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Controls resilience
Digitizing pathways to
the future of controls

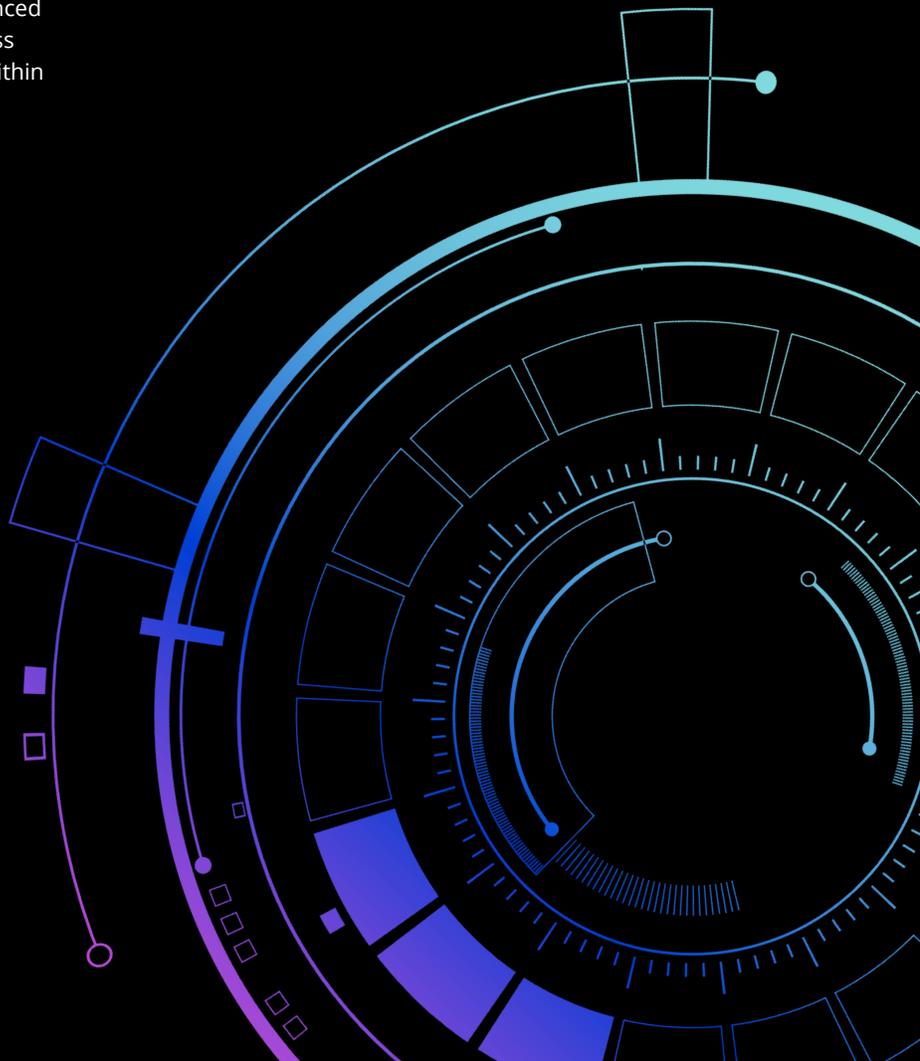
Introduction

Companies are beginning to evaluate how they want to harness technology transformation and business process modernization in a postpandemic business world.

In response to the pandemic, many companies introduced new technologies to enable remote work and sustain operations, as well as to serve customers in new and innovative ways. While business operations leaned into these emerging trends, it is important that back-office functions (e.g., finance, administrative, and other non-customer-facing functions) adapt at a similar pace.

According to a new Deloitte poll, only 22.1%¹ of respondents reported that their organizations currently leverage advanced technologies—like artificial intelligence (AI), robotic process automation, and advanced analytics and visualization—within their internal controls programs.

Limited use of advanced technologies often results in a growing disconnect between where the business is headed and the ability of risk, controls, and compliance functions to keep pace. In order to close the gap, many risk, controls, and compliance functions will likely need to focus more on offense, transforming themselves to leverage automation that enhances monitoring and facilitates identification of emerging risks. Embracing this shift can increase quality and scalability as well as reduce effort, making optimal use of scarce resources and lowering the total cost of controls.



Controls resilience: The time is now

A resilient system of internal controls is one that maintains state awareness and an accepted level of operational normalcy amid shocks and disturbances, including threats of an unexpected and malicious nature. In addition, given the pace of change in technology transformation in finance and operational systems, there is an opportunity to evaluate how controls resilience can be built into future-state processes as they change. Controls resilience involves fortifying companies from the inside out by continuously identifying risks, analyzing impacts, accelerating monitoring, and performing the right dose of controls at the right time. By leveraging emerging technologies in automation, AI, and advanced analytics and visualization, controls resilience can enhance an organization's ability to identify issues and produce insights in near-real time rather than quarterly or annually through traditional monitoring processes and audit cycles. With a progressive, offense-oriented program, organizations can get ahead of deficiencies, decrease exploitations, and rapidly complete exposure analyses.

"A resilient organization finds the right balance between 'defensive,' stopping bad things from happening, and 'progressive,' making good things happen. It has foresight, hindsight, insight, and oversight."²

The four "sights" of controls resilience enable organizations to go beyond withstanding shocks to help build a better path forward. Breaking down resilience fourfold:

Hindsight

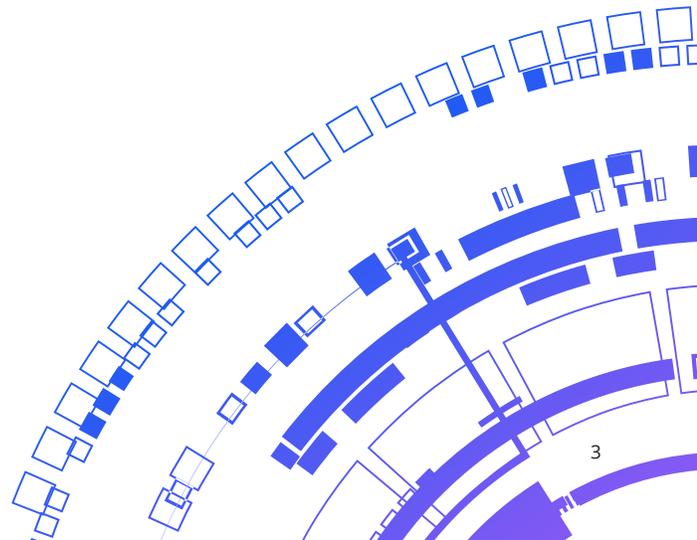
Looking back to understand the meaning of an event after it happened in order to gain new insights for taking action in the present. Hindsight often limits an organization's ability to identify issues as they emerge, preventing them from being contained sooner.

Examples of hindsight-oriented activities include infrequent or periodic Internal Audit (IA) or compliance audits that help to detect and respond to issues (or cases of noncompliance) that occurred in the past.

Insight

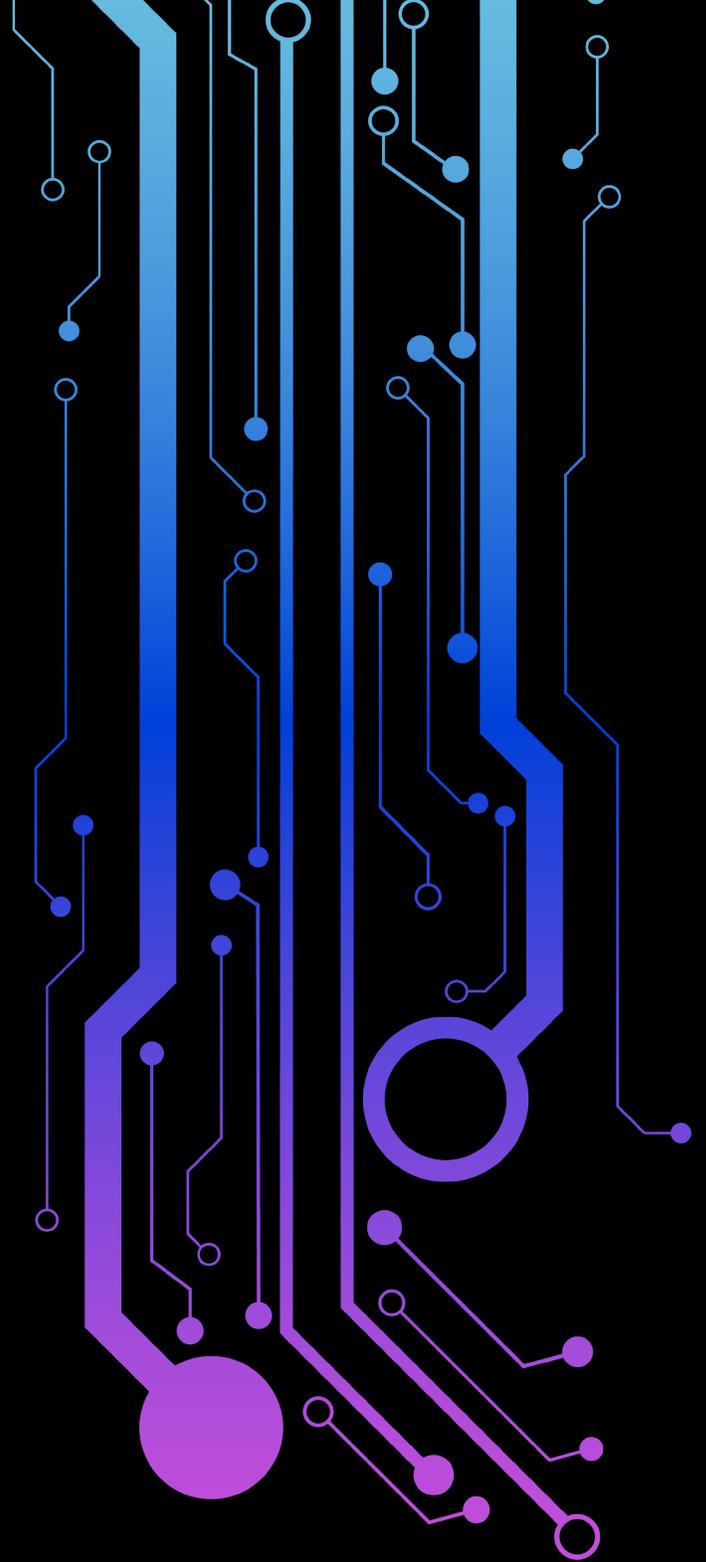
Obtaining a deeper understanding in the moment that ultimately drives decisions and actions in the present. Controls-resilient organizations leverage digital assets to harvest insights that enhance productivity and unlock value beyond the controls program, extending into improving the quality of business operations.

For example, a controls-resilient organization can measure the velocity of transactions to determine whether the outliers are a result of stellar performance or if they indicate fraudulent activity that requires further investigation.



An investment manager suspected a fraud had existed within its benefits disbursement business.

However, its existing monitoring processes and controls were unable to identify the root cause or nature of the anomalous activity. In response, it engaged Deloitte to use our CortexAI™ platform to give it a different view into its operations by visualizing its activity using AI and machine learning, as well as digitizing and enhancing its existing controls. We developed two machine learning and AI models with a series of analytics that identified irregular transactional behavior by employees, including splitting up disbursements to circumvent known thresholds within the population of **\$130M analyzed**. The models were presented in dashboard-style output with drill-down capabilities. By going on the offensive, Deloitte assisted management in accelerating its ability to pinpoint the control frailties in their environment, removing the root cause and the fraud itself while also driving sustainable efficiencies and providing business insights that could not be harnessed previously.



Oversight

Supervising the execution of work both in the past (hindsight) and the present (insight) to monitor results and improve decision-making. Controls-resilient organizations have the ability to shift oversight, monitoring, and reporting to real- or near-real time by harnessing the power of automation and analytics to identify risks as they occur.

Examples of oversight-oriented activities include both the higher-level oversight function (e.g., enterprise risk management), which defines the risk tolerances and overall responses to risks; direct management oversight (e.g., financial statement reviews and reconciliations), which confirms that risks are being mitigated; and proactive evolution of the control structure to address emerging changes in the organization (e.g., cloud migration, digital initiatives, process modernization, and M&A transactions). By incorporating interconnected digital assets, organizations can generate higher-quality assurance, greater impact, and value that is realized across the varying mandates of stakeholders and custodians through the enterprise.

Foresight

Predicting what might happen before it occurs in order to supply management with insight for taking action in the present. Introducing AI and cognitive risk sensing into controls programs can provide insight into what might be coming around the corner.

For example, a predictive model built using a historical record of account reconciliations can predict future variances with >95% accuracy. The model provides foresight, since it can predict the potential variances for a new account without having to wait for the entire reconciliation process to complete. In larger organizations with voluminous transactions and extensive reconciliation exercises, the return on investment can be even more pronounced, given the scalability of the model.

A controls-resilient organization finds the delicate balance between the four “sights” (i.e., hindsight, oversight, insight, and foresight). Through this balance, organizations can satisfy their risk appetites while dedicating appropriate resources to get ahead of what might happen. Controls-resilient organizations achieve better insights through improved quality of the information they receive. They can also attain a deeper understanding of the root causes of previous outcomes, as well as gain the ability to predict what might happen in the future, through the use of sophisticated modeling.

Return on investment is improved when the four “sights” are connected, and even more so when embedded at the design stages of transformational activities. Growth and maturation can also occur more rapidly, as lessons learned in responding to one issue inform the organization on how to get ahead of future issues, or at least how to respond to them in a timely manner.

Figure 1 illustrates the controls resilience maturity spectrum to help organizations evaluate where they stand in executing the four “sights.”

As organizations move further along the maturity spectrum, greater value can be realized by the business and key stakeholders. Highly manual, siloed, legacy approaches keep organizations stuck in a continuous cycle of “ask, wait, and evaluate.” In contrast, controls-resilient organizations benefit from the compounding benefits of automated, cross-functional connectivity. This connectivity enables them not only to address the issues immediately at hand, but also to identify root causes, streamline remedial efforts, and capture new insights that may improve business operations along the way.

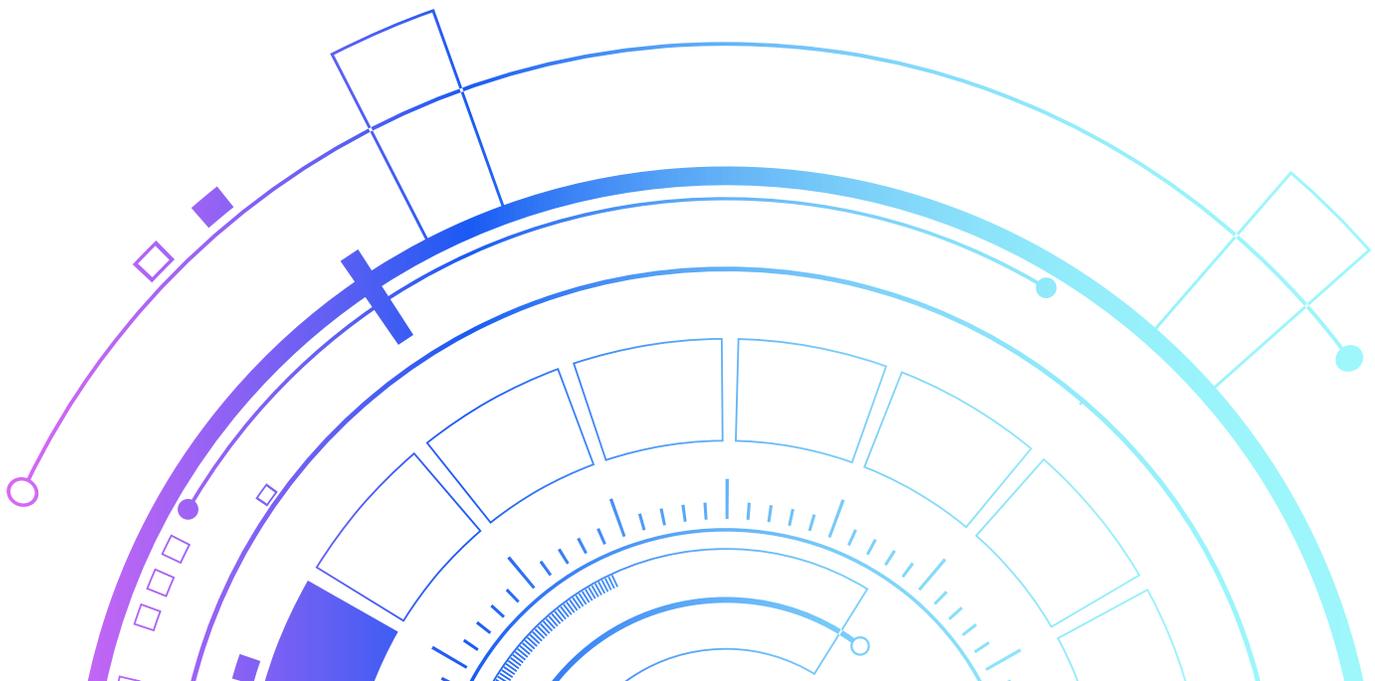


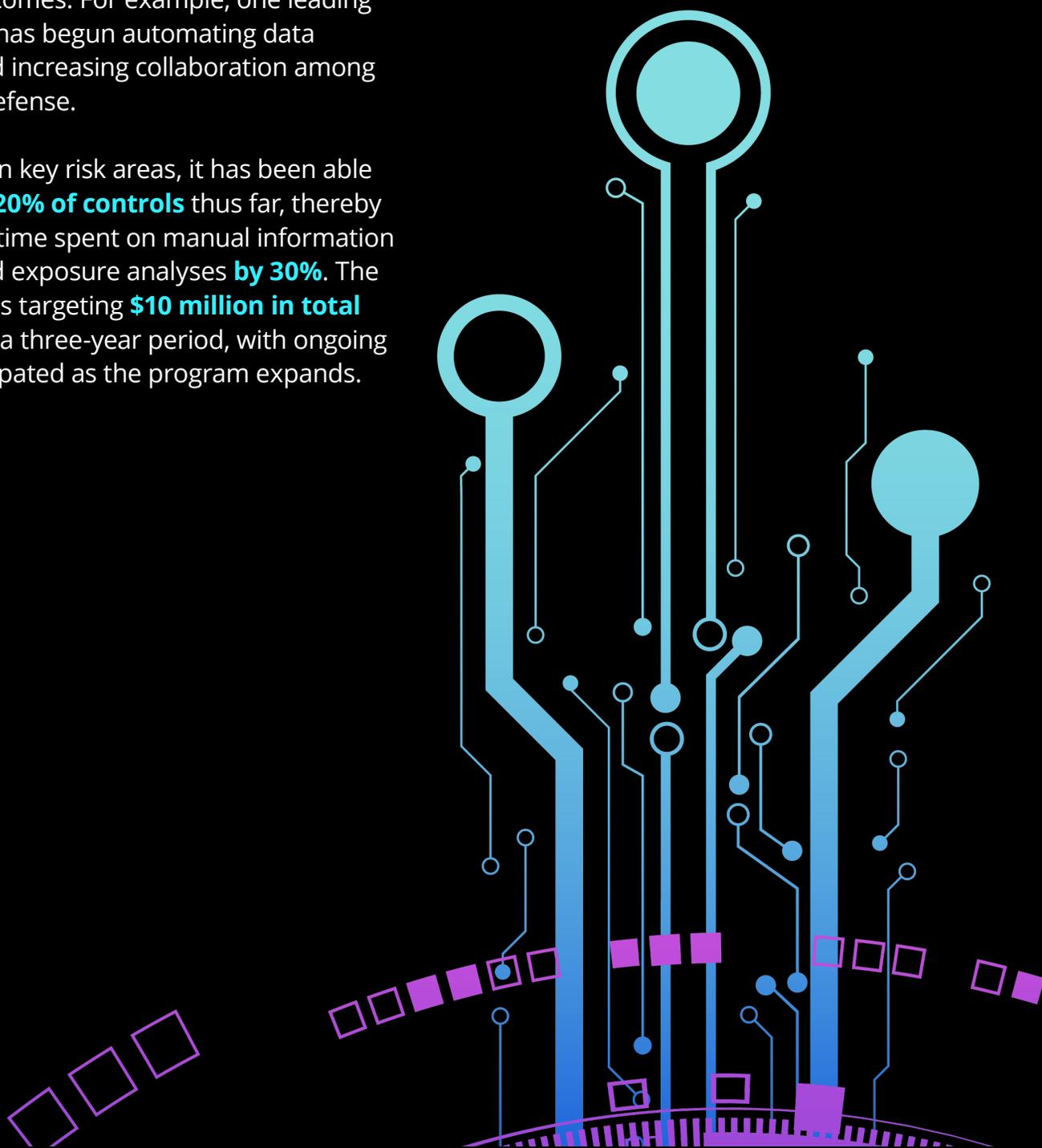
Figure 1. Controls resilience maturity spectrum

	RIGID AND REACTIVE	DEVELOPING	RESILIENT
Identify issues, understand risks, and gather information	<ul style="list-style-type: none"> • Issues are identified months after the event. • Controller creates a one-off request to IT or compliance to manually pull data. • Iterative process until confirmation is received that all required data has been obtained. • Analysis confined only to data gathered for the manual evaluation, which is maintained on the desktop of the person performing the analysis. 	<ul style="list-style-type: none"> • Issues identified closer to the occurrence of the event via a combination of hindsight and oversight. • Controllershship organization uses automated tools to independently perform its own data extraction. • Automated tools allow for collaboration across functions. • More likely to identify trends and insights in data. 	<ul style="list-style-type: none"> • Automated tools provide foresight by anticipating issues and notifying first-line management about anomalies. • Faster response times achieved, since all relevant information was extracted and provided as part of the “flag.” • Connected environment feeds insights from the entire organization into the evaluation, revealing clear root causes and enabling a more effective response.
Analyze and evaluate	<ul style="list-style-type: none"> • Analysis confined only to data gathered for the manual evaluation, which is maintained on the desktop of the person performing the analysis. 	<ul style="list-style-type: none"> • Automated tools allow for collaboration across functions. • More likely to identify trends and insights in data. 	<ul style="list-style-type: none"> • Connected environment feeds insights from the entire organization into the evaluation, revealing clear root causes and enabling a more effective response.
Mitigate and remediate	<ul style="list-style-type: none"> • Manual mitigating procedures impede progress. • When finally complete, the process starts again with the next “big issue.” 	<ul style="list-style-type: none"> • Automated tools maintain queries for future use. • Responses become quicker each time. 	<ul style="list-style-type: none"> • Connected systems and lines of defense quickly enable a unified response. • Management turns crisis into opportunity. • AI-enabled systems get progressively “smarter,” supporting continuous improvement.
Monitor and anticipate	<ul style="list-style-type: none"> • Lack of a robust risk assessment to anticipate and detect issues. • Undefined ownership in the control framework and lack of communication protocols. • Ineffective monitoring process. 	<ul style="list-style-type: none"> • Partially defined risk-assessment process and nascent communication protocols. • Monitoring performed only in certain areas. 	<ul style="list-style-type: none"> • Well-defined risk assessment process with established communication protocols, which enable the control structure to be highly adaptable to emerging business and technology changes. • Clearly defined ownership in the control framework. • Thorough monitoring process.

Early adopters that have embraced the move toward controls resilience have already started to realize tangible benefits.

They spend less time on periodic, sample-based reviews and check-the-box activities and more time focusing on meaningful business outcomes. For example, one leading organization has begun automating data collection and increasing collaboration among the lines of defense.

By focusing on key risk areas, it has been able to automate **20% of controls** thus far, thereby reducing the time spent on manual information gathering and exposure analyses **by 30%**. The organization is targeting **\$10 million in total savings** over a three-year period, with ongoing savings anticipated as the program expands.



Responding to the present

Regardless of where you stand in the resilience spectrum, remediating and/or mitigating deficiencies in the current environment remains a daunting hurdle. It is easy to become overwhelmed and tempting to just keep climbing the mountain of manual information requests.

While no one can flip a switch and instantly become controls-resilient, organizations can use the potential deficiencies identified in their current processes as a launching pad for taking the initial steps. Consider, for instance, piloting automated tools to gather and analyze data, or using advanced analytics and visualizations to reveal new dimensions within old data, such as velocity of transactions (see figure 2). These types of use cases can help the organization determine the extent of potential exposure quickly and accurately, rather than relying on traditional manual efforts that often address the symptoms without getting to the root cause.

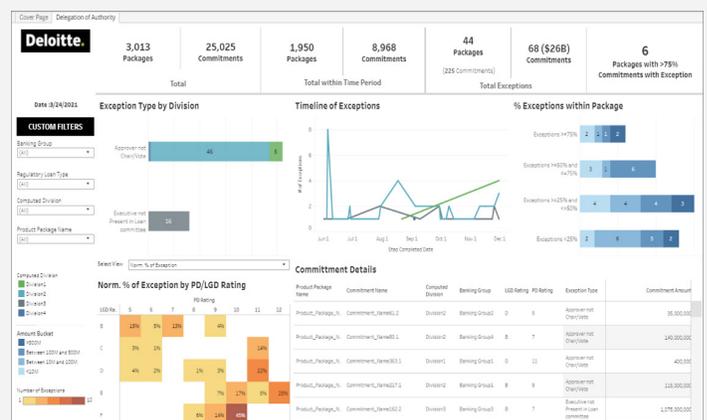
Considering the added strain organizations are facing in the current environment, it may also be appropriate to bring in specialists to provide surge support. These specialists may already be working in the second or third lines of defense, or, in more complex cases, may be external to the organization.

By collaborating across the three lines of defense and involving external resources when needed, growth can occur, and piloted solutions can evolve into digital assets that can benefit multiple stakeholders.

Figure 2. Access security and loan approval and delegation of authority dashboards

The sample access security dashboard helps IT governance understand whether users have logged into applications after they have terminated.

The loan approval and delegation of authority dashboard shows that, by using AI enablement, one bank was able to assess compliance for an entire portfolio (more than \$26B) of loans across multiple systems, rapidly detecting outliers.



Getting started

To drive meaningful controls transformation, resilient leaders can catalyze change by assembling a cross-functional team that brings multiple disciplines together. A leading practice is to pair business and functional professionals who have a macro perspective with technical and analytics professionals who understand the underlying mechanics of the systems and how to model future-state controls that consider connectivity between the four “sights” as part of the design phase. In addition, professionals from the second and third lines of defense (risk and compliance and IA, respectively) can help to incorporate assurance principles to understand whether the approach can be scaled across the organization and that it can withstand external scrutiny from auditors and regulators.

Once an appropriate team has been assembled, organizations should identify opportunities to create value, either through one-off pilots or as part of larger transformational activities. This includes defining business objectives, conducting cross-functional, end-to-end workshops, prioritizing processes for digitalization, identifying root causes behind gaps and improvement areas, and determining ownership of the future state.

Successful control automations generally start small, with a specific use case tied to a high-value activity. The goal is to drive value by accumulating quick wins that demonstrate capabilities. This encourages greater stakeholder engagement and end-to-end collaboration, helping leaders avoid pitfalls and paving the way for rapid progress. Quick wins build momentum, spark ideas for scalability, and facilitate engagement for building out additional solutions.

When asked if their organizations plan to strengthen resilience for internal controls in the year ahead, more than three-quarters (77.6%) of respondents said “yes,” according to a new Deloitte poll.³

Considerations for the next audit cycle

As organizations continue to regain their footing and refocus on the next audit cycle, they are once again turning their attention to whether internal controls are suitably designed for the long term. Controls affected by certain trade-offs made during the peak of the pandemic, such as furloughs, deferred investments, temporary fixes, and risk acceptance, will need to be re-evaluated for efficacy to conclude whether management’s risk assessment processes were sufficient.

Given the adaptations of their operations, organizations should reconsider the ongoing implications of the changes invoked and the broader impact on the control environment. While videoconferencing and collaboration sites have been the lifeblood of business during the pandemic, board members and auditors have demonstrated increased skepticism about the efficacy of controls in a remote working environment. Control breakdowns that might have been accepted as one-off deviations in the past now have increased attention from various constituents, requiring time-intensive and often costly one-off activities, such as exposure checks or rapid enhancement of operational processes to meet the rigor required for key controls. This level of effort is not sustainable for most organizations.

In a poll conducted during a recent Deloitte webcast, “Resilience meets controls modernization and digitization: A path forward to strengthen for the future,”⁴ 77.6% of respondents recognize that their controls and compliance programs must evolve to keep pace with the business, and they plan to enhance them to withstand systemic shocks and improve the resilience of the organization.

Move on to what matters

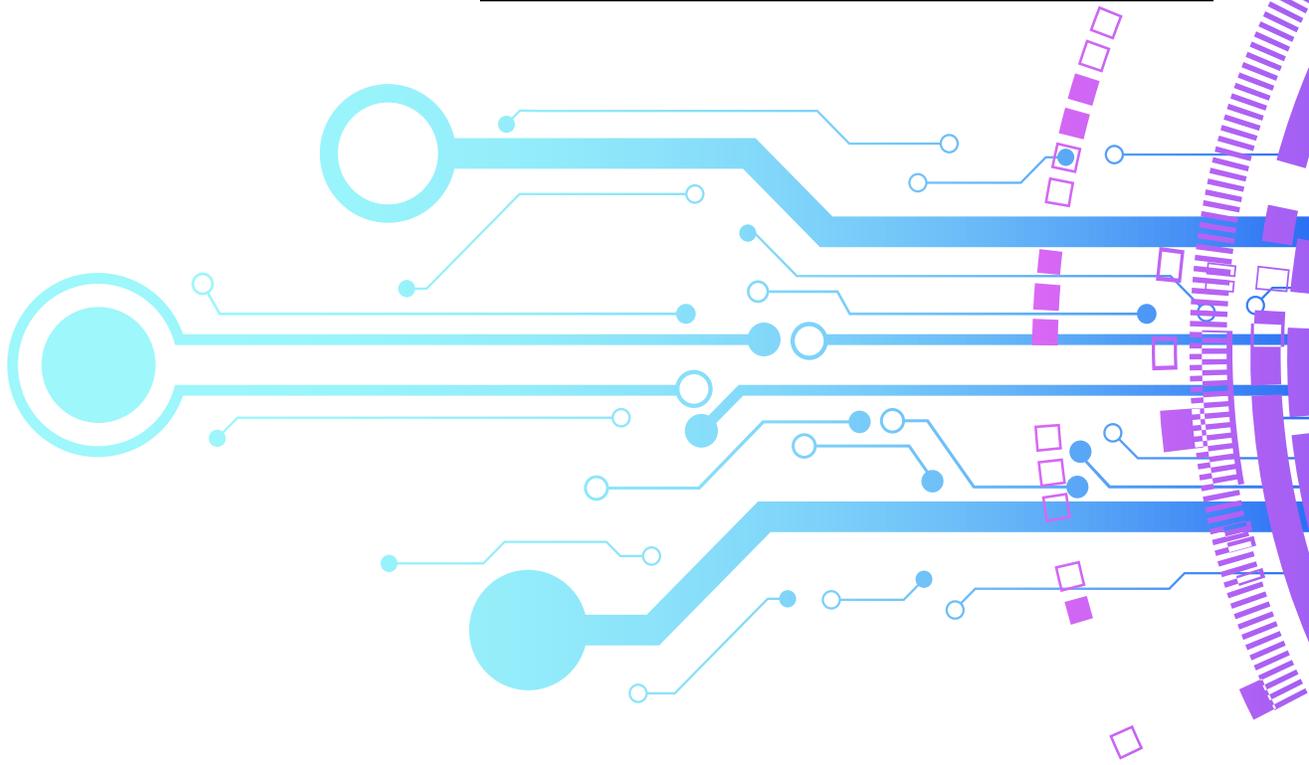
Many companies have come to a fork in the road. Audit issues and findings may have increased based on initial responses to the pandemic. This leaves organizations with a choice: Stick with familiar, yet largely inefficient manual responses, or take the first steps toward automation and real-time monitoring. Some compliance leaders choose to remain on the well-worn path of manual extraction, analysis, and mitigation—not because they want to, but because they believe that controls-resilient responses are too expensive and time-consuming, or they don't know where to start.

These barriers are often just misperceptions, and potentially harmful ones at that.

The cost of continually executing manual investigations for each item is high, both in terms of people's time and energy and job satisfaction. The more rewarding way forward isn't merely survival; it's breaking the manual cycle that holds people back. While it's tempting to just paddle harder—to try to keep up with the growing demands—there's no time like now to move on to what matters: building a controls-resilient organization that frees compliance personnel to add value and generate meaningful business outcomes.

Switching from defense to offense

When a large consumer products company was faced with a deficient detective review concerning segregation-of-duties risks, management could not sufficiently answer the questions related to transactional awareness posed by an external auditor. Deloitte assisted the organization in developing a series of automated analytics to enable management to understand the way in which people used the system and to quickly identify areas of risk that were not visible through the legacy IT and process-level controls. No longer was management reviewing potential violations where people could have exploited their access. They now had insight into actual usage, which allowed for a targeted response to manage risks. The results of the analysis further supported the organization in refreshing its role assignments on a large scale. In addition, management has embedded these queries into their oversight responsibilities as a risk-monitoring thread, giving them the ability to scale the automated analytics across other controls and compliance programs within the organization.



Controls advisory solutions

Deloitte's integrated controls advisory platform is designed to help an organization change its approach to compliance, moving it from hindsight-intensive to foresight-leaning, where executives can truly understand the state of their controls, drive insights, spot trends, change behavior, and identify weaknesses. Our suite of tech-enabled solutions takes full advantage of emerging technologies like robotics, cognitive, and data analytics. These digital tools can help companies to deliver meaningful business outcomes faster and more cost-effectively while realizing benefits and an improved return on investment. The suite is flexible and scalable to work across the spectrum, ranging from organizations seeking wholesale change to those looking to address a specific pain point.



Controls transformation

Applies tech-enabled solutions to an organization's controls for a smarter, faster, and more efficient end-to-end controls methodology.



Digital program management (Trustworthy AI™)

Helps organizations understand, govern, and address the increasing risks associated with their rapidly growing use of digital tools, such as those related to algorithms, AI, and cognitive intelligence.



Digital Testing and Controls Automation (DTCA) powered by CortexAI™

Drives control testing efficiencies, helps organizations manage their risk profile, and provides valuable insights. DTCA uses a combination of proprietary tools, AI, and machine learning and leading commercial automation software and can be hosted on Deloitte's CortexAI platform.



Transformation Assessment Services (TAS) and Assurance by Design

Gives executives an insider's perspective during large business transformations and system implementations, helping them to amplify their ability to probe deeply to identify potential issues early before they lead to costly delays, defects, or breakdowns in the system of internal controls. Assurance by Design extends these services to the design and implementation of future-state controls while leveraging digital controls and other leading practices to improve controls resilience.

Endnotes

1. Deloitte Elite webcast, "Resilience meets controls modernization and digitization: A path forward to strengthen for the future," October 13, 2020.
2. David Denyer, *Organizational resilience: A summary of academic evidence, business insights and new thinking*, British Standards Institution (BSI) and Cranfield School of Management, 2017.
3. Deloitte Elite webcast, "Resilience meets controls modernization and digitization: A path forward to strengthen for the future," October 13, 2020.
4. Ibid.

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Special thanks:

Ben Anderson, Micah Apolzon, Saiyed Abbas-Husain Asif, Carolyn Axisa, Dana Behrens, Ed Bowen, Derek Bradfield, Tom Carbone, Kristy Coviello, Alyssa Culp, Akshay Dhawan, Reebu George, Jennifer Gerasimov, Ashley Gibson, Carol Greaves, Kristen Heikkinen, Anthony Howard, Alison Hu, Shilpa Ivanick, Cherisse Leon Laurent, Casey Kacirek, Katherine Fortune Kaewert, Dheeraj Khandelwal, Theresa Koursaris, Geoff Kovesdy, Ajay Kumar, GK Kumar, Gloria Kwok, Brian Liebman, Tanavi Malhotra, Frank Milano, Robyn Mishkin, Madeline Mitchell, Irshad Niamathullah, David Rains, Lindsay Rosenfeld, Tushar Sainani, Patty Salkin, Jeff Schaeffer, Steve Schlegel, Manish Shaïda, Siddhartha Siddhartha, Sachin Kumar Singh, Curtis Stewart, Joe Sutter, Matt Tilner, Punit Trikha, Phani Vajhala, and Neil White.

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