

CAPCO

**WHY BANKS SHOULD CONSIDER TECHNOLOGY
AND DATA TO BE THE ANTIDOTE TO RISK**

SPEED READ

- A financial services organization can be likened to a living organism – and, as with many organisms, technology increasingly offers tools and techniques to enhance its ability to identify and deal with threats.
- Risk management is multi-faceted. An organization needs to deal internally with threats as the body's immune system does, with its many different parts working together to ensure the host/organization remains protected and viable.
- Data is the lifeblood of risk management, and there are increasingly powerful tools available to look deep within an organization and assess developments in real-time.
- Our paper explores how banking Chief Risk Officers can monitor potential risks within their organization and then leverage tools to counter threats.

SAFE FROM THREATS, COMPETITIVE BY NATURE

With so many new threats emerging today, from cyber to financial crime to climate change, what is the next step in the evolution of banks' risk strategies? Human survival from generation to generation is based on competition and adaptation at the biological level. A financial institution is not any different: like an organism, it needs to compete and evolve to deal with threats and changes.

Our bodies' immune systems are in reality a number of different systems – organs, cells, processes and chemicals¹ – which work together to keep us safe from threats, including how we construct and use the world around us. Similarly, banks must rely on different elements within the enterprise to work effectively together – culture, behaviors and data, as well as risk-specific controls and models – in order to thrive in today's markets. This paper suggests how Chief Risk Officers (CROs) thinking about the challenges and opportunities across risk, technology and data can keep their organizations safe and competitive.

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Ultimately, we believe that CROs should be looking at their organizations as organisms.

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From parasites and bacteria to viruses, outside vectors of infection can wreak havoc in a living host entity. Financial institutions are similarly vulnerable due to external competition and market events alongside cyber and (as COVID has highlighted) health threats, which can push vulnerable companies over the edge.²

Most organizations already somewhat treat risks holistically, putting in place a Chief Risk Officer (CRO) and an enterprise risk management approach coupled with an over-arching governance process. The challenge is to ensure that risk management is understood to be everyone's priority, not just that of the CRO. Every part of the organization encounters risks and threats, and every part needs to think about – and respond to – these threats in a coordinated and consistent way.

RISK MANAGEMENT: A MULTI-FACETED MECHANISM

To maximize the benefits to their organization, the CRO of the future will enable their business to identify and optimize the return on ‘good risks’ – that is, risk events which provide a possible positive impact – while controlling, mitigating or eliminating ‘bad risks’. This means a CRO and their wider organization must possess many different skills and perspectives to be successful: similar strategic capabilities to those of a Chief Executive Officer (CEO); an ability to understand regulations like a Chief Legal Officer (CLO); the same grasp of business operations as a Chief Operating Officer (COO); the ability to navigate financial risk like a Chief Financial Officer (CFO); exhibit the same technical knowledge as a Chief Information Officer (CIO); and understand risk data at the level of a Chief Data Officer (CDO).³

To do this effectively, banks must infuse emerging technology – such as RegTech or RiskTech – to disintermediate the system complexities and opaqueness of risk data to better protect themselves against threats. This would be most relevant in respect of financial crime risk. Organizations must proactively seek out financial crime, from investigating and analyzing suspicious activity through to uncovering vulnerabilities and taking necessary steps to address them. The battle to stay ahead of the next financial crime must take place at all levels of the organization – i.e. credit scoring, customer onboarding, client communications, payment processing, client advisory, sector analysis, etc.

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*The global economy is facing significantly higher risks ... [and] these risks are now increasingly intertwined.*⁴

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- **Christine Lagarde,**
President of the European Central Bank

A fusion of a strong risk culture and risk management processes must be coupled with technology to enhance organizational immunity to threats. If done well, the optimal outcome would be the following:

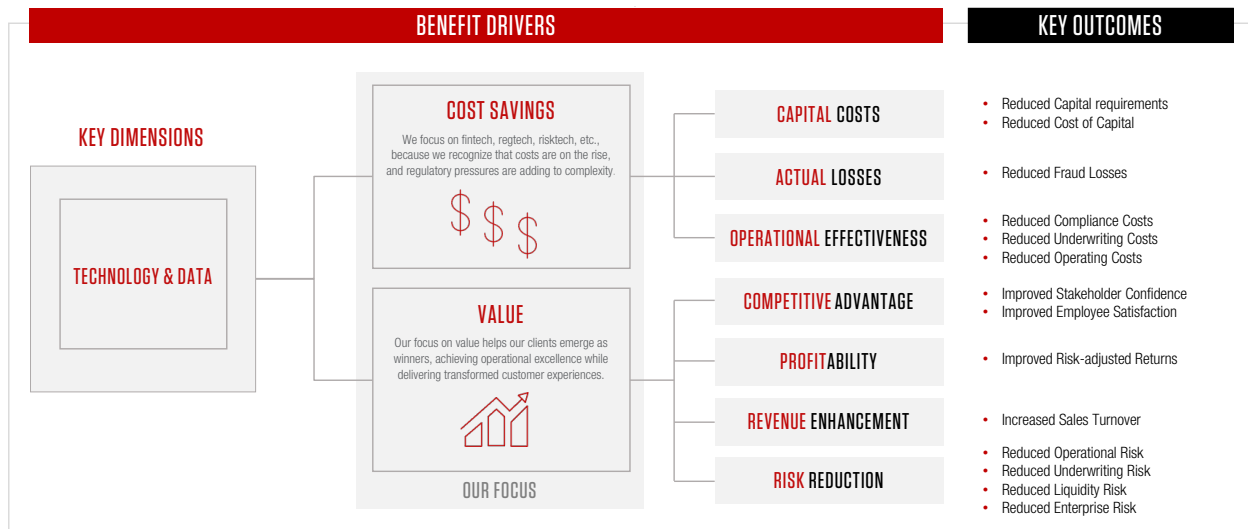


Figure 1: Benefit drivers across cost savings and value increase dimensions

Banks should recognize these benefit drivers now and execute strategies to keep their businesses healthy in a world of constant, unpredictable and ever-evolving threats.

DATA: MONITORING WHAT'S GOING ON

Building and maintaining high levels of integrity around risk management is fundamentally about using data – and also about finding ways to remove the ambiguity and biases which can undermine data-driven decision making. Data is the lifeblood of risk management, and there are increasingly powerful ways to look into the inner workings of an organization and follow them in real-time.

Just as the medical profession deploys ever more sophisticated tools to analyze what is going on inside a body – MRI scanners,⁵ for example – so banks can achieve similar levels of transparency as they get a better view of their data lineage and can see not just outputs but what is happening internally.

So, how can the risk-focused data organization achieve this through their transformation journey? At the heart of things, CROs need to monitor what is transpiring and use the information they uncover to counter threats. To do this, we suggest banks use data lineage, quality, and governance capabilities to determine in real time how the organization is responding to specific events and threats. Our recommendations for organizations looking to unravel their data include:

1. Unpick the complex data lineage between legacy internal systems and create the 'lineage by design' governance structures to keep that data under control.
2. Enable users by creating semantic data layers - the key is to allow users to understand what data is available and to allow them to then aggregate and enrich that data.
3. Create data quality processes which don't just monitor and validate quality, but enhance it on an ongoing basis using automation and machine learning.





Given our current dependence on technology across our day to day lives, the insights that banks can harness from data will soon make it the most valuable asset they possess. To unlock the true potential of data, banks must think harder about the practice of leveraging data (and, critically, high quality data) and supporting technologies to ensure proficient decision-making and effective risk management.



REACH INTO YOUR TOOLBOX

So, now you've established a stronger immune system for your business by enhancing data transparency to better identify and deal with threats, how do you evolve your business – and what tools do you have at your disposal?

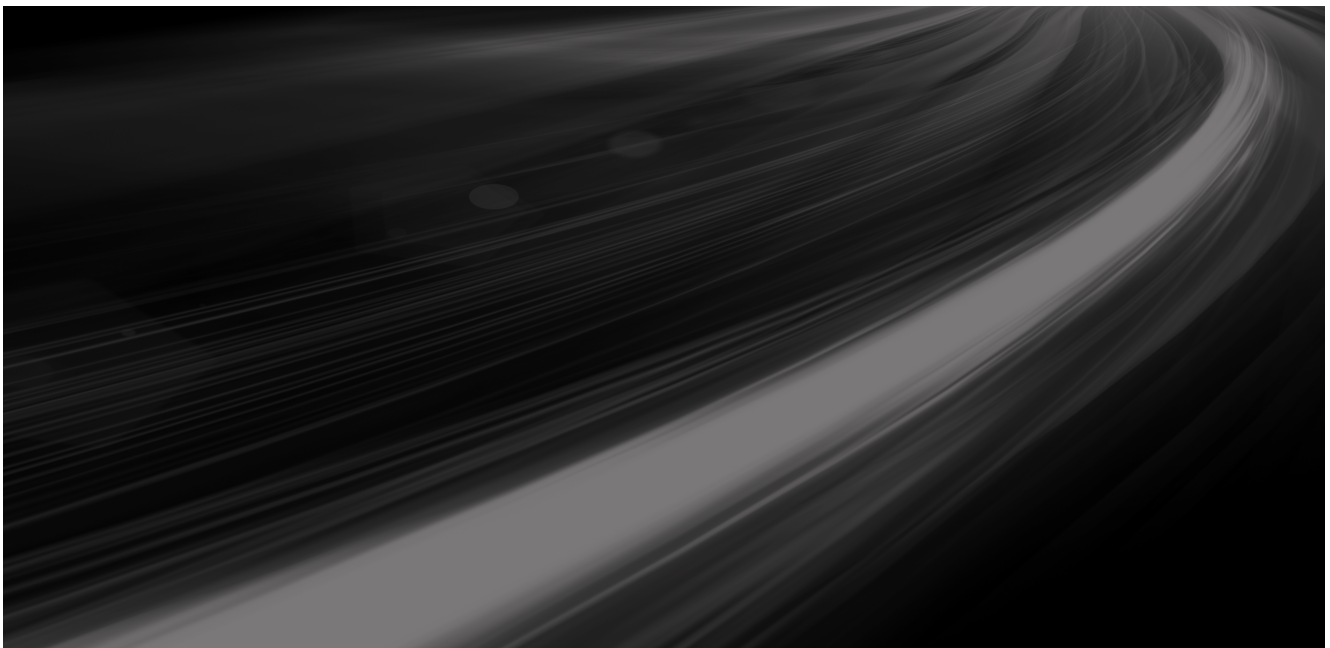
As we outline in our digital risk operating model,⁶ there are huge benefits to be derived from designing modern risk management practices wrapped in technology including cost savings, enhanced customer experiences, an expanded customer base, revenue opportunities and resiliency. For banks planning their next transformation journey, here are some valuable tools and insights to keep in mind:

	AUTOMATION	BLOCKCHAIN	BIG DATA	DIGITAL TRANSFORMATION
CAPCO	<p>Solutions which enable labour-intensive tasks to be done quickly and accurately, without human intervention. We can help you accelerate such initiatives to mitigate risks, improve data and change key processes and fix legacy practices.</p> 	<p>A distributed database that can keep track of transactions in a verifiable and permanent way. Such transactions allows firms to control their data through private and public keys, making their data immutable. We help clients save money, improve security and customer satisfaction.</p> 	<p>The recent rise of remote working brings opportunity for us to help clients to map out a data-drive roadmap and build measurement points to work with teams to ensure cyber security and data analytics are used to deliver continued process improvement.</p> 	<p>We support business leaders in the transition into a Transformation Management Office to lead and manage longer-term digital and operational changes that builds on the lessons from the past.</p> 
INDUSTRY INSIGHTS	<p>Automation & additional technologies: Intelligent Automation (IA) integrates components from different emerging technologies.</p> <p>Reinventing organisations, processes & functions: Coordinating cross-organizational efforts to propel the operating model and strategic direction.</p> <p>Enhanced workforce: Redirecting repetitive mundane tasks to automation, enabling people to utilize and develop their skillset and focus on other fulfilling, high value adding activities.</p>	<p>Newfound transparency & trust: Third party trust organisations may no longer be necessary, creating a global decentralised source of trust for complex networks.</p> <p>Global revolution: Blockchain has far-reaching opportunities with potential to transform how organisations operate, with speed, savings and accuracy unlike any other technology.</p> <p>Leveraging capabilities: Adoption of blockchain will enable new markets, new business models and new ecosystems, advancing all industries.</p>	<p>Big Data & AI: Techniques such as machine learning (ML), natural language processing (NLP) and reinforcement learning provide valuable insights, enable model transparency, build trust and improve decision making.</p> <p>Data as an asset: Organisations will need to evolve their mindsets, become more data-driven and introduce data-intensive business models and strategies in order to remain competitive and succeed in the modernization drive.</p>	<p>Fully-equipped digital organisations: From customer experience to internal processes, digitally maturing enterprises are able to redesign their ways of working, culture, workforce and offerings, to be in a position to compete.</p> <p>Successful adoption of emerging technologies: Remaining competitive to win and maintain loyalty, with the ability to adapt and remain resilient in a new ever-changing environment.</p>

PERFORM AN MRI, NOT AN AUTOPSY

While the challenges of managing risks and realizing significant value from technology can be daunting, we believe it is more than possible if leaders act now. If you plan to use technology to address this ubiquitous risk, here are some key success tips:

- 1.** Have a laser-like focus on managing traditional and emerging risks, by:
 - Mapping the core risk management processes and practices arising from interrelations with other business units.
 - Scoping the logical layers of the IT architecture to analyze the impacts of risks across business areas, data services, shared services, operations and control functions.
 - Defining critical success factors that center on a clear understanding of existing common denominators amongst those functions.
- 2.** Have a plan to implement successful transformation work to maximize the impact of cutting-edge technology, by way of:
 - Running diagnostics to allow teams to gain an insight into the pain points.
- 3.** Starting with the desired end-state in mind and working quickly to determine what could be possible in the future, by considering:
 - Action-orientated strategies, prior to transformation, to provide early benefits to the business.
 - Understanding the ever-changing technology landscape and how it can be leveraged to solve the existing problems, while also unpicking the interdependencies between business mechanics to reduce complexity.
 - The real influencers on the organization and the needs of the business that ultimately define its structural principles and strategic vision.
 - The need for enhanced decision making, increased efficiency, improved transparency, cost reduction, process reengineering and resource optimization.
 - Embedding positive cultural changes made within the organization, requiring the application of a behavioral wrapper to promote the longevity of the changes.



FINAL THOUGHTS

We have determined that organizations – like organisms – need to be:

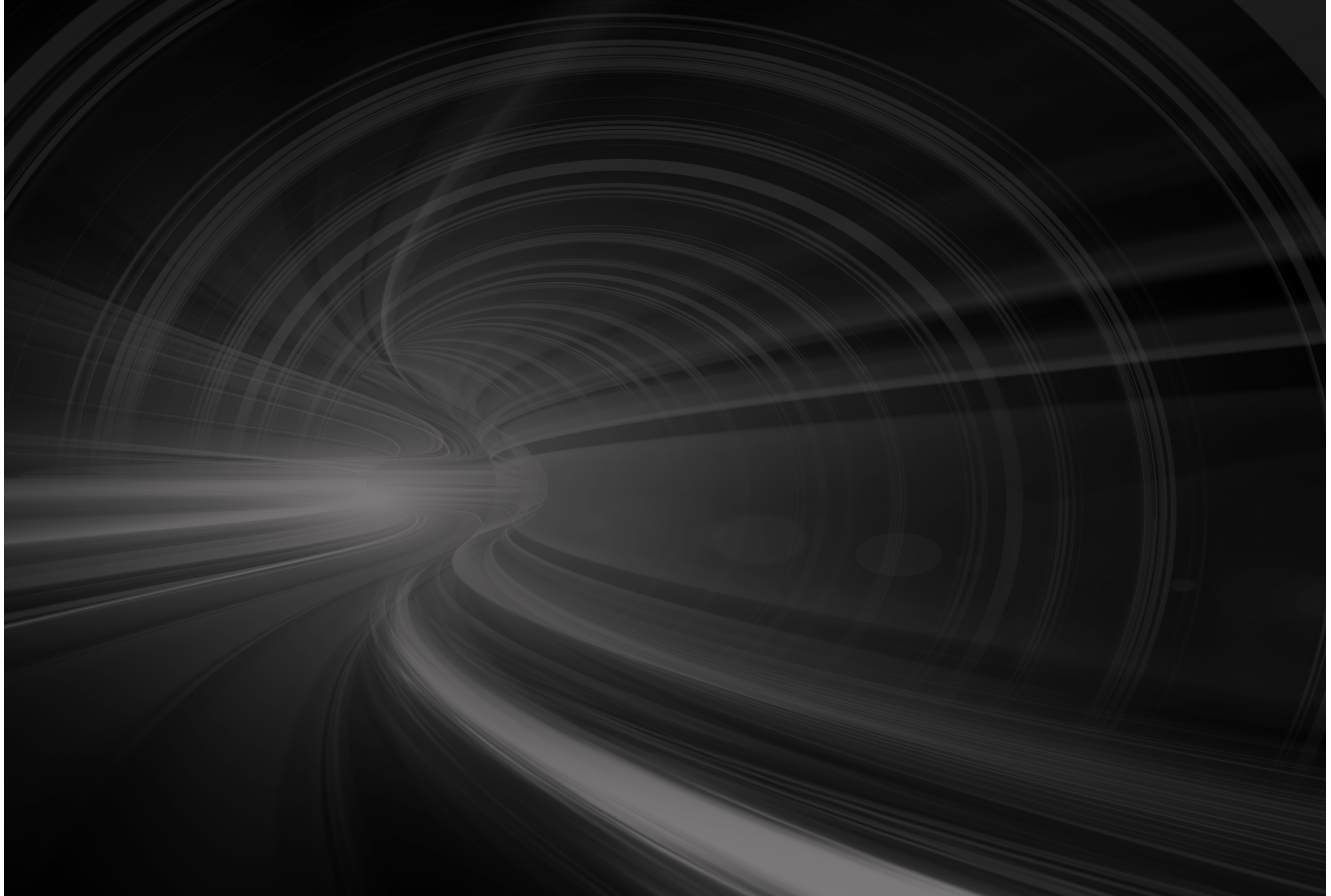
- Good at identifying and dealing with threats in a holistic, multi-level way.
- Proactive at looking inside themselves, with technology facilitating this in a way that creates new possibilities in terms of addressing threats and seeing new opportunities.
- Effective at evolving to adjust to changes in the external competitive environment.

These traits inevitably identify opportunities for financial institutions to implement transformation strategies.

At Capco, we believe forward-looking strategic decisions during a challenging environment can lead to significant growth opportunities for financial institutions. Having technology which

permits efficient capture and utilization of data is fast becoming the trend of today's leading institutions. We have seen recent supporting evidence of companies who have not only accelerated growth due to a focus on technological competitiveness, but also increased profitability during uncertain economic times.⁷

Such uncertainty is driven by elevated risks on different fronts: technological risks, including cybersecurity and trust; economic policy risks, including challenges to international institutions; social risks, including increasing inequality in many countries; and planetary risks, including climate change. However, while economic uncertainty still looms and the full ramifications of recent unprecedented times are yet to unfurl, we encourage our clients to take a step back, learn from their past history and lean into the next phase of technological evolution with optimism.



SOURCES

1. Allergy, Asthma & Clinical Immunology 'An introduction to immunology and immunopathology', <https://aacijournal.biomedcentral.com/articles/10.1186/s13223-018-0278-1>
2. Global Finance 'The World's Biggest Bankruptcies 2020', <https://www.gfmag.com/global-data/economic-data/worlds-biggest-bankruptcies>
3. Capco, 'Transforming The Theory and Practice of Risk Management in Financial Enterprises', <https://www.capco.com/Capco-Institute/Journal-46-Automation/Transforming-the-theory-and-practice-of-risk-management-in-financial-enterprises>
4. IMF, 'Opening Remarks by Christine Lagarde at World Economic Outlook Press Conference', <https://www.imf.org/en/News/Articles/2019/01/21/sp012119-md-opening-remarks-for-weo-press-conference-davos>
5. MRI Lincoln Imaging Center, 'Where Was The MRI Scan Invented', <http://mrilincolinimaging.com/where-was-the-mri-scan-invented/>
6. Capco, 'Designing Modern Risk Management Practices for a Digital First Value Proposition', <https://www.capco.com/Intelligence/Capco-Intelligence/Designing-Modern-Risk-Management-Practices-for-a-Digital-First-Value-Proposition>
7. Harvard Business Review, 'Companies Need to Prepare for the Next Economic Downturn', <https://hbr.org/2019/04/companies-need-to-prepare-for-the-next-economic-downturn>

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ABOUT CAPCO

Capco, a Wipro company, is a global technology and management consultancy specializing in driving digital transformation in the financial services industry. With a growing client portfolio comprising of over 100 global organizations, Capco operates at the intersection of business and technology by combining innovative thinking with unrivalled industry knowledge to deliver end-to-end data-driven solutions and fast-track digital initiatives for banking and payments, capital markets, wealth and asset management, insurance, and the energy sector. Capco's cutting-edge ingenuity is brought to life through its Innovation Labs and award-winning Be Yourself At Work culture and diverse talent.

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