

# The Risk Function of the 'Future' Now: The key to thriving in a vastly digitalised economy

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# Introduction

## The requirement for tech enablement within the risk function now borders on existential lines

Financial institutions (FIs) and Banks have come a long way in their use of technology. Especially, considering the service-based nature of the FI sector, the use of computers has been widespread from the front desk teller agent in a retail bank to the back-office post-trade settlement team of a trading desk. Technological and digital dependence has grown tremendously, and if we've been paying attention to history we know this is not about to slow down. An estimate of the exponential tendency of technological growth was made popular by Mr Gordon Moore and his famous Moore's Law.

The prominence of technology in our everyday life is fully evident from the market cap of some of the world's biggest tech companies. Much so, that it produced the first-ever trillion-dollar business (by market valuation) with more poised to follow. Technological innovation has been the demise of sectors and sub-sectors as much as it has been an agent for creating new and emerging sectors. Banks and FIs have been first-hand witnesses of activities such as High-Frequency Trading (HFT), and services such as Robo advisory to mobile banking applications.

Even new asset classes such as cryptocurrencies are being powered by nascent technologies such as blockchain, and all are very much a far cry from prior decades. Whatever one's stance on these innovative marvels, the fact remains that these have been game-changers, and with innovation not standing still, we're certain that no business sector would escape 'disruption' unscathed.

In this white paper, we have taken a fairly uncommon approach by going beyond typically documenting, and depicting findings and observations. We've attempted to re-imagine the future of the risk function via deep evaluation, and alignment of the external (prevalent trends) and internal (prevalent challenges) facts and evidence gathered from a combination of research and experience. It is our profound wish that the embodied message transcends intellectual norms and serves as a call to action! The importance of this very message is underscored by its origins i.e. the desire for deep synergy between businesses and industry for a joint and successful collaboration (Avantage-Reply and ElysianNxt), one incorporating the diversity of thought required for the evaluation of such a thematic issue.

## Internal & External Trend Drivers in the Risk Function

### External

Regulatory Scrutiny

Rapid Innovation & Technology

Cost & Competitiveness

Customer & Expectations

### Internal

Onerous Compliance Operations  
(i.e. Operational Efficiencies)

Deeper Business Insight to Support Management

Rapid Scalability to Support New Ways of Working (Wow)

Increased Shareholder Demands Resulting in Costs Pressures



## Sections

The sections within the paper have been ordered to guide readers progressively and in stages.,

**Section 1: Risk Function in the Modern Age**, chronicles the historical evolution of the risk function alongside trend drivers which have shaped the past. Further, the section sets the tone for things to come with a focus on four key prevalent risk trends with discussions on the trend drivers alongside resultant impacts and challenges.

**Section 2: Risk Technology Enablers**, this section further expands on some of the crucial internal drivers supporting change trends within organisations. Key examples include demand and/or appetite to alleviate challenges and pressures of tedious and onerous compliance operations, and the need for greater insight and scalability while capping off with an illustration of micro-service based solutions as a remedy to the challenge of flexibility and scalability.

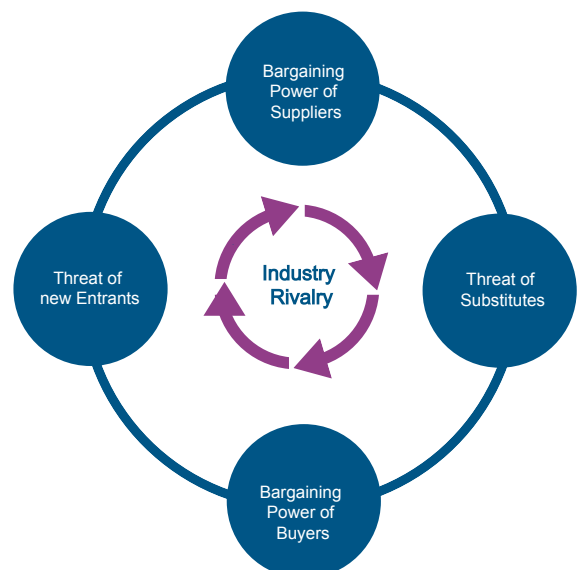
**Section 3: Risk Function of the Future**, Beyond the evaluation of key trends (internal & external) a path towards successful navigation of trends is discussed alongside best practice approaches and considerations. The need for a truly proactive approach is documented with emphasis on how firms can thrive by turning threats into opportunities. Also introduced in this section is a 'Risk Function Maturity Model' which depicts what we at Avantage-Reply believe to be the key components for digital/ Tech maturity i.e. from basic all through to state of the art.

**Section 4: Case Study - Climate Risk Stress testing**, For this section, we conclude with a case study discussion on some of the challenges and emerging requirements on the thematic subject of sustainability. Also in focus are the demands of climate stress testing including a set of unique challenges and how it differs from traditional stress testing, execution, implementation (computational capability), data sourcing, and evolving nature (implying the need for adaptability), and implementation of a new framework.

The great financial crash of 2008 did more than expose the deep layered cracks in the financial systems and institutions alike. Its impact was far-reaching, even reshaping and shifting the emphasis away from traditional success metrics such as market growth and bottom-line profitability. The reforms which followed attempted to bring into focus fundamental elements of 'Resilience' and 'Responsibility' both in the way financial institutions operate and more recently, their perception of roles as conscientious corporate citizens. And with rising demands for firms to do and be more, expressed via increased regulation and market competition, technology no longer exists on the fringes as just a mere tool.

Lastly, the role of technology needs to be re-imagined beyond the traditional i.e. mainly as an operational aid. But rather as a core part of a firm's strategy, business model and most importantly, a vital and unique selling point (USP). Technology introduces a new frontier for the firm and market competition. To put this in context, the famous **Porter's five forces** could easily be augmented with a technology layer, and its impact would sufficiently be felt across all five components. Undoubtedly, firms which recognise this, and commit to developing the ability to harness and wield the enormous power of technology, inarguably possess a key advantage as, in time, it could make all the difference between survival and extinction in our ever-evolving and digitalised world.

### Porters Five Force

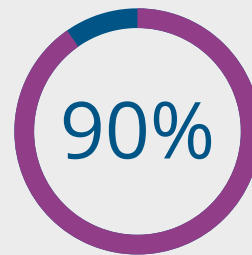


# I Risk Function in the Modern Age

Before the Great Financial Crisis in 2007/2008, the role of the risk function within the bank was heavily focused on traditional risk areas: credit risk for bank loans, the market risk for trading position and exposure limits. Risk management techniques relied heavily on Value-at-Risk (VaR) and other statistical models based on historical data. The limitations and weaknesses of these models were revealed during the crisis, resulting in the extensive application of additional and enhanced risk management measures such as stress testing and scenario exploration and planning.

Risk functions have continued to evolve in their function and role within organisations. As regulations developed following the crisis, the risk function became a core function within banks with significant involvement in key decision-making processes. In the summer of 2021, Avantage Reply in conjunction with UK Finance performed a Chief Risk Officer (CRO)

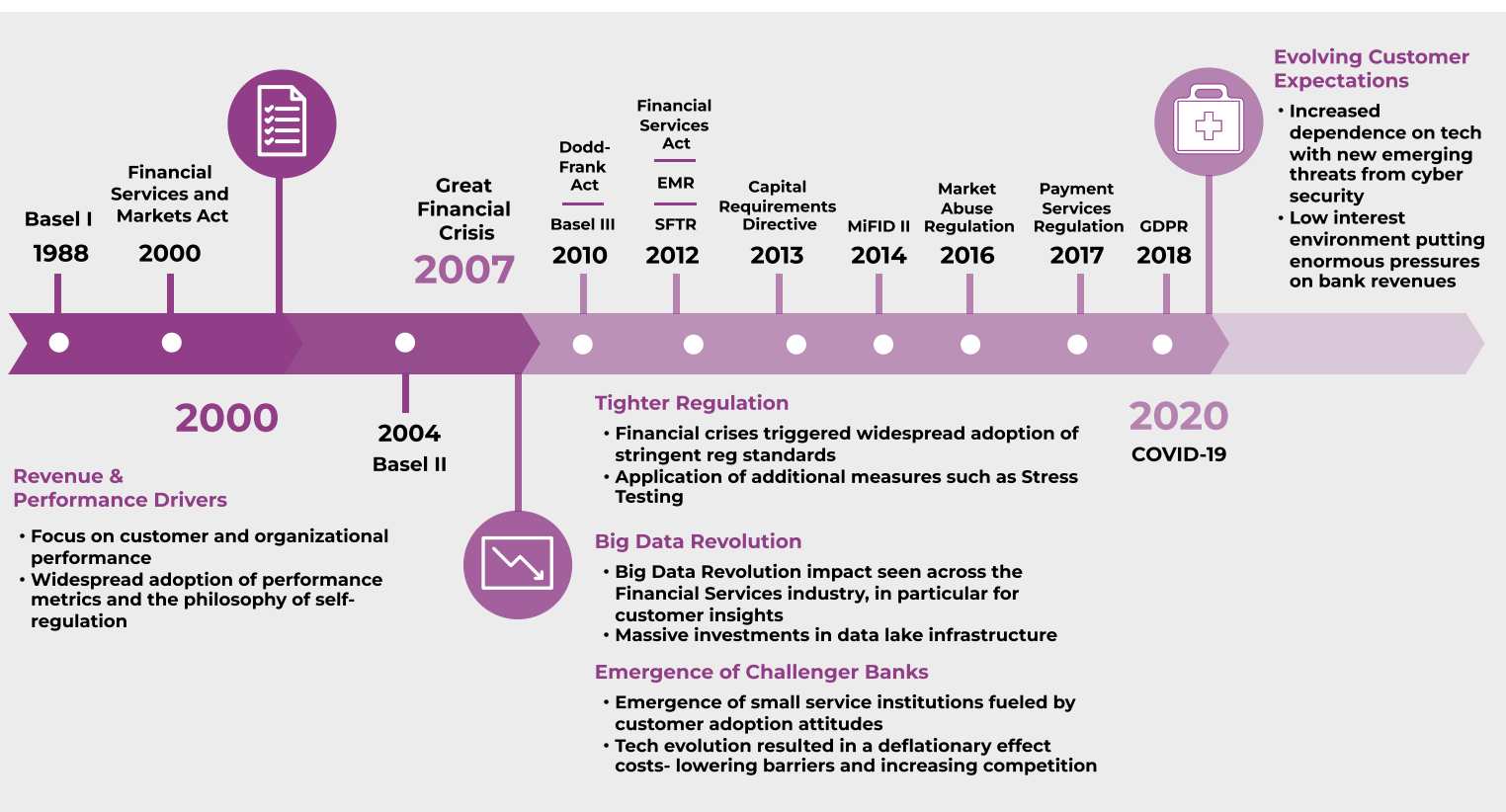
## Avantage Reply CRO Survey



of CRO's noted that they reported into the board/executive risk committee

survey on the state of the risk function, involving 50 UK financial services institutions. One of the salient findings in the area of risk governance noted that 'an overwhelming number of firms have CROs reporting into the board/ executive risk committee with acknowledgement from 90% of survey respondents. This is especially key as investigations by Aebi, Sabato, and Schmid (2012) showed better performance for banks where the CRO reports to the board rather than to the CEO.

## 1.2 Timeline



## 1.3 Trends in risk management

### Regulatory Scrutiny

Due to the severity of the Great Financial Crisis, there has been increasing regulatory scrutiny regarding risk management and risk functions. Risk functions have been required to centralise the monitoring and control of new regulatory requirements measuring the corresponding impacts on the bank as well as coordinating their implementation. Risk functions face significant pressure in ensuring that regulatory requirements are accurately assessed to ensure full compliance with significant fines placed when compliance is not met. Risk functions have also been required to adopt a proactive approach when it comes to regulatory management which typically requires a framework that is pre-emptive and engages with the regulator with utmost transparency in the risk management process.

Greater regulatory scrutiny has arisen in recent years as banks and risk functions, in particular, become more reliant on technology and digital solutions. Increasing reliance on technology in the financial services sector has exposed banks to new risks which are accompanied by new and increasing regulatory requirements. For example, the General Data Protection Regulation (GDPR), passed in 2018, places greater regulatory scrutiny over the use and storage of customer data.

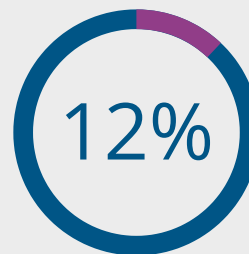
The increased scrutiny has also resulted in greater demand and involvement of the risk function within the wider bank's operations. Firms are still struggling with the demands of compliance and the challenges of getting it right. The severity of the Great Financial Crisis has placed a greater reliance on risk management in banks' decision-making processes. Risk functions are faced with the demand for optimal alignment with the business model and are responding more proactively, even occasionally taking the lead in driving business growth and development activities such as collateral optimisation, and RWA rationalisation in the middle office risk/ credit functions. Risk functions are supporting strategic decisions at the Board level. For example,

“ Greater regulatory scrutiny has arisen in recent years as banks and risk functions, in particular, become more reliant on technology and digital solutions.

implementing integrated ratio systems and risk-return adjusted KPIs which can provide senior management with greater insight into related risks to ensure optimal and fully-informed decisions are made.

The effects of increased regulatory scrutiny and pressures were evident from the CRO Survey, as several firms have commenced rethinking their technology roadmap to support the demands of the risk function. More often than not, compliance processes are still supported by legacy solutions with little integration within the risk function overall. Moreover, the compliance solutions are lacking some of the essential risk management analytical capabilities required for underpinning the business

#### Avantage Reply CRO Survey

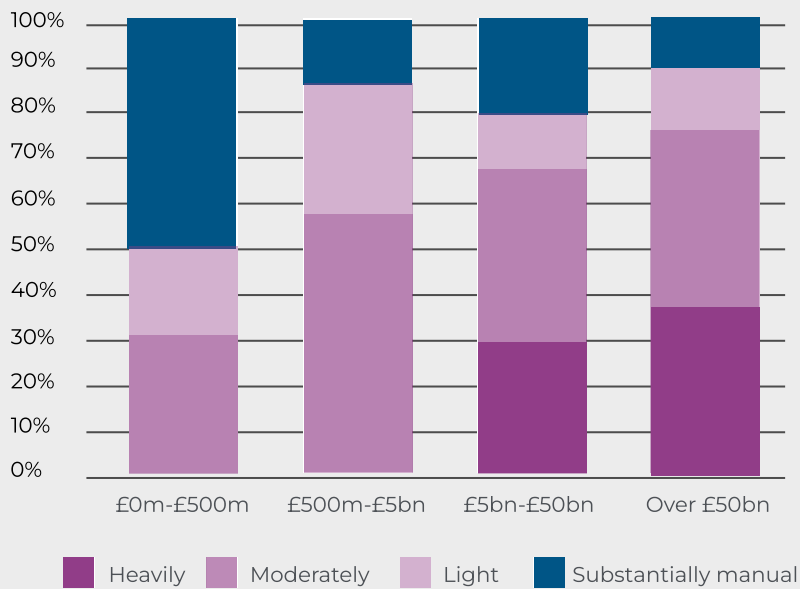


only a staggering 12% of financial institutions would describe their firm's risk management solution as 'Sophisticated'.

decision-making within the banks. Notably underscored by results from our CRO survey respondents as only a staggering 12% of financial institutions would describe their firm's risk management solution as 'Sophisticated'. Overall this is an area where considerable improvements are needed (especially for smaller financial firms)



**Extent to which the Risk function use automated risk systems, platform or tools by balance sheet size**



Cross-sectional chart of responses from CRO survey respondents which depicts relatively high-levels of 'Substantially manual' processes for risk function of firms of smaller balance sheet size.

## Rapid Innovation & Technology

Rapid innovation in the financial services sector has led to a need for greater transparency and standardisation of complex products and services. Consequently, risk functions are building-up business knowledge and developing product-related competencies to remain competitive in the market. Risk functions are taking a proactive role in the implementation of new products and services such as control dashboards and risk-mapping tools. Rapid innovation has also placed the risk function as a central advisor for all risk-related subjects in the organisations increasing the breadth of responsibilities and competencies.

Rapid innovation coupled with greater regulatory scrutiny has enhanced stress testing and analysis performed by risk functions. Although risk functions have previously relied on top-down level analysis and stress testing, recent innovations have made it possible for banks to run what-if analysis on large datasets in minutes and perform enterprise-wide stress testing.

Rapid innovation in technology and analytics has led to the need for improved IT and data estates across

business functions. To keep up with this trend as well as ensure competitiveness in the market, risk functions are prioritising investment in Big Data as a platform for data lineage, linkage, enrichment and cataloguing. Risk functions are also taking a proactive approach by raising business awareness of Big Data capabilities to ensure effective engagement for use-case generation and application. Risk functions are leveraging the power of AI & machine learning techniques to generate insights and improve governance and accessibility. Risk functions are also facing significant risks from disruption forcing them to improve capabilities to identify and address potential patterns and threats from customers, competitors and the market as a whole.

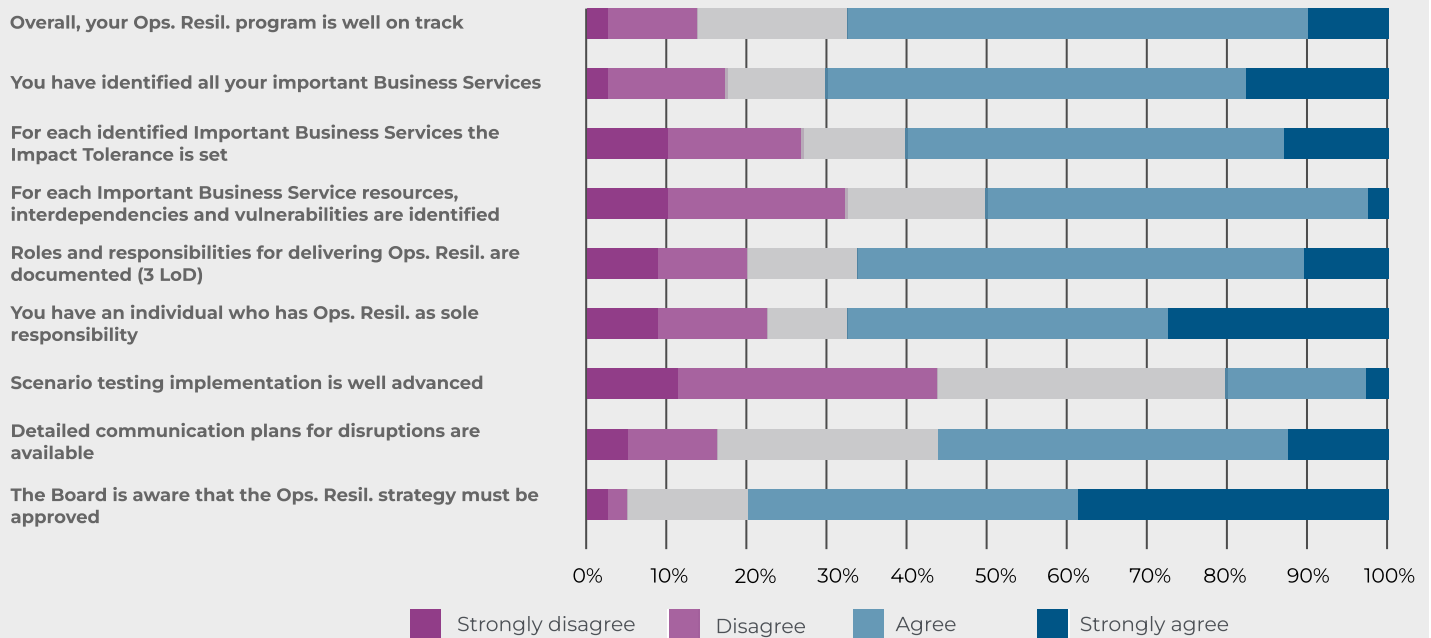
Despite the myriad of opportunities for risk functions, the rise of technology in the financial services sector has led to new and emerging risks such as cyber-attacks, IT failures and compromises to data storage and usability. As a result, operational (Ops) resilience is now clearly a strategic focus for regulators as per PRA policy [embed link] (published Mar 2021) which came into effect on the 31st Mar 2022. Considering the fast-evolving nature of the requirements/ demands



of Ops resilience, the standards for most firms remain inadequate and well below the levels expected. The below table of findings from the CRO Survey

indicates that 40% of respondents are either neutral or disagree that their Ops resilience programme is on track.

### Level of agreement with statements on Operational Resilience



## Cost & Competitiveness

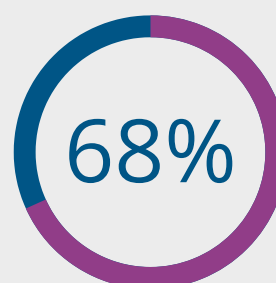
The rise of technology within the financial services sector has led to increased market competition for traditional banks facing new challenges posed by FinTechs and app-based challenger banks. This creates a challenge as well as an opportunity for the traditional players. New technology allows risk functions to operate with greater cost efficiency while adding business value and ensuring competitiveness in the market. For example, the adoption of Software as a Solution (SaaS) like solutions, that was impossible to implement 5 years ago, is now becoming a key consideration when engaging with new technology vendors.

In the recent CRO survey, an alarming number (68%) of respondents reported either 'needing further investments' or being grossly under-resourced (both small or very large risk functions). Increasingly risk functions are being required to improve cost and operational efficiency to ensure continued competitiveness in the market. Risk functions are adjusting their service portfolio to ensure that there is

a clear separation of responsibilities from other business units as well as optimal use of resources. Banks are also having to consolidate functions and processes to increase efficiency potentially increasing the scope and responsibilities of the risk function.

As the nature and operations of traditional banks continue to evolve, risk functions are faced with an increasing trend of balancing growth with risk

### Avantage Reply CRO Survey



of CRO's reported 'needing further investments' or 'being grossly under-resourced'

harmonisation. Risk functions are having to integrate various types of risk management to enable growth within the bank. Risk functions are faced with the need to consolidate functions and processes from different types of risks as well as decrease silo structures within the bank. As part of this risk harmonisation, risk functions are establishing a central unit for analysis, control and compliance of risk parameters and KPIs.



## Customer and Expectations

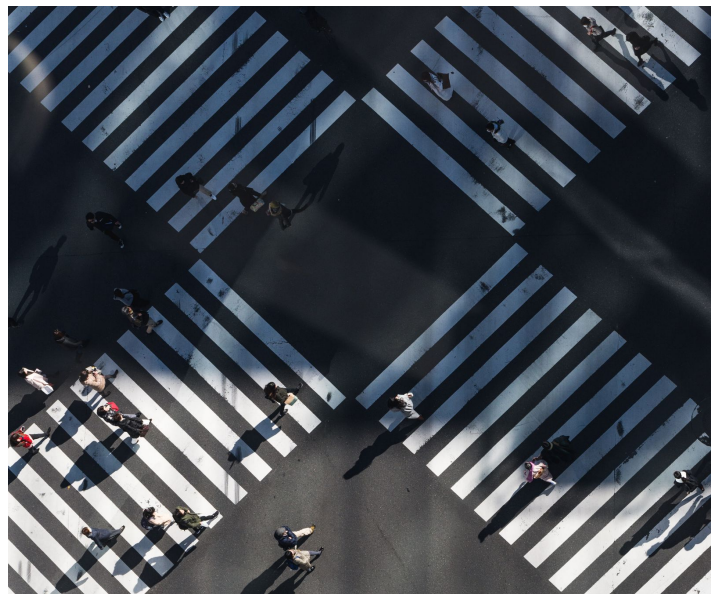
The increase in competition in the financial services market has forced banks to adjust their operations to meet ever-changing customer expectations. The rise of technology in the market continues to improve customers' access and experience of banking and financial services via new and improved channels. This puts significant pressure on banks to continue to meet these expectations. Technological advancements are also granting control to customers in some areas of traditional finance such as investments and advisory. There has been increasing popularity in Robo-advisory and fund supermarket platforms which offer unrivalled access to market products alongside customer-friendly information to support user decision-making.

In addition to evolving tech and increased competition from challenger banks, the rate of technological adoption from customers in the younger demographic continues to grow. For example, the number of bank branches is shrinking at an alarming rate with customer support functions switching predominately

to online and digital channels. This was particularly pronounced during the Covid-19 pandemic which resulted in increased use of alternative bank channels with the majority of customer servicing staff working remotely.

Regulation continues to play an important part in shaping customers' expectations. The introduction of GDPR not only impacts the security and storage of data but to a degree re-orientates and empowers customers. An appreciation of GDPR allows for a more informed customer engagement with businesses, demanding why, what, whom and how data sharing of information ultimately improves the product and services provided to customers.

In addition, the European Payment Service Provider Directive (PSD2) promotes innovation, competition and payment efficiency. PSD2 also democratises the payment space by enabling customers to authorise third-party access to financial information, and payments on their behalf via bank accounts. Furthermore, the incorporation of third party Application Programming Interface (APIs) would facilitate access to customer/product data to create new apps for services such as price comparisons and budget/ finance management as well as enable providers to view customers' transaction history.



## II Risk Technology Enablers

Over the last decade, a large number of technological innovations have been introduced which enable required changes in the risk function. Noteworthy IT innovations include the combination of cloud computing with micro-services and pipeline streaming architecture.

The increased regulatory demands on the risk function captured in the CRO Survey triggered the rethinking of institutions' technology roadmap to support the risk function to respond adequately to the new demands. More often than not, compliance processes are still supported by their legacy type solution with little integration within the overall risk function. Moreover, the compliance solutions are lacking some of the essential risk management analytical capabilities required for underpinning the business decision making within the banks.

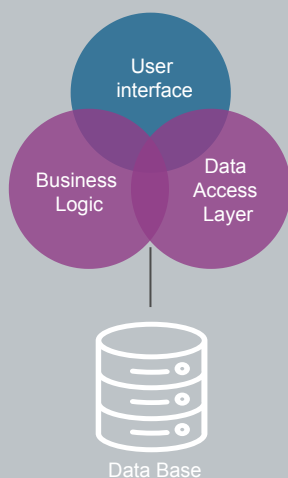
Compliance risk metrics are now firmly embedded in the risk department's operational processes and are part and parcel of the business decision-making process. This poses a whole new set of demands on the underlying compliance systems that now need to support the best of both worlds, i.e. guarantee compliance with an ever-changing regulatory framework and allow true risk analysis on those calculations, including simulations, stress testing,

forecasting, dynamic modelling of the balance sheet, etc. All of those capabilities have been talked about for a while now, but have rarely been operational as meeting the regulatory hurdle is still considered a monthly recurring challenge due to slow processing and fragile end-to-end processing. The current processes rarely lend themselves to expanding into real risk management due to the underlying technology used. Instead, the new demands call for a re-alignment with the technology revolution of the last decade.

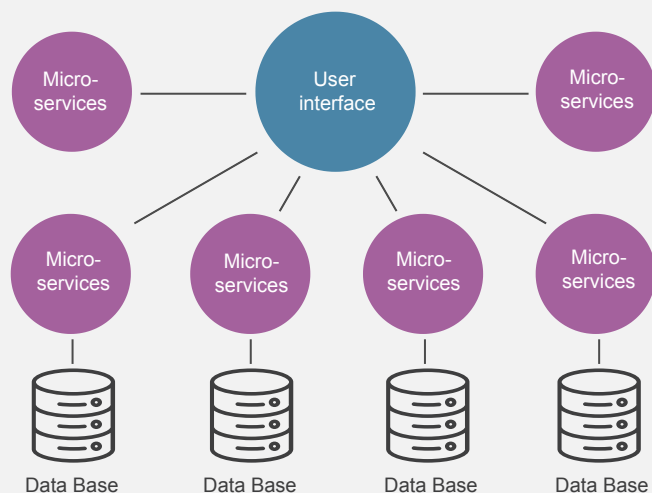
Micro-services are an enabler of the new regulatory risk (reg-risk) solution. The fundamental concept of micro-service technology is that end-to-end solutions are designed as chains of specialised components that are loosely coupled to each other. This stands in contrast to the monolithic solution design, which quickly reaches its boundaries when complexity increases. Some of those boundaries manifest themselves in extremely fragile processes, with slow performance and scalability features and generally prove to be hard to maintain.

A micro-services based solution design takes away those constraints as the technology lends itself to improved scalability, maintainability and performance. The latter has long been a bottleneck in

### MONOLITHIC ARCHITECTURE



### MICRO-SERVICES ARCHITECTURE





“

*With the new demands on the risk function to include the compliance processes as part of the operations, performance has become a focal point.*

compliance end of month processing, but one that banks lived with, be it unhappily. With the new demands on the risk function to include the compliance processes as part of the operations, performance has become a focal point. Compliance processes typically run in a stable setting, according to predefined timetables where frequencies are mostly monthly. Risk functions now require those same processes to be run on demand, intra-day, under a range of dynamic assumptions. In short, compliance process times need to come down drastically to fold into the new reality.

## III Risk Function of the Future

The trends described in the previous section place very specific and pertinent demands on the risk function, which would need to be met if it is to be effective for an increasingly digitised future. Typically, trends herald change which depending on the attitude of an organisation could be deemed either a threat or

an opportunity. We believe changes should never be viewed as ominous or a source of apprehension. The subsequent paragraphs serve as a call to action, advocating against the inertia of any kind by detailing the rationale to act. Hence providing the impetus for organisations to stay proactive and vigilant.

### 3.1 Trends in Risk Management

#### Regulatory Scrutiny

To respond to the growing level of regulatory scrutiny in the financial markets, the risk function will need to centralise the monitoring and control of new regulatory requirements, paying specific attention to their impact on the bank. Risk functions will also need to coordinate the implementation of new regulatory requirements across the bank requiring the support and involvement of other departments. Risk functions will need to adopt a proactive approach to managing rapid changes as well as increased regulatory expectations and requirements. To ensure a proactive approach, risk functions will need to engage with regulatory authorities with greater transparency rather than strictly as overseers. This will result in a changed dynamic between financial institutions and regulators.

As regulatory changes could impact all areas of the bank, risk functions will need to develop strong relations with other areas of the business. Risk functions will play a key role in supporting

strategic decisions and also taking a proactive approach to business development.

Lastly, as regulatory requirements grow more complex, the processes and systems within risk functions would need to adopt more transversal measures such as integrated ratio systems and risk-return adjusted KPIs that accurately reflect the nature of the bank's operations as well as the associated regulatory risk.





## Rapid Innovation & Technology

As technology continues to advance, risk functions will have the ability to increase their capabilities by building up business knowledge and developing product-related competencies. Enhanced technology will also allow risk functions to play a more proactive role in the implementation of new products and services by providing quicker and more accurate analysis and insight into the risks posed.

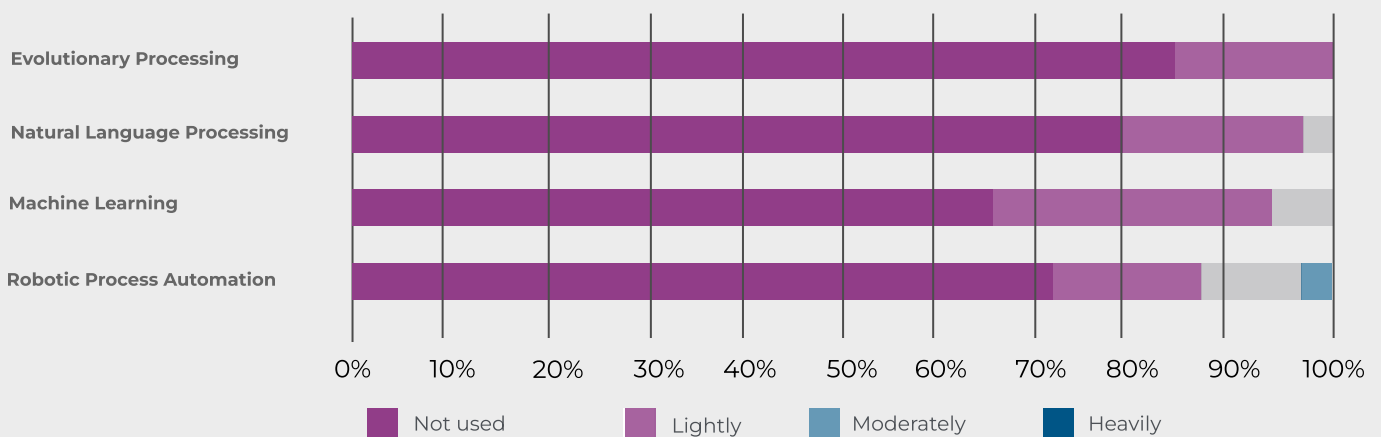
Rapid innovation will also allow risk functions to position themselves as a central advisor for all risk-related subjects in the bank giving them greater oversight and interactions with other areas of the business. As risk functions take on this key role in the bank, they will need to leverage the power of Artificial Intelligence (AI) & Machine Learning (ML) techniques to generate insights (via analytics) and improve governance & accessibility within the bank.

which further emphasises the case for investments in innovative technologies such as ML, Natural Language Processing (NLP) and Robotic Process Automation (RPA) etc.

## Cost & Competitiveness

As the costs and competition in the financial market continue to rise, the role of risk functions will increasingly become key as organisations consolidate operations and trim business functions in a bid to increase efficiency and minimise associated costs. As risk functions are consolidating business functions, they should pay careful attention to silo structures within the bank and look to minimise them as much as possible. Risk functions will need to support other areas of the business to ensure there is a clear separation of responsibilities across the bank and optimal usage of available resources.

**What extent does your firm use the following AI tools for risk management activities?**



To capitalise on new technologies and innovations, risk functions will need to prioritise investment in Big Data as a platform for data lineage, linkage, enrichment and cataloguing. As banks invest in Big Data, risk functions will need to raise awareness of its capabilities within the bank to ensure that it is used effectively and aligned with regulatory requirements. An overwhelming majority of CRO survey respondents admit to not using/ applying these new technologies. The table above reflects significant under-utilisation of new technologies in the area of risk management

To ensure that the bank remains competitive in the evolving financial market, risk functions will need to establish a central unit for analysis, control and compliance with risk parameters and KPIs. This will provide business areas and senior management with up-to-date and accurate information on high-risk areas of the bank as well as areas requiring improvement and/or consolidation.

## Customer and Expectations

As financial markets continue to evolve and technology becomes more advanced, risk functions will need to evolve to continue to meet customer expectations. Risk functions will need to build capabilities and processes to foster market

insights from frontline functions and improve focus on customer journeys and experiences. Risk functions will need to prioritise risk events related not just to internal operations, but also to customers and markets. Risk functions will also need to play a more pivotal role in the customer experience with customer data and cyber security high on the agenda.

## Risk Function Maturity Model

	STAGE 1 (LEGACY)	STAGE 2 (SILOED)	STAGE 3 (INTEGRATED)
Risk Data	<ul style="list-style-type: none"> <li>• Poor data management practices highly manual hence prone to issues such as versioning, duplication, missing fields etc.</li> <li>• Significant amount of time spent sourcing, cleaning, transforming, and augmenting</li> </ul>	<ul style="list-style-type: none"> <li>• Fragmented records lacking an enterprise-wide view of 3rd parties</li> <li>• Repository separately maintained within functions and geographies</li> </ul>	<ul style="list-style-type: none"> <li>• Comprehensive and well-maintained Golden Source for risk data</li> <li>• Standard and consistent definition and classification of risk types</li> </ul>
Risk Domain Coverage	<ul style="list-style-type: none"> <li>• Foundations exist but level of appreciation and understanding of the risk environment remains limited and immature</li> </ul>	<ul style="list-style-type: none"> <li>• Huge pockets of inefficiencies and inconsistencies from potentially having to engage risk multiple domain/areas &amp; stewards separately</li> <li>• Poorly integrated enterprise risk framework</li> </ul>	<ul style="list-style-type: none"> <li>• Comprehensive risk domain coverage and integration with firm's wider strategic risks</li> <li>• Fully primed and documented risk domain procedures to support contingencies and escalations</li> </ul>
IT/ Cloud Infrastructure	<ul style="list-style-type: none"> <li>• No strategic target for Risk systems/ infrastructure and no holistic approach (at best ad hoc)</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure roadmap and strategy exists but only at a business level and the approach and standards may vary between business functional areas and across geographies</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure framework comprehensively aligned with an enterprise wide Centre of Excellence (CoE)</li> <li>• Industry standards and best practice consistently implemented across the organisation</li> </ul>
Automation	<ul style="list-style-type: none"> <li>• Workflows are largely manual with dependence on standard 'End-user' computing applications e.g., Microsoft office</li> <li>• Ad hoc and at best chaotic</li> </ul>	<ul style="list-style-type: none"> <li>• Poorly integrated platforms feeling more like 'add-ons'</li> <li>• Workflows typically relying on a few tactical/ manual sub-processes</li> <li>• Disparate monitoring and reporting functions</li> <li>• Inconsistent and poorly defined risk appetite</li> </ul>	<ul style="list-style-type: none"> <li>• Platforms fully integrated within existing IT and data estate incl. wider procurement systems</li> <li>• Adequate tech support with a strong change control process</li> <li>• Centralised and well-defined metrics with routine risk monitoring and board reporting</li> <li>• Ever-greening of metrics, risk appetite etc.</li> </ul>
Ways of working	<ul style="list-style-type: none"> <li>• Key-man Dependency</li> <li>• Activities &amp; processes heavily dependent on individual heroics</li> </ul>	<ul style="list-style-type: none"> <li>• Poor knowledge management and documentation</li> <li>• Process inconsistencies across functions &amp; area</li> </ul>	<ul style="list-style-type: none"> <li>• Fully dedicated team of professionals (focus on value-add) with responsibilities understood and supported at all levels</li> <li>• Board level sponsorship</li> </ul>

## IV Climate Risk Stress testing

The last few years have seen climate change receive increasing attention from policymakers, supervisors, and other relevant institutions. Financial institutions have a crucial role to play in driving the transition to a sustainable economy, and such enormous responsibility would undoubtedly result in an increasing level of regulatory scrutiny. Unsurprisingly, according to findings from the Avantage-UK Finance CRO Survey, significant work remains to bring ESG to the expected levels. As expected the bulk of activities still focuses on reporting and disclosures as per the below chart. However, firms and institutions would need a high degree of will and commitment to ensure ESG considerations permeate all essential areas considering its transversal nature.

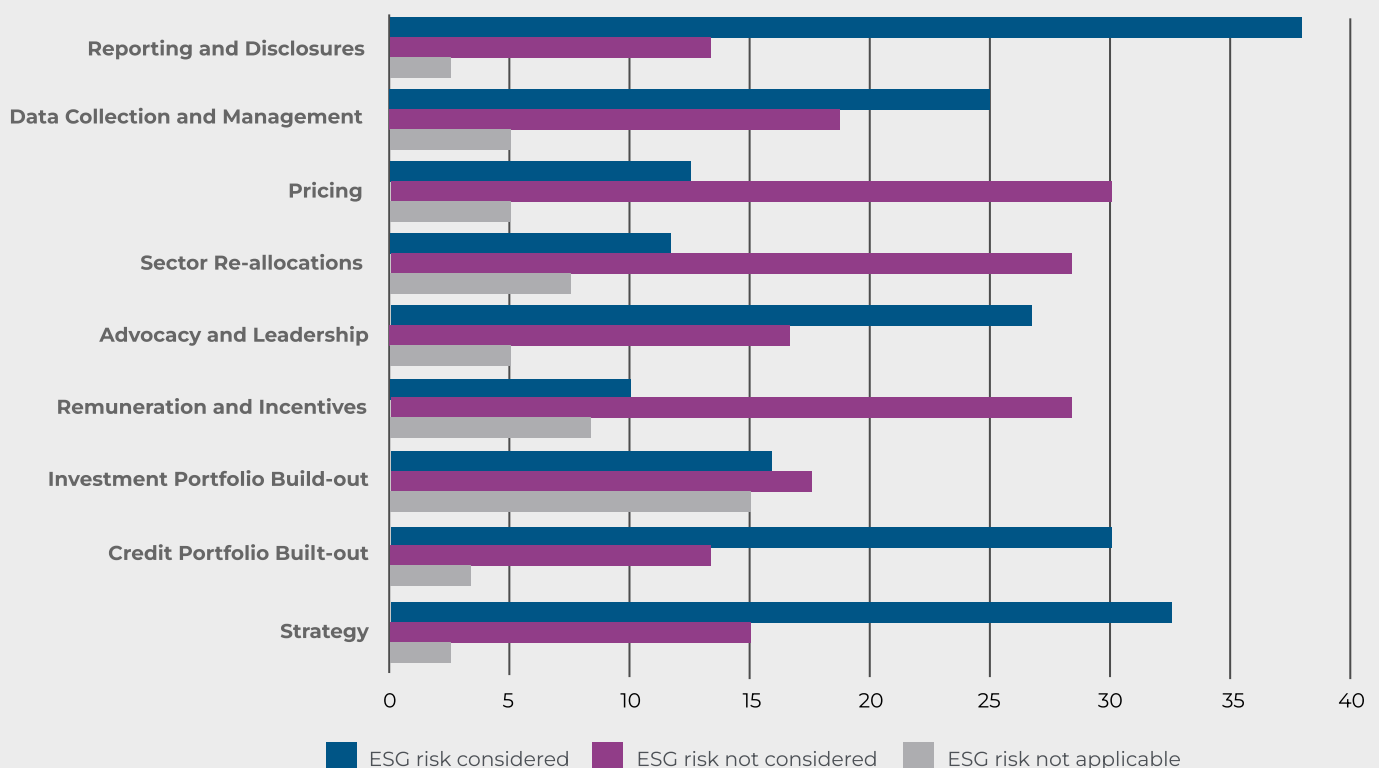
Climate stress testing differs quite a bit from the regular stress test exercises performed in the Financial institutions, predominantly in the objective; Climate stress testing is less aimed to ease supervisors' concerns, it is mainly aimed to guide Financial Institutions themselves on how to appropriately

react to the changing climate reality i.e. ditching the preconception of 'Climate Change' being an outlier event.

Climate change will impact the business environment causing financial institutions to develop new strategies by running multiple scenarios on their credit risk, market risk and operational risk metrics.

From an execution point of view, this brings an important difference: traditional stress test exercises have usually been top-down stress tests with over the top adjustments and assumptions. However, for the climate stress test, a bottom-up calculation will be required (with unique considerations for stressing certain counterparties, including stress tests based on locations etc). Recent innovations in technology now make it possible for bankers to run detailed what-if analysis on large datasets for a multitude of scenarios. Institutions should check their current IT infrastructure if they can handle these demands.

Consideration given to ESG risk by topic



## A couple of examples of climate stress testing that can currently be measured



**Stress test counterparty ratings for companies that are in polluting sectors and which will be confronted with increasing carbon taxes.**



**Stress testing of collateral values given several physical risk climate scenarios such as flooding, bushfires etc. What happens to my Credit risk capital requirements if my collateral values are significantly reduced?**



**With the increased emphasis on energy efficient-houses, should Loss given default models be looking at different house price indices; different indices for good and bad EPC labelled properties? This will have an impact on Credit Risk capital requirements and IFRS 9 expected credit losses.**

Being able to adapt strategies quickly to the changing climate circumstances will have a direct impact on minimising costs and increasing the organisation's competitiveness. The competitive position for financial institutions in the coming decade will be partly defined by their ability today to understand how climate risks impact their business environment and how well they can adjust strategies to changing climate realities as they unfold.

Apart from the physical and transition risks, the impact of climate risks on the business environment goes through the customer expectations as well. As climate sensitivity increases, customers will expect their banks to have a long-term sustainable plan in place with increasing importance placed on ESG scores. It can be expected that high ESG scores will pay a higher premium in future years, which introduces another layer of scenario modelling needs that go beyond the top-down approach.

## Conclusion

In conclusion, historically high volatilities in the business, economic, and even geopolitical environment in which banks operate are causing redefinition and reimagination of the risk function. The risk function needs to address complicated regulatory demands while playing an increasing role in aligning the business strategy with the changing environment and consumer demands. Quantum leaps in technology are currently enabling CROs to address those challenges, but the Avantage-reply CRO survey shows that an overwhelming majority of financial institutions continue to lag. Invariably, the risk function now finds itself in the precarious position of needing to

evolve quite rapidly while lacking the essential tools/ know-how to fulfill the requirements of its new role. This is vital, especially considering the ever-increasing requirements from regulators, scrutiny from customers & competitors, and evolving business challenges such as ESG.

In a nutshell, the requirement for tech enablement within risk functions now borders on existential lines. Hence the risk function of the future is that which is required today .i.e one enabled with the leadership, will, and mindset to accelerate the technology adoption roadmap imperative for thriving in a vastly digitalised economy.



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### *ElysianNxt*

ElysianNxt is a fast-growing RegTech company focused on developing the most technologically advanced, user-friendly, real-time Risk and Finance solutions. Comprised by seasoned industry veterans and subject matter experts, the company was established to provide an alternative solution to the traditional, outdated, monolithic applications that the financial industry is accustomed to in their quest to automate their back-end financial calculation obligations.

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