European Risk Management Council

Risk Landscape Review

September 2018

Industry Survey Results: Transforming Strategic Risk Management to Realise Competitive Advantage

DEAR READER,

I am delighted to present the Q3 2018 edition of the Risk Landscape Review. This edition is fully dedicated to the strategic risk management survey that the European Risk Management Council has conducted with Genpact, a global professional services firm focused on digital transformation.

In the past three months, 48 CROs, board members and other senior risk management executives from financial services firms in Europe, Asia-Pacific and Middle East/Africa participated in our online survey. In addition, we conducted detailed interviews with 10 selected CROs and senior decision makers to obtain in-depth information about the path of the risk management transformation. Information that we collected during the survey has been analysed and reconciled with our vision of the current and future state of strategic risk management.

In this publication, we are presenting an article written by Alessandro Vecci, Samir Saurav and Takis Sironis from Genpact with some key findings of the survey. The full report can be downloaded from Risk Council's website (http://riskcouncil.org/wp-content/uploads/2018/10/SRM-Report.pdf) or from Genpact's websites (http://www.genpact.com/insight/report/transforming-strategic-risk-management-to-realize-competitive-advantage)

My huge thanks to Genpact and all respondents who participated in our online survey and live interviews.

Enjoy the reading.

Yours sincerely,

Dr Evgueni Ivantsov

Chairman of European Risk Management Council

Transforming Strategic Risk Management to Realise Competitive Advantage

The old business order is breaking down, as new types of risk emerge, financial institutions widen their customer services, and an explosion of data and technologies disrupt the status quo. Although in the last 10 years firms have materially improved their risk management practices, now there is an urgent need to evolve their strategic risk management (SRM) capabilities. Given its direct impact on market competitiveness, SRM should allow for better, faster forward-looking risk assessments.

Genpact and the European Risk Management Council conducted a survey of about 50 chief risk officers (CROs) of global financial services institutions. We examined how the risk function contributes towards developing, evaluating and supporting the implementation of their business strategy. We explored three key areas: the current state of their risk framework; key challenges; and new technologies and applications.

The survey focused on the SRM framework, in which the risk function is represented by the CRO and factored into defining and operationalising a firm's business strategy. However, the rise of digital technology and its potentially radical impact dictate that the role of the CRO must evolve to become more strategic and proactive.

In a digital world, what might the roles of the CRO and the risk function look like? We challenged ourselves to imagine what these could be, as aligned with the findings in the survey and the views expressed by the CROs we interviewed. In our vision:

- SRM becomes the guiding light of the enterprise risk strategy
- The CRO becomes the watcher on the wall, detecting needs and anticipating the future
- The risk function becomes the conduit for aligning business operations to business strategy
- SRM becomes the hungry consumer of massive, disparate data to provide near-time risk advice using predictive tools

In the following four sections of this report prepared by Genpact, we discuss these views, with insights from the CROs interviewed, who are experiencing the evolution first hand. We conclude with next steps and three initiatives that can transform SRM.

1. Re-considering the current role and tools of the risk function

The evolving role of the CRO

In our vision of the future, many recent advances in technology have been implemented and risk is a fully digitised function. The role of the CRO in this new SRM framework will be to provide real-time strategic advice to the business, reducing unwanted exposures, managing portfolio investment and optimising capital allocation. The "live" advice will be based on risk and data analytics, and projected performance.
On the board, the CRO will become a decision maker and advisor. The CRO will analyse the implications of the business strategy and risk appetite for any business, product, and geography under various macroeconomic and microeconomic scenarios, while artificial intelligence (AI) tools will help optimise future

outcomes. The CRO's new role will be multi-faceted, wearing different hats, such as that of a challenger to business heads and team player to executive committees, while possessing excellent communication skills and deep knowledge of risk and IT. The CRO will actively manage the holistic impact of risks with a focus on enhancing both balance sheet and business performance.

"The role of risk is to enable business to do more, but in a controlled, safe, risk-aware manner, not just to stop risk taking." – Non-executive director of a global investment bank

Currently, this is significantly different as the CRO is not often a regular member of the board, but an attendee invited on an ad-hoc basis. According to our survey, many CROs do not actively participate in defining the business strategy but are limited to monitoring its execution. The board view of the CRO's role is to provide risk assessment of products and business, monitor risk-based performance and produce forward-looking trends on short-term horizons.

Changing gears – From qualitative to quantitative, tailored business decisions

The role of risk executives will change from supporting to enabling strategic decisions – protecting shareholder value, assessing capital efficiency and improving financial performance. The risk function will support the CRO with 360° coverage of emerging risk trends and mitigation strategies and forward-looking views of the firm's risk profile. This will enable the CRO to deliver holistic information to stakeholders for making informed strategic decisions (see figures 1 and 2).

Figure 1

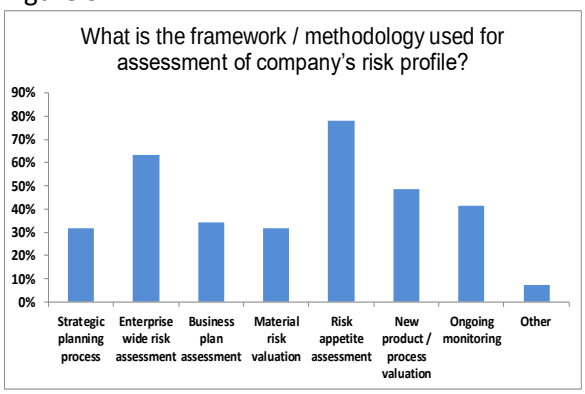
Figure 2

According to our survey, the current view of risks associated with the business strategy needs to widen beyond traditional risks (eg market, credit and operational risks).

Most financial institutions already have vast amounts of data and this trend will continue as they will collect and use social, behavioural and demographic data. This will be used in conjunction with machine learning (ML), natural language processing/generation (NLP/G) and AI robotics to extend their risk management functions.

This vision again contrasts with the current tools and approach used by financial institutions to implement SRM (see figure 3). The enterprise risk management (ERM) framework has become the main tool to support implementing the strategy, together with related tools like risk appetite, stress tests and reporting.

Figure 3



These tools, unless enhanced, cannot fully meet the needs of the digitised world, where new risks emerge due to product and technology innovation and traditional risks become highly volatile.

Adjusting the lenses – Moving beyond the traditional risks into a new risk universe

Based on our survey, strategic risk needs to encompass a wider category of risks, which should be continuously refreshed:

(i) **Strategic risks**: any business risks which could hinder or disrupt the implementation of the business strategy

(ii) **Emerging risks and operational risk**: more granular, including emerging risks, such as reputation and sentiment risk. Also, critical components of operational risks are technology-related risks, such as cybersecurity and blockchain.

(iii) **Financial risks**: although including traditional market, credit and liquidity risks, they require different treatment due to real-time change of market, client and stakeholder conditions

(iv) **Compliance and third-party risk**: these risks now extend beyond regulators to include legal and third-party risks as the value chain of the risk function is intermediated, for example, pricing/valuation models are assembled through the use of in-house and cloud markets

> *"Risk will be more and more about making money." – CRO, Asian G-SIB bank*

The scope of the risk function is often limited to risk assessments and risk advice. According to our survey, there is a dichotomy in the CRO's role in that the CRO monitors strategy execution rather than contributing towards the strategy itself. Participants highlighted that the CRO was more accepted for traditional risks, such as market and credit, but not for more qualitative risks, such as reputation, political or strategic risk (see figure 4).

Figure 4

In contrast, the digital world will require a CRO, who provides a holistic view of enterprise risk, powered by advanced predictive analytics and a deep understanding of emerging risks, and understands the impacts on capital, shareholder value and portfolio optimisation.

From ex-post to ex-ante – From the rear-view mirror to virtual simulation projectors

Current strategic actions are based on stale, historical views that are used for forward-

> *58% of survey respondents feel that the CRO is a decision maker and contributes to strategic decisions.*

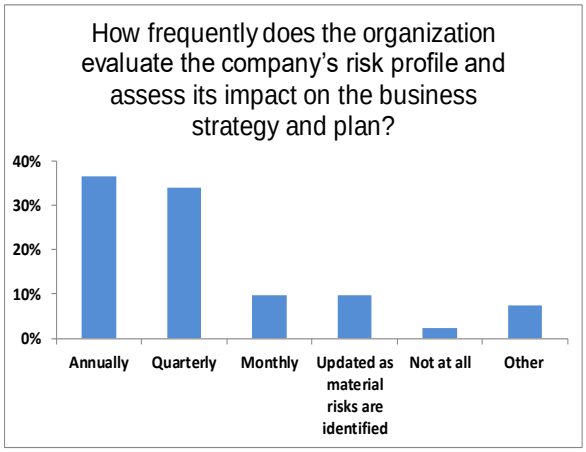
looking scenarios, which are difficult to define and execute, leading to poor decisions (see figure 5). The future CRO will provide a holistic view of all types of risk within seconds, accompanied by advanced early warning systems driven by real-time events and data. These risks will be tested against future scenarios and outcomes and will be fully aligned to strategic key performance indicators.

This vision of real-time data analysis, which enables drill down on risk performance indicators aligned to strategy, contrasts with the current situation observed in our survey. Most financial institutions produce quarterly or ad hoc strategy-related risk reports, while producing daily risk reports for products, LOBs and legal entities based on short-horizon scenarios.

"SRM is only as good as the weakest point in the chain that is required to provide appropriate inputs to the board." – CRO, UK digital challenger bank

The ability to perform real-time what-if scenarios and navigate the results by using intelligent interfaces with AI robotics is also in stark contrast with the static and limited scope of reports.

Figure 5



Becoming a more nimble organisation

For the risk function to play a leading role in business strategy, financial institutions will need to change their culture to become more elastic and agile, adjusting to the new business reality.

Introducing digital technology, AI and cognitive computing will change the functional composition of the lines of defence, for example, automated approval of mortgages by smartphone. Furthermore, the intermediation

The survey reveals that speed to report on ad hoc requests regarding existing and emerging risks varies and can take up to 120 days for bottom-up scenarios.

of certain risk functions to other groups within the organisation and to third-party providers could change the size and shape of the lines of defence. Conversely, new types of risk could require the rapid enhancement of risk functions, for example, cybersecurity, technology risk and related contagion risk.

70% of survey respondents have identified data as the primary challenge, followed by legacy infrastructure and culture.

2. The constant challenge for efficiency and effectiveness

Risk efficiency can be measured by the ability to provide real-time insights for strategic and operational decisions. We envision two waves of improvement in efficiency and effectiveness:

- through robotics and automation;
- through AI, blockchain and cloud ecosystems delivering substantial benefits in financial performance, while significantly improving risk efficiency and effectiveness.

Robotics, ML, NLP and NLG will improve efficiency in a number of risk management operations, such as automating underwriting, credit approval processes and risk decision making. Critical functions, such as stress testing and what-if analysis, will be improved by ML and AI, where new scenarios are proposed based on data mining.

"Old IT infrastructure means inefficiency in report production... Ideally, you want reports produced in one day and new tech plays a big role in enabling this." – CRO, major European bank

Cognitive robotics will be used for decision making, including shareholder value protection strategies, capital utilisation, portfolio optimisation, dynamic limits and mitigation strategies.

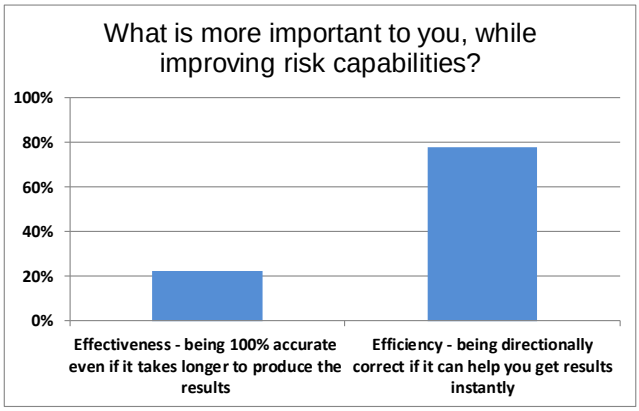
"Timeliness of data is the key challenge." – Head Risk Strategy, GSIB bank

Based on survey responses, at present, quarterly or ad hoc strategic risk reports are not considered critical to business strategy. Respondents saw these risk reports as too difficult to produce, lacking reliable data, and having high production costs. All these factors are inhibiting the CRO's ability to be more actively engaged in the business strategy.

Data as a critical asset or organisational fuel

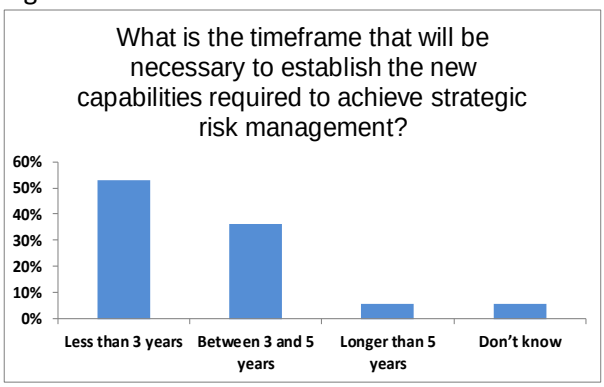
Improving the effectiveness of risk functions will depend on the availability of reliable data and deployment of predictive analytics. Use of common data will improve the quality of risk insights for different levels of risk across the hierarchy of product/business line/legal entity/group. This is in line with the expectations of CROs today, who would be happy with more directionally correct information rather than fully precise information for decision making (see figure 6).

Figure 6



Risk operations will become generally more efficient through the use of 'compliance by design' standards embedded in products and operations. This approach, combined with the robotic automation of many risk processes, will lead to risk management by exception, which reduces human error and detects employee inappropriate behaviour. This vision aligns well with the current thinking of risk management stakeholders (see figures 7).

Figure 7



80% of respondents have plans to address operational challenges in the next 5 years

Infrastructure changes can improve efficiency and effectiveness

The financial services industry will be transformed and firms will offer products tailored to customers based on price optimisation – the right product for the right customer, the right price for the right customer measured through enhanced risk-adjusted pricing models.

Culture promoting partnership with third parties especially regulators

The emergence of new risk types emanating from the markets and new ecosystems (fintechs, utilities, third-party stakeholders) will require a closer integration between regulators and financial services companies. Regulatory reports can be replaced by data sharing processes where multi-dimensional data is shared with regulators and they provide risk insights based on the firm's activities and risks.

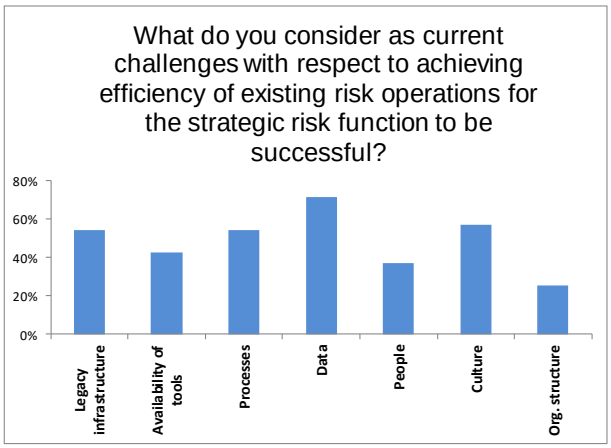
Regulatory costs will be reduced as financial institutions wire in compliance into products and operations. Compliance costs will be further reduced as firms deploy 24x7 AI and ML tools to prevent non-compliant actions and automate a number of risk functions, such as credit due diligence and portfolio monitoring.

As financial institutions look to improve risk management performance and reduce costs, they will disintermediate a number of risk functions to fintechs, utilities and third-parties. Fintechs, utilities and social media platforms will help CROs create a holistic view of risks across their products, customers and markets. As utilities will provide more generic risk function support, such as regulatory compliance and model validation, the risk function will focus on higher-value risk management tasks.

The development of forward-looking capabilities, including pre-deal analysis, forecasting, stress test scenarios and what-ifs execution, will likely be developed in-house or use utilities to provide the service.

A common theme among survey participants was how legacy infrastructure, access to data and culture inhibit improvements in SRM (see figure 8). Financial institutions are currently experimenting with new data and process automation technologies but must implement them within an SRM transformation program to benefit from their investment.

Figure 8



3. Using new technology to improve market competitiveness

Enhancing risk IT

While financial institutions have started to modernise their IT infrastructure by adopting new tools and techniques, such as data lakes, RPA and ML, and have made small steps towards migrating to the cloud, a fundamental change will only occur when they fully endorse the cloud.

Cloud functions will change the role of risk IT from managing the physical estate (large numbers of delivery centres) to continuously reconfiguring the cloud estate (virtual delivery centres).

"Use AI and move a lot of applications and data into the cloud… this in conjunction with ML will transform the role of the risk management function." – CRO, global universal bank

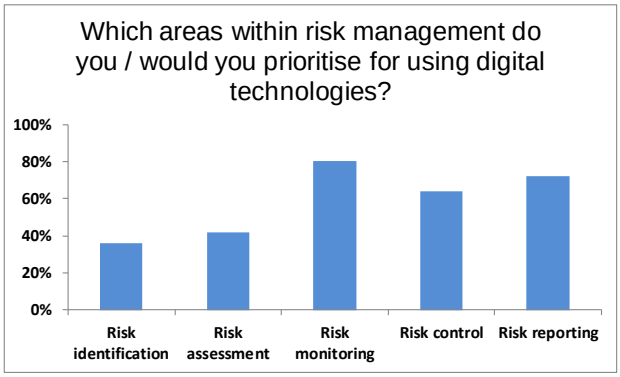
Cloud resources can be easily reconfigured to perform ML techniques on transactional and historical data, such as discovering new risk drivers for profitability by using historical performance data to determine their impact on risk-adjusted profitability. In a mature cloud market, the risk IT will improve its ROI and move into a dynamic ROI.

IT costs will decrease through the timely reconfiguration of the IT estate, while the application development cycle is reduced due to new productivity tools.

Survey participants all recognised the role of new technologies in digitising the risk function (see figure 9). The underlying driver for various initiatives has been the need to improve data management, which feeds all critical risk management decisions. According to our survey, the deployment of RPA, ML or AI is not being explored systematically, but in an opportunistic way and a reactive mode.

It is worth noting that there is a drive from the board to use new technologies, but normally with a lens on achieving cost efficiency vs transforming the role of the risk management function. Perhaps now is a timely opportunity to change board perceptions by significantly improving the valued delivered, while reducing operational costs.

Figure 9

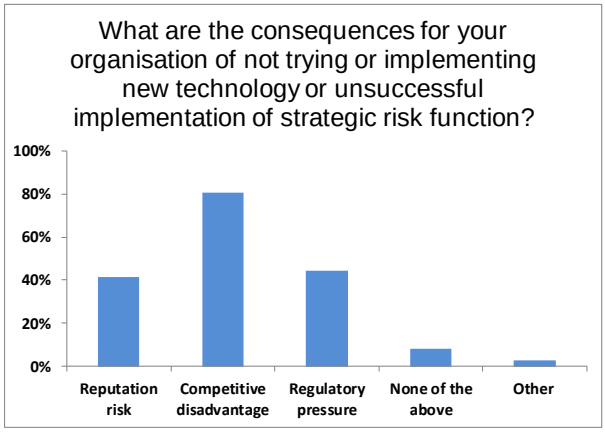


Mobilizing talent and culture

The risk function of the future will need to expand its skill base and the role of its risk professionals. It will consist of data scientists, model experts, business experts and user experience experts, who will use ML, AI, quant analytics and data visualisation to develop risk applications and services. These professionals will need to endorse a culture of innovation and experimentation, and be agile and flexible to work across different risk functions. They will need to think outside the box, develop new risk services in public/private clouds, and collaborate with fintechs and utilities. These characteristics will be critical in being able to perform a strategic role and generate a competitive advantage.

Most survey participants saw culture and skills as the main inhibitors to improving SRM. While technology is seen as a key enabler, understanding the potential of new technologies is limited. Most respondents agreed that failing to use new technologies will lead to competitive disadvantage (see figure 10).

Figure 10



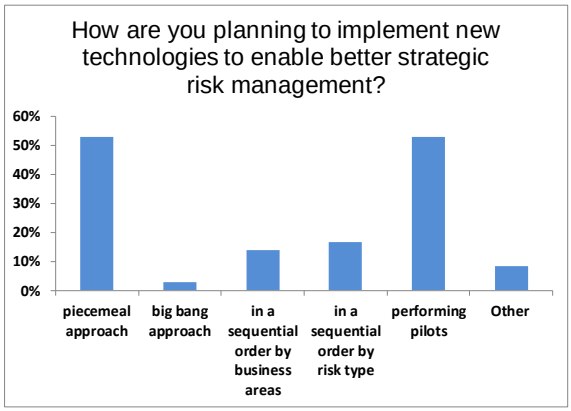
80% of respondents felt that not trying new technology is seen as a competitive disadvantage.

The current status represents a unique opportunity for the CRO to move into the role of decision maker rather than that of controller/trusted advisor by offering a new vision. This can be achieved by deploying new technologies, expanding the skill base and re-organising risk operations.

4. Finding the way forward

Moving to a digitised risk function may seem daunting and long. However, standing still is not an option and a different approach to the piecemeal approach taken by most financial institutions is required (see figure 11).

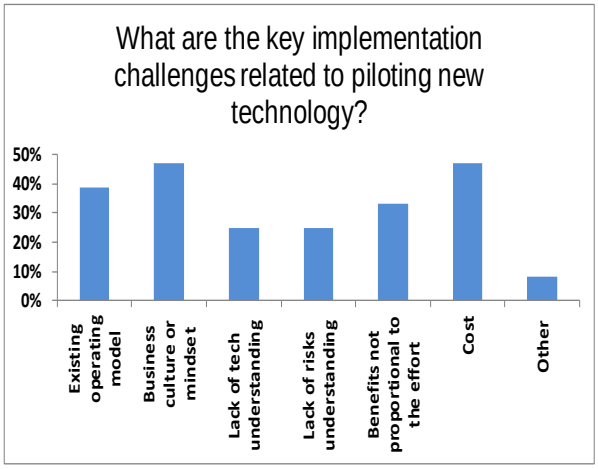
Figure 11



A wise approach is to take a strategic view – big in ideas and design, but small in implementation steps, which are firmly anchored in the ERM framework. This will ensure that investment in modernising the risk function will have tangible benefits to the strategy of the organisation.

The foundation of any initiative will be dependent on the modernisation of the inputs, the evolution of data and IT infrastructure, and a change in the governance and culture of the risk function (see figure 12).

Figure 12



Three initiatives to transform SRM

Based on our survey, all CROs feel an urgent need to evolve the SRM framework and improve value-add and profitability. Given the different pressures at business and risk management level, including cost reduction, change of business model, and the potential impact of Brexit for UK and European financial institutions, we identified three pathways. These can be implemented at different speeds, depending on the overall business and risk strategy.

1. SRM decision platform – beyond reporting

Transforming risk reporting can unlock tremendous potential for the CRO and the risk function. Organisations can create "live" risk dashboards with up-to-date information about risk exposures, the impact on the business and mitigation strategies. Digital technologies enable financial institutions to dynamically aggregate risk exposures, perform live drill downs, ingest non-structured data, conduct what-if scenarios, visualise multi-dimensional data and export data in different formats. Implementing ML and AI techniques also provides unparalleled risk insights, which are currently unavailable.

2. Forward-looking capabilities – stress-testing utilities

The ability to easily perform what-if scenarios and assess potential outcomes is vital in transforming SRM. Digital technologies allow stress-testing utilities to be implemented within the organisation or by an outside provider. Using stress-testing utilities with the same ease that we currently use the electricity grid will define risk management leaders, while developing AI risk engines and predictive analytics will make the CRO a valuable partner in the business strategy.

3. Risk process re-imagination – risk control processes

Several risk processes can be re-imagined with digital technologies, drastically changing the efficiency and effectiveness of the risk control function. This "re-imagination" approach deploys all appropriate digital technologies to enhance process implementation across three axes: ethnographics – the way the user interfaces with the information; digital lean six-sigma – the way the user performs various tasks in the context of the digital processing; and digital technologies – ML, AI, cloud and robotics, which transform the way risk control tasks are performed.

A focused approach to these initiatives will transform data management across the risk value chain in a pragmatic way that suits the firm's pace of change. In implementing these initiatives, the risk culture and talent will also inevitably change to enable the digital transformation. New talent will join the risk function and a new culture will be formed.

SRM can be the most transformative enabler for ensuring an organisation achieves its business goals, and new technologies can help unlock the potential of the CRO and the risk function to play a critical role in defining and implementing business strategy.

About the survey

Genpact and the European Risk Management Council launched a joint survey on SRM in June 2018 to take stock of its current status in the financial sector and to obtain indications of the planned evolution of strategic risk capabilities.

The survey involved:

- An online questionnaire with 29 questions, which was taken by 48 selected senior risk officers and decision makers across the financial services industry
- Individual meetings or calls with 10 selected CROs or board members to gather additional information

The survey sample included:

- Job titles: approximately 70% of respondents were CROs, 10% board members and 20% other C-level officers
- Industry sector: approximately 65% of respondents are in banking and capital markets, 13% in wealth and asset management, 10% in insurance, with 12% others
- Headquarters: 64% of respondents are headquartered in UK or Europe, 25% in Asia Pacific, 9% in North America and 2% in Middle East/Africa
- Size: approximately 43% of organisations that participated in the survey have a total revenue in excess of US$ 5 billion, 36% between US$ 500 million and US$ 5 billion and 21% less than US$ 500 million

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Genpact is a global professional services firm that makes business transformation real, driving digital-led innovation and digitally-enabled intelligent operations for our clients.

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