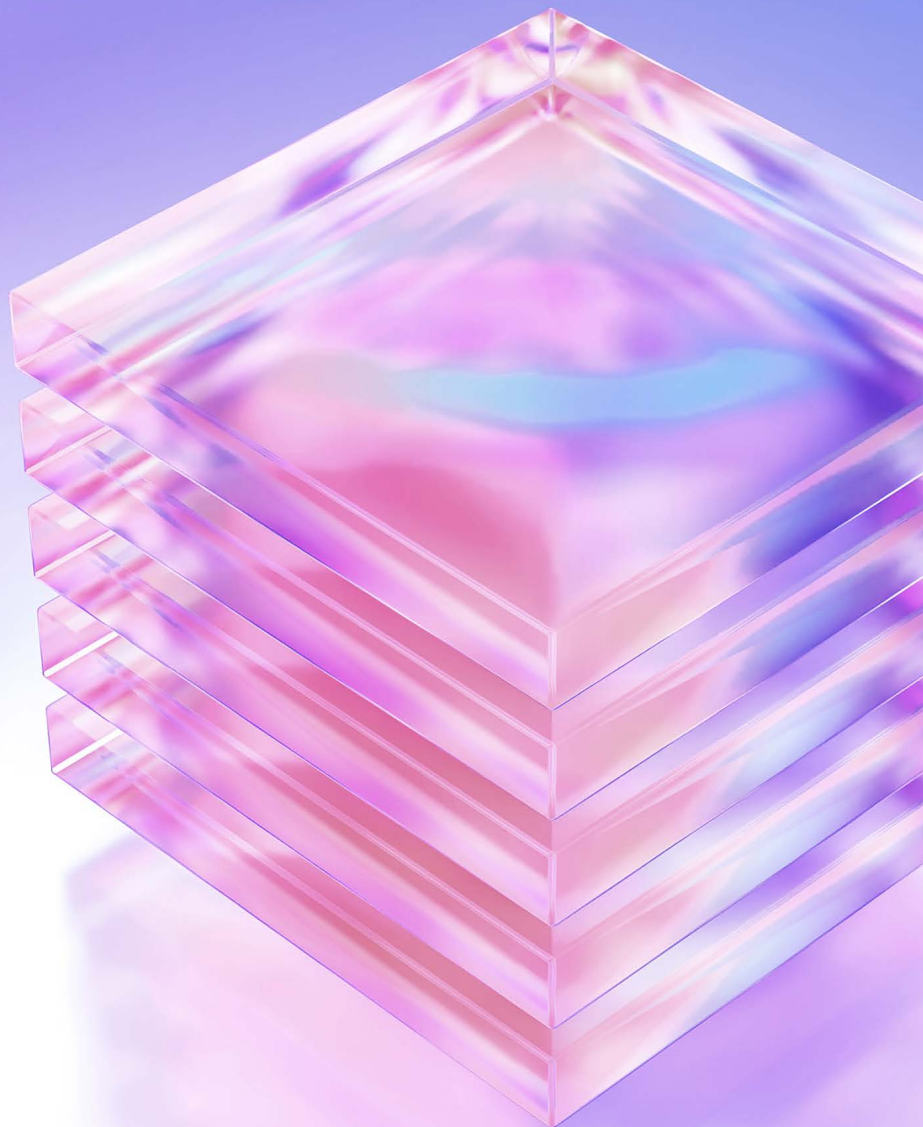




Risk modernization

Enabling insight.
Embedding resilience.
Creating value.

**Implementing a modern technology
architecture to accelerate
risk transformation**



Today's technology is built for today and tomorrow

Building out a robust, "future-ready" risk function has become a top priority for forward-thinking organizations. However, the simultaneous pressure to deliver increased business value while saving costs remains challenging thanks to a perpetually "uncertain" economy, rapid technological advances, and shifting regulatory and compliance requirements.

In fact, the pace of change across industries is quicker and more challenging than ever before. Organizations are buffeted by a myriad of disruptions, including new business models, evolving customer expectations, industry and regulatory shifts, the cost of innovation, the increasing complexity of big data, the emergence of artificial intelligence (AI), and the need to ensure today's workforce can embrace and deliver on the promise of these and other developments.

Building and managing a risk function that can deliver on all of these changes and the new expectations businesses demand is critical and highly complex. In addition to having the capabilities required to operate in this new, demanding environment, the risk function must also be flexible, adaptable, scalable, and interoperable enough to evolve as new challenges and opportunities arise. It's a lot to ask.

The good news is that approaches for developing the modernized technology architecture needed by organizations to improve, upgrade, and enhance their risk function are already here. Used strategically as part of a larger risk transformation, a robust technology architecture can help position the risk function to be more proactive and a source of competitive advantage for your organization that generates stakeholder trust, fulfills regulatory expectations, and empowers decision-making.

Are you ready for change?

- Do you have multiple siloed technologies that each serve an individual risk function's need?
- Is it challenging to aggregate data from independent sources to gain insights or enable decision making?
- Are your technology costs growing with limited return on value?
- Are you able to respond to requests from stakeholders (e.g. business leaders, executives, regulators) in a timely, data-driven manner?
- Do your risk functions ultimately rely upon manual processes instead of a defined technology solution?
- Is the source of truth and how information is accessed/shared for each critical data element known?
- Does your current technology architecture help accelerate the maturity of your risk program through advanced and automated capabilities?

Harnessing technology for growth

Risk and compliance functions are expected to reliably contribute to deeper stakeholder trust, enterprise growth, and optimization. In response to these expectations, risk management needs a resilient and modern data and technology architecture strategy to facilitate the five risk transformation drivers (Exhibit 1) and associated outcomes we've identified.

In this paper—the third segment in a four-part series that has previously covered cost takeout and digital acceleration—we focus on the role of technology as an enabler of risk transformation. Here, we address the critical role of modernized technology architecture as a risk-transformation enabler across each risk transformation driver, and how they contribute to a holistic risk transformation.

Breaking down risk management silos

Organizations and their risk functions are ingesting information from a multitude of systems and solutions, but many of these legacy solutions were built to address a specific challenge or task. Suppose these systems are not integrated to standardize enterprise risk data collection. In that case, they force risk officers and business groups to go back and forth among various teams to gather and understand the information they need to assemble a complete picture of their organization's risk exposure. That can be time-consuming, labor-intensive, confusion-inducing, and expensive.

As such, these legacy solutions are slower in identifying and responding to risk events by weeks or months, rather than proactively anticipating, preventing, detecting, and responding to issues before they occur. As a group of disparate solutions to individual problems, they lack a holistic and integrated ability to address risk and compliance as it is today.

As these legacy solutions become more expensive to service and even obsolete, they can expose organizations to new risks for which they don't have an immediate and effective solution. Such solutions don't contribute to risk transformation—they create impediments that escalate risk, and that's when crises can occur.

Modern technology architecture is the foundational engine organizations need to help elevate their risk function capabilities, add value to the business, and strengthen the bond with stakeholders. To achieve these objectives, it is critical for an organization to embark in both technological and organizational transformation—through both modern digital architecture risk solutions and embracing new ways of working with the business—to proactively identify, measure, monitor, and reduce risk. Ultimately, developing a modern technology architecture is the first step in a longer journey, with organizations identifying their requirements for transformation depending on their needs, resources, and understanding of how its implementation will benefit their risk function and the organization overall.

Exhibit 1. Risk transformation achieved through modernized technology



Embrace integration

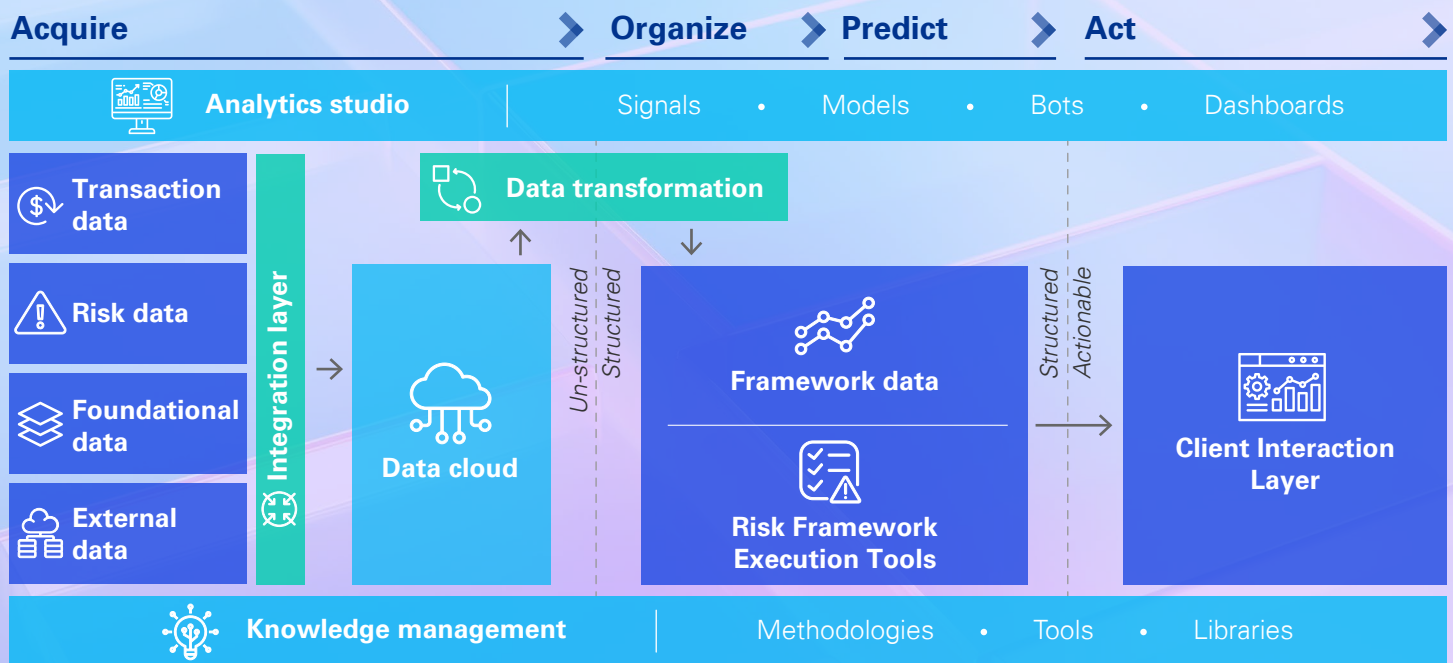
According to the KPMG 2023 CRO survey, 32 percent of respondents indicated that they rapidly deploy advanced technology to enhance risk management functions.¹ To maximize return on time and capital, organizations need a clear understanding of their desired architecture, and the focus to drive risk digitization efforts down that path.

The goal, then, is to implement a modern, centralized risk technology architecture that can meet that objective—one based on an integrated platform and solution strategy across the organization, leveraging powerful data analytic capabilities. When done correctly, this can enable various risk and compliance processes by integrating data that can be leveraged across functions to provide an enterprise perspective. Further, this modern risk architecture provides the foundation required for the effective use of artificial intelligence. This approach helps accelerate the maturity of the risk function, boost automation, reduce inefficiencies, inspire insights that promote a proactive risk management posture, and embed a culture of risk awareness across the business. Exhibit 2 depicts an example of an architecture that centralizes data in a core system but allows for function-specific technologies.

Taking this into account, we encourage organizations to put aside the conventional focus on tasks, activities, and how to accomplish them and instead review, reimagine, and reframe their needs related to their risk compliance programs. Getting it right can have a positive ripple effect on performance—for the risk functions and organization as a whole—long into the future.

¹The KPMG 2023 CRO Survey

Exhibit 2. Example of a modern risk and compliance architecture



Our experience shows that organizations should focus less on purchasing the latest technologies and instead prioritize the daily needs of those who use or manage these technologies. Taking this approach increases the probability of adopting technology that can evolve with changing needs and regulatory and business environments.

This same observation applies to the decision-makers across the organization who rely on the quality of information, insights, and analysis provided by these technologies to make informed decisions. It is essential to ensure that risk technology architecture is embedded within day-to-day business operations to drive enhanced stakeholder experience, real-time and data-informed insights, and increased organizational value.

The technology architecture for AI and humans

Perhaps of greater interest is how adopting artificial intelligence, generative AI, machine learning, and other transformative technologies whose nature is to analyze and derive insights from data—similar to the activity and outcome of a human decision-maker—can assist with this analysis. According to our 2023 CRO survey, risk managers are focused not only on how the business uses AI but on using AI for risk management. It is no longer only about governing the use of AI alone, but also about leveraging it to enable advances in customer experience and operational efficiency, among other things. By leveraging AI and other advanced technologies in the modern risk platform, organizations can help decision-makers receive accurate, real-time information.

We summarize the data needs of the modern technology architecture into the following core components:

1 Acquire. By integrating with other systems, you can bring together relevant data for a comprehensive view of the information necessary to manage risk, which saves your team time by eliminating the need to search for and gather data from multiple sources. Having all the necessary data in one centralized location empowers you to make better-informed decisions more quickly and comprehensively.

2 Organize. Once data has been collected, the modern risk platform ensures that it is structured in an organized and consistent manner. Standardizing data helps prevent potential errors within your organization's data. Organizing data in this way makes it easier to access, analyze, and compare. Having an organized and consistent data set also creates the opportunity to gain insights into potential risks that may have gone unnoticed otherwise, saving your organization from possible negative consequences.

3 Predict. With machine learning and AI algorithms, you gain a deeper understanding of patterns and anomalies within internal and external data, empowering you to predict future risks, identify potential compliance issues, and take steps to reduce risks. Predictive analysis helps create effective risk management strategies, manage resource allocation, and minimize risk.

4 Act. With a modern risk platform, you're empowered to act quickly on any signals of potential risk. The platform provides automated workflows and standardized risk management procedures to identify and respond quickly to risks. By following a streamlined, automated process, your team can focus on responding effectively to risks rather than figuring out how to deal with them. As a result, your organization is better equipped to minimize the potential negative impact of risks.

Organizations must take a structured approach to managing the risk data lifecycle to establish a modern technology architecture that meets the needs of human and AI users. This includes “acquiring” and “organizing” data in a way that makes it understandable and normalized. Additionally, organizations need to treat data as an asset that can drive analysis and predictive models for risk management. By doing so, they can anticipate potential issues and develop ways to address them. A successful approach to managing the risk data lifecycle supports effective decision-making and enables a more proactive risk management posture.

It’s essential to note that there is no one-size-fits-all solution to modernize an organization’s technology architecture to support its risk function. Many large and complex organizations will discover that the answer is not a single technology solution but a combination of existing tools and analytical routines. Each organization will have unique technology needs, and adopting different technology solutions will be driven by each of the five risk transformation drivers. The successful integration of these solutions into a cohesive ecosystem will support and sustain the organization’s risk function.

An ecosystem built on a foundation of modern technology architecture provides risk functions and an underlying infrastructure built and customized to meet the users’ needs.

How a modern technology architecture can benefit your risk and compliance function

1

Improved insights: With a common language and set of foundational data, information from multiple sources can be compared, combined, and evaluated with ease to deliver enhanced insights into the organizational risk profile and compliance status.

2

Better decision-making: With improved insights, organizational decision-makers can make strategic decisions from a genuinely risk-informed perspective, helping the organization capitalize on opportunities and outperform its competitors.

3

Enhanced capabilities: By taking a strategic approach to build an integrated risk capability, organizations can significantly improve in what they do and how they do it, adding more and better tools to their risk management toolkit.

4

Build trust: Enhanced insights, high quality data and improved capabilities allow organizations to reliably achieve their objectives, thereby building stakeholder trust and protecting their reputation and relationships.

5

Increased interconnectivity: A modern technology architecture helps to break down siloes and join disparate processes, data and ways of working, improving collaboration, productivity and value-generation across all three lines of defense and realizing cross-domain synergies.

6

Enhanced oversight: Enhanced capabilities, insights, and data—coupled with real-time management information—help the organization to report with confidence, facilitating enhanced levels of internal and external oversight.

7

Future-proofing the technology landscape: By investing time and resources into a modernized technology architecture, organizations set themselves up for continued long-term success and provide the foundation for transformative technologies, such as generative AI, to thrive.

The case for change

It's no longer enough for risk functions to react to circumstances and, in turn, protect when those circumstances call for it. Today, they are expected to be proactive to enable business growth by providing real-time, actionable risk insights. Leadership is expected to rethink the nature of risk and how it fits into an organization's future, creating new opportunities to act that previously were not even on the radar.

Risk functions that continue to use legacy technology and think they can generate the relevant outcomes expected of them today are at a significant disadvantage. Instead, achieving the measurable outcomes they seek requires a modern platform-based technology architecture as part of its arsenal of efforts. Without this modern technology platform, organizations can't improve efficiency and flexibility, automate routine processes, and address risk-related issues internally before regulatory action is needed.

Establishing stakeholder trust through connected data



As a result of inconsistent, isolated data and decentralized technologies, a large financial services company found it hard to obtain accurate insights, manage risk, and evidence compliance to regulators. Recognizing the need for a consistent and single view of risk across the enterprise, KPMG designed a blueprint for a technology architecture that integrated what were previously data siloes with a centralized technology ecosystem that enabled a more holistic approach and proactive posture toward risk and compliance. KPMG developed a model to align data elements across multiple technologies used by the business and enable accurate reporting. A foundation was laid to integrate critical technologies, thereby creating an integrated risk management program across business, risk, and compliance, and internal audit functions that enhance confidence in the risk and control environment and strengthen business decision-making through reliable, risk-informed insights.

Transforming internal audit for improved risk management



A leader in business market intelligence and technology wanted to rebrand and transform its internal audit function. This transformation would help the organization better understand the risks across its systems, processes, and procedures to better cover the intricacies of its business through enhanced assurance. KPMG onboarded and immediately embraced the culture and bespoke systems in place to help the company work toward its goals to transform its internal audit organization. KPMG helped the client rebrand and transform its internal audit function, including assisting senior leadership to transition to a new communication and reporting strategy. Through the use of agile concepts, this transformation helped the organization connect more effectively with audit stakeholders and improve project management efficiency. KPMG also employed innovative technology, data analytics, and new ways of working to bring relevant industry-specific solutions using transparency, leading practices, and quality as cornerstones.

Where to start

- ✓ **Set clear objectives** – Determine the desired business objectives and optimal target-state.
- ✓ **Translate objectives into measurable outcomes** – Define priorities and KPIs to track performance and align expectations.
- ✓ **Start small and win fast** – Conduct pilot programs to limit exposure, moderate risks, achieve quick wins, build internal support, and reduce unintended outcomes while laying the foundations for broader transformations.
- ✓ **Think creatively** – Be willing to cut ties with legacy approaches and consider new ways of solving old problems.
- ✓ **Proactively engage with stakeholders** – Promote active dialogue with business and functional stakeholders to ensure the development of risk technology architecture that aligns with and supports business needs and regulatory expectations.
- ✓ **Leverage diverse perspectives** – Utilize the knowledge, experience, and perspectives of cross-functional employees to innovate in a smarter, more informed, consensus-driven manner.
- ✓ **Develop a multiphase roadmap** – Outline a clear path forward that focuses on building foundational items to enable future cost savings and efficiency gains. Review and recalibrate often.

How KPMG can help

Our Risk Services team has deep experience supporting organizations in managing risk management in the most complex, fast-changing, and global business environments.

Our practitioners deliver leading risk services to hundreds of client organizations with our organization of independent firms worldwide.

We also help organizations build compliant, effective, efficient, and scalable risk management solutions with technology and automation to transform their risk programs.

Learn more about how KPMG risk professionals can help your organization advance the risk imperative.

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