

THE FUTURE RISK IMPERATIVE

Exxeta Risk Management and
Sustainability Practice



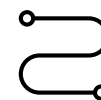
exxeta

Risk practitioners are overwhelmed with information on how to address the structural shifts arising in the functioning of the marketplace whether this is occurring within specific markets, industries or regions. In parallel financial technology is continually advancing.

We believe that digital finance i.e. the impact of new technologies in finance, presents risk practitioners with the opportunity to transform their business in a way that allows for more effective risk management over the longer term and better utilizes the existing human capital, resulting in a structure of a risk function that is materially different from the traditional risk function that exists today and one which many people are familiar with.

So how can we as an industry harness the power of the digitalization revolution for our benefit? In a nutshell how do we go from talking the talk to walking the walk?

How to adress Structural Shifts



Fostering the business enabling purpose

Fostering the business enabling purpose with a rationalized risk infrastructure employing location and delivery models.



Focusing on the risk management core

Focusing on the risk management core competencies and delegation through the leverage of RegTech solutions will increase agility and shorten response times



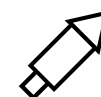
Embracing a cultural and skillset change

Embracing a cultural and skillset change, shifting to a more diverse and digitally enabled organization, working in partnership with other internal functions



Streamlining for cost optimization

Streamlining for cost optimization. While total FTE count will shrink, the share of senior managers within the function will increase

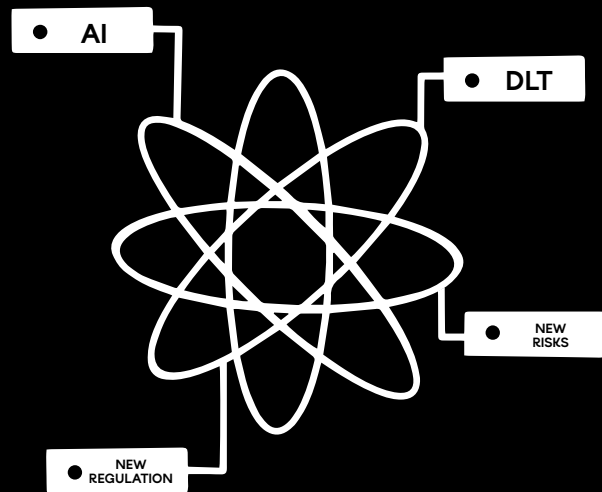


Harnessing the power of digitalization

Harnessing the power of digitalization allows the risk function to examine an ever-wider range of early warning signals in the internal and external environment

01. The Risk Imperative

Market-related stress events and the ubiquitous presence of data have further highlighted the nested interdependencies within the global supply chain. In turn this has heightened the risk management requirements for timely risk oversight and smarter risk management. The external drivers of change within the financial ecosystem have long been identified.



Risk Management Needs

FinTech Digital Transformation

New actors are providing innovative services at a reduced cost. The rise and organic growth of FinTech start-ups is also an opportunity for incumbents to complement their business offering through cooperation with and/or through acquisition. FinTech companies may come under increased scrutiny from regulators and clients alike with regards to their risk management services and compliance adherence. This naturally extends the relevance of building the risk management function of the future to Neobanks and challenger banks.

Distributed Ledger Technology (DLT)

Constantly expanding applications of DLT are bringing about a wave of decentralization, thus lessening the dependency on authorities and traditional banks.

Artificial Intelligence (AI)

Continued but gradual implementation of AI and robotics across functions e.g., credit scorecards.

New Risks

AI applications are giving rise to transition risks such as cyber risk and reputational risk in automation. Climate and biodiversity related risks are becoming increasingly more important agenda items.

New Regulation

New regulation covering topics such as Sustainable Finance, AI risks and crypto assets are expected to further shape the landscape.

Paradigm Shift



The current paradigm shift has the potential to be a turning point for traditional banking due to three reasons:

- 1.** Big data removes incumbent banks' data advantage
- 2.** There is less need for human contact, leading to large cost savings
- 3.** Allows for the oversight with less reliance on relationships where collateral and reputation are leveraged by traditional banks

Source: Beck et al. 2022 – European Systemic Risk Board

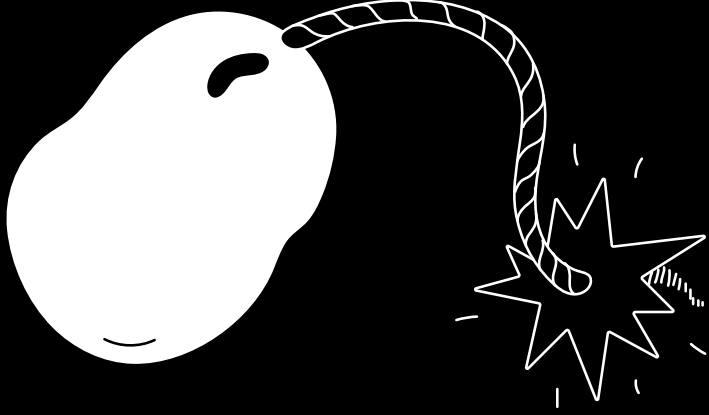
Business Enablement

Today, risk managers and risk owners are perceived as holding onto the handbrake whereby they protect their franchise rather than enabling the sales organization in their dealings. The main challenges currently forcing risk management into a defensive and reactive role are: slow and partially automated processes requiring human intervention, suboptimal IT infrastructure, communication issues and gaps in the information flow as well as outdated methodologies.

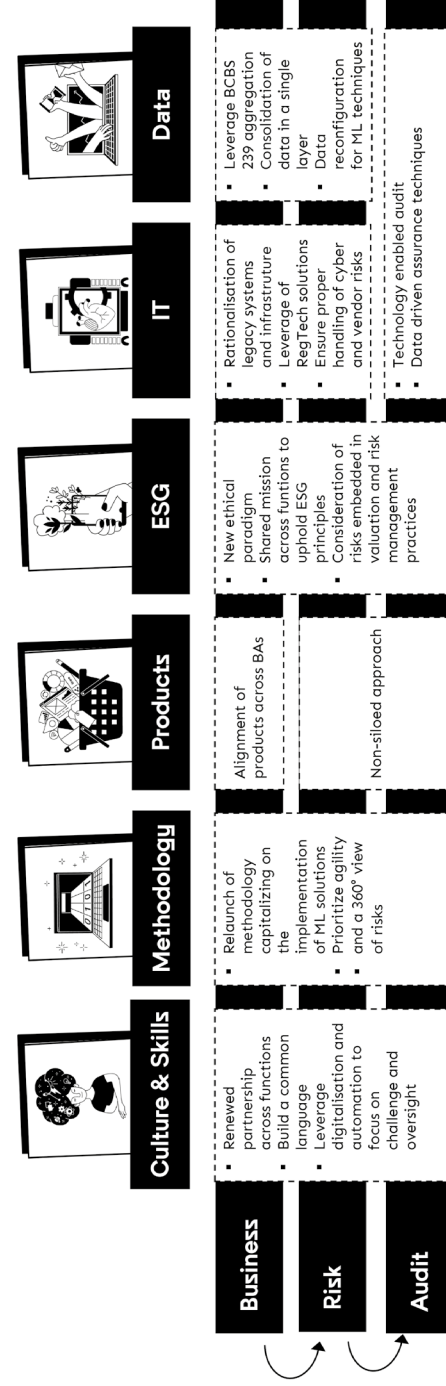
There is an increased need to internally revamp the risk domain, to transform it into a business enabling function, attracting talent and leveraging cutting edge technologies. The concept of business enablement is central to a relaunch of the entire risk function. This, together with introducing changes to reach operational resilience and optimizing change management, constitutes our vision of the future state of the risk function.

02. Operational Resilience

Sustainable transformation can be achieved by integrating innovation across the three lines of defense. Several themes require alignment between front and back-office functions to shift towards a future enabling structure.



Key Building Blocks



The banking industry is challenging the status quo across the board to achieve and maintain operational resilience. This path leads through changes throughout the traditional three lines of defense model, reinterpreting roles and objectives of functions.

What we see today around the industry is a siloed approach driven by legacy-IT systems and a fragmented landscape. Processes and controls are largely still manual or only semi-automated, leaving room for human error and taking up valuable resources.

Harmonization and alignment have also not yet been achieved across business areas with regard to products and methodologies. This makes the risk manager's oversight tasks extremely difficult to perform. The shift to operational resilience will entail tackling different aspects in an integrated manner and connecting business and risk without compromising the 2nd line ability to provide independent challenge.

Culture & Skills

The implementation of digital solutions is underpinned by building a common language and a renewed partnership across the lines of defense. The skillset required for the future state of a risk function includes not only financial and non-financial risk knowledge, but more than ever digital affinity and the ability to communicate swiftly and clearly across functions.

Empowerment of the risk function means leveraging digitalization and automation to support the business in their ownership of risks through challenge and oversight. A cooperative and technologically enabled risk management culture should supersede regulatory requirements as the minimum common denominator and emerge at the forefront of future banking.

Methodology

The big steps forward achieved in the past few years in the field of deep learning, and in particular neural networks, allow the ever growing application of ML techniques to a broader range of activities (Source: Exxeta). Integrated Machine Learning solutions can be leveraged to relaunch entire risk methodologies. Methodological updates ensure quicker turn-around times thus benefitting the bank clients and sales organization alike.

Methodological updates are necessary to effectively identify and rapidly address idiosyncratic risks and black swan events. These unexpected and hard-to-predict events are becoming more relevant due to the increased presence of tail risks in the current environment e.g., the COVID-19 pandemic, extreme climatic events and the conflict in Ukraine.

Products

Banks should undertake a legacy products rationalization as different IT systems within the same bank could lead to different data for the same products across business areas. More fundamentally, definitions and scope across traditional products should be revisited.

For example, a relevant question would be: what is the accepted internal definition of a Lombard Loan? Can a Lombard Loan be backed by cryptocurrencies? (Source: Finanzen.net). Such product housekeeping is fundamental to guarantee the respect of the institutions' risk appetite limits and to allow a solid 360° near instant view of risk concentrations.

Environmental, Social and Governance (ESG)

ESG considerations are the pillars of a new ethical paradigm. The mission to uphold ESG standards internally and through external activities is a shared one across all functions. For all stakeholders involved, future not only means faster, efficient and smarter but also sustainable across all dimensions. The efforts to mainstream sustainability into banking cover the incorporation of ESG criteria into

financial advice, credit ratings and market research, as well as climate risk modelling and more technical proposals on the treatment of 'green' assets in the capital requirements of banks and insurers. All these activities aim to transform environmental risk factors into quantitative measures of financial risk that can, in turn, inform firms' risk management and investment decisions.

In addition to the above, a push towards transparency coming from the regulators and other stakeholders needs to be addressed by banks to combat greenwashing. Reporting and disclosure however prove to be time-intensive due to the lack of comprehensive ESG databases. The implementation of data sourcing and automated reporting solutions can not only decrease the effort, but also increase accuracy in reported information.

Exxeta Case Study: ESG Reporting Tool



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Empowerment of the risk function means leveraging digitalization and automation to support the business in their ownership of risks through challenge and oversight. Regulatory requirements should no longer be seen as the minimum common denominator, but rather a risk management culture enabled by technology and supported by cooperation across functions need to be at the forefront of future banking.



Information Technology and Infrastructure

Legacy IT systems and a labyrinth of in-house and third-party applications are a weak spot for incumbents. IT at many large banks has been built through add-ons and sometimes in obsolete computer languages (Source: R. Stultz, 2019). One of the challenges for traditional players is to obtain an overview of their IT architecture for rationalization and clean it up in order to enable innovation. This is fundamental to effectively compete with the agility of modern FinTech IT systems. The implementation of technology solutions, either built in-house or bought from third-party vendors, will free-up resources across functions and thus increase the focus on supervision, challenge and communication.

RegTech solutions in particular allow corporate functions to support business performance, by shifting the focus on optimizing risk management rather than reporting and fulfilling regulatory expectations. Furthermore, RegTech solutions are expected to lower regulatory driven costs, making regulated banks more competitive vis-à-vis unregulated FinTechs. Technology does not replace the human skillsets required within risk management, but rather provides a useful complement to increase effectiveness and cost-efficiency.

Exxeta Case Study: Data Driven IT Modernisation

A large sized transaction bank was facing issues with legacy applications and an overly complex IT architecture. Exxeta provided an assessment of the entire application portfolio with the aim to eventually streamline the landscape and created a visualization of dependencies within the IT architecture.

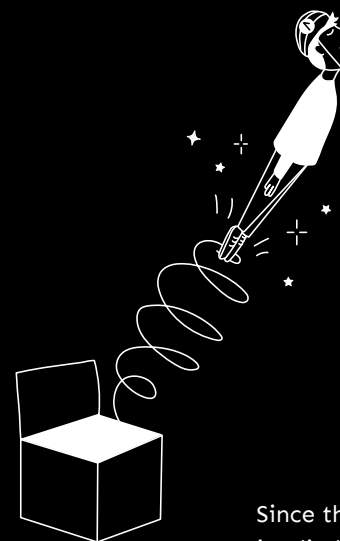
This allowed the unwinding of application dependencies in a highly complex landscape in order to achieve optimization e.g., decommissioning obsolete applications, simplifying data feeds, decoupling parts of the architecture etc.

Consolidation of data into a single layer together with data reconfiguration is needed to allow for data mining using machine learning (ML) techniques (Source: R. Stultz, 2019). This is closely linked with the integration of IT architecture and decommissioning of legacy IT systems, which will not only permit the application of ML, but also free up cost from maintenance of retired systems. This is a delicate and costly process, entailing risks: systems cannot stop running and the impact to risk management activities should be null. However, in this case slow and steady wins the race – while sudden disruption of systems may threaten data integrity and business continuity a steady and controlled progress is vital. Over recent years, Domestic Systemically Important Banks (D-SIBs) and Global Systemically Important Banks (G-SIBs) have implemented through the last years measures and controls around data quality driven by BCBS239. The Supervisory Review and Evaluation Process

(SREP) has recently shared insights around the Banks' transition. Albeit improvements have been achieved by many banks, data aggregation problems are still an area of concern especially for geographically dispersed and diversified banks. Structural weaknesses in IT infrastructure and risk data architecture affect the ability to address information needs and to properly aggregate data at group level

(Source: ECB: Aggregated Results of SREP 2021).

Using the Momentum for Analytics



Since the introduction of BCBS239 and the implied data lineage for risk data, financial institutions have had the opportunity to further expand and integrate compliance, sales and even external data. Data aggregation initiatives driven by compliance to BCBS 239 requirements can thus be leveraged as a valuable enabler for predictive analytics and early warning monitoring (Source: E. Loki, 2019).

For example, external data aggregation capabilities can be repurposed to facilitate the application of ML to extrapolate news-sentiment from prominent blogs, e.g. Reddit. The news-sentiment data extracted by the ML algorithm was used to scan assets in the portfolio and provide early warning flags of potential short-squeeze events

(Source: P. Stevens, 2021).

03. Change Management



The Risk Manager Role

In the current environment, the risk manager typically operates in a reactive mode: working case by case and often not enabled to oversee the entire portfolio. To change this, they must be equipped with a user-friendly platform containing automatically sourced and aggregated information.

While the risk manager of today is juggling routine, manual tasks, change initiatives and reporting, the risk manager of the future must be able to focus on oversight, by using increasingly advanced analytics capabilities and near real-time information on complex and heavy supply-chain information.

To do this, the risk function will need to actively encourage their organization to further structure the risk data and to enable its effective use.

Thanks to automation, the risk managers of the future will devote themselves purely to qualitative work. To fulfill this changed role, seniority and experience are paramount. The focus will be partnering up with business to optimize decision making.

Change Function as the Matchmaker

The turnover caused by short-term contracting contributes to the failure of many high-profile digitalization initiatives within traditional banks. Other key factors contribute to the failed delivery of AI projects i.e., unrealistic expectations, use case related issues, organizational constraints, lack of key resources and technological issues (Source: K. Schuler et al. 2021).

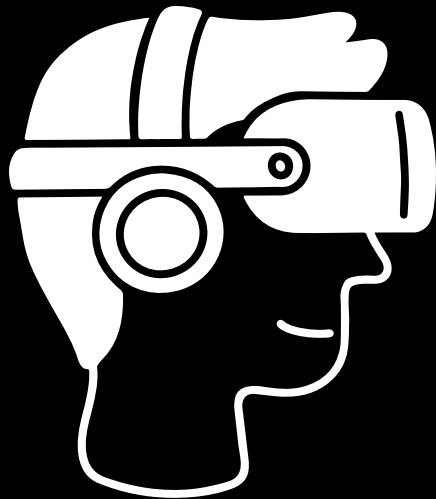
We envisage the creation of agile “squad teams” integrated in the line management composed by SMEs, technology experts and project managers. The change function itself must provide internal coordination and orchestration across teams. Our industry experience has shown that reliance on smaller external teams could reduce vendor dependencies and ensure continuity in change projects.



04.

Conclusion

The Risk Function and the whole banking ecosystem is undergoing a deep and exciting transformation. This report aims to summarize potential areas for improvement, which risk managers could focus on to ease the transition. Internal and external factors drive the definition of three main pillars of change.



1. Business Enablement

Fundamentally empowering the risk function to work hand-in-hand with business. The key contribution will be challenging and enabling business activities rather than focusing on reporting or routine manual tasks

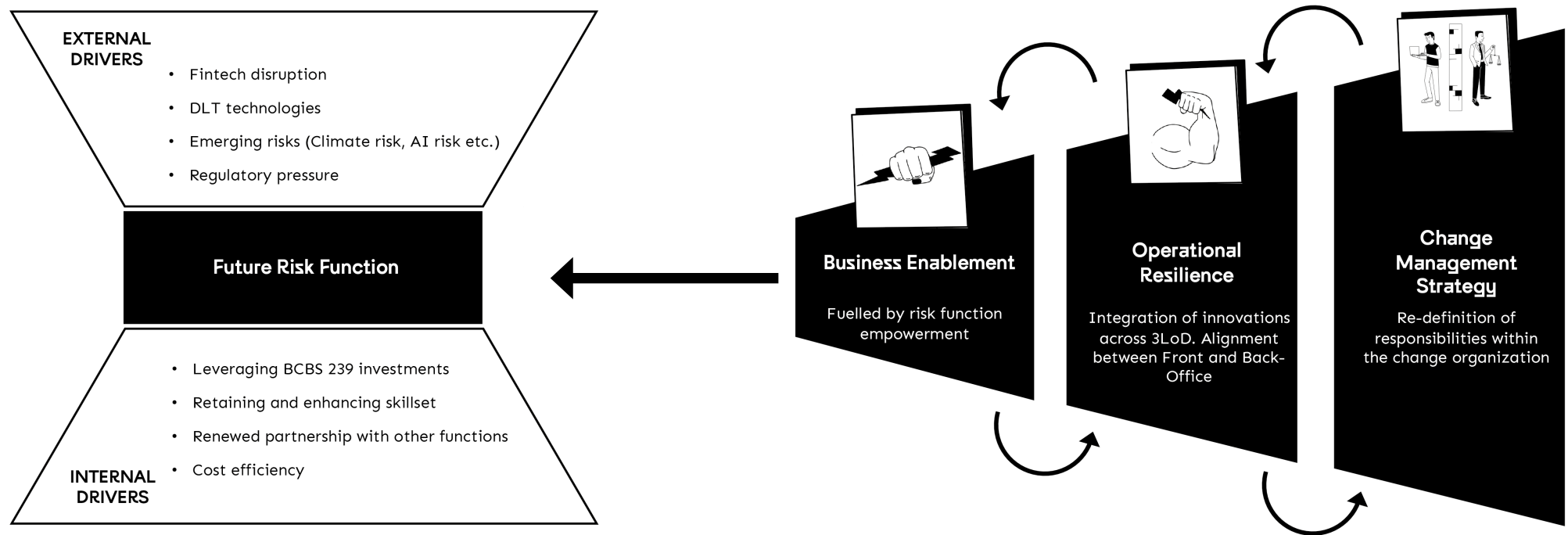
2. Operational Resilience

Integrating innovations across lines of defense. Cross-pollinating different functions with new technologies and ideas to foster a more resilient environment

3. Change Management Strategy

Focusing on long-term change and relying on internal change management functions to coordinate and lead internal transformation and on external SMEs for specific work-packages

Our end-to-end Approach for the Future Risk Imperative



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Let' get in touch!



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Deep Dive?



End Notes

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