Deloitte.

DATA AS AN ASSET

THE ERA OF THE CONSUMER

FUTURE OF CONTROLS

DIGITAL TRANSFORMATION

RISK BASED REGULATIONS

RESPONSIBLE BUSINESS

Future of Controls
A bold and positive vision

2021

GO

Contents

Your Future of Controls journey begins now.

In business, nothing happens without risk. The problem is that the risk landscape is in a constant state of flux, making it a moving target for controls efforts. Consequently, addressing risk is never a "one-and-done" job. In fact, it requires constant vigilance to keep organizations safe as they strive to drive value. Existing controls environments are not equipped to respond to the agile landscape they operate in—they are rigid, reactive, and inefficient. Though absolute preparedness is not necessarily possible, to attain or maintain inaction is certainly not a viable alternative.

Global organizations require a bold and positive Future of Controls (FoC) vision to make controls more effective and efficient while also adding value—a true win-win scenario. In taking cues from Deloitte's industry and regional leaders, we have developed a strategic vision and road map for FoC that provides an opportunity to rethink what controls can and should be, both for today and tomorrow.

Executive Summary

These lessons are informed by industry trends that have assisted us in identifying key levers to help organizations achieve their FoC vision:

1 Reconstructing the internal controls framework

Adopting a data-driven approach to ensure risk alignment and a true integration between risk and controls, ultimately resulting in value creation

2 Designing the next generation controls operating model

Using technology, capability, culture, and incentives to embed ownership and accountability within the first line, while integrating the second line
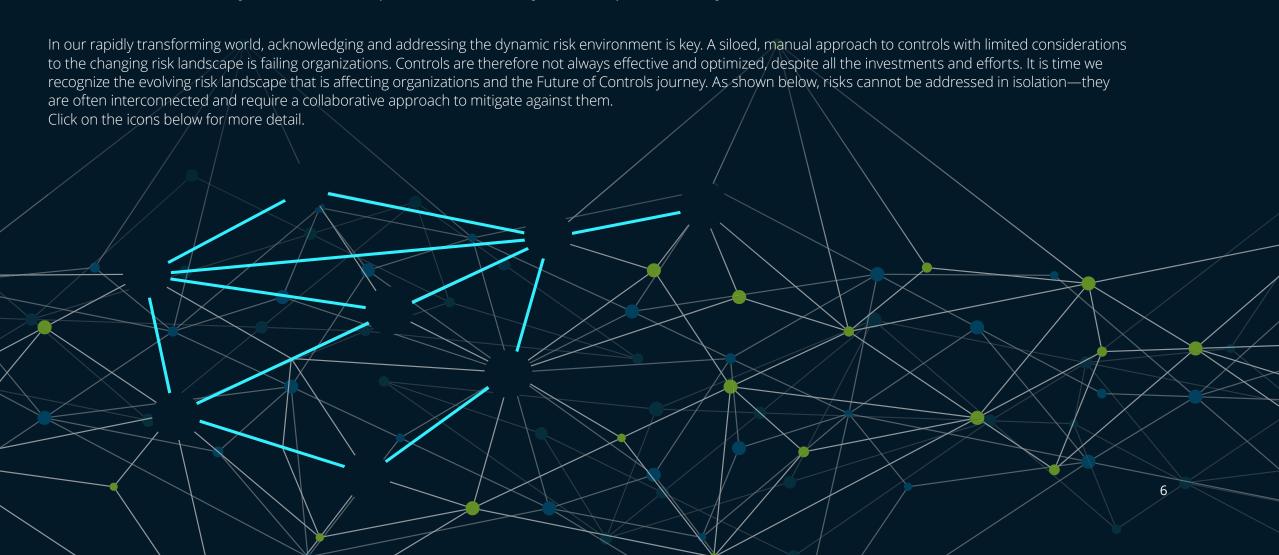
3 Establishing the controls technology ecosystem

Deploying next-generation technologies (e.g., automation/artificial intelligence (AI)) to drive foresight and insights from controls, and moving away from the existing hindsight approach

Understanding and applying these levers can not only be instructive to the process but can also help organizations create a structured approach to their FoC journey through top-level thinking, key practices, and expected solutions.

While all this content is instructive, moving it to the tactical realm can be challenging for businesses. A little knowledge can go a long way toward overcoming the initial hurdles. This report takes the next step, providing the leading practices and guidance to help make the bold moves required to advance to the next generation of controls.

Challenges and trends

What factors influence the Future of Controls

The evolving risk landscape
Based on an analysis of the reported risks by the top industry brands

In our rapidly transforming world, acknowledging and addressing the dynamic risk environment is key. A siloed, manual approach to controls with limited considerations to the changing risk landscape is failing organizations. Controls are therefore not always effective and optimized, despite all the investments and efforts. It is time we recognize the evolving risk landscape that is affecting organizations and the Future of Controls journey. As shown below, risks cannot be addressed in isolation—they are often interconnected and require a collaborative approach to mitigate against them.
Click on the icons below for more detail.

Challenges and trends

From our leaders

Click each location dot on the map to view videos from our global leaders on the Future of Controls. Please use Adobe Reader; the map does not function if viewing in a web browser.

Key trends influencing and reshaping the internal controls

Several key trends are impacting the development of internal controls: data as an asset; the era of the consumer; digital transformation; responsible business; and risk-based regulations. Taken separately, each represents important guideposts along the Future of Controls journey. More importantly, when taken together they can help organizations reach their future controls destination.
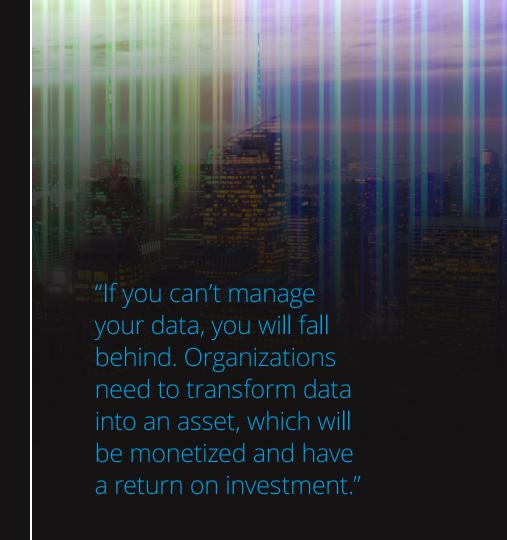
Click on each trend for further detail.

Key trends influencing and reshaping the internal controls

Due to the reduction in costs to maintain and acquire data, organizations are increasing the volume of data they own. However, insufficient controls over data means they cannot rely on the output. Shifting to a "data as an asset" mindset allows for enhanced integrity, quality, and more robust, value-adding data that can help companies make informed business decisions. The benefits are clear: Data can help predict risks before issues occur and implement mitigating controls, reducing the cost of potential non-compliance. Meanwhile, big data focused on velocity, variety, and volume allows companies to monitor their controls in real-time. Quality data can also allow controls to drive business insights such as identifying efficiencies in workflow routing. Those companies that fail to improve their data management risk falling behind their competitors.

"If you can't manage your data, you will fall behind. Organizations need to transform data into an asset, which will be monetized and have a return on investment."

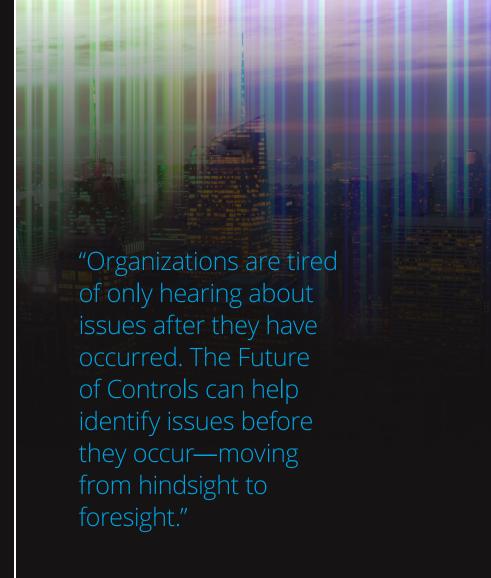# Key trends influencing and reshaping the internal controls

Historically consumers have chosen what is most accessible to them, and accepted limited choices and input to their needs. Going forward, consumers will increasingly expect organizations to anticipate their needs to create new levels of convenience through technology (e.g., AI). Consumers now have a choice, so companies should expect them to shop elsewhere if their needs are not met. Controls should be viewed as a differentiator to improve the consumer journey. Consumers now demand higher standards and quality, and a focus on social consciousness. In the end, consumers are reshaping how organizations behave and run their businesses.

"Consumers are the new regulator ... the fifth line of defense and are demanding organizations to manage risks more holistically ..."

Key trends influencing and reshaping the internal controls

Companies are rapidly adopting emerging technologies to enhance customer experience and capture market share, but we have not seen the same pace of adoption to benefit controls programs. While there remains significant investment due to the highly manual nature of most programs, in part due to limited effectiveness of reporting from legacy systems, companies are not currently seeing the returns. Going forward, companies should utilize technology as an enabler to be more efficient, effective, and impactful in risk, operations, and controls. During the transformation journey, organizations can implement digital assets that go beyond singular purpose controls from the outset to maximize their application and effectiveness across the lines of defense. In the future, we will have the ability to perform controls supported by AI enhanced technology to improve the way we monitor the controls environment and focus efforts in non-compliance areas—moving from "hindsight to foresight".

"Organizations are tired of only hearing about issues after they have occurred. The Future of Controls can help identify issues before they occur—moving from hindsight to foresight."

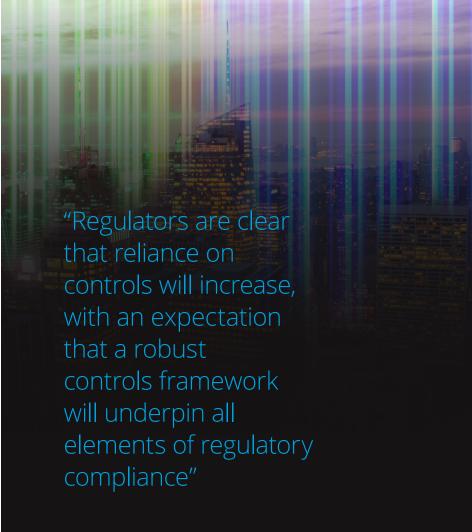# Key trends influencing and reshaping the internal controls

There are limited ways today to test your commitment to acting as a responsible business. Sustainability is viewed as a competitive advantage to help companies stand out from the crowd. But as a truly responsible business, sustainability is more of an expectation. Companies that ignore this imperative will not survive. In the near future, organizations will be required to report on environmental, social and governance (ESG) factors, and will be governed by regulation and disclosure requirements. Companies must refocus their priorities away from traditional financial risks to a new environment where controls substantiate a company's commitment to sustainability.

"There is an ever growing expectation on organizations to do the right thing, and controls can be the perfect way to demonstrate this"

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Key trends influencing and reshaping the internal controls

Regulators are migrating to a risk-based approach to regulation. This provides organizations with an opportunity to lower the costs of compliance if they can demonstrate a robust risk assessment and prioritization approach supported by a strong controls environment to manage compliance. Data can help ensure real-time regulatory monitoring, and technology can help predict potential indicators of non-compliance even before they occur. Consistency in compliance will be less expensive for mature organizations than responding to one-off instances of non-compliance.

"Regulators are clear that reliance on controls will increase, with an expectation that a robust controls framework will underpin all elements of regulatory compliance"

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Creating a bold and positive vision

Creating a bold and positive vision

Controls can be challenging for organizations that struggle to get even the basics right. Simultaneously, others are making significant strides to develop more effective and efficient controls, and add value to their companies. There are clear trends and individual cases of creativity and innovation that help us to imagine a bold and positive future for internal controls.

The role that the risk and controls community has played during the pandemic gives us confidence in that bold future. A robust risk and controls environment has helped organizations become more agile and resilient, and supported the accelerated digital transformation. In turn, this has helped them better utilize automation in operating and monitoring their controls.

So, it is time that organizations develop a clear Future of Controls vision to manage the myriad of challenges and build on these positive trends. A clear vision that is aligned to the wider business strategy and links to the underlying business purpose and goals will assist organizations in embedding a robust controls environment, and help them thrive in this volatile and complex business environment.

"We have overcomplicated our controls environments. There is a need to simplify, synchronize, and harmonize controls landscapes to drive value and minimize costs. In an arena where costs are imperative to organizations, they cannot afford to skimp or overspend on controls—and need to do proper analyses in order to find the happy medium."

Creating a bold and positive vision

Building your vision

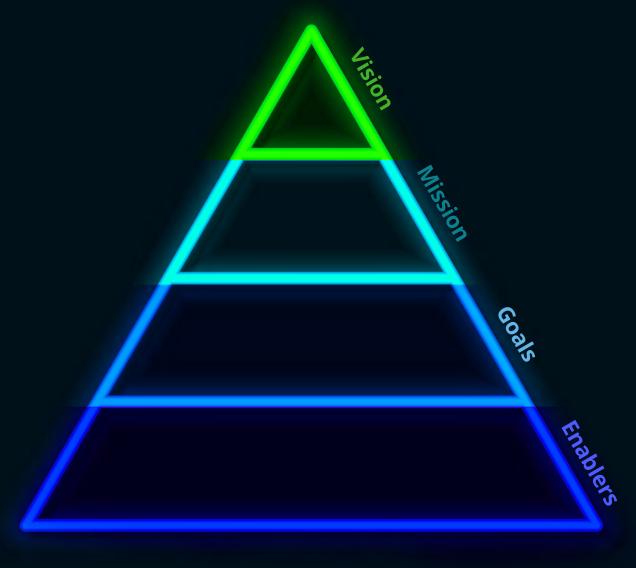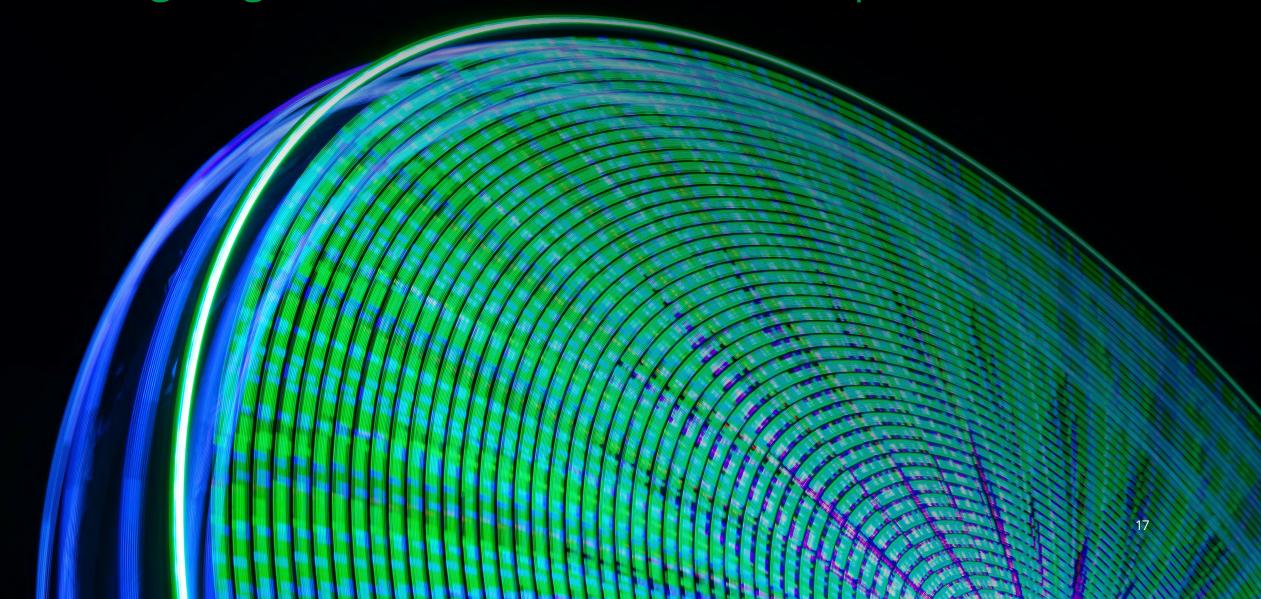Click each icon in the figure for more information.

Figure "Building your vision" spells out the vision, mission, goals, and enablers of our FoC mission that we developed over time in consultation with Deloitte leaders and practitioners.
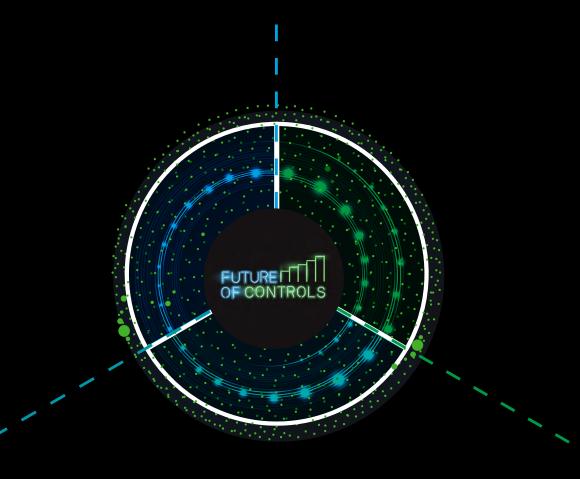
Reimagining the Future of Controls landscape

Reimagining the Future of Controls landscape

There are three key levers that help drive the internal controls journey and achieve the FoC vision. These levers are interrelated and are based on the goals outlined on page 16. We explore these levers in more detail and provide examples from global organizations that demonstrate the trends and successful business engagements that help achieve the FoC vision.

Click on 1, 2 and 3 to see the three levers.

Lever 1

Reconstructing the internal controls framework

With increasing business complexity and regulatory requirements, organizations face a changing risk environment. The internal controls framework must adapt. This requires more than just standardizing, benchmarking, or rationalizing the controls framework. This is also about building a true data-driven agile framework that mitigates known risks, anticipates and apprises the organization to emerging risks, delivers value and drives focus. Organizations should concentrate on what's required to reconstruct the internal controls framework.
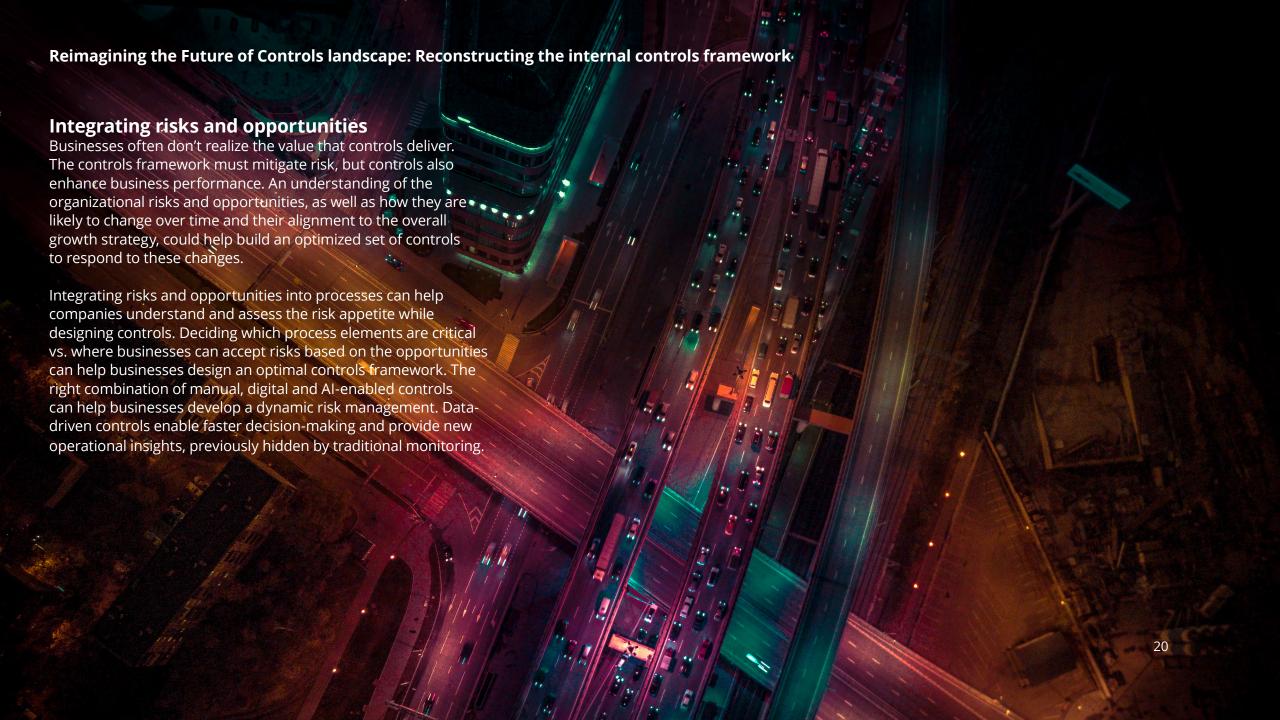
A "data-flow"-based controls framework

Since the introduction of SOX 404, a significant effort has gone into designing a robust controls framework. Recently, organizations have focused on how to optimize and rationalize it. However, these efforts are often built on assumptions, influenced by a few key individuals defining the process. Controls represent the happy path without a real view of the exceptions and process deviations that often represent the biggest risks.

With better access to data, organizations should develop a data-driven view that is free of intuition, bias, or assumptions. This new outlook can provide genuine insights based on the entire population of end-to-end transactions, associated exceptions, alterations, and work arounds. This would not only help identify risks, but it could also prioritize risks based on actual transactions. In addition, the present could inform the future, using AI and other analytical tools to help predict emerging risks.

A robust monitoring system based on this framework can provide meaningful performance insights for decision-making to support the growth agenda and help organizations respond to the pace of change.

"Data is an asset...with the advancement of technology and accelerated digital transformation, we should use data to determine the key risks and the approach to mitigate the key risks."

Integrating risks and opportunities

Businesses often don't realize the value that controls deliver. The controls framework must mitigate risk, but controls also enhance business performance. An understanding of the organizational risks and opportunities, as well as how they are likely to change over time and their alignment to the overall growth strategy, could help build an optimized set of controls to respond to these changes.

Integrating risks and opportunities into processes can help companies understand and assess the risk appetite while designing controls. Deciding which process elements are critical vs. where businesses can accept risks based on the opportunities can help businesses design an optimal controls framework. The right combination of manual, digital and AI-enabled controls can help businesses develop a dynamic risk management. Data-driven controls enable faster decision-making and provide new operational insights, previously hidden by traditional monitoring.

Balancing between rules and principles

Our modern and increasingly digital markets are continuously evolving. Organizations must quickly adapt to manage this change but also need to comply with numerous regulations. The entire organization must operate with agility to balance risks and opportunities to stay ahead of the game. Under these circumstances, an organization can't maintain a static set of controls or a detailed controls framework governed by rules based on historic risks. Controls frameworks must now be comprised of a combination of broad principles supported by detailed rules based on risk appetites and opportunities.

Unfortunately, there is no one-size-fits-all solution. The risk landscape should drive the key principles and standards by which organizations operate. They can provide the flexibility and breadth of applications required by the first line to address emerging risks and maximize performance. These are focused on objectives or outcomes and address the qualitative aspects required to manage the risk landscape.

The overarching principle-based entity-level controls for effective data management are often supplemented by specific rule-based controls embedded within the key processes. They must be monitored continuously to ensure compliance with new and changing regulations—as we see with evolving digital and data management risks. Businesses continuously need to monitor these specific rule-based controls to ensure they are complying with data privacy regulations. This will provide the speed, agility, and dynamism that an organization needs to manage rapid change and succeed in the market.

Value creation

Business models are changing rapidly from B2B to B2C, coupled with a shift in competition fueled by mergers and acquisitions, a rash of new entrants (disruptors), digital interaction, and a shift to hybrid work environments. As businesses adapt to the new market and evolving expectations, entire value creation models are changing as well. A sound risk and controls framework is fundamental to making these business models work and can help generate value.

As businesses build and maintain their value-creation model, the assessment and management of risks, uncertainties, and opportunities are key. The controls framework must strengthen innovation, facilitate a client-oriented mindset, enable risk taking and help maximize a company's value to its shareholders, now and in the future.

A controls framework drives value creation:

"There is a push to drive value out of everything and pressure to gain a return on investment in controls."

A multifaceted holistic view of controls

The business and regulatory landscape of the future is growing increasingly complex, and organizations need a comprehensive set of controls to manage and mitigate risks across the end-to-end process. It is inefficient, ineffective, and expensive to take a siloed view with a separate controls framework by individual risk domain, inconsistent language and taxonomy, and different monitoring and assessment regimes. Moreover, the new environmental, social and governance (ESG) reporting requirements demand a more comprehensive view of the risks facing a wide array of stakeholders.

This holistic approach allows organizations to remove the need for maintaining stand-alone risk and controls metrics and their associated exponential maintenance costs, thereby enabling businesses to reallocate the costs to drive shareholder value. Risks and controls can be managed by an integrated function with clear linkage between risk and strategy while allowing for a clear line of sight to the biggest risks. A single, consistent approach to financial, operational, and compliance risks—coupled with an integrated controls framework—could help unlock value and help organizations proactively manage and monitor risks.

Lever 2

Designing the next generation controls operating model

The complex, uncertain, and evolving risk and business landscape demands reevaluating the controls operating model to thrive and prosper. Organizations need to reimagine the key principles of the operating model and the enablers that will help change mindsets, develop capabilities, and enable business to embrace, operate and embed controls as part of the organization's DNA.
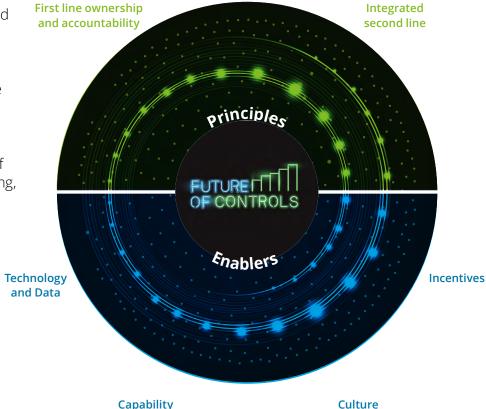
A shared ambition and access to unified data across business units and three lines of defense can help ensure that controls are effectively embedded in the organization. This can help barriers fall and business functions to unite—to exploit insights and unlock value. The first line of defense must demonstrate a clear understanding, ownership, and accountability for the risks and controls they are managing.

Figure "Future of Controls Operating Model Framework" shows the key **principles** and the related **enablers** that will shape the next generation controls operating model. Taken together, these seven aspects demonstrate how controls deliver value and what enables them.

Future of Controls Operating Model Framework
Click on each icon for more information.

Shared ambition

First line ownership and accountability

Integrated second line

Principles

FUTURE OF CONTROLS

Enablers

Technology and Data

Incentives

Capability

Culture

24

Three key principles drive the operating model:

⊕ First-line ownership and accountability

The first line runs the day-to-day business activities, and controls and compliance that must be embedded in the business. Increasing regulatory requirements over the years created a second line to build, help implement, and in some cases operate controls for the organizations' immediate benefit. The third line constitutes internal and external audit who are responsible for assessing the quality of the control environment and its ability to mitigate against key risks.

It is clear that organizations realize the value of controls when they are owned and operated by the first line. With first-hand experience of operations, only the first line can understand and manage the actual risks, especially in dynamic business environments where the risk landscape is changing at an exceptional pace, and organizations need to regularly manage new risks.

To increase ownership and accountability, organizations must:

Concentrate the first line of defense risk and control capabilities, and close expertise and skill gaps that might exist	Reassign and realign responsibility for the management of operational risk to the first line	Bridge the interaction gap with the second line of defense	Define accountabilities to ensure clarity around controls responsibility, how this delegation operates, and where overall accountability lies	Focus on risks that matter to ensure a risk-based approach is undertaken in a pragmatic way	Pick up wins along the journey to entice followership

"To perform your controls transformation, you need to challenge you first principles and the purpose of the three lines of defense."

Reimagining the Future of Controls landscape: Designing the next generation controls operating model

🤝 Shared ambition

The entire business covering all three lines of defense should share the same mission to embed controls in the first line. This can help create value by focusing on enhancement and protection of the business on a day-to-day basis through the first line. This combined effort will allow the first line to comprehend, own, and operate the controls with speed, precision, and flexibility. This will also help establish a single strategy that is focused on a set of activities to achieve the vision, mission, and goals of the FoC journey.

There are three key points for establishing a shared ambition:

> Empower the first line to define the controls vision supported by all lines of business to create a unified vision

⬇

> Set a clear tone from the top to drive and support the unified vision

⬇

> Redefine company culture to make "front-line successful" an organization-wide motto

⭐ Integrated second line

Today, we have multiple second-line functions operating in silos that may not be consistent and integrated. This not only exposes the organization, but businesses also struggle to get to a single version of the truth regarding the controls' status. This exposes the organization to potential risk-management issues that can result in significant cost of control, suboptimal use of their people, loss of business, and margin erosion. Global organizations are increasingly exploring the possibility of integrating risk domains for greater value add, and building the scale and authority for the second line to drive and guide organizations toward their purpose. This will also allow a better and coordinated working relationship with the third line of defense and facilitate implementation of a cost-effective integrated assurance model. Key features of the integrated second line include:

> Identifying comprehensive risk across the value chain

⬇

> Ensuring a consistent language of risk and controls across the business that is embraced by the first line

⬇

> Helping to drive a structured approach in risk aggregation, assessment, prioritization, monitoring, and response

⬇

> Providing a single version of the truth to senior management

Reimagining the Future of Controls landscape: Designing the next generation controls operating model

Enablers
The operating model is enabled by:

Capabilities - Organizations must take a holistic view of the capabilities required to manage risks and embrace opportunities. They need to rethink how to combine the right skills and revisit the nature of teams across the three lines of defense to achieve the FoC vision. This can be achieved in a cost-effective manner through on- and off-shore control centers, teaming with third parties and their platforms as well as through digitization.

Culture - Organizations must empower teams to encourage ownership and accountability. There should be a culture of openness to facilitate a greater understanding of the risks and mitigation strategy, a positive culture to help envision controls as a value creator, and a culture of continuous improvement focused on internal and external customer needs.

Incentives - It is necessary to recognize and encourage positive behaviors across the first line to facilitate greater ownership and operations of controls. Incentives need to strike the right balance between encouraging good and bad behaviors—if incentives are removed based on the inability to achieve targets, this may encourage deception to mask any perceived exceptions. By digitizing and now monitoring complete data sets, organizations will have transparency into exceptions like never before. Rather than focusing on punitive outcomes as many organizations do, there are new opportunities and incentives to get behind the data, learn from it, and convert new insights into furl for the business to operate better, smarter and faster. Rewards and recognition must be clearly defined and aligned to the desired outcomes to make them meaningful and impactful.

Leading companies are increasingly embedding controls performance management into the DNA of an organization, linking controls to KPIs, and including controls priorities into specific metrics for all employees at all levels.

"Controls will move to a hybrid state, where human intervention will be required to review the output of technological developing, requiring a new skillset from the workforce."

Reimagining the Future of Controls landscape: Designing the next generation controls operating model

Technology & data - Adopting a technology enabled approach using automation and AI enables businesses to see beyond oversight and move toward foresight, to identify emerging risks before they make an impact.

Organizations can make better use of data to support their view of risk and ultimately controls landscapes. Taking aggregated data from a distinct source and converting it into a machine-readable format can enable businesses to identify emerging risks quickly and respond rapidly.

Data-based design and management of the controls environment is key to the success of a next-generation operating model. It helps create a preventive and proactive culture, as well enables the organization to focus on what's truly important. A technology ecosystem is another key aspect of the enabler that can help organizations maximize automation and help deliver a Future of Controls vision, which we discuss in detail later.

"The emergence of analytics and automation needs a shift in the perception that jobs will be replaced. We need to move from an automation 'instead of' mentality to automation 'with' humans approach."

Lever 3

Establishing the controls technology ecosystem

Arguably one of the most important outcomes of the shift to remote working is digital acceleration. The use of technology accelerated traditional and innovative digital platforms to build, operate, and manage the day-to-day business. Organizations must leverage this digital transformation and maximize automation in controls operations and monitoring. Automation can help alleviate some of the pressure on the internal controls functions in cost reduction, efficiency drive, and effective management of risks and opportunities. It can also build confidence, intelligence, and performance—three key elements of a successful FoC journey.

To seize opportunities in technological development, a fundamental shift is required in how technology is used to support controls environments, including the operation and monitoring of controls. Organizations must establish their priorities based on their vision, aspirations, and challenges they face. This will help identify what technology solution features would be most beneficial.

Leading global organizations are deploying market-leading risk capabilities, technology solutions, and alliances across risk and control landscapes. They are aligning a technology ecosystem to their controls requirements to bridge gaps where continuous controls improvement, efficiencies, and actionable insights can add real value.
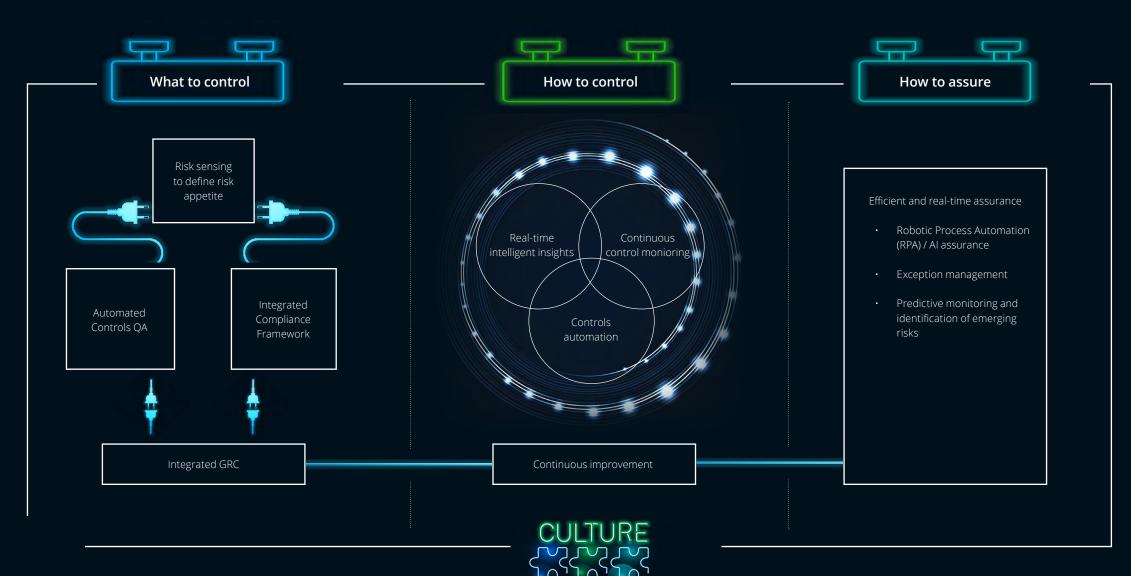
The controls technology ecosystem

The ecosystem is a hub-and-spoke model that combines different technologies (the spokes) into one central location (the hub), while enabling a company to be asset-centric yet nimble and performance-driven.

To deliver on their objectives, companies must employ various technologies with complementary features and characteristics. Businesses can unify the best thinking from across the organization to build tailored digital assets, creating a harmonized ecosystem capable of enabling intelligent risk management, and providing quality insights into internal controls effectiveness across the organization.

Each technology spoke can have multiple use cases. Each use case demonstrates a new way for organizations to boost productivity, increase accuracy, reduce non-compliance, and better understand financial, regulatory and operational risks—or flag areas of concern. The hub serves as a base to integrate each technology, such as a governance, risk and compliance (GRC) platform.

Reimagining the Future of Controls landscape: Establishing the controls technology ecosystem

Click the mouse icon for an overview of each key component.

What to control

Risk sensing to define risk appetite

Automated Controls QA

Integrated Compliance Framework

Integrated GRC

How to control

Real-time intelligent insights

Continuous control monioring

Controls automation

Continuous improvement

How to assure

Efficient and real-time assurance

- Robotic Process Automation (RPA) / AI assurance

- Exception management

- Predictive monitoring and identification of emerging risks

CULTURE

Reimagining the Future of Controls landscape: Establishing the controls technology ecosystem

What to control

Risk sensing: A fusion of internal and external data can contextualize business direction. It helps identify external events that could harm operations, and proactively identify the regulatory changes on the horizon and the impact on the organization. It also can raise alerts about time-sensitive developments and third parties (suppliers, outsourced service providers) impacting risk and control environments. And finally, it creates a feedback loop to integrate the actions with the risk management framework.

Automated controls quality assurance: Deployment of natural language processing (NLP) uses AI to automatically assess the quality and completeness of controls documentation. NLP also automatically identifies unseen controls gaps and risks (including gaps based on emerging risks and dynamic risk landscape), recognizes target areas for control deep-dive, and provides real-time feedback on controls design.

Governance, Risk and Compliance (GRC): GRC supports the three lines of defense by managing risks and controls across all areas to meet internal and external compliance requirements with integrity. GRC applications deliver a real-time view of compliance and risk, improve decision-making, and increase performance across organizations and with vendors.

Integrated compliance framework: The unified compliance framework, embedded within GRC, provides a continually updated controls database aligned to regulatory risk and standard business risks.

Reimagining the Future of Controls landscape: Establishing the controls technology ecosystem

How to control

Controls automation: Using a system of solutions and tools, controls automation can conduct a multitude of tasks, reducing the need for human interaction in operating and monitoring controls. Automation is maximized in:

- **Controls configuration –** utilising built-in system configurations to validate business transactions
- **Workflow –** an automated review and authorization flow designed in alignment with the authorization matrix
- **System reports –** user-friendly, meaningful, risk-based reports and visualizations enabling review and validation, specifically generating an understanding of the outliers and trends
- **Controls evidence –** smart ways to evidence controls operations and retain evidence

- **Non-standard developments –** specific bespoke system developments to operate and manage controls, including RPA, AI, and ML

Real-time intelligent insights: This is achieved through **advanced analytics**, which includes data gathering, interpretation, and manipulation to identify exceptions from standard processes, risk signals, variations to the historic risk patterns through machine learning, etc. **Visual AI** uses video analytics to turn images into structured data to analyze, visualize, reconstruct, and refine business process and controls across an organization. It is used for automated process mining, and process streamlining, control performance analysis, robotics discovery. Organizations have used these techniques to identify channel-stuffing fraud, millions of dollars' worth of excessive supplier payments, and common theft tied to previously unknown segregation of duties violations. It also can optimize workloads across global accounting functions.

Continuous controls monitoring: Intelligent technology identifies potential control issues inside and outside the business. Continuous controls monitoring (CCM) applications establish and monitor controls by identifying exceptions to policies, business rules, and built-in application controls (e.g., continuous access monitoring, configurable control monitoring, and IT controls monitoring). CCM also helps in process monitoring by extracting data from enterprise resource planning (ERP) and financial applications, and applying a set of pre-defined analytic business rules to identify control exceptions (e.g., continuous master data monitoring and continuous transaction monitoring).

"Automation of controls will help organizations so that they no longer have to constantly respond to instances of regulatory noncompliance, which they cannot afford to continue to do."

Reimagining the Future of Controls landscape: Establishing the controls technology ecosystem

How to assure

Efficient and real-time assurance is about taking near real-time action on issues as they arise using in-moment tailored persona-based intelligent insights. **CCM exception management**, for example, is the effective workflow and management of issues arising from the continuous monitoring of controls and helping organizations focus on more strategic matters and improvements to processes, by channeling issues back to the first line of defense as they arise. This helps to identify and respond to risks before serious issues arise and cause significant damage to a business (e.g., through significant regulatory fines/impact on continued operations).

Emerging risks involves making effective use of information from integrated GRC, continuous controls monitoring, and real-time intelligent insights to interrogate the areas of greatest risk in the third line of defense. Companies are then able to properly focus energy in the second line to process improvement where common themes are emerging.

Reimagining the Future of Controls landscape: Establishing the controls technology ecosystem

Leading-edge technologies help drive behavioral change by facilitating rapid identification and accelerated remediation of control issues. They drive a positive controls culture by making controls learning effective and efficient, and also promoting a culture in which risk empowers performance. For example, users are pushed **bite-sized learning** based on their activity in the business. With **gamified learning**, users engage in bite-sized learning by answering questions, earning points and, where they do not know the answer, they are guided to complete a short learning. This drives completion rates through engagement in the game. In **controls-training programs**, users engage in bespoke on-demand online classroom training, which includes advanced simulations based on specific business problems, a digital facilitator-led "controls game," and various online courses developed to address hot topics.

A typical Future of Controls journey

A typical Future of Controls journey

The Future of Controls journey will vary from organization to organization based on the maturity of the controls environment, the level of regulatory compliance pressure they endure, and the specific industry trends they need to manage. However, irrespective of the level of maturity and transformation, the vision, mission, goals, and key levers discussed earlier can help organizations define a six-step road map for a successful FoC journey.

START

CLICK THE PINS

We are in a period of unprecedented uncertainty with the confluence of technology revolution, global pandemic, merger and acquisitions and private equity funded disrupters. Organizations can't passively search for answers—they must take action now or they will face a chasm so wide and deep, between their pace of customer-facing innovation and their controls programs, that legacy programs will stifle growth and prevent them from realizing their prospects. The time to act is now.

By reading and digesting these insights about developing a bold and positive vision, you can establish a productive path to follow for a successful Future of Controls journey. It all starts with the first step you have just taken. Before you know it, you'll be firmly traveling the right path, and the Future of Controls can become today's reality sooner than you think.

To further explore the key themes and trends, and for more information about how Deloitte can help you succeed with your Future of Controls journey, please contact:

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