The evolution of risk in the digital age

Risk Transformation Survey
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The evolution of risk in the digital age

Digital technology is impacting risk functions and changing the banks approach to strategic risk management. In a digital future, the chief risk officer’s role will extend further, and the risk function will cover both detecting risks and defining business strategy.

In 2018, Genpact and the European Risk Management Council (ERMC) 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 bank’s business strategy.

To determine how strategic risk management has evolved since that time, Genpact and ERMC supplemented last year’s survey with a real-time survey performed at the annual ERMC Leadership meeting in March 2019 in London.

In real-time, we polled 108 senior attendees from more than 100 organizations, including financial services firms, regulatory bodies, government organizations, industry associations to explore:

- The future of risk management
- Digital transformation strategies and risk implications

1. The future of risk management

The role of risk continues to evolve as an advisor to board and business

In our vision of the future, many recent advances in technology have been implemented and risk is a fully digitized function. With this strategic risk management framework, the role of the CRO will be to provide real-time strategic advice to the business, reducing unwanted exposures, managing portfolio investment, and optimizing capital allocation. The team’s advice will be based on risk and data analytics and projected performance.

On the board of directors, the CRO will become a decision maker. The CRO will analyze 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 improve this analysis.

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Last year, our research suggested that, contrary to this vision, many CROs were not active participants in defining the business strategy, but instead were limited to monitoring its execution. Today, while the focus of the risk function is still about balancing an advisor role with that of a controller and compliance enabler, the role of the CRO as advisor to business and senior management continues to take on increased importance (see figure 1).

**Figure 1: Which of the following statements best describes the role of your risk function today?**

- Advise businesses and senior management on risk implications, challenge and provide recommendations: 43.75%
- Manage portfolios and risk profile: 21.88%
- Ensure compliance with regulatory requirements: 17.19%
- Protect key assets and business of the firm: 10.94%
- Advise on strategy planning: 6.25%

Likewise, over the last three years the risk function has placed more focus on the transformation of risk capabilities as compared to regulatory compliance (see figure 2). In much the same way as the role of the CRO is evolving, transformation elevates risk management from a functional capability to an enterprise responsibility, expanding the traditional view of risk.

**Figure 2: How has the role of your risk function evolved in the last three years?**

- More focus on transformation of risk capabilities: 50.00%
- More focus on regulatory compliance: 31.48%
- More focus on efficiency: 14.81%
- It has not materially changed: 3.70%

The role of risk as a critical advisor to the business and board will continue to grow. And, as part of this evolution, there is a clear need for the risk function to become more analytical and quantitative (see figure 3).

**Figure 3: How do you expect the role of your risk function to evolve in the next three years?**

- Become a critical advisor to business and board: 39.34%
- Become more analytical and quantitative: 31.15%
- Increase its decision-making role: 18.03%
- Evolve its capabilities to ensure compliance: 9.84%
- Stay more or less as it is now: 1.64%
2. Digital transformation strategy and risk implications

While new risks emerge, AI and cloud technologies will transform risk capabilities

The role of risk executives will continue to evolve from reactively supporting to proactively enabling strategic business decisions, such as protecting shareholder value, assessing capital efficiency, and improving financial performance. In the process, the risk function will support the CRO with 360-degree coverage of emerging risks and mitigation strategies and forward-looking views of the firm’s risk profile. This, in turn, will enable the CRO to deliver holistic information to stakeholders, such as the CEO and fellow board members, to help them make informed strategic decisions.

As part of this evolution, the current view of risks associated with the business operations and strategy needs to widen beyond traditional risks such as market, credit, and operational risks. For example, in the last three years, the identification and assessment of new threats related to technology, such as cybersecurity and blockchain, and how to manage them, has been a key focus (see figure 4).

*Figure 4: How did the risk function change to better align to the use of digital applications in the last three years?*

- More focus on identification and assessment of new risks related to technology (e.g., cyber): 25.81%
- Reviewing risk appetite to include new risks: 23.66%
- Expanding coverage of new risks in stress testing process: 18.28%
- Enhancing end-to-end straight through processing/automation: 16.13%
- Closer link between risk, operations, and front office to define mitigation strategies and actions: 11.83%
- It did not materially change: 4.30%

Over the next three years, AI and cloud technologies are expected to help the risk function tackle these emerging issues (see figure 5). But key challenges remain – not only with respect to data and legacy infrastructure, but also culture and skills (see figure 6).
3. Digital solutions that transform risk management

Risk identification, assessment, and reporting processes will be transformed with digital through pilots

Current strategic actions are based on stale, historical views that are used to create forward-looking scenarios, which are difficult to define and execute, which leads to poor decisions. 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.

Risk teams still have a long way to go before they can realize the value available from technology. This vision of data analysis, which allows people to drill down on risk performance indicators aligned to strategy, contrasts with the current situation and the situation observed in our survey last year. Most banks produce quarterly or ad hoc strategy-related risk reports, while producing daily risk reports for products, lines of business, and legal entities based on short-horizon scenarios. The ability to create what-if scenarios on demand and navigate the results by using intelligent interfaces with AI and robotics is also in stark contrast with the static and limited scope of reports.
In the past three years, risk identification, assessment, and reporting processes have been the focus of digital risk transformation (figure 7). In the next three years, digital transformation efforts will continue in these areas but increasingly focus on risk identification (figure 8).

**Figure 7:** In which areas of risk management have digital technologies already been successfully implemented by your company in the past three years?

- Risk measurement/assessment: 25.00%
- Risk monitoring/control: 19.23%
- Risk reporting: 19.23%
- Not currently used yet: 17.31%
- Risk identification: 11.54%
- Other: 5.77%
- Risk strategy: 1.92%

Digital solutions are transforming risk management. The risk function is moving, and will continue to move, toward digitization. More than 90% of those surveyed expect new digital technologies to be implemented by their banks over the next three years (see figure 8). And digital risk transformation will focus on risk identification, assessment, and reporting processes (see figure 8).

**Figure 8:** In which areas of risk management do you expect new digital technologies will be implemented by your company over the next three years?

- Risk identification: 25.42%
- Risk measurement/assessment: 23.73%
- Risk reporting: 20.34%
- Risk monitoring/control: 13.56%
- No plans to implement new digital technologies: 8.47%
- Risk strategy: 6.78%
- Other: 1.69%
4. Putting it into practice

On the journey to improve the efficiency and effectiveness of their risk functions, financial institutions continue to explore and pioneer the application of new digital technologies. Normally, these institutions start by addressing their data foundations before moving to smart analytics and then to robotics, cloud computing, machine learning (ML), and artificial intelligence (AI).

These technologies are central to several initiatives. For example:

- **Enhancing data governance, management, and processing**
  Banks are undertaking finance and risk integration initiatives to enhance capital management and improve reporting, at both a data and process level. To solve process fragmentation and data inconsistencies, many banks look to deploy new digital technologies on top of their current infrastructure.

- **Improving risk quantification**
  Investment banks often use ML as an alternative to traditional techniques to reduce risk dimensionality.

- **Enabling better compliance**
  Banks are using automation and AI to reduce false positives in the fight against financial crime, ensure better regulatory compliance, and improve investigation efficiency.

- **Cloud-based pilots**
  Many programs have established a roadmap for migrating the valuation of certain asset classes to the cloud, where banks can take advantage of on-demand scalability at attractive price points.

- **Achieving an integrated view**
  As the market of cloud providers begins to differentiate itself in the area of online processing, ML/AI capabilities and enterprise data management allow better management information and reporting.

Nonetheless, the execution of such digital initiatives remains a challenge for banks. At present, there is little active usage of agile methodologies. And banks rarely use integrated development life cycles for ML or AI systems.

However, proof-of-concepts represent a good step in establishing a new culture to support the digitization of the risk function. In our experience, successful transformation programs have four commonalities:

1. Executive sponsorship with clear long-term objectives, defined tactical plans, and robust governance

2. Early use of digital transformation in the organization, made possible by a collaborative culture, prompt communications, and reskilling
5. Conclusions

Digital is already a reality for many risk functions and continues to be a journey for all

Overall, the results from the real-time poll were consistent with the views and trends identified in the survey last year. Namely, digital technologies are already a reality for some risk functions and many more will adopt them in the near future. As part of this journey, the role of risk and of the CRO continue to evolve as an advisor to the board and business. While new risks emerge, AI and cloud technologies will transform risk capabilities to address the needs and expectations of the evolved risk function and CRO.

Risk identification, assessment, and reporting processes will be the focus for new technologies. And, while pilots and piecemeal approaches continue to be widely used for digital transformation, organizations are trending toward clearer more programmatic priorities for transformation programs.

There are steps to be taken along the way to risk becoming a fully digitized function. But the journey has more than commenced.

3. An innovation team fully connected to risk and operations teams for joint ideation, design, and implementation

4. Risk functions involved upfront in every transformative project

As risk functions transform with digital, there many opportunities to make a strategic impact on the business provided teams adopt these best practices.
About the survey

Genpact and the European Risk Management Council performed a supplement to the joint survey in March 2019 to take stock of the current status and planned evolution of strategic risk capabilities in the financial sector.

The survey involved:

- An audience response system to collect opinions of the audience and run a live survey on digital transformation
- A real-time poll with 9 questions, taken by 108 selected senior risk officers and decision makers across the financial services industry

The survey sample was:

*Research organisations, media companies, academia
About the authors

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Alessandro leads the Risk Consulting practice in Europe. With a long experience in the financial services industry, Alessandro has a wealth of experience in risk, regulation and capital management frameworks, methodologies and processes.

He worked in several countries, mainly UK, Switzerland and Italy, both in big 4 consulting firms and banks, and in CRO roles in UK and CH.

Prior to Genpact, Alessandro was at EY London where, among others, he ran the UK FS ERM team. He also held other senior risk management roles in Arthur Andersen, Banca del Ticino and BNL.

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Prior to that he worked for various consulting companies including OW, CGI-AMS, Centerprise Services as UK Risk Chief Technology Officer, Director and Head of EMEA for Consulting.

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About Genpact

Genpact (NYSE: G) is a global professional services firm that makes business transformation real. We drive digital-led innovation and digitally-enabled intelligent operations for our clients, guided by our experience running thousands of processes primarily for Global Fortune 500 companies. We think with design, dream in digital, and solve problems with data and analytics. Combining our expertise in end-to-end operations and our AI-based platform, Genpact Cora, we focus on the details - all 87,000+ of us. From New York to New Delhi and more than 25 countries in between, we connect every dot, reimagine every process, and reinvent companies’ ways of working. We know that reimagining each step from start to finish creates better business outcomes. Whatever it is, we’ll be there with you - accelerating digital transformation to create bold, lasting results - because transformation happens here.

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