opportunity to make extra money or the pressure to deliver against targets. A case in point is recommending products because they pay the highest commission or incentive, rather than because they are the best fit for the customer. Another example is trading strategies that ignore market integrity rules and longer-term performance, because an individual's bonus is based on short-term trading profits.

Professional development programs that do not adequately incorporate training on values, ethics and conduct can further exacerbate risks. Clearly, people cannot be expected to abide by conduct obligations if they are not regularly made aware of what those obligations are and taught how to apply them to their day-to-day business activities.

Promotion, and other types of reward and recognition programs, which chiefly reward money making abilities and give little attention to other performance indicators (such as adherence to business values, people management skills, customer and employee satisfaction and risk awareness), can also increase the risk of unwanted behavior.

Similarly, key performance indicators (KPIs) that reward a large quantum of claims or complaints being finalized and that do not incorporate consideration of the quality of claims or complaints management can incentivize misconduct. Other examples include promoting the "bad apple" or celebrating the employee at the top of the sales league table (and pressuring those at the bottom). Paralleling such reward and recognition practices are decisions on discipline, demotion and dismissal, such as failing to exit the high performer when they breach conduct codes or job security based on meeting quarterly financial reporting targets.

The human resource practices sketched out above reinforce one another to foster the belief that revenue generation matters more than anything else within the organization. In this context, good conduct is not perceived as a professional advantage. When faced with a choice between maximizing profit (or minimizing costs) and acting in accordance with codes of conduct, decision-making can be skewed to the former.



"When breaches of conduct standards are not penalized, the message is sent that contraventions are acceptable and rules are bendable."

Individuals and leadership are not responsible or held to account for misconduct

Just as conduct within a firm is heavily influenced by what is seen to be rewarded, failure to penalize individuals involved, as well as managers in charge, for ethically or legally questionable behaviors supports its perpetuation and can foster a culture of impunity.

When people do not have to bear the risk if things go wrong, they have a reduced incentive to treat that risk as important. When breaches of conduct standards are not penalized, the message is sent that contraventions are acceptable and rules are bendable.

A common critique to surface from conduct related enforcement actions and inquiries was the absence of personal responsibility within firms. Many individuals were aware that their activities were unacceptable but openly engaged in abuses and exhibited a belief that no negative consequences would follow. Those employees who witnessed bad behaviors often failed to report or escalate the matter, suggesting they viewed the conduct as acceptable practice or that raising concerns would not lead to any action against the wrongdoer. Worse yet, in some cases employees may have felt that speaking up might have resulted in retaliation.

Many firms have, likewise, been faulted for accountability deficiencies in regards to the managers and supervisors who presided over conduct failings. In some organizations, there was no formalized or hierarchical structure for management accountability.

In others, managers or supervisors were unclear on their responsibilities for a team's professional behavior or expressed ignorance of poor practices. Some were aware and even complicit in transgressions. Each of these scenarios indicate managers and supervisors had a level of confidence that they were not responsible or would not be admonished for their team's standards of conduct.

Another important part of discussions on accountability has been the erosion and reconfiguration of the role of the first line of defense (individual business units) and the second line of defense (typically the risk, compliance and product control functions). The first line is traditionally responsible for "owning" the risks and therefore responsible for assessing and managing the risks in their business lines (including conduct risk), while the role of the second line is to monitor compliance with internal and external requirements as well as to challenge, question and engage in dialogue. In addition, the role of internal audit as the third line, is to test and escalate matters to help identify thematic issues such as conduct patterns and provide assurance to the board that the organization is addressing these issues satisfactorily. However, what gradually happened in many firms, and what enabled conduct to slip in many cases, was that the first line delegated responsibility for managing conduct risk to the second line. The second line could then not carry out their duty to provide effective and proactive challenge over business practices as they were on the hook for operating the controls. Similarly, internal audit has been criticized for not being adequately staffed to help identify thematic problems.



Failing to identify and manage conflicts of interest

When an individual has two competing objectives (a conflict of interest) and there is an incentive to act opportunistically, they may forgo compliance with a competing legal, professional or ethical obligation.

Failing to identify and manage conflicts of interest has been recognized as playing an important role in the cases of misconduct emerging over the past decade. If conflicts go unmanaged, opportunities for misconduct can be more prevalent.

Conflicts can arise in a range of ways in different parts of a firm. Some well-known examples of conflicts that have been identified as incentivizing misconduct within financial services firms include:

- Traders being able to both influence the setting of a benchmark and trade in products that reference those benchmarks.
 The potential risk being that the benchmark will be manipulated to support successful trading strategies.
- An advisory team possessing non-public information about a customer. The potential risk being that a team member may engage in insider trading.
- A firm that engages in proprietary trading while its clients are active in relevant markets at the same time.
 The potential risk being that traders may exploit knowledge of a client's confidential trading positions to advance their own strategies, to the detriment of clients or counterparties.

- A firm that produces research reports for customers on financial products and also issues or trades in those financial products. The potential risk being that report recommendations may be designed to support firm product sales or trading strategies and may not provide unbiased advice to customers.
- Commissions are given to sell certain products. The potential risk being that the firm's advisors may recommend products that pay the highest commission over those that best meet customer needs.
- Advice or wealth management businesses that incentivize or metricate companydeveloped products. The potential risk being that advisors may recommend company-developed products at the expense of those that may be the most suitable for clients.
- Transactions, including loans and trades, are executed with insiders or affiliates on preferential terms. The potential risk being that it may expose the firm to claims of client favoritism.

Subject to any specific legal and regulatory requirements, conflicts can also be managed in a variety of ways (for example through disclosure, physical segregation of individuals and teams, restricting access to information or outright prohibition).

"If conflicts go unmanaged, opportunities for misconduct can be more prevalent."



Complex, disconnected or "growth at all cost" businesses models

Conduct within complex or disconnected organizations can be difficult to manage. There may be a tendency to develop silos where different cultures, behaviors and operational practices incubate. This can erode enterprise-wide cohesion, communication and coordination on managing conduct. Further, business models and strategies that are solely focused on growth typically contain inherent conduct vulnerabilities that allow problems to spread and grow more rapidly.

In a number of the cases of misconduct, early warning signs were overlooked or treated in isolation, patterns of poor behavior were not identified, matters were not escalated, detached teams had their own unique ways of operating, and lessons learnt in one business unit were not applied to the rest of the organization.

Offering a multiplicity of services makes creating simple or uniform standards and procedures extremely hard, particularly if operating across several jurisdictions. Such organizations are usually working within a variety of cultural norms and are subject to a diverse stack of often inharmonious and challenging state, national, and global regulation. In this context, policies and processes around conduct can become too generic or too convoluted, resulting in unintended or discordant interpretations. Often a myriad of technology systems and data sources have accumulated over time, making retrieval and connection of information arduous and time-consuming. Responsibility and accountability may also be worn thin by size and complexity; identifying the individual responsible for an act can be tough when decision-making is scattered across several jurisdictions, numerous business units and different teams. Similarly, complex and disconnected organizations may face misplaced confidence amongst their people that someone, somewhere else, is taking care of an issue. This is particularly so when control and responsibility is diffused through third party distribution and other licensing agreements.

In the environment described above, it is challenging to know what remote teams are doing, to comprehend the bigger picture, connect dots and identify patterns (critical to identifying potential or systemic issues), and to design simple conduct programs suitable to roll out across an enterprise. How issues are tackled end-to-end may vary and the urge may be to solve problems in a piecemeal or isolated fashion, resulting in only minor and temporary improvements.

Further, business models that do not take customer needs into consideration, or that are otherwise premised on the existence of one or more of the drivers of misconduct for their success, can create an inherent bias to "growth at all costs" throughout an organization. Growth and profitability are, of course, important considerations for any business; however, negative outcomes can occur from unrealistic or unsustainable market share or return on equity goals. Product complexity, a move into unknown or niche markets or prioritizing higher margin businesses can result. As business models have enterprise-wide impact, undesirable behavior may also scale up and spread rapidly across an organization when the model is not conduct or customer aligned, and such a model can undermine controls designed to manage misconduct or render remediation efforts as only localized and fleeting.



Manual and complicated processes and procedures

Labor intensive or convoluted processes and procedures increase the chance of error and give people the incentive and opportunity to ignore controls that are designed to prevent misconduct.

Compliance policy documents that span hundreds of pages, inconsistent and at times contradictory guidance, repetitive risk approval processes, manual data entry, multiple form filling on a single issue, countless obligation databases, constant change in process and procedures. This is a state of affairs that is not unfamiliar to many highly regulated and complex businesses. The result may be accidental misconduct: manual processes are more prone to human error and a dense policy or convoluted procedure may not be correctly followed, because it was not understood.

Further, people can experience unwieldy processes and procedures as pointless bureaucratic roadblocks that undermine business agility. The danger is that individuals become skeptical about the value of requirements, hostility develops and it can then seem reasonable to ignore controls, carry out manual workarounds or adopt a "tick-box" attitude toward compliance. As Thomas C. Baxter of the Federal Reserve Bank of New York has observed: "In some large, complex organizations, the rules can be difficult and tedious ... we comply ... only because it represents a mandatory but silly rule ... and not because the sanction seeks to address a problem that all should find abhorrent"2. Evading controls designed to prevent misconduct or executing a procedure because you have to (rather than appreciating the reason for it) enhance the risk of misconduct. Internallydeveloped procedural requirements that serve less-critical conduct and compliance purposes, where prolific, can also work to undermine the integrity of risk and

"People can experience unwieldy processes and procedures as pointless bureaucratic roadblocks that undermine business agility ... it can then seem reasonable to ignore controls, carry out manual workarounds or adopt a "tick-box" attitude toward compliance."

compliance approaches.

Disrespect for systems of governance and control bought about by complex, inconsistent and manual processes and procedures will naturally extend to those who are seen as responsible for their design and administration, usually being the risk and compliance function. When such a mindset evolves, guidance and challenge from these functions is unlikely to be valued or followed, particularly when up against potentially conflicting views of highly profitable and powerful business units. As noted previously, weakness in the second and third lines of defense has been highlighted as a factor that made possible the financial services misconduct seen in recent years.



"If systems for monitoring and surveillance are inadequate, management information on conduct will likely be lacking, leaving leadership unable to identify and manage important risks."

Weak systems for monitoring and surveillance

If monitoring and surveillance is nonexistent or inadequate, misconduct can go undetected and risks may not be appropriately managed. Further, some individuals may be more likely to engage in poor behaviors because they estimate their chance of being discovered as low.

The UK's Fair and Effective Markets Review has commented that "an important lesson from the enforcement actions of recent years is that firms must ensure they have the means to detect wrongdoing (since they are closest to the actions of their own staff and counterparties) and act decisively when it is detected (since they stand to lose the most, financially and reputationally)"3. Indeed weaknesses in monitoring and surveillance were found to be an important factor in explaining how behaviors exposed in the benchmark manipulation cases could be perpetrated by numerous individuals over several years using electronic messaging services, emails and telephone. The failure to monitor the quality of sales processes, for example by recording faceto-face and telephone conversations, has similarly been criticized in cases of misselling. Likewise, the failure to adequately monitor employee activity is a common theme in rogue trading cases.

Concerns have not just centered on absent or substandard systems for identifying poor behaviors. As touched on in the section on responsibility and accountability, the failure to then take action and escalate problems that have been identified, as well as to use such intelligence to inform updates to controls and to create more proactive procedures, has also been the subject of criticism.

While recognizing the critical importance that trust and autonomy plays in employee satisfaction and productivity, it should also be noted that internal monitoring and surveillance for misconduct is a core aspect of compliance and required under many regulatory regimes. Further, if systems for monitoring and surveillance are inadequate, management information on conduct will likely be lacking, leaving leadership unable to identify and manage important risks.



Disparate subcultures or a problematic prevailing culture

Poor conduct can develop in a firm that has various disparate subcultures or when the prevailing culture does not balance short-term financial success with other important business and ethical imperatives.

The shared set of values, mindsets and assumptions distinct to a firm – its culture – is increasingly being seen as at the heart of ethical lapses within financial services.

In many cases, damaging behaviors have been attributed to a corporate culture that failed to balance concerns about short-term commercial success with other important business objectives such as longer-term sustainability; the interests of customers, counterparties and employees; the maintenance of wider market integrity; and upholding ethical principles. In many respects, the drivers of misconduct discussed above can be seen as observable manifestations of such a culture.

The failure to have a uniformity of culture that is established at the very top of the house, underpinned by a single guiding business purpose, has also been identified as allowing problematic subcultures to emerge and go unmanaged within many financial services organizations. Clarity of purpose and values means it is less likely that outcomes are traded off across each other. Without such clarity, messaging (and behavior) can become inconsistent.

For example, having a formal customer centric purpose statement but then a business model or regular communications that focus on the centrality of superior shareholder return can result in mixed messages and confusion amongst employees about the relative importance of treating customers fairly versus managing profitability. This is likely to be replicated across an enterprise, from management reporting to budgets to items on meeting agendas.

Another critical element of the discussion on culture is the importance of leadership in defining, communicating, embedding, and substantively testing risk-related attitudes, ethical values and standards of behavior (i.e., risk culture). Authority provides the principal check on conduct and those who possess authority set the parameters of what is acceptable and unacceptable. That is, behavior within an organization is ultimately guided by the explicit and implicit messages that leaders communicate; through what they say and also what they do. When leaders fail to actively set the right tone and ensure that it infuses throughout the firm, the reality of conduct may not match aspirations and the "mood in the middle" or "echo from the bottom" can differ substantially from the "tone at the top".

The eight drivers often overlap and, because each firm is structured differently, each driver will have differing levels of relevance.



Restoring trust

Industry, regulators and governments are designing ways to address the drivers of misconduct and raise standards within financial services firms, which in turn is helping to restore trust in the industry. Challenges, however, still remain.

Significant energy and resources are being invested by the financial services industry and its regulators to improve conduct. Addressing misconduct is one of the Financial Stability Board's (FSB) priorities and, to this end, the international body is pursuing "a major work program" that has seen a working group set up to drive efforts and recommendations on reducing misconduct in the financial sector due for release in the first half of this year.4 The importance of embedding a good culture and cultivating good conduct is recognized as key in restoring reputational capital, retaining customers, building a sustainable business and maintaining a competitive advantage.

This is perhaps even more pressing in the current environment where governments are looking for ways to augment and diversify competition in the financial services industry. Some of the responses to restoring trust are outlined on the pages that follow.





Ensuring customer needs and suitability steer product lifecycle decisions

Various product governance and consumer protection obligations across jurisdictions mean that firms need to understand whether products are fit for purpose and actions are in the customer's best interest. In the EU, the Markets in Financial Instruments Directive II (MiFID II) will introduce new rules in 2018 to enhance investor protection by regulating all stages of the lifecycle of investment products and services.⁵ The Insurance Distribution Directive will introduce similar rules in 2018 in relation to insurance products6. In Australia, new product design and distribution obligations are being proposed to ensure that products are targeted at the right people⁷. Behavioral analytics is also being explored by both regulators and industry to provide better customer outcomes. The UK's Financial Conduct Authority (FCA) has published a paper describing how it uses behavioral economics in the regulation of financial conduct⁸ and the Australian Securities and Investments Commission (ASIC) has set up a behavioral economics team within its strategic intelligence unit9. Further, in the US rules were proposed around standards of fiduciary duty and incentive compensation, and the Consumer Financial Protection Bureau (CFPB) was created.

Many firms are continuing to identify better ways to incorporate the customer's needs and suitability into the entire product lifecycle; from design to marketing, sales, distribution and post-sale customer care. This includes new training modules on needs and suitability, mystery shopping, post-sale customer surveys/analytics, enhancements to complaints and escalation procedures, and tightening rules on how to treat customers, as well as new processes for assessing a customer's level of financial sophistication.

"Many firms are continuing to identify better ways to incorporate the customer's needs and suitability into the entire product lifecycle; from design to marketing, sales, distribution and post-sale customer care."



Building "balanced scorecards" for human resource decisions

Organizations are placing increased emphasis on an individual's ethical, compliance and regulatory history during the hiring process and refreshing recruitment, induction, training and development frameworks. Regulators are enhancing the information that is available about the conduct of individuals, as well as toughening punishments for misconduct. Ways to raise standards of professionalism, for example through educational requirements, are also being investigated. In the UK, mandates are being implemented to help prevent the "recycling" between firms of individuals with poor conduct records through a more comprehensive references process¹⁰. In the US, the Financial Industry Regulatory Authority (FINRA) is using advanced analytics to identify registered representatives with potentially problematic regulatory histories¹¹ and in 2017 will be devoting "particular attention" to firms' hiring and monitoring of highrisk and recidivist brokers¹². In Australia, legislation has been passed to raise the professional, ethical and education standards of financial advisers13 and the Monetary Authority of Singapore (MAS) is adding an ethics and skills component to existing financial adviser and market intermediary competencies¹⁴.

There has been significant focus on compensation and remuneration. Many firms have put limits on bonuses, aligned internal policies on variable compensation to longer-term risk and implemented mechanisms for in-year bonus adjustments, deferrals, and clawback in cases of misconduct. Firms are now focusing on building structures to encourage positive conduct, such as linking performance objectives to ethical codes and incorporating non-financial objectives into performance assessments (e.g., customer satisfaction and cooperation with control functions). In Europe, the remuneration requirements under Capital Requirements Directive (CRD) IV require firms to identify "risk takers" and have specific requirements in relation to bonus caps and long-term incentive structures to encourage key people to think beyond short-term profits¹⁵. The Financial Stability Board (FSB) is taking action to improve the alignment between remuneration and conduct risk by conducting consultations on the use of compensation tools and recommendations for consistent national reporting and collection of data¹⁶.

"Organizations are placing increased emphasis on an individual's ethical, compliance and regulatory history ...
There has been significant focus on compensation and remuneration."



Ensuring individuals and leadership are responsible and accountable for conduct

Regulators and prosecutors have been devising ways to augment accountability for misconduct. The UK's Senior Managers and Certification Regime (SM&CR), for instance, makes senior managers personally accountable for firm contraventions of relevant requirements unless they have taken reasonable steps to prevent the contravention¹⁷. In the US, a 2015 memo from the Deputy Attorney General of the United States ("the Yates Memo") included requirements that firms provide all relevant facts about individuals involved in corporate misconduct in order to qualify for cooperation credit18. Hong Kong's Securities and Futures Commission (SFC) has also recently introduced measures for strengthening senior management accountability¹⁹. The FSB is examining whether steps are needed to improve standards in the fixed income, currency and commodity markets in order to increase individual accountability and support enforcement efforts²⁰.

"Firms meanwhile are focusing on ensuring the first line owns risk in their business line, strengthening second line challenge, and creating a 'speak up' culture."

Firms meanwhile are focusing on ensuring the first line owns risk in their business line, strengthening second line challenge, and creating a "speak up" culture. For example, management maps are being drawn up to clearly articulate and communicate roles and responsibilities, rotations between business and risk management are being implemented, and new training is being rolled out for business units on risk and to the second line on how to effectively perform their challenge function. In addition employee issue escalation processes and customer complaints workflows, with special attention to whistleblowing, are being reviewed and strengthened. Key areas of focus include the implementation of measures to ensure issues and complaints are actioned in a timely and consistent manner, confidentiality of the reporter is maintained, and the necessary provisions are in place to protect against potential retaliation.



Proactive processes for identifying and managing conflicts of interest

Rules on conflicts of interest have been strengthened by some authorities. In the EU, for instance, MIFID II requires that "all appropriate steps be taken to identify and to prevent or manage conflicts of interest"²¹ and, in the US, the Volcker Rule²² has prohibited proprietary trading. The FSB meanwhile has been coordinating the global reform of benchmark design and methodology to address inherent conflicts. Firms are conducting enterprise-wide reviews to develop a deeper understanding of where conflicts may occur and designing controls to manage those conflicts, for example by enhancing information barriers, physically segregating teams and ensuring supervisory oversight of conflicts.

"Firms are conducting enterprise-wide reviews to develop a deeper understanding of where conflicts may occur and designing controls to manage those conflicts."



Creating a cohesive organization with a conduct-aligned business model

Industry and regulators are both working to ensure that good governance and supervision are bought into the core. Isolation or remoteness is no longer being accepted as an excuse for instances of misconduct. Governance, conduct and risk management frameworks are being designed to have enterprise-wide penetration and with direct lines to the executive. Firms are reviewing their business models, making them more customer centric and identifying any other potential conflicts with desired conduct outcomes. Regulators are also adopting a more holistic and forward looking approach. Japan's Financial Services Agency (JSFA) "dynamic supervision" approach is one example and involves the regulator concentrating on "better quality financial services to customers (or best practices)" rather than "a formality check of financial institutions compliance with rules and regulations (or minimum standards)", as well as a move from "individual parts to total picture" in which underlying root causes are addressed "rather than focusing too much on individual instances"23.



Automating and streamlining processes and procedures

Some firms are reviewing and refreshing their risk and compliance processes and procedures to simplify, rationalize, and optimize them; such that there are fewer, but better, rules. Duplicate or overlapping requirements are being consolidated, contradictions clarified and procedures and processes identified as unnecessary, low value or redundant are being axed. Other firms are challenging and changing the way processes and procedures are set, or leveraging technology to automate manual routine tasks. Regulatory concerns and expectations around effective processes and procedures seem primarily driven by reporting requirements (for example, those around data gathering and aggregation for capital stress testing). However, a knock on effect has been to provide further urgency to enhancing the quality of risk and compliance rules and requirements. Similarly, digital transformation projects aimed at modernizing the business so as to meet evolving customer expectations, are providing an additional impetus for firms to overhaul labor intensive and cumbersome processes and procedures.

"Duplicate or overlapping requirements are being consolidated, contradictions clarified and procedures and processes identified as unnecessary, low value or redundant are being axed."



Strengthening and modernizing monitoring and surveillance capabilities

Legislation requiring recording and monitoring of transactions and communications, as well as reporting and recordkeeping of the same, have been boosted in many key jurisdictions. MIFID II and the Market Abuse Regulation (MAR)²⁴ in the EU and Dodd-Frank Wall Street Reform and Consumer Protection Act in the US are examples. Many firms are making improvements to their monitoring and surveillance capabilities to meet these regulatory expectations. Some are scaling up headcount. Others are applying sophisticated technology and analytics to leverage current data and create predictive and preventative systems.



Defining and embedding a clear unified culture

Improving firm culture is at the top of everyone's agenda today and is seen as central to the restoration and maintenance of good conduct within the financial services industry. Firms are rolling out change programs focused on culture that include comprehensive communications plans, developing socially-desirable purpose statements that emphasize support for customers or broader society, and proactively and systematically assessing the role culture plays with respect to risk, conduct and compliance. Culture and conduct are also being embedded into risk management frameworks, placed as regular discussion topics on board agendas and incorporated into strategies, business models and governance arrangements. Desk heads and intermediate supervisors are being trained on the important role that they play in communicating and developing capabilities for timely prevention and detection of unacceptable standards of conduct. Industry-wide efforts are also underway, in the UK for instance the Banking Standards Board has been set up to annually benchmark, assess and report on good culture across the banking sector.

Meanwhile regulators are undertaking detailed reviews of firm culture. In the US, FINRA has been conducting targeted exams, known as "sweeps", on how firms establish, communicate and implement cultural values, and whether these are guiding appropriate business conduct²⁵. The Federal Reserve Bank of New York has set up a dedicated webpage on financial services culture and behavior²⁶. In Europe, De Nederlandsche Bank has created a center that undertakes behavior and culture reviews of firms, designed to help early identification of unhealthy corporate culture²⁷. The UK's FCA has put governance and culture as one of its priorities for 2016/2017²⁸; while for Canada's Office of the Superintendent of Financial Institutions (OSFI), enhancing the ability to assess how risk culture and other drivers of behavior support or undermine effective risk management is a 2017-2020 priority²⁹. In Asia Pacific, the Hong Kong Monetary Authority (HKMA) has recently provided guidance on promoting sound culture in banks30 and the Australian Prudential Regulation Authority (APRA) will be conducting pilot reviews of firm culture in the year ahead31.

"Improving firm culture is at the top of everyone's agenda today and is seen as central to the restoration and maintenance of good conduct within the financial services industry."

Continuing challenges

There are signs that all these efforts to improve standards of conduct within industry are paying off. The 2016 Edelman Trust Barometer reports that global trust in financial services has increased eight points over the past five-years, the biggest increase of any industry in the surveys³². Nonetheless, meeting regulatory requirements and expectations around managing conduct remains challenging for firms, particularly due to the proliferation of complex and onerous financial services regulation that has emerged since the financial crisis (and that continues to shift and evolve). Managing the cost of regulatory compliance is one of the biggest challenges for financial services organizations³³. Compliance costs for a financial institution can be over \$1bn every year and governance, risk management and compliance now represent an estimated 10-15% of the total financial services workforce³⁴. Overall, these significant investments in regulatory change programs and compliance pose a challenge to profitability. And few organizations can provide evidence that their investments in improving culture and fewer misconduct incidents are helping with the bottom line.

And this is when technology can make a difference. There is a growing interest in how innovative technologies can help organizations fulfill regulatory and compliance requirements more efficiently and effectively. Can the latest breed of innovative technologies provide new, improved and more cost effective ways not just to catch misconduct in a timely fashion, but actually help address the drivers of poor conduct?

A new approach through innovation

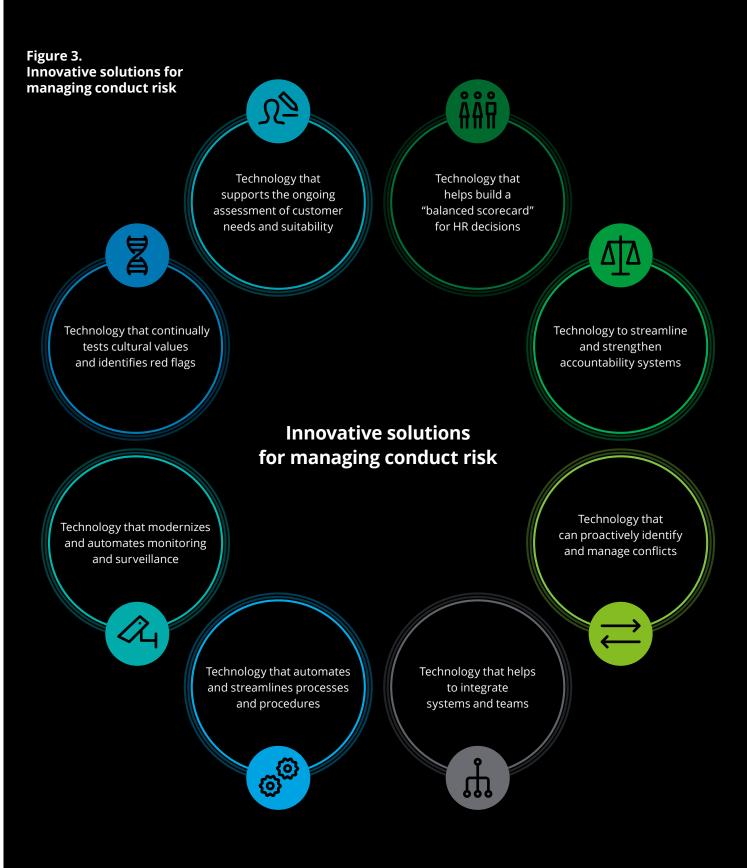
It is well established that innovation is disrupting the way that financial services are being provided to consumers. The focus is now being turned toward internal operations, with innovation being used to power better regulatory and compliance outcomes. The time is right to consider how new technologies can help manage conduct risk.

There is an expanding list of exciting technological advances and innovations that are driving disruptive innovation. On page 24, we explore some of the developments and technologies that offer the hope of significant efficiency and value gains by automating, simplifying and streamlining processes; integrating, aggregating and visualizing vast volumes of structured and unstructured data; effortless customization and scalability; enlisting self-learning machines to carry out intuitive tasks and real-time, possibly predictive and pre-emptive, systems replacing post-factum, reactive analysis.

The use of new technologies to fulfill regulatory and compliance requirements more efficiently and effectively is commonly referred to as "RegTech" (regulatory technology). Enlisting technology to help ease the burden of regulatory compliance is not new. However the current buzz around RegTech is how the innovations and technologies that are transforming the way we provide financial services (some of which are noted on page 24) could also be harnessed to transform the way we go about meeting regulatory and compliance obligations.

It is certainly the right time for firms to explore and trial RegTech solutions. Technological innovation is providing entirely new ways of doing established activities. Regulators and organizations are sponsoring various initiatives to nurture innovation within the financial services industry. FinTech "hubs" and "regulatory sandboxes" are being set up to cultivate the growth of start-ups and provide a flexible regulatory environment in which applications of novel technologies can be road-tested. Industry is also investing deeply, setting up new teams to drive innovation, and partnering with technology players to develop solutions. Moreover, compliance costs are reaching unsustainable levels and not always producing desired results. Technology that can improve efficiency and value must be considered.

On the pages that follow we consider a sample of ways in which innovative new technologies could be used by firms to address the drivers of poor conduct and thereby help them to manage their conduct risk, meet regulatory expectations and produce better customer outcomes.



Examples of recent developments and technologies driving disruptive innovation:

- Robotic process automation (RPA) is allowing software robots to perform routine business processes, such as moving files between folders, filling in forms and data validation.
- New big data technologies and techniques are enabling the varied and colossally-sized datasets that organizations hold to be efficiently aggregated, stored and managed.
- Cognitive technologies and artificial intelligence (AI) are enabling machines to perform more and more tasks that have hitherto required human intelligence, such as decision-making, visual perception, speech recognition, analysis of unstructured data and natural language processing (NLP), as well as learning on the basis of pure exposure to large data sets (rather than through instruction).
- Advanced analytic techniques, such as behavioral and video analytics, that enlist sophisticated algorithms and cognitive technology allow meaningful insights to be gleaned from huge pools of data in a fraction of the time it would take a human to perform the task.
- Augmented reality (AR) and virtual reality (VR) are intersecting with Internet of Things (IOT) technology to bring virtual and real worlds together, integrating and extending the digital and physical landscapes to create a "mixed reality", with applications such as 3D training models and remote operation of machinery.

- Application programming interface (API) is facilitating the integration of systems, technologies and functionalities.
- Biometric technology is providing new ways to verify identity, such as through fingerprint sensors, iris scanning and typing tempo.
- Cloud applications are facilitating the hosting of data, systems and services on the internet, providing significant savings and greater flexibility, scalability and configurability.
- **Quantum computing** is promising to deliver millions of times the processing capacity of a traditional computer.
- Distributed ledger technology (DLT), which provides a distributed, shared and encrypted database that maintains near tamper proof data, has the potential to significantly improve data security and integrity, enhance transparency and auditability, reduce the chance of single point of failure and remove the need for third party intermediation.



Technology that supports the ongoing assessment of customer needs and suitability

- Visual network analytics to find data relationships relevant to customer needs (e.g., data integration, dynamic relationship mapping).
- Interactive visual analytics to reveal insights from large data sets (e.g., from public, cloud, social network, enterprise).
- Customer value, customer segmentation, and customer satisfaction analytics.
- Natural language processing to gain insights from a wider pool of customer data and facilitate automation of customer communications and suitability assessments.



Technology that helps build a "balanced scorecard" for HR decisions

- Cognitive computing to analyze context, content and relationships within big data sets and to reveal critical trends and findings about an individual or across cohorts (e.g., from professional registers, performance reviews, customer feedback, complaints).
- Software that automates connections between performance management and organizational objectives.



Technology that streamlines and strengthens systems of accountability

- Distributed ledger technology to strengthen the audit trail by simplification of record keeping, enhancing transparency, robust time stamping and protection against manual change.
- Automated enforcement of escalation procedures.



Technology that can proactively identify and manage conflicts

- Master access control to set parameters and provide alerts when controls are violated.
- Automated enforcement of ethical walls, segregation of duties, and watch lists.
- Big data analytics and algorithms to map personal or business connections and internal and external networks.
- Cognitive technologies and predictive analytics to accelerate conflict scenario simulation and analysis.



Technology that helps integrate systems and teams

- Application programming interfaces and integration systems to facilitate interoperability and system communication.
- Distributed ledger technology for enhanced transparency and access to a "single source of truth".
- Regulatory radar software to identify regulatory change and cognitive technologies to assess application and impact.
- Mixed reality applications to improve communication and collaboration between remote teams and break down functional silos.



Technology that automates and streamlines processes and procedures

- Robotic process automation to automate routine processes.
- Distributed ledger technology to strengthen against manual workarounds, reduce errors deriving from duplication and eliminate manual efforts required to perform data reconciliation.



Technology that modernizes and automates monitoring and surveillance

- Machine learning algorithms to search and aggregate across multiple mediums (e.g., voice, email, video, social media, instant messaging) and flag potential violations.
- Natural language processing to automate communications monitoring (e.g., phone, text, instant messaging).
- Biometric technology to enhance identity verification procedures.
- Relationship, behavioral and content analytics to facilitate pre-emptive and proactive measures.
- Big data analytics and machine learning to predict future behaviors based on large-scale analysis of the particulars and patterns in prior incidents.



Technology that facilitates continual testing of cultural values and identification of red flags

- Big data analytics to scan patterns
 of behavior across technologies
 and systems to surface potential
 vulnerabilities and model behavioral
 risk (e.g., from sources such as
 complaints, risks, incidents, near misses,
 staff feedback and employee surveys,
 social media, individual performance,
 remuneration and incentives, human
 resource and compliance data).
- Modelling of organizational performance and risk culture.
- Real-time pulsing of staff to test the mood of the organization, providing frequent and contemporaneous feedback on culture throughout an organization and at all levels (including external partners and value chain participants).

Conclusion

In this paper we have sought to identify the common themes and drivers of misconduct in the financial services industry, with a view to helping firms identify and manage their conduct risk. We have also explored industry and regulatory responses for restoring trust and have suggested some potential RegTech solutions to help firms think about ways to optimize outcomes in a more cost effective way.

Expecting to eradicate misconduct incidents in financial services organizations is unrealistic, and hence the regulatory agenda continues to evolve its focus. Financial services organizations of all types are being expected to put in place a proactive framework to continuously identify and tackle poor conduct, and the role of technology cannot be ignored.

While technology can itself provide a means to carry out misconduct (think algorithmic strategies with biased code, or cyber breaches and privacy leaks) innovative technologies can also be part of the solution. There are still significant hurdles to work through, much of the RegTech market is in its infancy and many of its ideas are only at proof of concept stage (for example, many distributed ledger technology and artificial intelligence solutions). Nonetheless RegTech represents an important opportunity to explore innovative processes supported by technologies that can drive the right outcomes.

The promise of an organization that functions effectively with a strong culture and good conduct is worth the effort. Few will dispute that managing poor conduct is essential to be on strategy, and for maintaining the trust of customers, regulators and the broader market. Similarly, few would dispute that business success today is intimately connected with an ability to harness innovative technology quickly and enthusiastically.

Designing the right conduct program supported by the right technology solution starts by bringing together business, technology and regulation experts. Tapping into this collective pool of knowledge will best draw out the relevant conduct issues that undermine executing on strategy, and enable a bespoke and sustainable solution to be developed. By identifying the core drivers of misconduct, the ways that regulators and industry have sought to address these drivers, and the new technologies that can optimize responses we hope to have provided ideas for a strong foundation from which to build a conduct program that will inspire trust.

End notes

- 1 Egan, Matvos and Seru *The Market for Financial Advisor Misconduct* (1 March 2016) http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2739170
- **2** Thomas C Baxter, Executive Vice President and General Counsel of the Federal Reserve Bank of New York *The rewards of an ethical culture*, London (20 January 2015) http://www.bis.org/review/r150121a.pdf
- **3** Fair and Effective Markets Review *Final Report* (June 2015) http://www.bankofengland.co.uk/markets/Documents/femrjun15.pdf
- **4** FSB Chair's letter to G20 Leaders Building a resilient and open global financial system to support sustainable cross-border investment

http://www.fsb.org/wp-content/uploads/FSB-Chair%E2%80%99s-letter-to-G20-Leaders-in-advance-of-their-meeting-in-Hangzhou-on-4-5-September..pdf

- **5** Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0065
- **6** Directive (EU) 2016/97 of the European Parliament and of the Council of 20 January 2016 on insurance distribution (recast)
- http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016L0097
- 7 Australian Government *Design and Distribution Obligations and Product Intervention Power, Proposals Paper* (December 2016)

http://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Consultations/2016/Design%20and%20distribution%20obligations/Key%20Documents/PDF/Design-and-distribution-obligations.ashx

- **8** FCA *Applying behavioral economics at the Financial Conduct Authority* (April 2013) https://www.fca.org.uk/publication/occasional-papers/occasional-paper-1.pdf
- **9** Peter Kell, ASIC Deputy Chairman *ASIC and behavioral economics: Regulating for real people* Brisbane, Australia (18 October 2016) http://download.asic.gov.au/media/4051518/peter-kell-speech-qube-symposium-published-21-october-2016.pdf
- 10 FCA Strengthening accountability in banking and insurance: regulatory references final rules: PS 16/22 (September 2016) https://www.fca.org.uk/publications/consultation-papers/strengthening-accountability-banking-insurance-reg-refs
- **11** Richard G. Ketchum, FINRA Chairman and Chief Executive Officer *Remarks From the 2016 FINRA Annual Conference* Washington, DC (23 May 2016) http://www.finra.org/newsroom/speeches/052316-remarks-2016-finra-annual-conference
- **12** FINRA **2017** Annual Regulatory and Examination Priorities Letter (February 2017) http://www.finra.org/sites/default/files/2017-regulatory-and-examination-priorities-letter pdf
- **13** Corporations Amendment (Professional Standards of Financial Advisers) Bill 2016 http://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bld=r5768
- **14** MAS Consultation Paper on Review of Competency Requirements for Representatives Conducting Regulated Activities under the Securities and Futures Act and Financial Advisers Act (December 2016) http://www.mas.gov.sg/News-and-Publications/Consultation-Paper/2016/Review-of-Competency-Requirements-for-Reps-under-SFA-and-FAA.aspx
- **15** Directive 2013/36/EU of the European parliament and of the council of 26 June 2013 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0|:L:2013:176:0338:0436:En:PDF
- **16** FSB *Measures to reduce misconduct risk: Second Progress Report* (1 September 2016) http://www.fsb.org/wp-content/uploads/Measures-to-reduce-misconduct-risk-Second-Progress-Report.pdf
- 17 FCA Senior Managers and Certification Regime

https://www.fca.org.uk/firms/senior-managers-certification-regime

18 US Department of Justice, Office of the Deputy Attorney General *Individual Accountability for Corporate Wrongdoing* (9 September 2015) https://www.justice.gov/dag/individual-accountability

- **19** SFC Circular to Licensed Corporations Regarding Measures for Augmenting the Accountability of Senior Management (16 December 2016)
- http://www.sfc.hk/edistributionWeb/gateway/EN/circular/intermediaries/licensing/doc?refNo=16FC68
- **20** FSB *Chair's letter to G20 Leaders Building a resilient and open global financial system to support sustainable cross-border investment*

http://www.fsb.org/wp-content/uploads/FSB-Chair%E2%80%99s-letter-to-G20-Leaders-in-advance-of-their-meeting-in-Hangzhou-on-4-5-September..pdf

- **21** Article 23(1) Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0065
- **22** § 619 (12 U.S.C. § 1851) Dodd–Frank Wall Street Reform and Consumer Protection Act,

https://www.gpo.gov/fdsys/pkg/PLAW-111publ203/html/PLAW-111publ203.htm

23 JFSA Summary Points from Progress and Assessment of the Strategic Directions and Priorities 2015–2016 (September 2016)

http://www.fsa.go.jp/en/news/2016/20161028-2/01.pdf

- **24** Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation) and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC Text with EEA relevance, http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014R0596
- **25** FINRA *Establishing, Communicating and Implementing Cultural Values* (February 2016) http://www.finra.org/industry/establishing-communicating-and-implementing-cultural-values
- **26** Federal Reserve Bank of New York *Governance & Culture Reform* https://www.newyorkfed.org/governance-and-culture-reform
- **27** De Nederlandsche Bank *Behaviour and Culture in the Dutch financial sector* https://www.dnb.nl/en/binaries/DNB%20brochure%20gedrag%20en%20 cultuur%202015%20ENG_tcm47-326577.pdf?2017022001
- **28** FCA *Business Plan 2016/17* https://www.fca.org.uk/publication/corporate/business-plan-2016-17.pdf
- **29** 2017–2020 OSFI Priorities http://www.osfi-bsif.gc.ca/Eng/osfi-bsif/rep-rap/pp/ Pages/pp1720.aspx
- **30** HKMA *Circular B1/15C B9/146C: Bank Culture Reform* (2 March 2017) http://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2017/20170302e2.pdf
- **31** APRA *Information Paper: Risk Culture* (October 2016) http://www.apra.gov.au/CrossIndustry/Documents/161018-Information-Paper-Risk-Culture.pdf
- **32** Edelman 2016 Edelman Trust Barometer: Trust in Financial Services http://www.edelman.com/insights/intellectual-property/2016-edelman-trust-barometer/state-of-trust/trust-in-financial-services-trust-rebound/
- **33** Deloitte University Press *Global risk management survey, 10th edition: Heightened uncertainty signals new challenges ahead* (March 2017) https://dupress.deloitte.com/dup-us-en/topics/risk-management/global-risk-management-survey.html
- **34** BBVA Research *Digital Economy Outlook* (February 2016) https://www.bbvaresearch.com/wp-content/uploads/2016/02/DEO_Feb16-EN_Cap1.pdf
- * 2016 Edelman Trust Barometer http://www.edelman.com/insights/intellectual-property/2016-edelman-trust-barometer/global-results/
- ^ CCP Research Foundation *Conduct Costs Project, Report 2015* (July 2016) http://conductcosts.ccpresearchfoundation.com/conduct-costs-results
- † Minouche Shafik, Bank of England *From 'ethical drift' to 'ethical lift':* Reversing the tide of misconduct in global financial market (20 October 2016)

http://www.bankofengland.co.uk/publications/Documents/speeches/2016/speech930.pdf

‡ European Systemic Risk Board *Report on misconduct risk in the banking sector* (June 2015) https://www.esrb.europa.eu/pub/pdf/other/150625_report_misconduct_risk.en.pdf

Contacts

Center for Regulatory Strategy contacts

Kevin Nixon

Global & Asia Pacific Lead Center for Regulatory Strategy Deloitte Australia

P: +61 2 9322 7555

E: kevinnixon@deloitte.com.au

David Strachan

EMEA Lead Center for Regulatory Strategy Deloitte UK

P: +44 20 7303 4791

E: dastrachan@deloitte.co.uk

Chris Spoth

Americas Lead Center for Regulatory Strategy Deloitte US

P: +1 202 378 5016 E: cspoth@deloitte.com

Other contacts

Global

Rick Porter Partner, Deloitte Global

P: +1 561 962 7792

E: rickporter@deloitte.com

China / Hong Kong

Tony Wood

Partner, Deloitte China

P: +852 2852 6602

E: tonywood@deloitte.com.hk

United Kingdom

Nikki Lovejoy

Partner, Deloitte UK

P: +44 20 7303 2921

E: nlovejoy@deloitte.co.uk

Australia

Philip Hardy

Partner, Deloitte Australia

P: +61 2 9322 7294

E: phhardy@deloitte.com.au

Japan

Tsuyoshi Oyama

Southeast Asia

P: +65 6216 3158

E: tgthio@deloitte.com

Tse Gan Thio

Partner, Deloitte Japan

P: +8 190 9834 4302

E: tsuyoshi.oyama@tohmatsu.co.jp

Executive Director, Deloitte SEA

United Kingdom

Hugo Morris

Partner, Deloitte UK

P: +44 20 7303 5985

E: hmorris@deloitte.co.uk

Australia

Grant MacKinnon

Principal, Deloitte Australia

P: +61 2 9322 3693

E: gmackinnon@deloitte.com.au

United States Elia Alonso

Advisory Principal, Deloitte US

D. +1 212 426 2710

P: +1 212 436 2718

E: elalonso@deloitte.com

Canada

Jay McMahan

Partner, Deloitte Canada

P: +1 416 874 3270

E: jfmcmahan@deloitte.ca

United Kingdom

Cindy Chan

Partner, Deloitte UK

P: +44 20 7303 5836

E: cichan@deloitte.co.uk

United States

Scott Baret

Advisory Partner, Deloitte US

P: +1 212 436 5456

E: sbaret@deloitte.com

CENTER for REGULATORY STRATEGY

The Center for Regulatory Strategy is a source of critical insight and advice, designed to help clients to anticipate change and respond with confidence to the strategic and aggregate impact of national and international regulatory policy.

With regional hubs in the Americas, Asia Pacific and EMEA, the Center combines the strength of Deloitte's network of experienced risk, regulatory, and industry professionals—including a deep roster of former regulators, industry specialists, and business advisers—with a rich understanding of the impact of regulations on business models and strategy.

Deloitte.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. Please see www.deloitte.com/about for a more detailed description of DTTL and its member firms.

Deloitte provides audit, consulting, financial advisory, risk management, tax and related services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 150 countries and territories, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges. Deloitte's more than 245,000 professionals are committed to making an impact that matters.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the "Deloitte network") is, by means of this communication, rendering professional advice or services. No entity in the Deloitte network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.

© 2017 Deloitte Touche Tohmatsu.