



European Risk Management Council

Risk Landscape Review

March 2019



- Culture and Conduct
- How to weather STORM
- Making sense of turkeys' vote for Christmas



DEAR READER,

I am delighted to present Q1 2019 edition of the Risk Landscape Review. This time the Review is linked to three latest Council's events: Q1 APAC Risk Council's meeting which took place in Singapore in January 2019, Q1 European Risk Council's meeting in London in February and 2019 European Leadership Meeting in March.

Our quarterly meeting in Singapore was dedicated to risk culture in the financial services industry. To continue this important conversation, we include an article "Culture and Conduct: Progress and Opportunities" by Elizabeth St-Onge and Edward Emanuel, partners of Oliver Wyman. In their article, authors summarise the G30's assessment of banks' progress in the culture change, provide a guidance for a culture measurement and suggest practical actions on how to embed desired values and behaviours within an organization.

A special report of Chartis Research "Weathering the STORM" focuses on a problem of the 'STORM' (Statistical Techniques and Open Risk Management) - a growing disturbance of using diverse and complex techniques like AI. In the report, Chartis defines and demystifies the problem and offers practical advice for firms, helping them make sense of statistical methods and their implications. Chartis' report is linked to a discussion that we had at European Risk Council's meeting in February about the progress reached by financial services in their digital transformation.

Finally, we include an article "Making sense of the turkeys' vote for Christmas" which provides some results of "people's vote" - a survey that the Council conducted at 2019 European Leadership Meeting. Using the survey results, the Council's aggregated the data into the UK Risk Sentiment Index - a forward-looking index that reflects expectations of CROs and other risk executives about the future risk landscape of the financial sector.

My huge thanks to all contributors.

Enjoy the reading.

Yours sincerely,

Dr Evgueni Ivantsov

Chairman of European Risk Management Council



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Culture and Conduct: Progress and Opportunities¹

By Elizabeth St-Onge (Partner, Oliver Wyman, Chicago) and Edward Emanuel (Partner, Oliver Wyman, Sydney)

In light of recent misconduct scandals from Hollywood and Silicon Valley to Wall Street and Washington, senior executives across many industries are increasingly focused on conduct and culture. Some organizations have been managing culture and tracking conduct outcomes for years, while others are still in their early stages. The banking industry in particular has been doing some soul-searching given the number of cases of misconduct, often at firms that describe themselves as having a relatively healthy culture. We summarize the G30's assessment of banks' progress and also provide a condensed "how-to guide" that any organization can use for culture measurement. We also provide thoughts on how the desired values and behaviours within an organization can be embedded.

Taking stock of misconduct

Although banks have made visible efforts to review their cultures since the crisis, they have found it difficult to fully win back customers' trust. As the G30 report points out, the banking industry has a less favourable reputation compared to other industries.

This result is not particularly surprising given the continuing stream of misconduct cases in financial services across the world. The cases span from excessive fees and mis-selling to internal fraud and market manipulation. Taking the Asia-Pacific region as an example, below are some of the significant incidents that have grabbed headlines in the past 5 years.

"As society and the competitive landscape rapidly evolve, banks cannot afford to be complacent about their trust and reputational problems. From a competitive perspective, new entrants are quickly moving into the traditional banking space and may capture clients (and talent) that would have otherwise been directed to banks."

- Group of Thirty (G30), Banking Conduct and Culture

Conduct issues are not only limited to banks. In a recent example from the automotive industry, a major automaker was discovered to have gamed emissions tests in millions of its cars, leading to wide-ranging negative consequences. Meanwhile, in a recent tech industry example, a ride-hailing company admitted to using software to make its service appear non-operational to regulators, which prompted government investigations.

¹ This piece synthesizes two reports from the Group of Thirty (G30) and Oliver Wyman respectively: *Banking Conduct and Culture: A Permanent Mindset Change* by the G30 with support from Oliver Wyman; and *Measuring Conduct and Culture* by Oliver Wyman.

Note: G30 is an international body of leading financiers and academics which aims to deepen understanding of economic and financial issues. Oliver Wyman is a global management consultancy and part of Marsh and McLennan Companies. This piece was prepared by Oliver Wyman.

*Exhibit 1: Selected cases of misconduct in Asia-Pacific*

MIS-SELLING OF PRODUCTS AND SERVICES	MAJOR INTERNAL FRAUD	PRODUCT PERFORMANCE AND MARGINS	MARKET MANIPULATION
<ul style="list-style-type: none"> • Fees charged for no service rendered • Loans based on illegal collateral • Options offered without license • Alleged mis-selling of insurance, fixed deposits and balanced funds • Fake insurance from rogue agent 	<ul style="list-style-type: none"> • Major AML breaches, some in connection to 1MDB • Financial planning fraud • Theft of deposits • Insider trading • Fraudulent guarantees for bonds and loans 	<ul style="list-style-type: none"> • Excessive transaction fees • Overcharging wealth management clients • Pushing poorly performing products to meet targets • Insufficient due diligence on recommended bonds 	<ul style="list-style-type: none"> • Manipulation of bank bill swap rate (BBSW) • Cartel charges in capital raising • Currency market manipulation • Manipulation of share prices

Source: Oliver Wyman research

These types of shortcomings in conduct are not a feature of any particular industry; they can arise in any organization when its culture is not carefully nurtured, monitored, and linked to tangible performance outcomes. Moreover, the causes and remedies for cultural failings are fundamentally similar across industries.

Progress areas identified by the G30

The news is not all bad. As reported by the G30 based on their long-running set of interviews with bank executives², banks have made some progress across specific focus areas.

1. There has been a shift in **mindset**. Banks have rapidly recognized the importance of conduct and culture to regaining the trust of their clients and broader stakeholders. However, much remains to be done in embedding stewardship of culture at all levels of the organization, especially in middle management. The “tone from above” (the behaviours and actions of direct managers) is just as important as the “tone from the top”.
2. In terms of **senior accountability**, bank boards and senior management have reorganized their governance and reporting structures to better oversee conduct and culture. Yet there is still a lack of clarity in many organizations on how the board will carry out this oversight.
3. **Performance management** has also been evolving, and banks now have balanced scorecards that evaluate “how” results were achieved. However, managing based on a balanced set of metrics requires cultivating additional skills among middle management.
4. In the area of **staff development**, banks are reviewing their training programs and focusing on diversity and inclusion efforts in order to improve the quality of decision-making. They

² Interviews of senior executives about bank governance were carried out over multiple years by G30 with support from Oliver Wyman. Progress areas in this article are paraphrased from the G30 report. Source of the full report: *Banking Conduct and Culture: A Permanent Mindset Change* by the G30.



are also looking for ways to establish “psychological safety”, an environment in which all team members feel safe speaking up.

5. **Building an effective “three lines of defence” framework** still requires particular attention. There is some work to do in designing audit practices and empowering second-line oversight of conduct risks, as well as in entrenching ownership and accountability for risk taking in the first line.
6. **Regulators and supervisors** globally “have increased attention to, and expectations regarding, conduct and culture” as observed by the G30. Yet they “continue to grapple with the scope of their role and responsibilities, and whether and how they can best support the industry. Addressing conduct and culture from a regulatory and supervisory perspective requires careful judgement, new skillsets, and industry experience.”

The G30 interviews also uncovered some key lessons for effectively managing culture.

- Managing culture is not a one-off exercise, but a continuous process “integrated into day-to-day business operations”
- Embedding culture “requires a shift in how managers at all levels of the organization are trained, promoted, and supported”
- “Conduct is not just about purposeful misbehaviour, but also unintended consequences from decisions and/or lack of skills and knowledge”
- Leaders noted that “diversity in thinking, problem solving, and leadership styles” helps organizations avoid cultural pitfalls and achieve better results for all stakeholders.

These lessons have led to a series of recommendations developed by the Group of Thirty (G30).

Group of Thirty (G30) Recommendations:

“

1. **Governance:** Bank boards should re-evaluate their governance structure to ensure a specific board committee has oversight of the bank’s conduct and culture.
2. **Data:** Bank boards and senior management should work more closely with various business units and geographic and functional heads to strengthen the quality and availability of data and insights needed to manage conduct and culture.
3. **Incentives:** Banks should consider the potential impact of outsized incentives in their compensation mechanisms.
4. **Sales targets:** Banks should remove the link between quantitative sales targets and compensation for sales staff to minimize pressure that can lead to misconduct and help staff prioritize meeting customer/client needs.
5. **Role models:** Banks should explore ways to celebrate role models in behaviour, both in business decisions and in individual actions.
6. **Middle management:** Bank governance structures must recognize the integral role that middle management plays in embedding cultural reforms and promoting values through lower levels of the organization.
7. **Diversity:** Banks should make efforts to promote diversity and inclusion in the workplace in their hiring and staff development practices.



8. Psychological safety: Banks should promote an environment of “psychological safety” that encourages employees to speak up and escalate issues or share feedback without fear of retribution; bullying or aggressive management styles must not be tolerated.

9. Enforcement: Banks should establish credibility and enforcement through their disciplinary mechanisms for conduct breaches to ensure employees take these measures seriously.

10. Recruiting: Banks should focus on hiring people who align with the bank’s purpose and values as they strive to create the right culture for their organization, recognizing that recruiting is a critical element to creating the right culture.

11. Business ownership: Banks should persevere in their efforts to shift primary ownership of conduct risk to the first line of defence to ensure conduct risk is truly owned by the business and is effective.

12. Second line empowerment: Conduct risk oversight roles and responsibilities should be clear across the various second-line functions such as Human Resources (HR), Risk, and Compliance.

”

Leaders implementing these recommendations will need a way to show progress against key indicators. While measuring culture is a challenging task, it is also a necessity. In order to identify conduct concerns early enough to mitigate them, management needs a set of credible metrics for tracking behaviour. By deploying these metrics, leaders can ensure that their vision and objectives are being translated into appropriate conduct throughout the organization. We have some suggestions to get started on this path.

“To maintain a healthy culture and detect conduct issues before they become a significant problem, management needs to be able to observe and track behaviour through meaningful and objective metrics. This is especially true for larger organizations that span numerous geographies and business lines, and can host a myriad of “sub-cultures” that differ significantly. Culture also needs to be measured and monitored because it is not a constant; culture can and should evolve over time.”

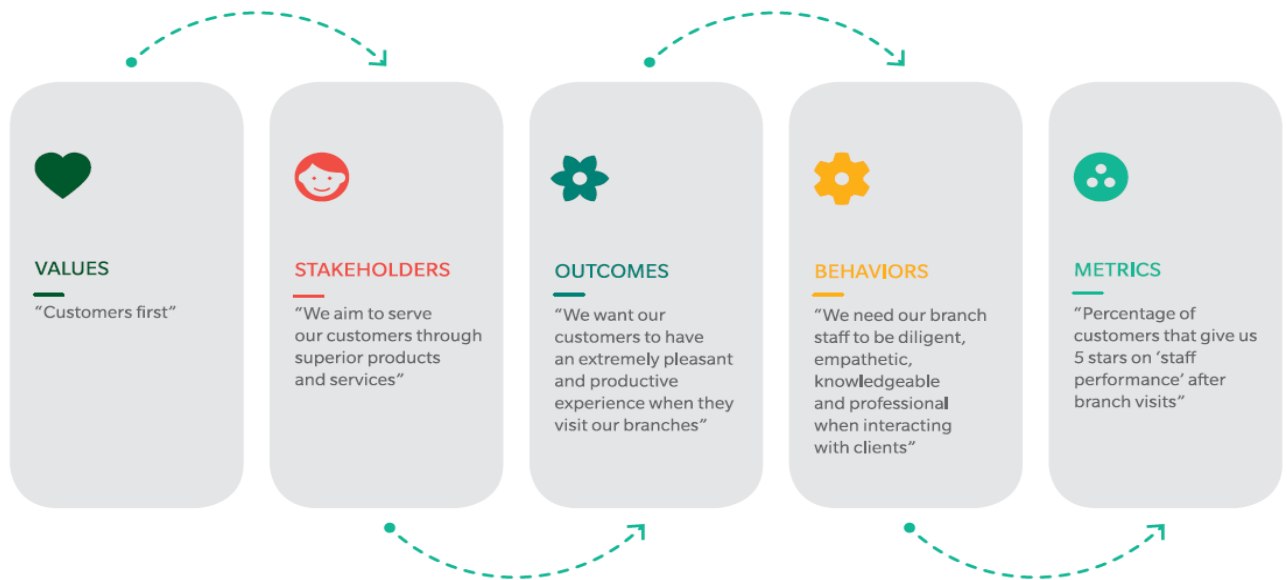
- Oliver Wyman, *Measuring Conducting and Culture*³

A quick how-to guide for culture measurement

Oliver Wyman has developed an approach for selecting metrics that are the most relevant and actionable for an organisation. The process starts by aligning on the fundamental principles of the company, as shown below. The organization should first define their values and stakeholders, then follow a logical process to identify useful metrics. In turn, these metrics should indicate whether observed behaviors support the organization’s values.

³ Authors: Elizabeth St-Onge, Ege Gürdeniz, and Elena Belov. Full report name: *Measuring Conduct and Culture: A How-To Guide For Executives*

Exhibit 2: Example illustrating the path to meaningful metrics



Source: Oliver Wyman

Having the right metrics is necessary but not sufficient for organizations to derive meaning and find actionable insights. The next step is determining when and how to act, which should be informed by the characteristics of each metric.

Exhibit 3: Key considerations for selecting a monitoring approach for metrics

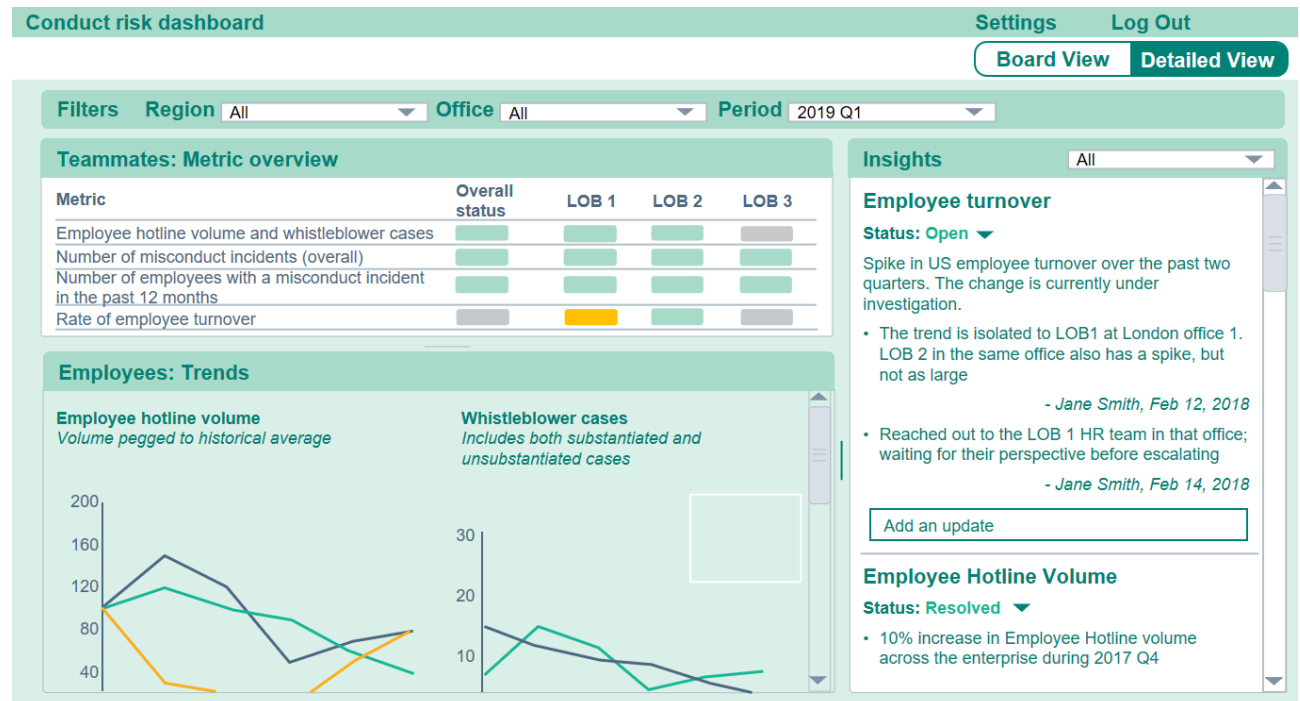
Key considerations	Monitoring approaches	Sample metric types
A Does the metric capture an incident with high severity/impact and low frequency of occurrence?	Review all instances	<ul style="list-style-type: none"> Misconduct litigation incidents Regulatory findings
B Does peer comparison provide valuable insights for this metric and is this information available?	Benchmark against peers and set ranking targets	<ul style="list-style-type: none"> Sentiments across social media Brand surveys and reputational ratings
C Is historical movement representative of normative bounds for this metric and is there reliable historical data available for this metric?	Monitor relative to historical movements	<ul style="list-style-type: none"> Sales practices complaints Terminations for cause
D Are there existing internal/strategic targets that exist for this metric?	Monitor relative to internal targets	<ul style="list-style-type: none"> Philanthropic investments Diversity and inclusion goals
E Is there an expectation for the metric to increase or decrease over time due to specific initiatives that have been implemented to drive change?	Monitor period-over-period trend	<ul style="list-style-type: none"> Employee morale (to track response to work life balance initiative)
<ul style="list-style-type: none"> Root cause analysis must be conducted for all metrics, regardless of selected approach In some cases, a combination of monitoring approaches may be used 		

Source: Oliver Wyman



These monitoring approaches can then be reflected into a conduct risk dashboard, such as the following illustration.

Exhibit 4: Illustrative conduct risk dashboard



Source: Oliver Wyman

Reviewing conduct is not a one-off exercise. Once an organization has identified the appropriate metrics, reporting mechanisms, and escalation procedures, it needs to take this process seriously and rigorously refresh the metrics if their relevance fades. Managing conduct is difficult challenge, because it touches on the mindsets and assumptions of every individual in a firm. Yet it is also an incredibly worthwhile challenge – the trust of customers and of the broader public is at stake.



Weathering the **STORM**: Coping with the deluge of AI in financial risk management

A special report from Chartis Research

Are you ready for STORM?

Statistical techniques – like Artificial Intelligence – are everywhere in the finance industry, helping to free up risk management across financial organizations. But the sheer volume, diversity and complexity of these techniques make costly misunderstandings and misapplications more likely for technology users and vendors.

Chartis identifies this problem as the growing ‘STORM’ that threatens to engulf many organizations that aren’t properly prepared.

By diagnosing, defining and demystifying the problem – as Statistical Techniques and Open Risk Management – Chartis offers practical advice for firms everywhere, helping them make sense of statistical methods and their implications.

A torrent of technologies

Statistical techniques⁴, models and processes are well established in the finance sector today, cutting across every process and category in the industry. Even the simple act of reading a balance sheet can now be driven by a statistical process. Thanks to developments in Artificial Intelligence (AI) technology, a whole range of new and evolving statistical techniques are also being introduced to the sector.

The growth in new statistical techniques in the last few years has increased the complexity in Financial Institutions’ (FIs’) systems and processes and made it harder for them to fully appreciate or even understand what tool should go where. Battered by hype and in fear of being left behind, many FIs may have adopted these tools without a clear idea of what they do. They may even have adopted some techniques without even realizing it.

Exacerbating the issue, risk management is increasingly becoming a core part of processes across the finance organization, enabled in part by this new technology revolution. Having escaped its natural home within the confines of enterprise risk, risk management is now embedding itself in areas as diverse as trading, market data, Anti-Money Laundering (AML) and compliance systems (see Figure 1). As risk management – and in particular risk analytics – become more distributed, FIs now have to know exactly where everything should go to get the best results from their risk management systems.

Together, these trends are creating what Chartis has identified as **STORM: Statistical Techniques and Open Risk Management** – a growing disturbance that affects FIs and the tech vendors that supply them.

Figure 1: Advanced statistical techniques can be used to solve a range of risk and compliance problems

⁴ By ‘statistical techniques’ we mean quantitative, mathematically driven computational tools and processes.



Problem category	EP	GA	ML	NLP	RPA	RCA	SDA
Regulatory compliance			✓	✓	✓	✓	✓
Fraud analytics			✓		✓	✓	✓
Credit analytics	✓	✓					
Cybersecurity	✓		✓				
Data quality			✓		✓		
T&Cs extraction			✓	✓			
Equity strategy analysis	✓		✓	✓			
Customer engagement/conduct risk			✓	✓			
KYC	✓	✓	✓	✓	✓		
AML/Patriot Act	✓	✓	✓	✓	✓		
Trade surveillance	✓	✓	✓	✓		✓	

EP Evolutionary Programming
GA Graph Algorithms
ML Machine Learning
NLP Natural Language Processing
RE Rules Extraction
RPA Robotic Process Automation
RCA Rules Compression Analytics
SDA Statistical Data Aggregation

Source: Chartis Research

The wider implications of STORM: a change of climate

Chartis believes that the misuse and misapplication of statistical techniques can create considerable collateral damage. This could include a glut of false positives, breaches of regulations because data has been misused, or misaligned and maladjusted trading strategies based on opaque statistical mechanisms. Different statistical techniques can have very different underlying mechanics, and each presents its own risks and challenges. What's more, there is no standard back-testing for new analytics, and a host of myths and miscommunication around AI itself threaten to confuse things further.

Terminological inexactitude

In areas where statistical techniques have been used heavily in the past – such as asset management, trading and wholesale markets – techniques have started to converge in complicated ways. As this happens, FIs and vendors must understand exactly how they overlap.

Unfortunately, the terminology used to define and describe statistical techniques can differ across the financial sector: different terms may mean different things to different institutions. The term 'performance analytics', for example, may mean something different to sell-side firms than it does to those on the buy-side, or to low-latency traders – with practical implications for the technology (such as data infrastructure) that firms use.

Ensuring consistency and accuracy of description and understanding – knowing exactly what these techniques are, and where and how they can be used – is fundamental to a successful 'statistical strategy'. FIs can be hugely dependent on analytics – with a well-defined taxonomy of the analytical landscape they should find it easier to control their analytics environment.

A lack of standards

Testing and validating statistical models and ensuring that they are appropriate for a particular task, is a challenge. While the processes themselves become more complex, however, standards are few



and far between, and FIs have to make important decisions about what to test. And in the new hyper-statistical environment, considerations about the statistical models FIs employ take on a great deal more resonance, with a host of new considerations – none of which is trivial.

Stepping outside the comfort zone

The increasing convergence of statistical techniques is also forcing users to address techniques that sit squarely outside their comfort zone. Derivatives models, for example, are mature and well understood, but there is no comparable understanding in many other areas where statistical processes are rapidly encroaching.

Even for experienced firms – both FIs and vendors – this can present a challenge. The growing number and diversity of statistical domains means that expertise in one will not necessarily translate into expertise in another. And the newest statistical techniques tend to be relatively opaque, further confusing matters, particularly in decision-making processes.

Implications for FIs: optimizing technology and people

In attempting to weather STORM, FIs will have to confront two big issues:

Ensuring they optimize their technology. Making decisions around statistical techniques is a challenge, with huge consequences for an FI's technology infrastructure. Our research shows that FIs have a tendency to 'mash up' statistical techniques and environments that are very different from one another.

With an unclear view of the taxonomy of their processes, and a hazy idea of how to control them, FIs could risk making the wrong decisions at a crucial time in their technological development. Not fully appreciating the diversity and complexity of these techniques could also leave FIs considerably out of pocket, if they select a misaligned technology process or supporting infrastructure.

Ensuring they make best use of their employees. Data scientists and developers that are familiar with one particular modelling approach may struggle to move to a new one, with a knock-on effect in terms of the efficiency of the process and the time taken to rectify the problem. Employees may even refuse to switch unless the techniques have been appropriately mapped beforehand.

Implications for tech vendors: developing strategies and frameworks

Technology vendors have some serious considerations too. To weather STORM they will have to develop strategies that address broad and complex variables. Migrating from their current environment to a new one with different statistical nuances is a big and potentially costly step, with important questions to be answered. How far into another area is it wise to go? And are there any challenges to face on the journey?

So far there is also very little in the way of a robust theoretical framework around these new techniques and models that vendors can rely on. Regulation can't force their hand, either: there has been very little AI-related regulation to date – nor, we believe, is there likely to be any for some time. As more techniques and models interact, vendors may have to ask themselves what the right approach is for them, with the possibility of serious structural change to their organizations.



Conclusion: making sense of STORM

STORM is our summary of what we see happening in the finance industry the world over – it's our diagnosis of where the industry is right now, and a way of categorizing and analysing what's going on: a statistical, mathematical upheaval linked to risk management frameworks. There are many distinct statistical techniques and applications with different frameworks and underlying capabilities, and these are ubiquitous and omnipresent across the finance industry landscape.

FIs have been investing in these technologies for some time, perhaps because they feel left behind if they don't. Few may have a clear sense of their strategy in this area, or how they're going to integrate risk effectively into their businesses. The consequences of this lack of clarity are becoming more evident, and fall along a continuum from the fairly benign to the serious results of making the wrong technology and spending choices.

FIs and vendors can and will react in different ways. Within FIs, three distinct groups need to prepare for the STORM. Firstly, there are risk management teams themselves. As risk management pervades the organization, they already own and are responsible for many of the analytical tools, so need a clear idea of how they work. Those in adjacent departments to risk (such as finance teams) may have suddenly found themselves invaded by new tools they may not understand. Finally, model validation teams need to know which models among many they should validate – and how to do it effectively.

We believe FIs and vendors will win by appropriately categorizing statistical techniques, and by clearly understanding the positions, interactions and differences between the various components in their systems, as well as how they diverge and converge.

Chartis will be publishing an in-depth report on this topic, containing a detailed look at the related vendor landscape, later in the year.

Making Sense of the Turkeys' Vote for Christmas: Update on UK Risk Sentiment Index

The European Risk Management Council has updated its UK Risk Sentiment Index (RSI). Fresh data was collected at the European Leadership Meeting on 28 March 2019. More than 100 CROs and other senior risk executives provided their views on the future trends of seven risk types via live survey. Using the survey results, the Council aggregated the data into a forward-looking index that reflects expectations about the risk landscape of the financial sector in the next 12 months. Numerically, the RSI reflects the adjusted percentage of experts who consider that risk will increase in the next 12 months.

Aggregated RSI

Based on expert judgement of CROs and other risk executives, the aggregated RSI across seven risk types stands at 0.56 in March 2019. Compared to an RSI of 0.42 in January 2019, the current level represents a substantial increase (see figure 1). Overall, 35% of respondents believe that risks will slightly increase and 38% say that risks will increase substantially in the next 12 months (see figure 2). Compared to the survey in January, the percentage of experts who believe that risks will substantially increase jumped from 24% to 38%. Moreover, the level of optimism dried up quickly: experts who voted for “no change” or “risk decrease” has dropped from 40% to 26% since January.

Figure 1. RSI trend: January 2019 vs March 2019

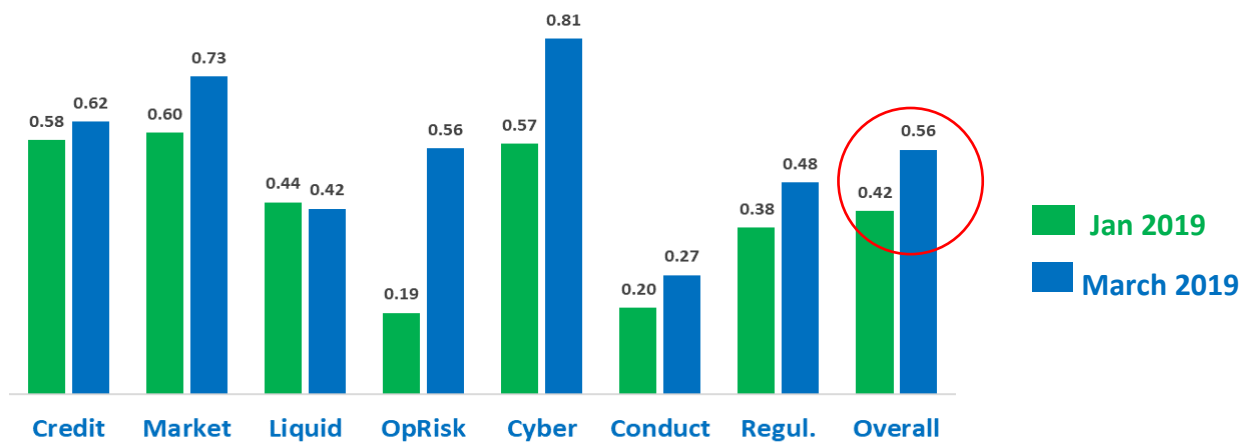
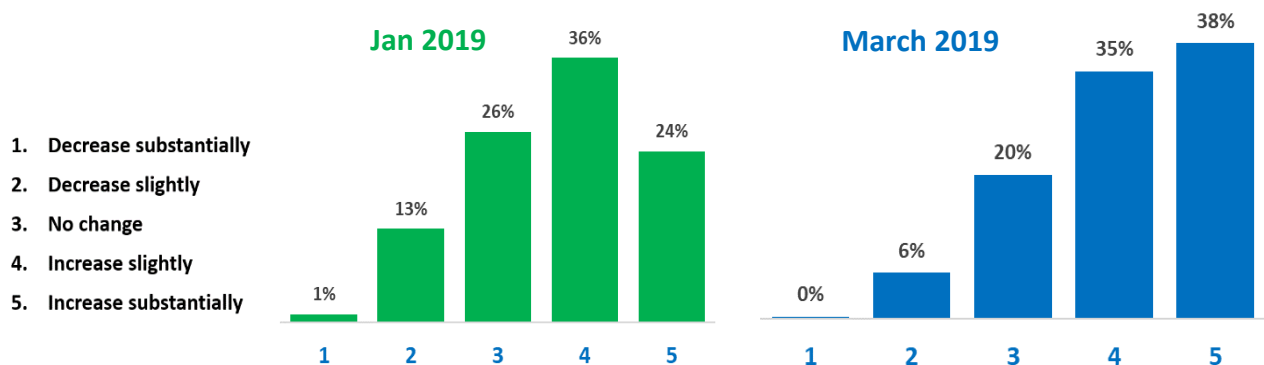


Figure 2. Aggregated results for all risks





RSI per risk types

Experts have the most pessimistic sentiment for cyber risk, market risk and credit risk – RSI is at 0.81, 0.73 and 0.62, respectively. For cyber risk, 93% respondents expect that the risk will increase with only 7% believe that it will stay the same. Conduct risk is considered as an area where the risk will grow least in the next 12 months.

RSI historic trends per risk types

Since January 2019, across seven risk types, RSI increased for all risks except for liquidity risk. While the negative sentiment prevails for almost all risk types, the largest areas of growing concern are operational, cyber and market risks. For these risks, we observe the largest percentage of experts shifting to more pessimistic views since January 2019.

Is liquidity risk expected to decrease?

The only type of risks where RSI was lower in March vs that in January was liquidity risk (0.42 vs 0.44). Does it mean that experts believe now that actual liquidity risk will be lower in 12 months compared to now? The answer is no. RSI does not reflect the absolute risk level but measures a “steepness of the slope” – the incremental increase of risk in a 12-month period compared to the current level. Any RSI of more than 0 means incremental growth. The current level of RSI for liquidity risk is relatively high with 56% of respondents believing that the risk will increase. A reduction of RSI for liquidity risk in March compared to that in January means the percentage reduction of those respondents who voted for risk increase (56% in March vs 67% in January). In other words, experts now anticipate that a steepness of a risk increase will be lower than they previously expected.

Should we ask turkeys to vote for Christmas?

The very idea of asking Chief Risk Officers and other risk management executives to share their views on future risks might be considered as controversial. Dealing with risks on the daily basis and being paid for managing risks, risk executives should have (and actually have) a more negative attitude towards the future risks compared to other executives of financial services. Therefore, one can expect that while answering survey questions about the future risks, risk executives would tick the answer “Increase” too often, painting a “dark” picture of the future risk landscape. Should we ask turkeys to vote for Christmas? Does risk executives’ sentiment towards future risks matter?

Our answer is yes. We should ask risk executives about future risks as these people are the most informed experts to answer this question. What we also need is to understand the problem of their “negative bias” and always treat the absolute level of the RSI with caution. As any judgement-based index (as opposed to a statistical data index), the RSI was created to provide information about the **relative** sentiment of risk experts rather than the **absolute** level of risk. The main advantage of the RSI is that it helps to assess historical risk trends and to rank the order of expected risk shifts:

- **Risk sentiment change over time** - the index level today vs last month, last quarter, last year, or at any past reference point.
- **Rank order of expected 12-month dynamics of various risk types** (e.g. expected changes of credit risk vs market risk vs liquidity risk, etc.).

Due to a large constant pool of respondents, the level of their “natural negative bias” towards risks should be relatively constant. Therefore, any historical variations of the RSI level (RSI today vs RSI at previous reference points) reflect the dynamic of risks per se.

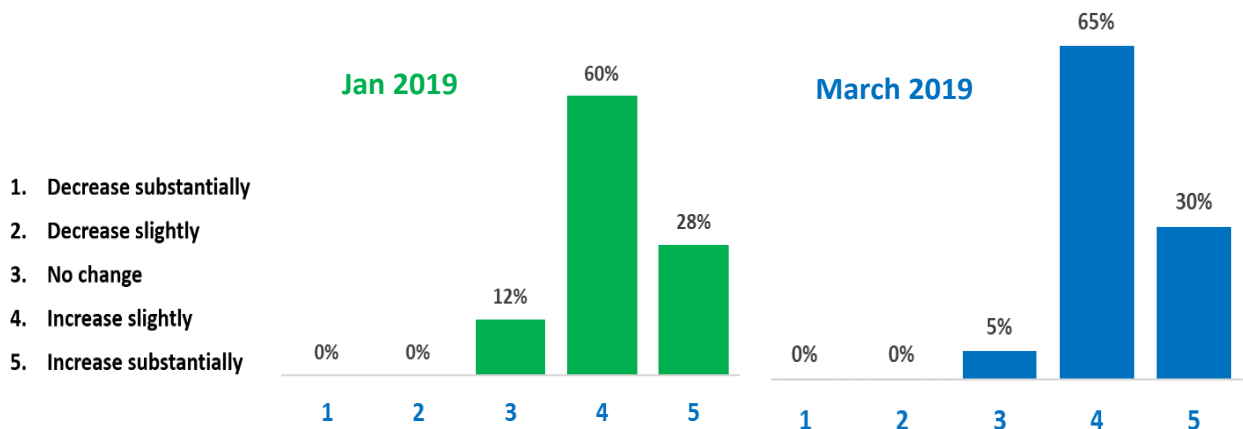


Also, the “natural pessimism” of risk executives does not influence the rank order of future risks that we can make based on their judgements. As risk professionals, our experts are equally “negatively biased” towards all risk types, not towards particular risk. It allows us to make a comparison and rank the order of seven risk types on their expected future dynamics.

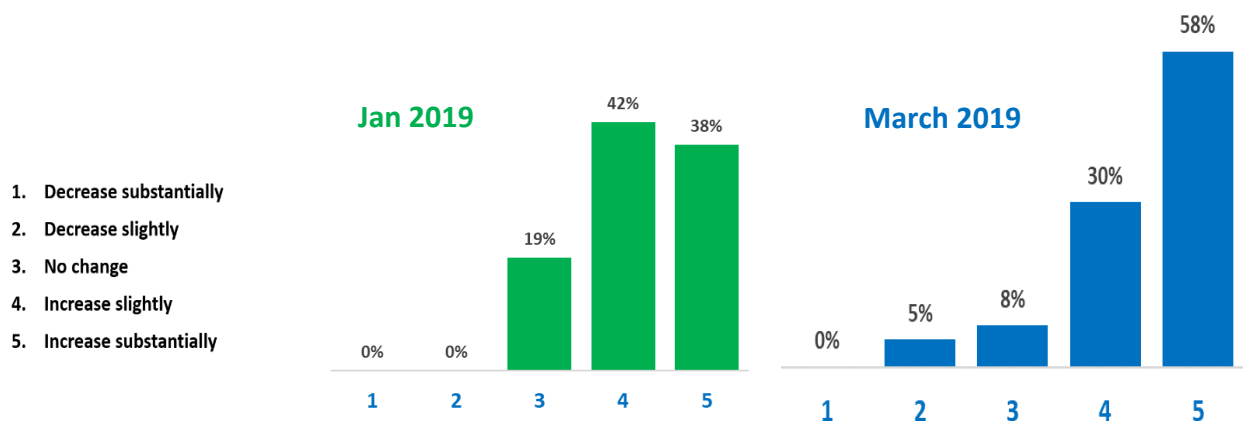
Appendix. Vote distribution (in % of total votes provided)

In your opinion, how will the following risks for UK financial industry change in the next 12 months?

1. **Credit Risk** (*Risk that borrowers or counterparties will fail to meet its obligations in accordance with agreed terms*)

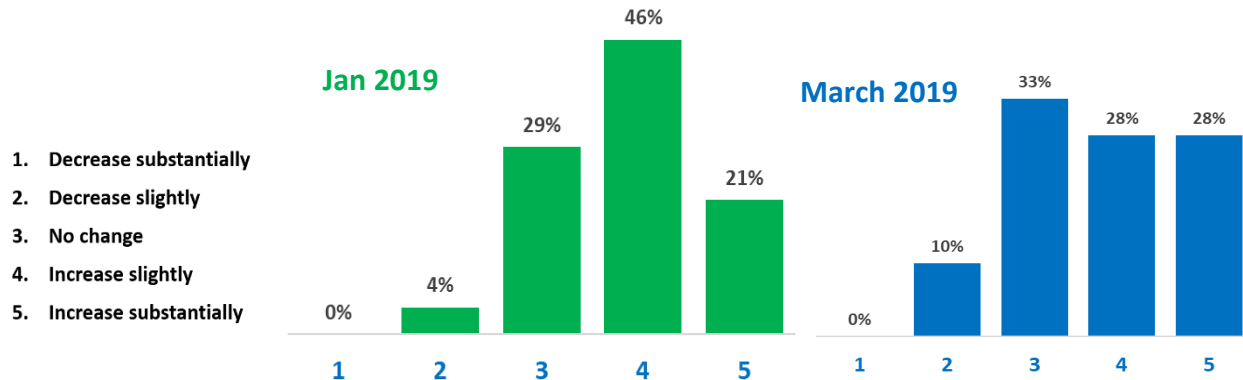


2. **Market Risk** (*Risk of losses in on and off-balance sheet positions arising from adverse movements in market prices*)

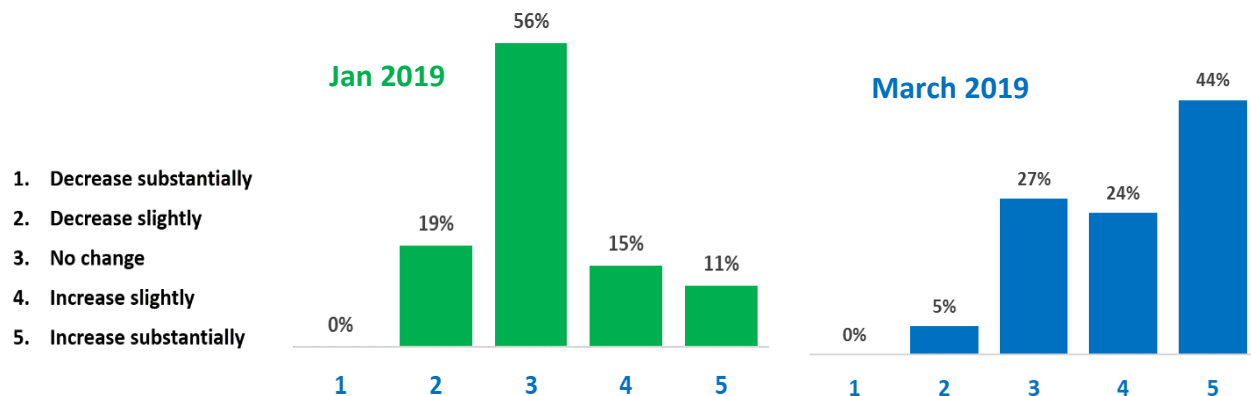




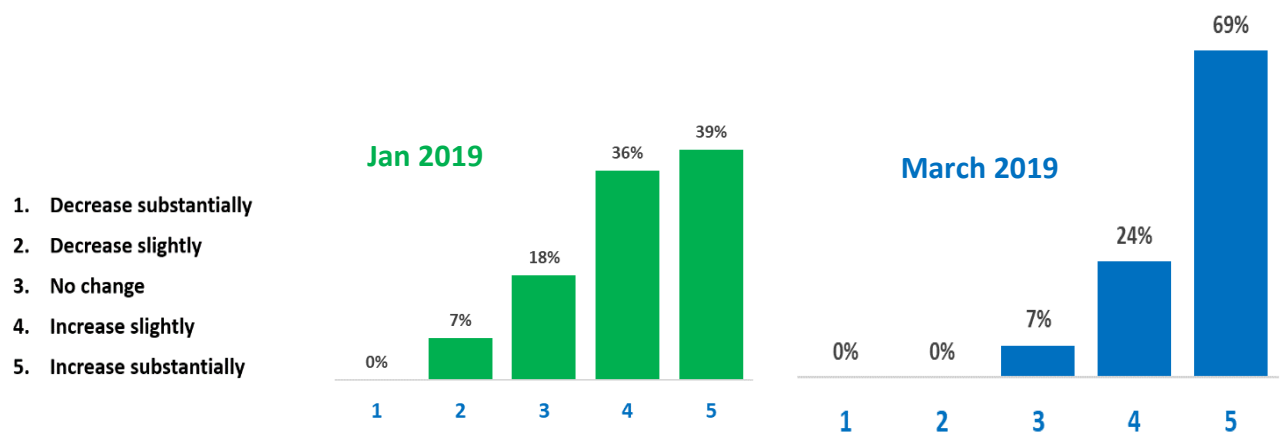
3. Liquidity Risk *(Risk for solvent institutions to lose their ability to make agreed upon payments in a timely fashion as well to raise funding in short notice)*



4. Operational Risk excluding cyber and IT *(Risk of human errors, control failures, failure of internal processes, model risk, risk of frauds, third party risk, physical safety risk)*

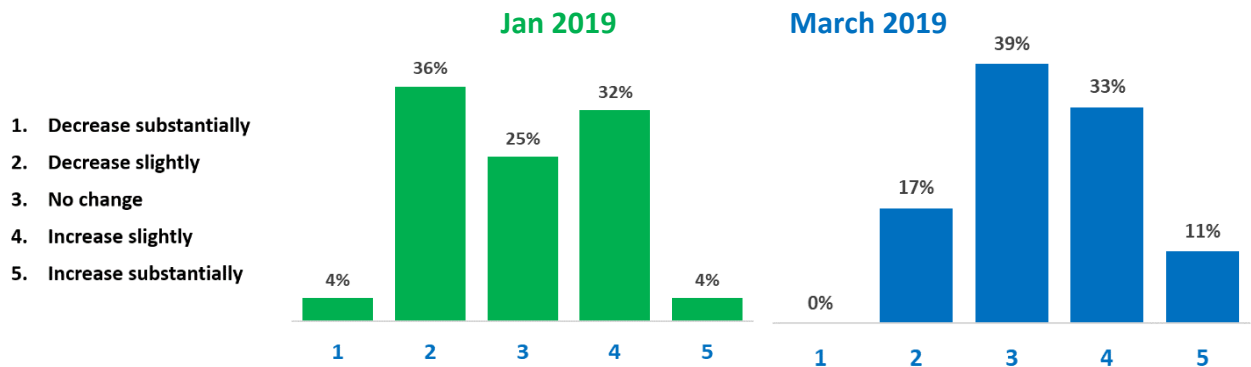


5. Cyber Risk *(Risk of events that can lead to data breaches, financial loss, reputational damage, and disruption of operations caused by a failure of IT systems and procedures)*





6. Conduct Risk *(Risk of actions that lead to customer detriment or has an adverse effect on market stability and effective competition as well as a failure to comply with a regulatory defined code of conduct)*



7. Regulatory Risk *(Risk that a change in laws and regulations or unintended consequences of that change will materially impact a security, business, or market)*

