INTERNAL AUDIT'S DIGITAL TRANSFORMATION IMPERATIVE: ADVANCES AMID CRISIS

Analyzing the Impact of 2020 on Internal Audit Functions' Implementation of Technology

AUDITBOARD

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The IIA's International Professional Practices Framework (IPPF) comprises the full range of existing and developing practice guidance for the profession. The IPPF provides guidance to internal auditors globally and paves the way to world-class internal auditing.

The IIA and the Foundation work in partnership with researchers from around the globe who conduct valuable studies on critical issues affecting today's business world. Much of the content presented in their final reports is a result of Foundation-funded research and prepared as a service to the Foundation and the internal audit profession. Expressed opinions, interpretations, or points of view represent a consensus of the researchers and do not necessarily reflect or represent the official position or policies of The IIA or the Foundation.

Contents

A Year of Unprecedented Change

The year 2020 will long be remembered as a year of disruption. In the midst of a global pandemic, social unrest, political upheavals, and economic crises, internal auditors were challenged to provide assurance and advisory services to help their organizations survive. However, that is not all; internal audit's infrastructure and processes also were disrupted—internal auditors had to shift to remote work, deal with a rapidly broadening risk environment, and grapple with resourcing fluctuations. A successful response to such disruptions requires effective and efficient collaboration, communication, and productivity—all of which can be enabled or enhanced through innovation and the adoption of technology.

In November 2020, the Internal Audit Foundation, in collaboration with AuditBoard, conducted a survey to understand how internal audit leveraged technology to respond to the year's challenging and fast-changing conditions, in addition to examining how technology was used prior to the pandemic. The survey was distributed in North America to chief audit executives (CAEs), directors, and managers working in the internal audit profession; 134 responses were received. The survey was designed to gather data and provide answers to the following questions:

- How has technology helped internal audit functions adapt to rapidly changing conditions in 2020?

- Have internal audit functions accelerated, decelerated, or otherwise changed their current use or intended adoption of new technology in response to the conditions of 2020?

- What is the most effective type of technology for helping internal audit functions succeed in their response to changing conditions?

The survey compared and contrasted internal audit's use of five types of technology to enable collaboration, communication, and productivity: 1) manual (spreadsheets, email, shared drives, and SharePoint), 2) on-premise audit management software, 3) cloud-based audit management software, 4) on-premise governance, risk management, and compliance (GRC) software, and 5) cloud-based GRC software.

The Path Forward

Over the past five years, internal audit has slowly adopted technology to elevate the audit process and add value to its business. According to the Internal Audit Foundation, in 2015, 38 percent of CAEs surveyed[1] indicated they had implemented appropriate or extensive use of technology to support the internal audit process. At this time, technologies implemented were primarily on-premise software solutions, as cloud-based solutions for internal audit were just coming to market.

Since then, research shows that across the enterprise, technology implementation has been shifting from the use of on-premise solutions to cloud-based solutions. Internal audit's digital transformation during this shift has been slow compared with other departments across the enterprise. According to Shuba Balasubramanian, a principal in Deloitte Transactions and Business Analytics LLP:

> "Organizational leaders often see digital transformation as a path to grow the business, streamline operations, and strengthen customer relationships. Sales, supply chain, research and development (R&D), and other functions that directly impact profit and loss are deeply engaged in capturing transformation's return on investment (ROI). As a result, compliance and internal audit are often the last ones to hear about it."

> "Compounding the problem, compliance and internal audit groups may not yet grasp the speed and scope of digitization underway in the organization. Or, if they are attuned, they may feel more threatened than excited by technology's potential to change their work, or even replace them. The lack of a direct communication line to the information technology (IT) organization can be another hurdle in compliance and internal audit transformation. As a result, compliance and internal audit are unable to capture IT mindshare as they pursue transformation, while technology developers risk overlooking potential vulnerabilities. Finally, the compliance and internal audit roles often involve checking other peoples' work and actions. Chilly receptions from other enterprise functions may come as no surprise."[2]

As observed by Anand Bhakta, AuditBoard's senior director of risk solutions, internal audit is considered a cost center in most organizations and constantly has to justify investments: "Most companies first think about transforming revenue-generating services, then the services that have cross-enterprise impact, and internal audit may be last."

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[1] Michael P. Cangemi, *Staying a Step Ahead: Internal Audit's Use of Technology* (Lake Mary, FL: Internal Audit Foundation, 2015), 6.

[2] Shuba Balasubramanian, *Digital Transformation for the Risk and Compliance Functions* (Deloitte: 2018), 2. https://www2.deloitte.com/us/en/pages/advisory/articles/digital-transformation-risk-compliance-functions.html

Tom O'Reilly, internal audit practice leader at AuditBoard, agrees and adds that in addition to financial concerns, CAEs may not be aware of the power of a purpose-built solution. "Ironically," states O'Reilly, "my experience has shown me that first and second line functions—operations and risk management—are further along in adopting digital technology. Internal audit typically recommends technology solutions when providing assurance over these areas, but fails to implement the same technology within internal audit."

Despite challenges, the internal audit profession recognizes potential opportunities that can result from migrating to the cloud: increasing collaboration within internal audit and across the organization, streamlining communication, and increasing productivity. As with the finance department's adoption of cloud enterprise resource planning (ERP), internal audit's move to the cloud and adoption of audit management software is likely to accelerate.

Standards, Competencies, and Technology

Internal auditors and internal audit organizations are expected to understand and leverage technology. According to IIA Standard 1210.A3, "Internal auditors must have sufficient knowledge of key information technology risks and controls and available technology-based audit techniques to perform their assigned work."

In addition to the standard, The IIA's Internal Audit Competency Framework specifies multiple computer-based competencies required to plan and perform internal audit engagements, including applied knowledge- and expert-level competencies related to computer-assisted audit tools and techniques and data analytics methods.

The Framework also specifies computer-based competencies required to identify and address the risks specific to the industry and environment in which the organization operates. Internal auditors at the applied knowledge level apply data analytics and IT in auditing. Internal auditors at the expert level go even further and evaluate the use of data analytics and IT in auditing.

Without these competencies, internal audit is left applying an "analog approach to risk management in what is now a digital world."[3] Conversely, a dynamic digital approach to risk assessment leverages Agile auditing and continuous monitoring practices, enabling internal audit to "more effectively quantify risk in a rapidly evolving business environment, in real time, and execute relevant assurance work to align with key organizational risks and priorities."[4]

Against this background, internal audit technology is not a nice-to-have, it is a must-have. Emerging internal audit change agents are helping to usher in this shift in mindset.[5]

In support of internal audit's adoption of technology, the Internal Audit Foundation and AuditBoard share these survey findings to help the profession better understand internal audit's progress, challenges, and path forward with technology implementation.

[3] Brian Christensen, "Adapting to the Dynamic Risk Environment," *Internal Auditor* (October 2020), 22.

[4] Ibid, 22–23.

[5] Russell A. Jackson, "Emerging Leaders: 2020," *Internal Auditor* (October 2020), 27.

Technology Use

The current survey focused on internal audit's use and planned use of technology before, during, and after 2020. Survey responses demonstrate that many internal audit functions have accelerated implementation of cloud-based technologies, and the profession as a whole has a significant opportunity to digitally transform in the years ahead. There are likely multiple reasons that internal audit has not leveraged technology in ways that would further enhance the value-add to the organization. Given The IIA's *International Standards for the Professional Practice of Internal Auditing (Standards)* in the International Professional Practices Framework (IPPF), and the competencies needed in the profession, it would be useful to explore these reasons.

How Has Technology Helped Internal Audit Functions Adapt to Rapidly Changing Conditions in 2020?

According to the survey, 47 percent of internal audit functions were already using audit management or GRC software prior to January 1, 2020, and 22 percent are planning on implementing audit management or GRC software in 2021.

For those teams who are already using audit management or GRC software, the events of 2020 appear to have thrown its value into sharper focus. Of the internal audit functions that are already using audit management or GRC software, 31 percent increased their use of such software, most notably to collaborate remotely with internal and external stakeholders and avoid wasting time and resources on manual and administrative tasks. Among internal audit functions already using cloud-based software, nearly half increased their use. In fact, those already using cloud-based audit management or GRC software were significantly more likely to increase their use of that software to enable collaboration, communication, and productivity, demonstrating that they recognize the value of leveraging technology to respond to a dynamic risk environment.

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> **Changing conditions have led to increased use of technology—31 percent of audit functions currently using audit management or GRC software increased their use of such software to enable collaboration, communication, and increased productivity.**

Overall, 35 percent of respondents indicate that their audit function's current approach to technology use is limiting effectiveness. Unsurprisingly, 46 percent of audit functions using manual technologies agreed that their approach limited effectiveness and prevented the delivery of optimum value.

FIGURE 1

Percentage of Auditors Who Agree/Disagree That Manual Technology Is Limiting Their Function's Effectiveness

Strongly agree/agree — 46%
Strongly disagree/disagree — 27%
Neither agree nor disagree — 27%
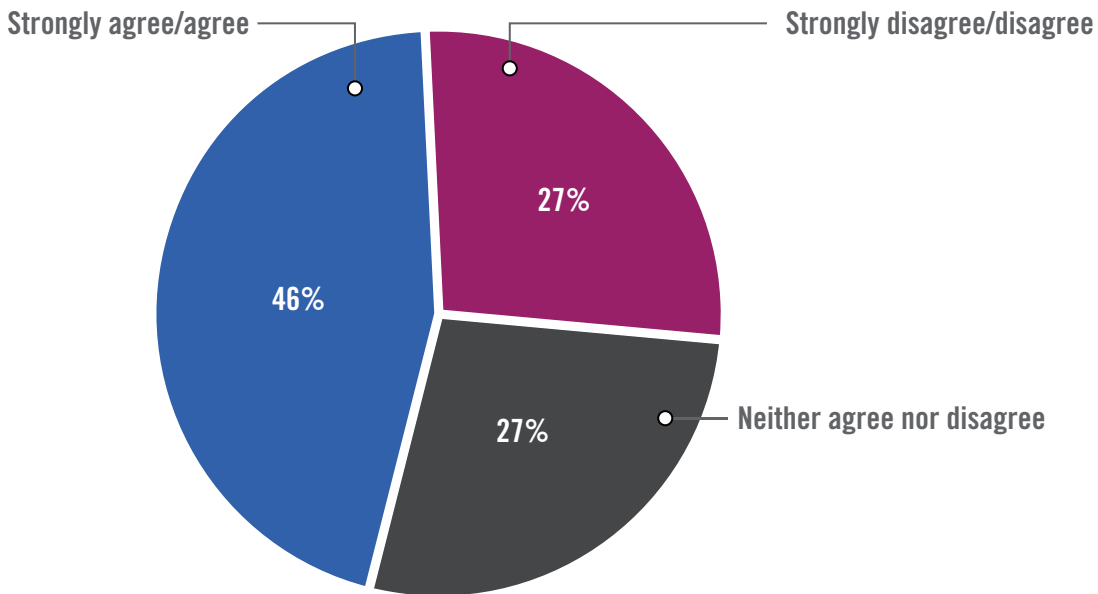
Have Audit Functions Accelerated, Decelerated, or Otherwise Changed Their Current Use or Intended Adoption of New Technology in Response to the Conditions of 2020?

Given the results cited above, it is apparent that internal audit functions realize the need for digital transformation and automation. The global pandemic and changing conditions in 2020 influenced internal audit's move to automation, including the increasing use of cloud-based technology by those already adopting (46 percent) in response to changing conditions. It is also evident that those functions relying on manual technology see the importance of moving forward, as 36 percent indicate their audit function plans to implement audit management or GRC software after 2020.

When examining various demographics, technology adoption was most highly correlated to department size; small internal audit functions with a staff size of 1–5 were significantly more likely to be operating in a manual environment with no plans to implement audit management or GRC software. These small functions may be missing the opportunity to use technology to free up limited resources and provide greater service to their organizations.

FIGURE 2
Planned Technology Implementation (Dependent on Audit Function Size)
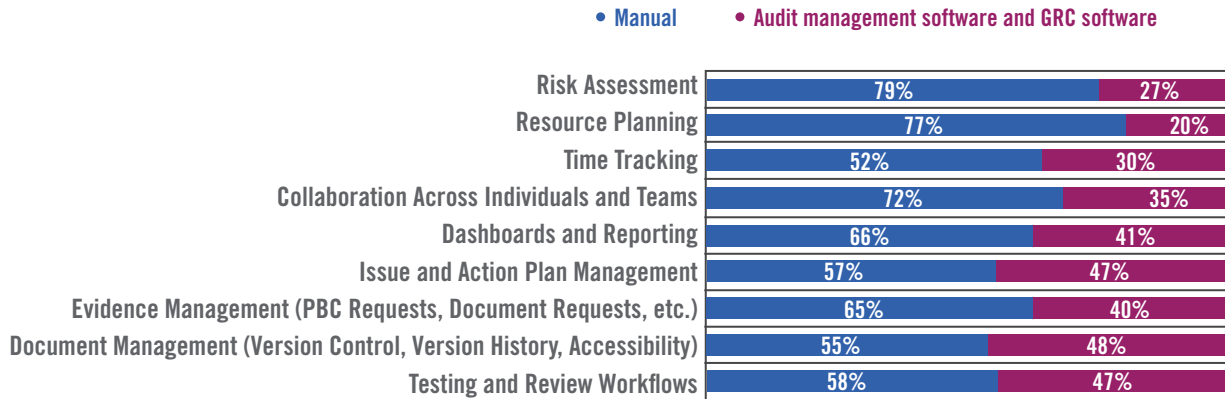

Audit Function Size
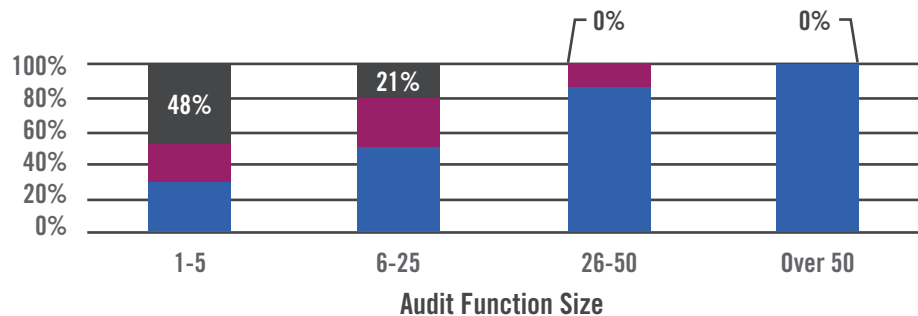
- In a "manual" environment, and not planning on implementing audit management or GRC software after 2020

- In a "manual" environment, and planning on implementing audit management or GRC software after 2020

- Already using audit management or GRC software

***What Is the Most Effective Type of Technology for Helping Audit Teams Succeed
in Their Response to Changing Conditions?***

Internal auditors use audit management and GRC software to manage a wide
variety of activities. However, many automated functions still take a manual
approach to strategic activities such as risk assessment, resource planning, and
collaboration. The top three use cases of audit management and GRC software
are related to streamlining key audit activities: document management, issue and
action plan management, and testing and work reviews. One respondent indicated
that internal auditors have more time for strategic activities when administrative
activities are automated. While this is true, it suggests that internal auditors may
not fully understand how technology can be leveraged to drive departmental and
business value.

FIGURE 3
Internal Audit Activities and Technology

● **Manual**   ● **Audit management software and GRC software**

Activity	Manual	Audit management software and GRC software
Risk Assessment	79%	27%
Resource Planning	77%	20%
Time Tracking	52%	30%
Collaboration Across Individuals and Teams	72%	35%
Dashboards and Reporting	66%	41%
Issue and Action Plan Management	57%	47%
Evidence Management (PBC Requests, Document Requests, etc.)	65%	40%
Document Management (Version Control, Version History, Accessibility)	55%	48%
Testing and Review Workflows	58%	47%

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Choosing the Approach

At a time of unprecedented disruption, internal audit functions have made steady progress toward automation. Internal audit leaders are realizing that the shift to cloud-based solutions can help to address common challenges faced by internal audit. According to Bhakta and O'Reilly, CAEs should consider the following when choosing the best approach to technology.

Manual Approach

A manual approach using spreadsheets, email, shared drives, and SharePoint is inexpensive because the infrastructure already exists within the organization. However, internal audit functions taking a manual approach may face several challenges.

Manual activities tend to be time-consuming and redundant. For example, a piece of information (such as a control description) might need to live in multiple locations, such as in the test sheets, risk control matrix, narrative or flowchart, walk-through document, and issue record. Anytime that a change is made to the control description, it needs to be made in each location. This requires extra time and each change is open to error. This approach presents version control and change management risks.

Another potential problem is the negative impact on morale. Internal auditors may become dissatisfied and less engaged with their work as they are drawn into administrative work that is not rewarding and not linked to what matters most to their organizations.

On-premise Solutions

Of the three technology approaches explored (manual, on-premise, and cloud-based), on-premise audit management and GRC solutions have the highest cost of ownership. On-premise solutions require the organization to have dedicated hardware and IT resources for support and maintenance. On-premise software is limited to organizational constraints such as limited bandwidth, which may cause latency issues—such as documents taking a long time to open—and work to become inefficient.

A potential advantage of on-premise solutions is that the organization has more control over security. However, more control does not necessarily mean better security. The security of today's software-as-a-service (SaaS) solutions is often more advanced than that of the organization buying the application.

Cloud-based Solutions

One of the greatest advantages of cloud-based solutions is that they are accessible from anywhere, anytime, supporting a more distributed work environment today and in the future. Cloud-based solutions offer additional advantages over other technologies in that they are more secure than manual solutions and are far easier to implement and administer than on-premise solutions. Cloud-based solutions are offered as a service, reducing the cost of maintenance and offering increasing value over time, as new features and improvements are deployed to the benefit of existing and new customers.

A final consideration that may make a difference in the path taken by internal audit teams is understanding nuances in approval processes relative to the purchase options. Cloud-based investments are considered operational expenses (OpEx), which are often favored by chief financial officers (CFOs) and may have a streamlined purchase process compared to on-premise investments, which are considered capital expenses (CapEx) and often subject to additional scrutiny. When choosing the best approach, CAEs should become very familiar with the organization's operational expense and capital expense approval processes.

The Risk Management Benefits of Modern Technology

According to the survey, identifying and evaluating new and emerging risks was the top challenge for internal audit functions in 2020. Other top challenges included collaborating remotely with stakeholders, communication and follow-up with business owners, and time wasted on manual and administrative tasks.

Top Challenges for Internal Audit Functions in 2020
Identifying and evaluating new and emerging risks.
Collaborating remotely with internal and external audit stakeholders.
Communication and follow-up with business owners.
Wasting time and resources on manual and administrative tasks.

Modern, cloud-based audit management and GRC software can yield a healthy ROI in addressing these challenges. They can enable:

- An Agile risk assessment process, compressing the risk assessment process from a matter of several months to a week or two.

- Improved audit team productivity and communication.

- Collaboration across the organization, including enabling combined assurance, providing the organization with broader coverage.

- Better visibility into risk and assurance status and trends.

- Increased ownership and accountability of controls.

- Improved accessibility to enable a distributed workforce.

- Time and cost savings.

According to IIA President and CEO Richard Chambers, "It is important that organizations recognize that technology investment in internal audit can be a capacity multiplier when done strategically, and internal auditors must be prepared to make the case on the return on technology investments. This is where having a change-agent mindset helps. We know the technology exists to make internal audit more effective and efficient, so we must be **bold enough** to advocate for the change and investment that create value."[6]

On the path forward, CAEs need to first understand how cloud audit management and GRC software can enable internal audit to provide more value to the organization, and second, to successfully communicate the need for digitization and technology to executive management and the board.

A final thought for CAEs from Tim Berichon, The IIA's director of insights and intelligence: "Don't delay digital transformation. Start by applying more of your current operating budget to automation, monitoring the outcomes, and using this success to communicate the need for further investment in digitization and technology."

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[6] Richard F. Chambers, *Agents of Change: Internal Auditors in an Era of Disruption* (Lake Mary, FL: Internal Audit Foundation, 2021).
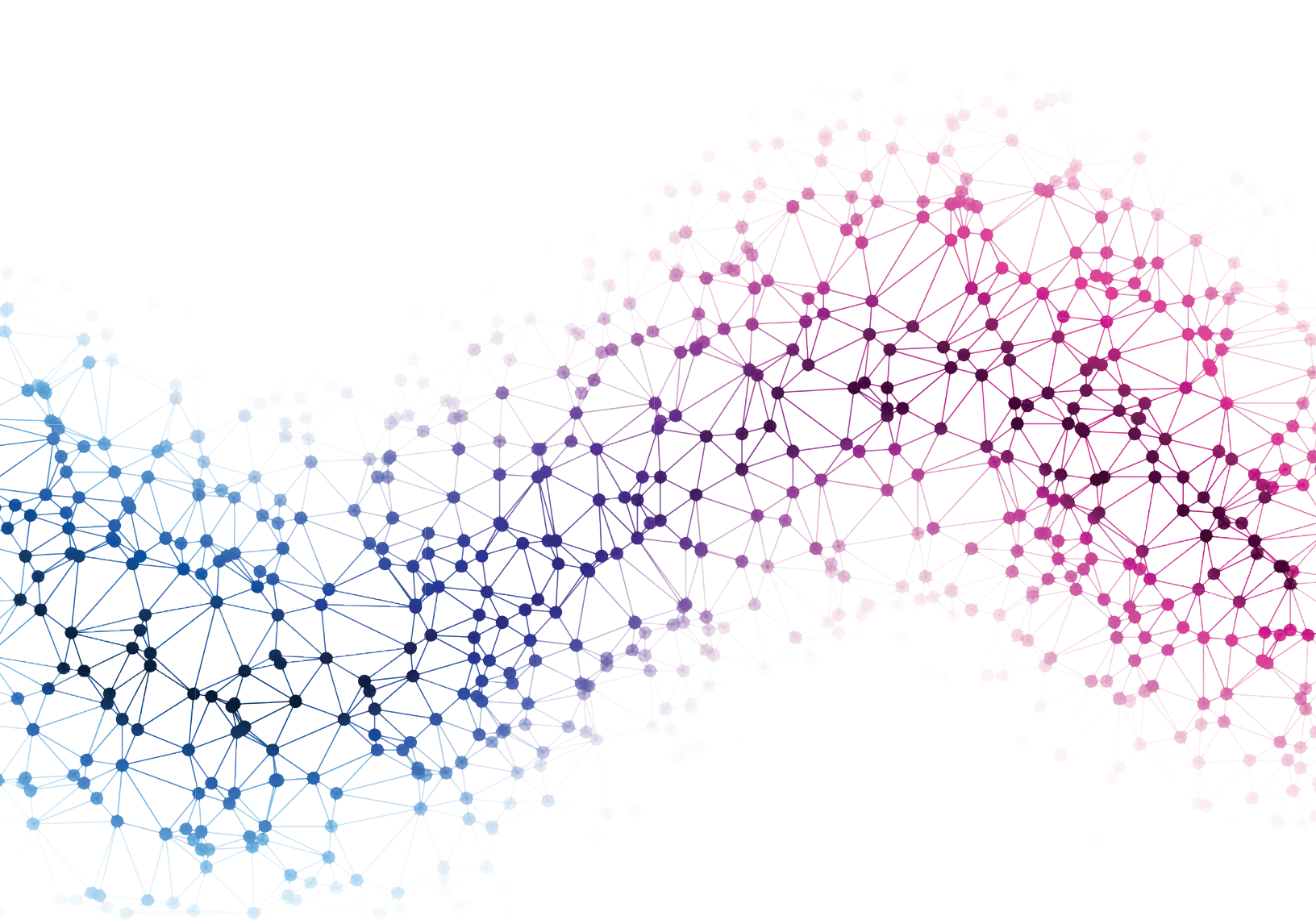
ABOUT AUDITBOARD

AuditBoard is the leading cloud-based platform transforming how enterprises manage risk. Its integrated suite of easy-to-use audit, risk, and compliance solutions streamlines internal audit, SOX compliance, controls management, risk management, and workflow management. AuditBoard's clients range from prominent pre-IPO to Fortune 50 companies looking to modernize, simplify, and elevate their functions. AuditBoard is the top-rated audit management software on G2, and was recently ranked as the third fastest-growing technology company in North America by Deloitte. For more information, visit www.auditboard.com.

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The Internal Audit Foundation strives to be an essential global resource for advancing the internal audit profession. The Foundation's research and educational products provide insight on emerging topics to internal audit practitioners and their stakeholders and promotes and advances the value of the internal audit profession globally. Through the Academic Fund, the Foundation supports the future of the profession by providing grants to students and educators who participate in The IIA's Internal Auditing Education Partnership Program. For more information, visit www.theiia.org/Foundation.