

The Future of the Audit: **Building Relevance and Sustaining Quality**



OUR EXPERTS



Christina Ho, CPA, CISA



Kimberly Ellison-Taylor,
CPA, CGMA, CISA,
CITP, CIA



Deanna Byrne, CPA



Jerry Maginnis, CPA



Allison M. Henry,
CPA, CGMA

TABLE OF CONTENTS

| | |
|-------------------------------------------------------------------|----|
| Executive Summary | 3 |
| Methodology | 4 |
| Our Experts | 4 |
| Survey of Auditors | 4 |
| Modernizing Audits for Sustained Relevance | 5 |
| Technological Challenges and Risks to Traditional Audits | 9 |
| Technologies Driving Change | 10 |
| Addressing the Technology Gap | 13 |
| Security and Compliance Risks | 13 |
| Advocacy and Standards for Audit Modernization | 15 |
| Regulatory Innovation and Recommendations | 15 |
| Role of Professional Bodies and State Societies | 16 |
| Audit Quality and Accountability | 17 |
| Talent and Workforce Impacts on the Modern Audit Landscape | 18 |
| Building a Technology-Savvy Workforce | 18 |
| Talent Retention Strategies | 19 |
| Path Forward for the Audit Profession | 20 |
| Immediate Actionable Steps for Audit Firms | 20 |
| Long-Term Outlook: Transforming Audits for Future Relevance | 21 |
| Meet the Experts | 22 |
| Survey Demographics | 23 |
| About TSCPA | 26 |
| About CPA Crossings | 26 |
| References | 27 |

Executive Summary

What must the audit profession do to stay relevant and trusted?

Whether we acknowledge it or not, the audit profession is in the middle of a radical transformation. Facing a confluence of challenges—technological disruption, shifting regulatory landscapes, and critical talent shortages—the profession must evolve rapidly or risk obsolescence. Traditional methods, once sufficient, can no longer meet the demands of an increasingly complex financial reporting ecosystem.

This in-depth research project takes a bold and forward-looking approach, weaving together expert insights and data-driven analysis to provide a roadmap for sustained relevance and effectiveness. Central to this vision is the strategic adoption of technologies that not only automate repetitive tasks but also reveal deep insights, aiding in risk assessment, enhancing substantive assurance, and adding valuable business insights. Artificial intelligence (AI) and machine learning offer the power to analyze immense datasets with speed and accuracy, uncovering risks in real time. Blockchain and advanced data analytics add transparency and rigor, enhancing the trust that underpins every financial transaction. Yet, for smaller and midsize firms, resource constraints pose formidable barriers, highlighting the need for scalable, cost-effective solutions.

Beyond technology, this study confronts the workforce challenges reshaping the profession. As traditional roles give way to more dynamic, analytical responsibilities, firms must invest in developing a new generation of auditors equipped with skills in data analytics, AI, and strategic advisory functions. Diversity, inclusion, and innovative talent strategies—such as flexible work arrangements and personalized career pathways—will be critical to attracting and retaining top talent.

Our findings point to five essential areas of focus:

- Modernizing audits to maintain relevance in a rapidly changing environment
- Addressing the technological risks and barriers inherent in traditional approaches
- Advocating for updated and forward-thinking regulatory standards
- Proactively managing talent shifts to ensure a robust, future-ready workforce
- Preparing for the future of audits by incorporating real-time insights and providing assurance on nontraditional subject matters (e.g., algorithms and AI systems, nonfinancial data, and environmental, social, and governance (ESG) metrics)

This paper does more than analyze problems, it also presents actionable solutions. We recommend that firms leverage emerging technologies, champion regulatory reform, and develop innovative workforce strategies. In doing so, the profession can secure its foundational role as a cornerstone of financial trust, maintain market stability, and deliver enhanced value to stakeholders. In an era defined by unprecedented change, the path forward is clear: embrace the forces reshaping auditing, meet challenges head-on, and seize the opportunities that innovation and foresight provide. The future of auditing is not a continuation of the past—it is a reinvention of the principles that have traditionally defined trust, transparency, and accountability in financial systems.

Methodology

This *The Future of the Audit: Building Relevance and Sustaining Quality* report explores the evolving landscape of audit quality and the modernization of auditing practices. To gain a comprehensive understanding of the challenges and opportunities facing auditors today, we employed a mixed-methods approach that combines qualitative expert insights with quantitative data collected through a survey of auditors.

Our Experts

We interviewed leading professionals from the auditing and accounting technology fields. These include a member of the Public Company Auditing Oversight Board (PCAOB), members of corporate audit committees, and audit technology specialists. Their perspectives on technology, regulation, and workforce challenges provide the backbone for our analysis.

- **Christina Ho, CPA, CISA** – Appointed as a PCAOB board member by the SEC in November 2021.
- **Kimberly Ellison-Taylor, CPA, CITP, CGMA, CIA, CISA** – A global technology and finance leader with over 30 years of experience.
- **Deanna Byrne, CPA** – PwC US Assurance Leader with over 35 years of experience.
- **Jerry Maginnis, CPA** – Chairs audit committees for several public companies.
- **Allison M. Henry, CPA** – PICPA vice president, professional and technical standards.

Full author bios are provided at the end of the paper.

Survey of Auditors

To complement our expert interviews and insights, we conducted a survey of auditors from firms of various sizes. Full demographics of survey participants can be found on pages 23-25.

Our survey reached auditors from firms of various sizes and geographic locations. It focused on:

- **Technology Adoption:** Integration of AI, machine learning, and other technologies.
- **Workforce Transformation:** Impact on skills, training needs, and workforce dynamics.
- **Regulatory Environment:** How changing standards affect audit practices.
- **Future of Audits:** Predictions for real-time assurance and the inclusion of nonfinancial metrics.

Survey findings reveal widespread support for technological innovation, alongside significant challenges related to cost, training, and regulatory adaptation.

By combining survey data with expert insights, this study provides a well-rounded perspective on the modernization of audit practices. The results contribute to a clearer understanding of the evolving role of auditors, the challenges they face in adapting to new technologies, and the opportunities for growth and innovation in the audit profession.

Disclaimer: The perspectives, insights, and opinions expressed by the subject matter experts in this paper represent their personal viewpoints and experiences, and do not necessarily reflect the official policies, positions, or views of their affiliated organizations, employers, or institutions. Additionally, the analysis and conclusions provided herein are derived from the information available at the time of writing, which may evolve as new data or regulatory guidance emerges. Readers are encouraged to consult primary sources, relevant regulatory bodies, and professional advisers for specific guidance before making decisions based on the information presented in this paper.

Modernizing Audits for Sustained Relevance

“There is a responsibility to protect investors and facilitate innovation rather than adding more burdens. We should be creating guidance and facilitating collaboration across the ecosystem, because technology is nuanced. We can't do standard-setting and rule-making the same way we have been, as by the time we put out a proposal it becomes obsolete.” — Christina Ho

Trust is the bedrock upon which every financial transaction, investment decision, and regulatory action rests. Without trust, markets would falter, economies would stagnate, businesses would crumble, and the public would pay the price. Audits play an indispensable role in fostering that trust, serving as the primary mechanism for providing stakeholders with assurance about the integrity, accuracy, and reliability of financial information. Yet, the auditing profession finds itself at a critical crossroads. In the face of unprecedented technological advancements, escalating regulatory scrutiny, and shifting market dynamics, traditional auditing practices are increasingly being seen as inadequate to meet the complexities of the modern business landscape.

The emergence of nonfinancial metrics—such as sustainability claims, technological innovations, and ambitious growth projections—has dramatically broadened the scope of what auditors are able to evaluate. Investors now seek deeper insights into risks and opportunities that extend far beyond financial statements. As a result, there is an urgent call for an audit framework capable of addressing this expanded landscape, one that can evaluate the full spectrum of risks and metrics critical to modern decision-making. Below, we have identified areas of concern that underscore the urgent need for the modernization of audits:

1 The Role of Audits in Maintaining Trust:

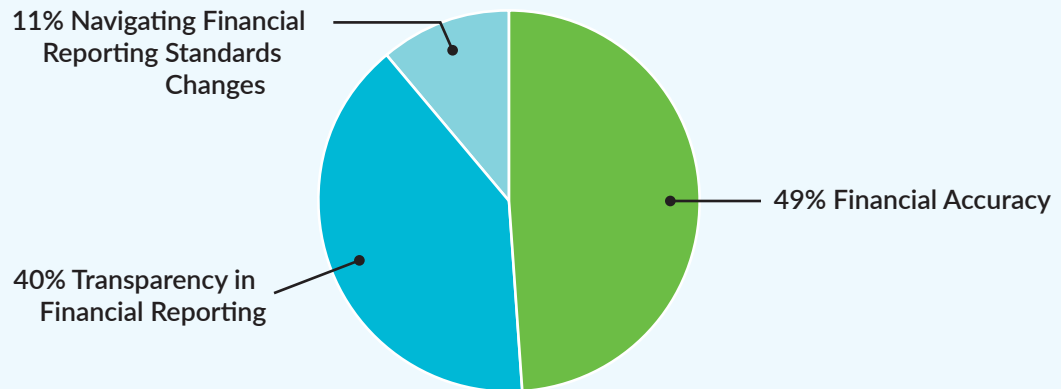
The role of audits has always been to preserve trust by ensuring the accuracy, reliability, and integrity of financial reporting.

However, as technology evolves and the opportunity for audit services expands beyond the financial statement reporting system, traditional auditing methods are increasingly ill-suited to meet the demands of the modern business environment. Auditors must adapt to this changing technological landscape with new tools and methodologies that allow them to assess not just financial performance but also nonfinancial risks, technological claims, and the broader corporate narrative.

With the audit's vital role in maintaining trust, it is essential to recognize the evolving expectations placed on auditors. Figure 1, on page 6, sheds light on the key aspects that auditors and investors alike deem most crucial in upholding the integrity of audits. The survey highlights that while financial accuracy remains paramount, transparency in financial reporting has become equally significant. However, as auditors navigate these traditional aspects, the profession faces growing pressure to adapt to a rapidly changing landscape. According to the survey, 49% of auditors emphasize financial accuracy as the most critical aspect of audits, underlining its continued significance in ensuring the integrity of financial statements. In addition, 40% of respondents stress the importance of transparency, reflecting the growing demand for clear and accessible financial data. These findings underscore the need for modern audit frameworks that can adapt to a rapidly changing business and regulatory environment.

FIGURE 1

Key Aspects of Audits Valued by Investors: Insights from Audit Professionals



2 Manipulation of Key Metrics: The rise of nonfinancial metrics—ranging from sustainability claims to technological projections—has added a layer of complexity that traditional audits were never designed to address. Companies today are increasingly leveraging metrics such as carbon emissions reductions, technology capabilities, and growth potential to shape investor perceptions. While companies have always made marketing claims aimed at attracting customers and investors, increased reliance on data and evolving perceptions on value creation have led many investors to prioritize these claims in their decision-making. Consider the rise in “impact investing.” Metrics used in this area, unfortunately, are often subject to manipulation, whether through the overstatement of achievements or the omission of critical information. One prominent example is the case of Trevor Milton. The U.S. Securities and Exchange Commission (SEC) accused him of using “his extensive media platform to repeatedly mislead investors about, among other things, Nikola [Motor]’s technological advancements, products, in-house production capabilities, and commercial achievements.” (U.S. Securities and Exchange Commission, 2021) These statements go beyond the financial reporting systems. The International Auditing and Assurance Stan-

dards Board (IAASB) has recognized the growing challenge of auditing nonfinancial metrics, urging auditors to expand their focus to include areas like ESG data, technological claims, and social impact indicators.

The Volkswagen emissions scandal (also known as “Dieselgate”) provides another lesson on the necessity of adapting audit practices to detect risks beyond the financial statements. In this case, the company’s fraudulent emissions tests were covered up for years. The scandal revealed the kind of value auditors could bring in expanding their engagements to include nonfinancial metrics—such as regulatory compliance and environmental impact. Auditors should consider broadening the scope of their services to include nonfinancial metrics, which are becoming increasingly relevant to investors and regulators.

Companies that exaggerate or falsify such metrics—sometimes referred to as “greenwashing” or “AI-washing”—mislead investors, inflate stock prices, and obscure the true financial health of an organization, especially startup companies. As investors increasingly seek out companies that align with sustainability or innovation goals, these nonfinancial metrics have become integral

to decision-making. However, without a robust auditing process in place to verify claims, investors are left vulnerable to false promises and misleading information.

- 3 **“Fake It ‘Til You Make It” Culture:** A “fake it ‘til you make it” culture is flourishing, particularly within the startup ecosystems. Companies often feel the pressure to portray rapid growth or technological breakthroughs to secure funding, and this pressure frequently results in the deliberate inflation of critical metrics, such as exaggerated revenue forecasts, inflated customer acquisition figures, and unsubstantiated claims about future technological developments. Companies, especially those in high-growth sectors like technology, are adopting these misleading practices to attract venture capital investments or satisfy market expectations.

The inflated metrics often bypass traditional financial statement audits, leaving investors exposed to significant risks. A stark example is the Theranos scandal, in which the company’s founder and CEO significantly overstated the capabilities of its blood-testing technology. Theranos, at one point valued at \$9 billion, misled investors through false claims of technological innovation and notably lacked rigorous financial statement audits. This situation highlights a crucial vulnerability: traditional audits, which focus primarily on historical financial data, often fail to capture nonfinancial metrics or forward-looking projections, which can be equally misleading to investors.

The issue has garnered attention from regulators. The SEC has begun to crack down on companies that engage in deceptive practices to mislead investors. By promoting an overly optimistic vision of their potential, companies such as Theranos and Nikola have disrupted investor trust, demonstrating

the potential value auditors could provide if the scope of their engagements could be expanded to focus not just on historical financial performance but also on key metrics outside of the financial statement ecosystem. This concern underscores the pressing need for a comprehensive auditing approach that evaluates both current and future performance claims to ensure they align with actual results.

- 4 **Technology Disintermediation:** The rapid advancement of technology has brought both transformative opportunities and significant disruptions to the auditing profession. Innovations in artificial intelligence (AI), machine learning, and blockchain are reshaping how audits are performed, allowing auditors to analyze and validate financial data with unprecedented accuracy. AI-driven systems can detect accounting risks and discrepancies in real-time, often identifying issues before they become publicly visible. These systems not only improve the precision of audits but also enable comprehensive, 100% analysis of entire financial populations, far surpassing the limitations of traditional sampling techniques.

However, the rise of AI-driven models presents a growing concern. For instance, an AI system developed by Hudson Rock identified potential accounting risks at Supermicro two years before these issues were disclosed publicly. As Blake Oliver highlighted in *The Accounting Podcast*, “If AI can surface these audit problems before companies can, people aren’t going to want to pay \$4.5 million for an audit.” (*The Accounting Podcast*, 2025) This statement captures a key concern: as technology advances, traditional audit models may increasingly seem obsolete. The possibility of disintermediation – the removal of an independent intermediary – is real. As AI

and machine learning systems become more capable of identifying discrepancies and risks faster and more accurately than human auditors, companies might bypass audits altogether in favor of cost-effective, technology-driven solutions.

These technological advancements promise remarkable improvements in audit efficiency and accuracy, but they also raise important questions about the future of human auditors. If AI can detect accounting issues before they surface in financial statements, the conventional audit process of periodic assessments and sample-based testing becomes less relevant. This technological disruption demands a fundamental shift in how auditors approach their work, urging them to integrate these technologies while ensuring that human judgment, oversight, and expertise remain central to the audit process. Auditors and investors alike should be skeptical of the perception of trust that technology creates, and they should continue to rely on human expertise to achieve real assurance. The future of auditing lies in combining cutting-edge technology with the critical thinking and decision-making that only human auditors can provide, balancing efficiency with accountability in financial reporting.

The Urgent Need for Audit Modernization

The need for audit modernization is not merely an operational shift; it is an existential necessity for the profession. Audits must evolve to incorporate real-time data analysis, automated risk detection, and comprehensive evaluation of both financial and nonfinancial metrics. This evolution will enable auditors to continue fulfilling their role as trusted financial consultants, ensuring that the public, investors, and regulators can continue to rely on the integrity of financial information.

This paper delves deeply into the urgent necessity for modernization within the auditing profession. It examines the challenges of today's environment, the critical role of emerging technologies, and the evolving regulatory landscape. By embracing these innovations and addressing these challenges head-on, auditors can ensure their continued relevance in a world where enhanced transparency, accuracy, and trust are more vital than ever before. Through intentional modernization, the audit profession can continue to safeguard market stability, protect stakeholders, and uphold public trust in the financial system.

Technological Challenges and Risks to Traditional Audits

“Technologists will get to trust before the profession understands technology. But we need to stay engaged so that when things go wrong we’ll be there to save the day.” — **Kimberly Ellison-Taylor**

The shift toward technology-driven audits is ushering in a profound transformation, challenging the foundations of traditional auditing practices. Technologies like blockchain and AI are automating tasks that auditors have long handled manually, reducing the reliance on conventional methodologies that once formed the backbone of the profession. Blockchain, with its immutable ledger, and AI, equipped with the ability to detect anomalies and predict trends, are revolutionizing how audits are conducted. Yet, the swift adoption of technology raises an important concern: the risk of disintermediation. On this issue, Jerry Maginnis shared concerns that if the profession doesn’t “stay on top of technology, there is a risk that investors may get their information from big tech companies,” highlighting a potential risk to both audit firms and investors. As automation takes over more routine audit tasks, auditors could find themselves

sidelined, their role diminished in an era dominated by AI and machine learning. However, this rapid technological evolution also opens new possibilities for auditors to enhance the quality and accuracy of their work in ways previously unimagined.

Figures 2 and 3 highlight a shift in auditors’ perceptions of technology’s role. While 43% acknowledged technology’s transformational impact over the past five years, 56% expect transformational impact in the next five years. This indicates growing awareness of technology’s expanding influence in shaping the profession. Those who view technology as having a moderate impact over the past five years decreases from 48% to 33% when looking forward to the next five years, reflecting a recognition of technology as a driving force for change. The percentage of respondents who felt technology had little

FIGURE 2
Auditors’ Views on the Impact of Technology on Audit Work Over the Last Five Years

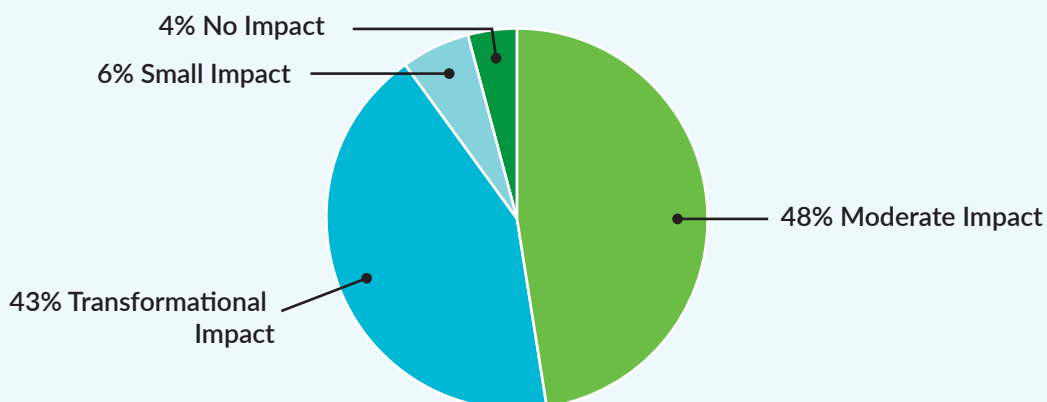
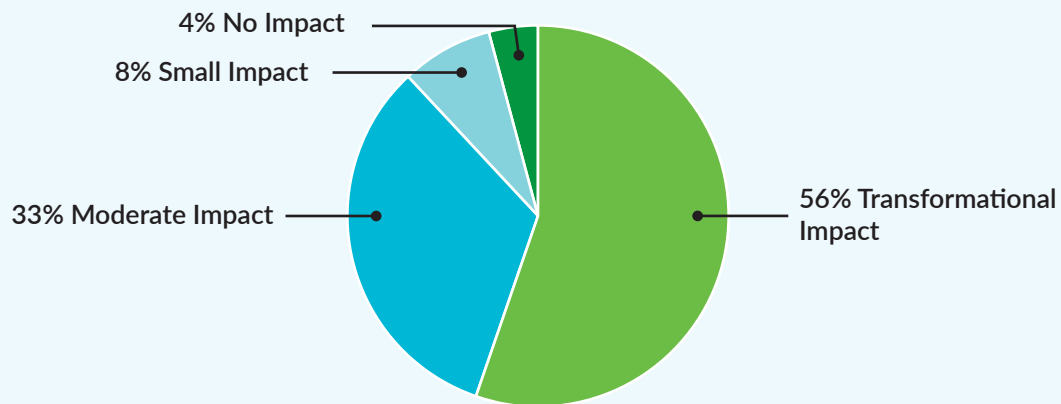


FIGURE 3

Auditors' Views on the Impact of Technology on Audit Work Over the Next Five Years



or no impact was low when looking backward and forward, signaling a broad consensus on its increasing influence.

Overall, the data points to an evolving mindset among auditors—one that acknowledges the accelerating pace of change and the necessity of adapting audit practices accordingly. This forward-looking perspective emphasizes the importance of continued innovation, upskilling, and strategic investment in technology to remain relevant and effective in the years ahead.

Technologies Driving Change

As technology continues to disrupt and redefine audit practices, it brings with it both unprecedented opportunities and challenges. AI, for example, empowers auditors to rapidly analyze vast datasets, identify anomalies, and streamline operations. Meanwhile, the adoption of cloud-based audit solutions has revolutionized data accessibility, allowing auditors to collaborate remotely and efficiently, a crucial advantage in today's fast-paced, global business environment.

Simultaneously, blockchain technology enhances the security and reliability of financial records, providing transparency and immutable record-keeping that reinforce trust in the audit process. Data analytics further strengthens the audit function, offering deeper insights and

enabling audits to become more predictive rather than merely retrospective.

Experts such as Deanna Byrne highlight that AI, rather than replacing human judgment, acts as a powerful tool to enhance auditors' capabilities. Byrne says, "Businesses—including PwC—are entering the second phase of business adoption of generative AI (GenAI), with a focus on how to create meaningful and responsible solutions. At PwC, we're embedding AI into our assurance services to enhance efficiency, further enable our people to focus on areas requiring human judgment, and identify insights and risks. We're doing all of this while maintaining and further enhancing audit quality and professional integrity. We have also updated our business rules governing the use of GenAI capabilities in the audit, which has been supplemented with additional trainings to help our people navigate this technology. AI will bring significant changes to our clients and new risks to the audit, requiring a responsible approach to its integration and ongoing monitoring or assessments of effectiveness."

Leading firms such as PwC are already advancing GenAI applications to streamline audit processes, improve efficiency, and strengthen risk assessment, all while maintaining the highest standards of audit integrity.

FIGURE 4

Auditors' Perspectives on How Technology Has Impacted the Quality of Audit Work

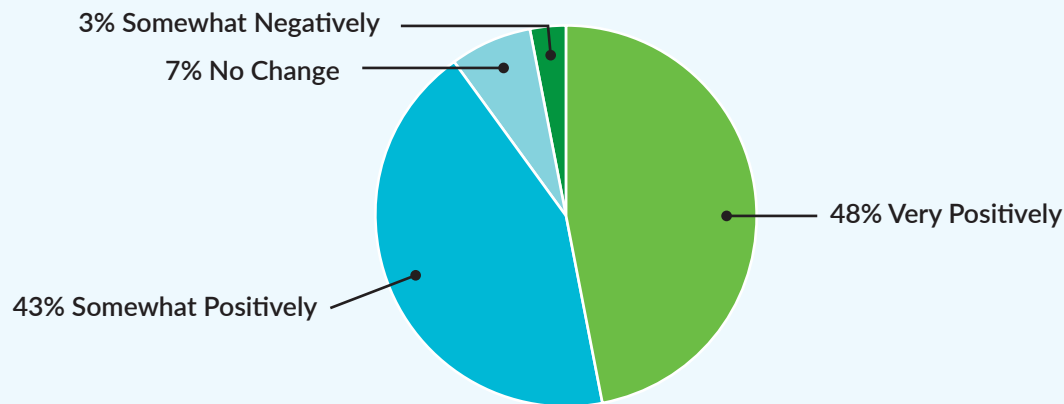


Figure 4 illustrates the growing consensus among auditors about technology's positive impact on audit quality. A near majority (48%) report that technology has had a "very positive" effect, while 43% acknowledge a "somewhat positive" impact. This broad acceptance of technology's benefits highlights its central role in driving more strategic, data-driven audit decisions and reinforcing the value of audits in an increasingly complex business world.

As the profession continues to evolve in response to these technological advancements, it is vital that auditors not only embrace new tools but also proactively manage emerging risks. For example, as more audit processes move to cloud-based platforms, the risk of data breaches increases. Auditors must remain vigilant, ensuring that the tools they use are secure, compliant with industry standards, and capable of safeguarding client data.

AICPA Recommendations

Recognizing the transformative impact of these technologies, the American Institute of CPAs (AICPA & CPA Canada, 2020) established recommendations for integrating AI and automation into auditing practices. These recommendations focus on the following:

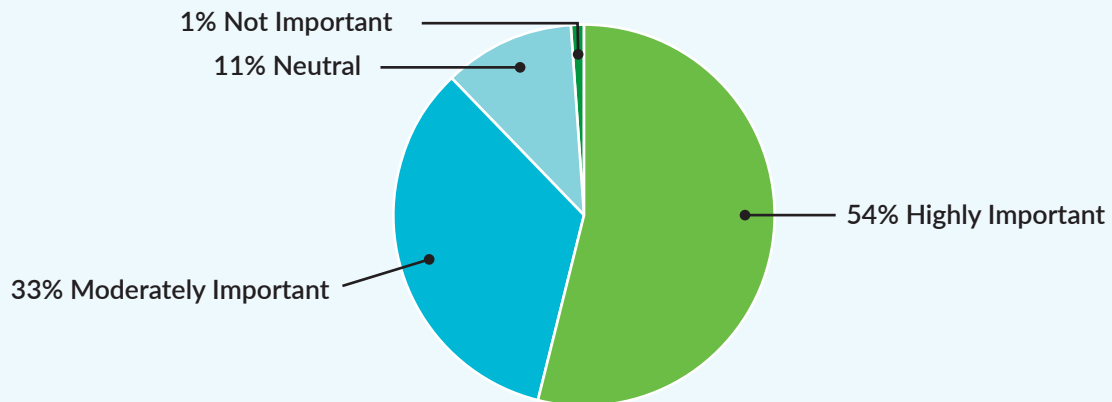
- **Pre-engagement and Planning:** AI can support

the gathering and analysis of data for risk assessments, using tools like Natural Language Processing (NLP) to scan financial documents. Auditors must ensure that AI tools use reliable data and address any biases in the technology, while safeguarding client privacy and ensuring compliance with cybersecurity standards.

- **Audit Fieldwork:** Automation and AI can help streamline tasks such as data validation, contract reviews (using optical character recognition), and expense analysis. However, auditors should critically evaluate AI-generated outputs, considering the context and the potential for errors. Real-time auditing is becoming more feasible, with AI identifying and validating transactions as they occur.
- **Challenges and Considerations:** AI tools must be continually monitored and trained to avoid data integrity issues, particularly when processing large datasets. Auditors must still apply professional judgment in complex areas such as estimates or detecting outliers. Data privacy, security, and the transparency of AI decision-making remain key concerns.
- **Skills and Knowledge Development:** To effectively integrate these technologies into their work, auditors will need to enhance their understanding of AI, data science, and machine learning.

FIGURE 5

Importance of Including Nonfinancial Aspects in Audits
(e.g., ESG, blockchain, smart contracts, algorithms)



Stakeholder Expectations

Modern stakeholders are increasingly seeking assurance on a broad range of data that extends beyond traditional financial reports to encompass nonfinancial metrics. Key expectations include:

- **Enhanced Data Transparency:** Stakeholders require detailed, accessible financial and nonfinancial data for informed decision-making.
- **Real-Time Insights:** Timely access to financial insights is crucial for agile, responsive decision-making.
- **Integration of Nonfinancial Metrics:** Inclusion of environmental, social, and governance (ESG) factors provides comprehensive evaluations that are essential for long-term strategic planning and investor decision-making.

Figure 5 highlights the growing importance of integrating nonfinancial aspects into audits. A significant portion (54%) of auditors believe that incorporating these aspects is “highly important,” while 33% consider them “moderately important.” This reflects the changing demands of stakeholders who now look beyond financial metrics to understand a company’s true value and

risks. The inclusion of ESG factors, technological developments, and other nonfinancial data points is becoming essential for providing a comprehensive, forward-looking audit.

Challenges and Barriers

Despite the advantages offered by these technologies, several barriers to broader adoption remain. According to the Center for Audit Quality (CAQ), common obstacles include:

- **Resistance to Change:** Many audit professionals and firms hesitate to adopt new practices due to comfort with traditional processes.
- **Financial Constraints:** Smaller firms, in particular, grapple with the high upfront investment costs associated with advanced technologies.
- **Technical Skill Gaps:** A shortage of expertise in AI, blockchain, and data analytics limits many firms’ ability to effectively integrate advanced tools.

To overcome these challenges, firms are increasingly turning to third-party technology solutions. Platforms that offer AI-powered risk assessment and journal entry testing, automated financial statement review systems, machine

learning tools for predictive analytics, and advanced data analytics solutions enable smaller firms to automate traditionally manual processes, improving efficiency and expanding the scope of audits without requiring substantial capital investment. These tools allow firms to analyze large datasets, detect anomalies, and streamline workflows, making advanced audit techniques accessible even to smaller organizations.

Addressing the Technology Gap

Jerry Maginnis underscores a critical issue facing smaller accounting firms: the lack of sufficient data and resources necessary for effectively training AI models. Larger firms generally possess expansive, diverse datasets, granting them a distinct advantage in AI capabilities. Without equitable access to comprehensive, anonymized datasets, a widening of the existing technology gap puts smaller firms at risk, limiting their ability to compete effectively and potentially compromising overall audit quality industrywide. Initiatives that focus on securely sharing encrypted, anonymized datasets across a sector could significantly mitigate this disparity, facilitating broader technological advancement and fostering higher audit standards universally.

PwC highlights that successfully integrating advanced GenAI platforms, such as ChatNational, ChatPwC, and Microsoft's M365 Copilot, requires firms to navigate intricate regulatory frameworks and compliance obligations. For smaller firms, this task is further complicated by high implementation costs and a scarcity of in-house technical expertise, as noted by the Center for Audit Quality (CAQ, 2023). These limitations exacerbate the technological divide, positioning smaller firms at a disadvantage relative to their resource-rich counterparts.

However, emerging technologies and AI-driven auditing solutions can offer smaller firms opportunities previously inaccessible, such as large-scale transaction testing and anomaly

detection. These tools enable smaller firms to enhance audit efficiency and quality without significant upfront investments, partially bridging the technology gap.

Regulatory and Human Factors in Technology Integration

Experts such as Christina Ho emphasize that while advanced data analytics and automation technologies have substantial potential to elevate audit quality through more rigorous and comprehensive analyses, unequal access remains a significant barrier to achieving these benefits industrywide. To address this disparity, Ho proposes the implementation of regulatory sandboxes—controlled environments designed to allow smaller firms to safely explore and integrate new technologies without immediate regulatory pressures or compliance risks. This is discussed further in the advocacy section of this paper.

Beyond access to technology, the effectiveness of automation in auditing depends on maintaining critical human oversight. Kimberly Ellison-Taylor cautions against excessive reliance on automation, emphasizing the indispensable role of professional judgment. Over-automation may diminish auditors' critical analysis capabilities, particularly when AI-generated conclusions lack transparency. If auditors cannot fully understand or explain how an AI program arrived at a conclusion, defending those findings in court would be a significant challenge. This underscores the need for a balanced approach—one that integrates technology with professional expertise—to maintain and enhance audit quality while ensuring conclusions remain defensible and well-reasoned.

Security and Compliance Risks

The extensive volume of sensitive financial data managed by audit systems significantly increases security and compliance risks. AI and blockchain technologies further amplify these concerns, as

they depend on the collection, storage, and analysis of vast datasets, making sensitive financial information increasingly vulnerable to breaches or misuse.

To address the heightened risks, audit firms must proactively invest in robust cybersecurity protocols and comprehensive compliance frameworks. This includes rigorous workforce training, advanced data encryption methods, secure data storage practices, and strict adherence to regulatory standards. By doing so, firms can effectively mitigate the potential risks posed by integrating advanced technologies into audit processes.

With the rise of cloud technologies, the associated risks—particularly cybersecurity concerns—become paramount. The risk of data breaches in cloud-based environments can be extraordinary, and auditors must remain vigilant

in ensuring that client data is secure, accessible only to authorized parties, and compliant with regulatory frameworks. As businesses increasingly rely on the cloud for data storage and processing, securing this information has become an essential focus for auditors. Cybersecurity protocols must evolve alongside technological advancements to ensure the integrity and confidentiality of financial data. Related legal and regulatory compliance requirements should be considered. The SEC, PCAOB, and AICPA also have requirements for maintaining client confidentiality.

Ultimately, by proactively addressing these security and compliance challenges, audit firms can fully harness the benefits offered by technologies such as AI and blockchain. This approach preserves the integrity of the auditing process and reinforces stakeholder trust in the accuracy and security of financial reporting.

Advocacy and Standards for Audit Modernization



Auditors are often in a compliance mindset rather than value creation, and the standards contribute to this dynamic.” — Jerry Maginnis

The effectiveness and quality of audits are deeply connected to the adaptability and strength of regulatory frameworks. Robust oversight not only ensures auditors’ independence and compliance but also reinforces stakeholder confidence in financial markets. As technology advances rapidly, regulatory bodies must evolve their standards to address emerging risks and challenges in the audit profession. Without regulatory innovation, audits risk becoming obsolete in the face of technological disruption. The goal should not be to preserve the status quo, but rather to foster a forward-thinking approach that maintains the credibility and effectiveness of audits in the digital era.

Regulatory Innovation and Recommendations

Ongoing monitoring of regulatory activities is crucial for high-quality audit standards, a remediation-focused inspection program, and a fair and accountable regulatory structure. The current regulatory burden is costly for both companies and auditors, particularly smaller firms that are opting out of public company audits, which may potentially undermine capital markets. A diverse range of audit firms is essential for market participation.

Recent PCAOB actions have led auditors to adopt a compliance-driven, checklist mentality that conflicts with the professional judgment required for high-quality audits. Key areas for evaluation include the costs of prescriptive guidance in U.S. generally accepted accounting principles (GAAP), SEC materiality thresholds, and litigation costs.

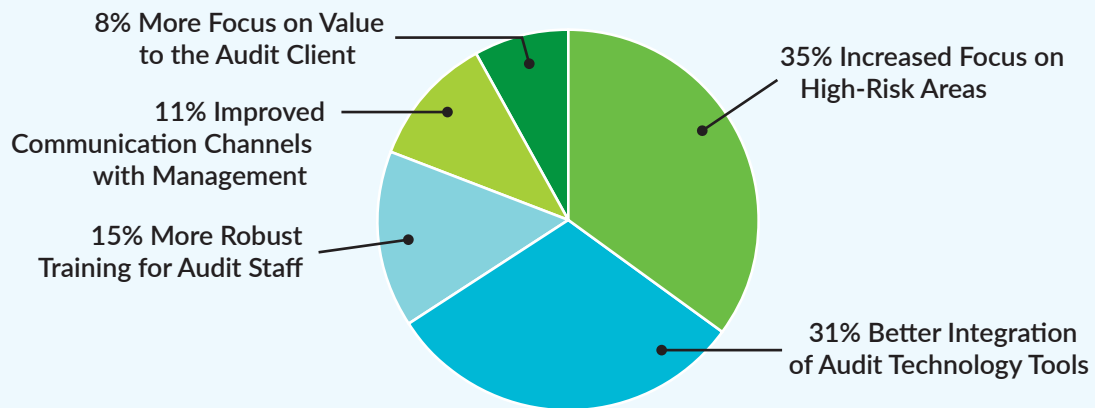
Deanna Byrne advocates for a regulatory approach that balances stability with the SEC’s and PCAOB’s missions to protect investors and support capital formation. She calls for thoughtful updates to audit standards that address emerging risks, emphasizing the need for a clear, structured implementation process. This should include stakeholder engagement, post-implementation reviews, and early guidance to ensure smoother transitions and better compliance. Byrne also notes that an evolving regulatory environment can hinder innovation as firms allocate resources to compliance rather than developing new solutions, highlighting the need for careful cost-benefit analysis when introducing new regulations.

Christina Ho underscores that regulatory bodies play a crucial role in facilitating technology adoption. The regulatory landscape is important in determining how audits evolve in response to technological advancements. Regulators must shift their approach from simply setting restrictive rules to actively facilitating innovation. By adopting more flexible, real-time frameworks, regulators can better support firms as they navigate the complexities of technology adoption.

One promising solution, proposed by Ho, is the concept of regulatory sandboxes. These controlled environments, to be established by regulatory authorities, allow firms—particularly smaller ones—to safely test and pilot innovative technologies without the immediate threat of regulatory penalties. By providing a structured space for experimentation, sandboxes offer critical regulatory oversight and guidance, enabling firms to explore new processes and solutions with reduced risk. This environment

FIGURE 6

Improvements Auditors Want to Make to the Audit Process



fosters real-time feedback on compliance and performance, allowing firms to refine their approaches while ensuring they stay aligned with regulatory standards. Regulatory sandboxes thus serve as a bridge, helping smaller firms navigate the complexities of technological adoption while fostering innovation across the profession.

The benefits of regulatory sandbox environments include:

- **Risk Mitigation:** Firms can identify and address compliance and operational risks early, reducing the potential for costly issues after full implementation.
- **Innovation Acceleration:** Firms gain confidence in adopting new technologies faster, helping to expedite innovation within the profession.
- **Learning and Adaptation:** Auditors can experiment, adapt, and refine technologies based on practical feedback, ensuring a smoother transition to broader deployment.
- **Enhanced Collaboration:** Regulators and firms can collaborate closely, fostering mutual understanding and alignment on regulatory expectations.

By offering regulatory support through sandbox environments, regulators can effectively boost

overall confidence in adopting innovative audit methodologies. Flexible standards and clear guidelines for new technologies are crucial for ensuring audit quality in a digital-first environment (CAQ, 2023).

Figure 6 shows how auditors perceive improvements to the audit process, emphasizing the need to increase focus on high-risk areas (35%), integrate technology into audits (31%), and enhance training (15%). These desired improvements resonate with the need for an updated regulatory framework that fosters innovation and supports both larger and smaller firms in adopting modern audit tools.

Role of Professional Bodies and State Societies

State societies play a crucial role in advocating for smaller firms, which are often underrepresented in regulatory discussions. Kimberly Ellison-Taylor highlights that these organizations can serve as vital champions for small and midsize firms by ensuring they have access to the necessary resources, training, and technological advancements needed to modernize their audit practices. By actively engaging in regulatory conversations, state societies help level the playing field, ensuring that the interests and challenges of smaller firms are not overlooked in professionwide policy decisions.

Beyond advocacy, professional bodies and state societies serve as essential drivers of education, technology adoption, and regulatory adaptation. Through specialized training programs, industry partnerships, and policy lobbying, they equip audit firms—particularly those with limited resources—with the tools needed to remain competitive and compliant. Their efforts extend beyond regulatory engagement, fostering a culture of transparency that strengthens public trust in the audit profession (IAASB, 2012).

Ellison-Taylor emphasizes that successful audit modernization requires a collaborative effort among auditors, regulatory bodies, professional organizations, and other stakeholders. By working together, these groups can develop forward-thinking frameworks that embrace technological innovation while preserving the core principles of auditing—trust, transparency, and accountability. This collective approach ensures that audits remain relevant, effective, and adaptable to the evolving demands of the financial landscape.

Audit Quality and Accountability

Maintaining and enhancing audit quality remains a top priority for audit committees, institutional investors, and regulators, such as the Department of Labor and Government Accountability Office. Audit committees strongly emphasize auditors' independence and their willingness to rigorously challenge management on critical issues, directly impacting perceptions of audit quality (IAASB, 2012). Institutional investors similarly prioritize the independence, reputation, and professional expertise of auditors, highlighting these factors as critical components influencing their trust in financial reporting (IAASB, 2012).

According to KPMG's Audit Quality Survey (2020), audit committees increasingly acknowledge the value of auditors actively challenging management decisions, with 82% observing heightened auditor scrutiny. This proactive stance, facilitated by enhanced professional skepticism and advanced data analytics, is integral to improving audit quality and reliability.

Talent and Workforce Impacts on the Modern Audit Landscape



Retention is my No. 1 talent concern – not the pipeline.” — Jerry Maginnis

The challenges outlined above—the pace of technological changes and steep learning curves they present, the punitive nature of regulatory inspection and enforcement, and complexity of standards—when combined with talent shortages, amount to a bona fide crisis for the profession and the public we serve. While technology may ease the burden of a smaller workforce, the profession must act urgently to build a culture of retention to meet the demand for real expertise.

Deanna Byrne recognizes that the next generation of auditors must possess a well-rounded skill set that blends traditional accounting expertise, technological proficiency, and strong professional judgment. While core audit and assurance competencies remain fundamental, mastery of AI, data analytics, and digital tools will be key to maintaining a competitive edge in the evolving audit landscape.

As the profession adapts to technological advancements, so too must its workforce. Christina Ho emphasizes that the increasing reliance on AI and data analytics demands a shift in auditor skill sets. However, smaller firms often struggle to attract and retain professionals with these specialized capabilities due to resource limitations. This talent gap is further exacerbated by the growing complexity of regulatory requirements, which can deter younger professionals from entering the field.

PwC underscores the necessity of targeted workforce development initiatives to address these challenges. Implementing tailored training programs, structured career development pathways, and comprehensive well-being initiatives are critical strategies for attracting

and retaining top audit talent. PwC’s innovative talent strategy, My+, prioritizes flexibility, personalized career growth, and customized incentives—ensuring that auditors remain engaged and equipped to navigate the profession’s evolving demands (PwC, 2024).

Building a Technology-Savvy Workforce

Modern auditors must now blend technical expertise with strategic advisory capabilities. The *2025 Workforce Transformation and Talent Management Strategies* report identifies this shift, emphasizing skills such as deep analytical thinking, proficiency with emerging technologies like AI and blockchain, and strong communication abilities essential for trusted advisory roles (CPA Crossings, 2025). This evolution demands that auditors proactively engage stakeholders, delivering predictive insights rather than mere transactional outputs.

Kimberly Ellison-Taylor points out that small firms face workforce transformation challenges. As technology becomes more integral to audit processes, smaller firms must find ways to offer their employees opportunities to engage with these technologies or risk losing them to larger firms that are investing heavily in advancements. State societies can assist by providing specialized training programs to help small firms upskill their workforce and stay competitive.

When adopting new technologies, it’s crucial for firms to focus on small wins and incremental improvements. Rather than attempting to overhaul entire systems or processes all at once, organizations can start by identifying specific,

manageable tasks that can benefit from automation or enhanced data analytics. This approach allows firms to test the waters, build confidence in new tools, and demonstrate value early on. By gradually integrating technology into existing workflows, firms can refine their strategies, address challenges as they arise, and achieve measurable improvements in efficiency. Over time, these incremental gains add up, leading to significant long-term advancements without the disruption that often accompanies large-scale technological changes.

The *2025 Workforce Transformation and Talent Management Strategies* provides actionable strategies that can significantly aid firms in developing a technology-competent workforce:

- **Prioritize Continuous Upskilling:** Adopt affordable, yet impactful, digital learning solutions, such as LinkedIn Learning, Coursera, Khan Academy, or Udemy, focused explicitly on analytics, cybersecurity, AI applications, and blockchain fundamentals.
- **Make Space for Innovation:** Identify a technology savvy point person and give them time to identify, evaluate, and champion new technology tools for enhancing efficiencies and/or making substantive audit quality improvements.
- **Leverage Professional Associations:** Maximize access to free or low-cost training resources provided by industry bodies such as the AICPA, state societies, and organizations like the Center for Audit Quality.
- **Create Partnerships with Educational Institutions:** Collaborate with universities and technical schools to introduce internships and apprenticeships, creating a consistent talent pipeline and equipping students with relevant skills early.

Talent Retention Strategies

Retaining skilled talent in the auditing profession involves proactively addressing auditors' evolving expectations and career aspirations.

Research from the Insights report *CPA Talent Retention 2024: Keeping Your Best Performers* and other professional bodies emphasizes several best practices:

- **Flexible Work Arrangements:** Implementing hybrid or remote work models significantly improve job satisfaction, work-life balance, and employee loyalty, supported by digital collaboration tools such as Slack, Microsoft Teams, and Zoom.
- **Continuous Professional Growth:** Establish clear and transparent career pathways supported by ongoing professional development, personalized feedback, mentorship programs, and meaningful career coaching.
- **Employee Well-Being Initiatives:** Implement comprehensive wellness programs, mental health resources, and employee assistance programs to enhance overall job satisfaction and mitigate burnout.
- **Promoting Diversity and Inclusion:** PwC highlights significant investments in diversity, equity, and inclusion initiatives that actively foster a culture of diverse thinking, improving audit quality through broader perspectives and innovative problem-solving (PwC, 2024, p. 23).

Byrnes stresses that auditing and accounting careers involve much more than just working with numbers, though misconceptions about the field remain common. She advocates for increasing awareness among students and early-career professionals about the wide range of opportunities available, particularly in large firms that offer exposure to different industries and specialized roles.

Ultimately, firms that strategically invest in their workforce through innovative talent management practices, continuous learning, and adaptable work environments will thrive in the evolving audit landscape. This approach helps ensure not only the attraction and retention of top talent but also sustains long-term professional relevance and exceptional audit quality.

Path Forward for the Audit Profession

As the audit profession faces a pivotal moment, it must respond to transformative shifts in technology, regulatory expectations, and workforce dynamics. Adapting to these pressures is vital to maintaining the profession's relevance, credibility, and value.

One area emblematic of this shift is AI. As automation and analytics continue to advance, AI has the potential to reshape audit processes, enhance quality, and increase efficiency. To gauge the profession's readiness, survey respondents were asked to share their views on the role AI should play in the future of auditing. Figure 7 presents how survey respondents perceive the role of emerging AI technology. The data shows that 44% of participants believe AI should be fully integrated into audit processes, while 46% think it should have a limited role, primarily for specific tasks such as data analysis. A small portion, 8%, feels AI has no place in the audit process, and 3% were unsure about its potential role. As the profession charts its future, embracing innovation will be key to delivering audit quality and sustaining public trust.

Immediate Actionable Steps for Audit Firms

To successfully navigate the complexities of the modern audit landscape, audit firms must take proactive steps to address the challenges they face. By strategically investing in technology, reinventing workforce development, adapting to regulatory changes, and cultivating talent, firms can enhance efficiency, improve audit quality, and remain competitive. This section outlines actionable steps for audit firms to stay ahead of emerging trends and future-proof their operations.

1 Strategic Investment in Technology

- Focus on incremental audit improvements – Prioritize technology tools that automate repetitive tasks to create audit efficiencies.
- Enhance business insights – Adopt

technology that helps add value and insights to engagement, such as data analytics.

- Monitor compliance with ethical responsibilities:
 - ▶ Ensure that you are competent on the technology tools that your client uses in their business that are central to their financial reporting systems.
 - ▶ Ensure that you are competent using the tools that your firm adopts.
 - ▶ Make sure to comply with the confidentiality provisions of the AICPA Code of Professional Conduct.
- Leverage scalable third-party solutions specifically designed for small and midsize firms to bridge resource gaps and improve data analysis capabilities.
- Perform appropriate due diligence on tools adopted – Monitor the requirements included in your quality control system (ensure compliance with the Quality Management Standards as of Dec. 15, 2025).
- Keep current on emerging technologies such as AI and blockchain and evaluate how these tools can be used on audits.

2 Reinvention of Workforce Development

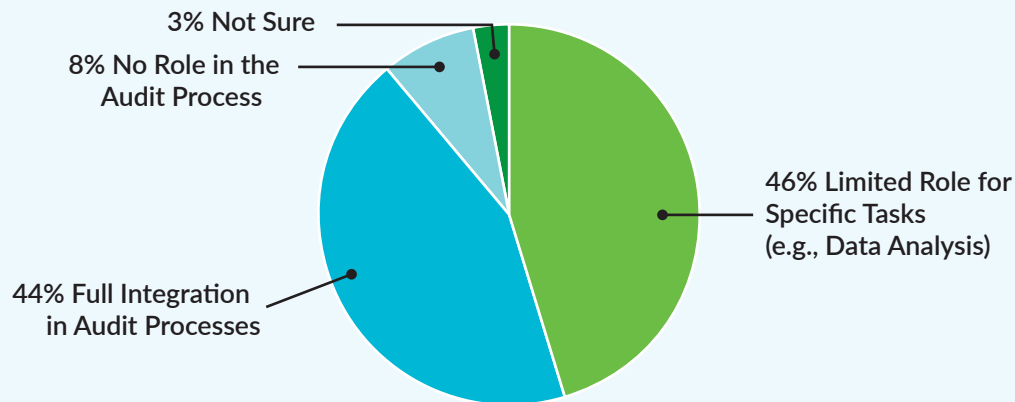
- Establish targeted upskilling programs in digital literacy, cybersecurity, data analytics, and advisory skills through partnerships with educational providers, professional associations, and online learning platforms.
- Promote continuous learning and professional development initiatives to ensure auditors can effectively adapt to evolving technologies and standards.

3 Proactive Adaptation to Regulatory Changes

- Actively participate in shaping new auditing standards and regulatory frameworks through engagement with organizations such as the PCAOB, SEC, FASB, AICPA, and state accounting societies.

FIGURE 7

The Role of Artificial Intelligence in the Future of Auditing



- Utilize regulatory “sandbox” environments to safely explore new technologies and methodologies without immediate compliance risks.

4 Talent Cultivation and Retention

- Implement flexible and remote work arrangements, enhancing job satisfaction and attracting diverse talent.
- Embrace comprehensive diversity and inclusion programs to foster diverse thought, creativity, and innovative problem-solving within audit teams.

Long-Term Outlook: Transforming Audits for Future Relevance

Jerry Maginnis notes that the audit profession’s biggest challenge and most significant opportunity is staying relevant to the capital markets in a rapidly evolving business landscape. Navigating the complexities of today’s audit landscape requires creativity and innovative problem-solving within audit teams. Auditors must proactively adopt advanced technological tools and analytics to effectively manage the growing volume and complexity of data. Additionally, staying agile in response to evolving regulatory requirements is essential to safeguard both compliance and reputation. Amid ongoing talent shortages, audit firms should foster a culture of continuous learning and innovation,

leveraging creative solutions to attract, develop, and retain skilled professionals. Ultimately, embedding creativity and innovation into audit practices will enhance audit quality, allowing firms to effectively address current challenges and sustain their critical role in maintaining financial transparency and integrity.

The future of audits lies in the integration of real-time assurance models. Christina Ho and Kimberly Ellison-Taylor both emphasized that audits must evolve beyond traditional point-in-time assessments to provide continuous, real-time assurance. AI and blockchain technologies offer the potential for more efficient and effective audits, but only if auditors embrace these tools and adapt their methodologies accordingly. Ellison-Taylor also noted that the increasing reliance on technology may lead to a new industry of experts who specialize in auditing algorithms and AI systems. This would create a new level of trust, resulting in technology-driven audits that are as reliable as traditional audits.

In conclusion, the modernization of audits—supported by strategic technological investment, proactive regulatory engagement, and innovative workforce development—represents the best path forward for the profession. By embracing this transformation, audit firms can ensure sustained relevance, reinforce stakeholder trust, and uphold their essential role in safeguarding financial market integrity.

Meet the Experts



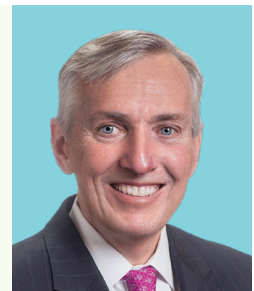
Christina Ho, CPA, CISA, was appointed as board member of the PCAOB by the SEC in November 2021. Prior to joining the PCAOB, Ho held executive roles in data science consulting and higher education financial management. From 2009 through 2017, Ho held several senior roles at the U.S. Department of the Treasury leading governmentwide transformational initiatives and overseeing mission critical financial operations.

Kimberly Ellison-Taylor, CPA, CGMA, CISA, CITP, CIA, is a global technology and finance leader with over 30 years of experience, including leadership roles at Oracle Corp. as well as involvement in consulting, business growth, innovation, and leadership. She is an adjunct professor at Carnegie Mellon University and an independent board director.



Deanna Byrne, CPA, serves as PwC US assurance leader, setting the strategy and leading the team that delivers PwC's audit, attest, ESG, and digital assurance capabilities. Previously the office managing partner of PwC's Philadelphia office, Byrne brings more than 35 years of diversified accounting, auditing, and financial reporting experience. She holds a bachelor's degree from Drexel University.

Jerry Maginnis, CPA, serves on the boards and chairs the audit committees of several public companies. Maginnis is the author of *Advice for a Successful Career in the Accounting Profession*, a guide for students and early career professionals. He also serves as a senior adviser, strategy and growth, for Centri Consulting.



Allison M. Henry, CPA, CGMA, is vice president, professional and technical standards at the PICPA, where she has worked since 2003. She manages PICPA's Joint Ethics Enforcement Program and oversees AICPA's Peer Review Program for multiple states. With extensive experience from Deloitte and a regional firm, she speaks at events, hosts webinars, and writes for industry publications. Henry graduated from Washington University in St. Louis and holds an accounting equivalency from the University of Arkansas.

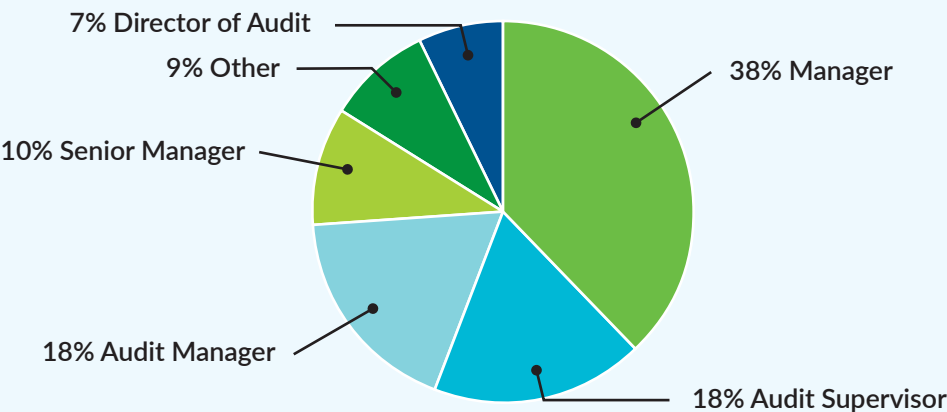
Survey Demographics

The survey used to help prepare this report gathered responses from a total of 115 auditors. The demographics of the respondents were

captured across several key areas to provide insights into their professional background and roles within the audit process.

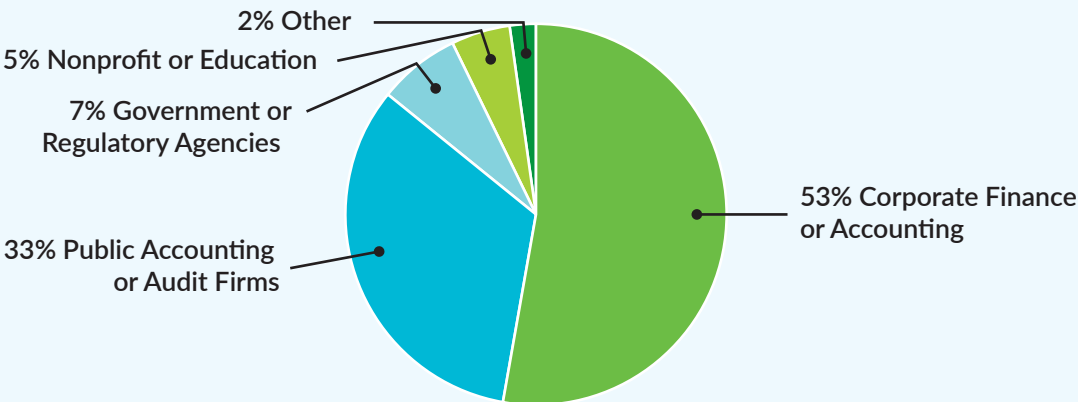
CURRENT JOB TITLE

Respondents included individuals with a variety of job titles, reflecting diverse positions within audit teams.



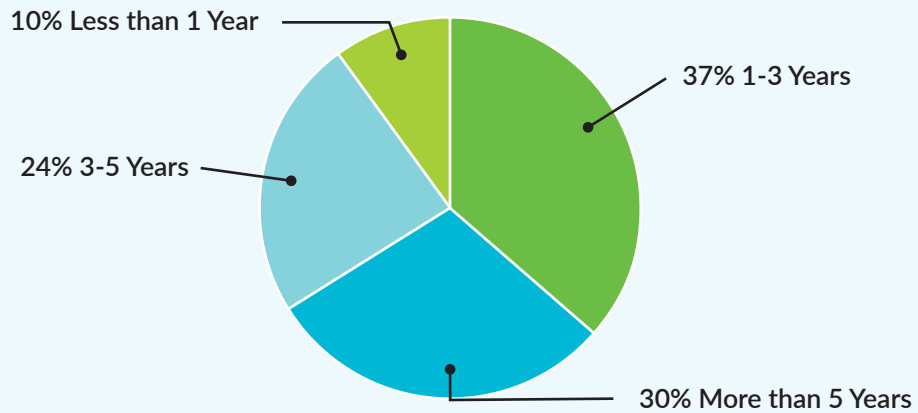
PRIMARY INDUSTRY

Survey participants represent a wide range of industries, showcasing the varied sectors in which auditing professionals operate.



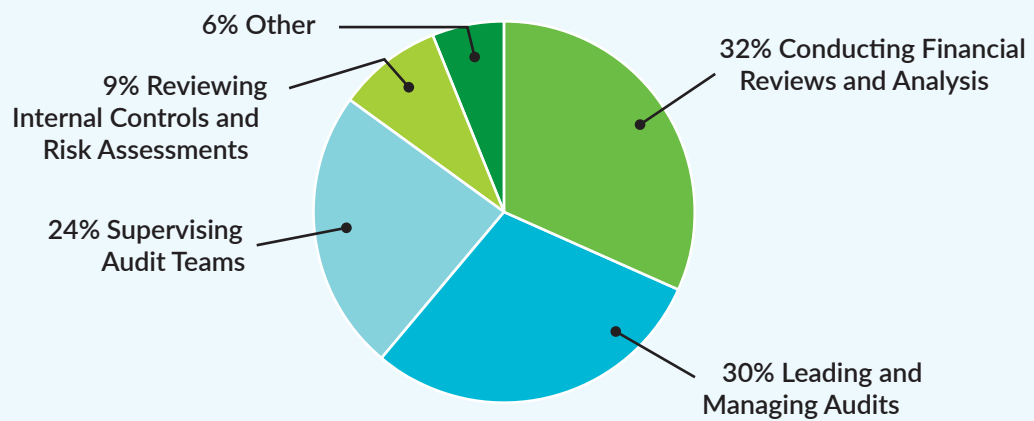
YEARS OF EXPERIENCE IN AUDITING

The survey included auditors with different levels of experience, from those just starting out to seasoned professionals with an extensive background in the field.



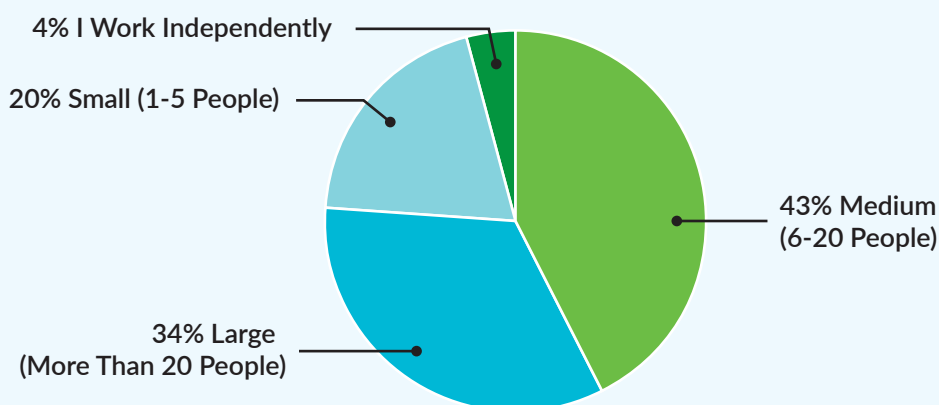
PRIMARY ROLE IN THE AUDIT PROCESS

Respondents identified their specific roles within the audit process, highlighting their key responsibilities in delivering high-quality audits.



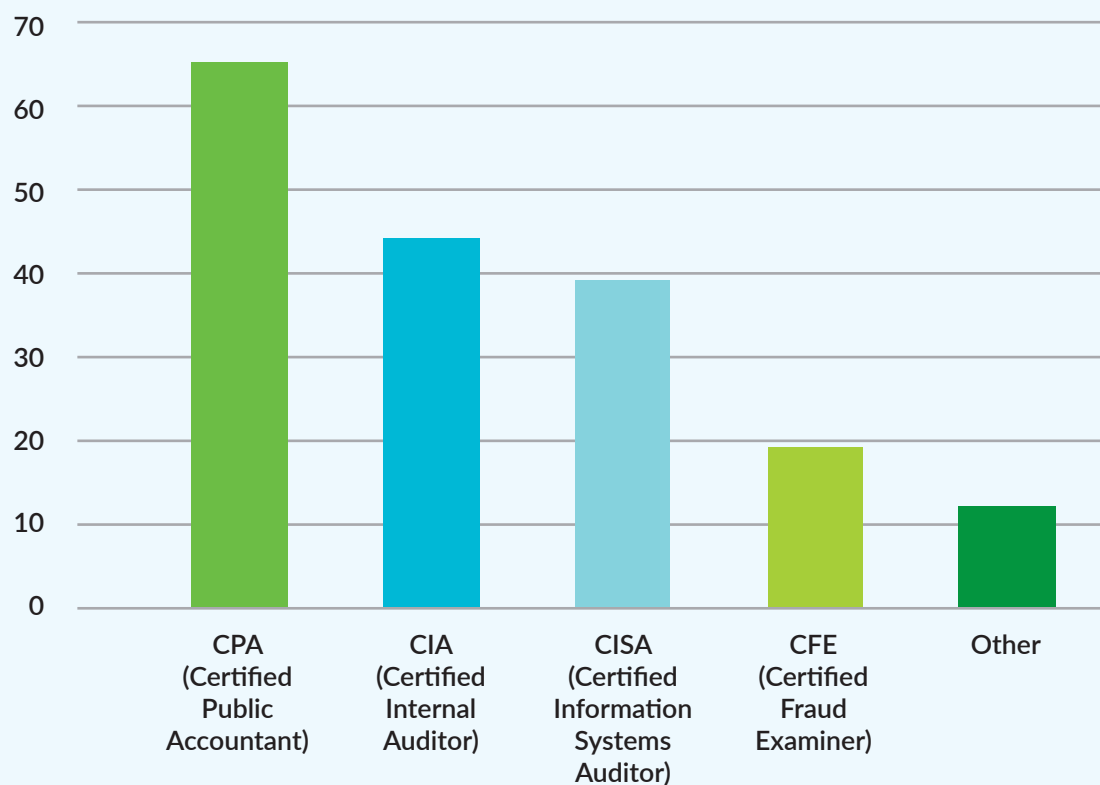
SIZE OF AUDIT TEAM

Respondents provided information about the typical size of the audit teams they work with, offering a sense of the collaborative dynamics in audit engagements.



PROFESSIONAL CERTIFICATIONS HELD

Information was gathered on the professional certifications held by auditors, giving insight into the qualifications and expertise within the respondent pool. Note: Respondents could select more than one option, so the percentages shown in the chart do not total 100%.



About TSCPA

The Tennessee Society of Certified Public Accountants is the state professional organization for CPAs. The society's membership is composed



of nearly 10,000 members working in a variety of areas including public accounting, business and industry, government, and education. With more than 100 years of service to the accounting profession, TSCPA has supported generations of accountants and led the profession through countless changes and environmental shifts. TSCPA operates today with guidance from its Board of Directors, council, numerous committees, and established strategic plan.



About CPA Crossings

The CPA Crossings Research Program provides comprehensive research with data and analysis on the hottest topics trending in the accounting profession. We create the research instruments, conduct the data collection, analyze the results, and produce reports or presentations of findings. Some research is based on national data; other research includes specific state data. We can also help with the launch of your research by providing webinar presenters and support, infographics, blogs, social media videos, and more.

To learn more about our Research Program topics, pricing, and production schedule, please reach out to Kelly Waffle, our Director of Research, at kwaffle@cpacrossings.com to set up a personal meeting.



References

American Institute of CPAs (AICPA) & Chartered Professional Accountants of Canada (CPA Canada), *The Data-Driven Audit: How Automation and AI are Changing the Audit and the Role of the Auditor*, CPA Canada (2020). Retrieved from www.cpacanada.ca

Center for Audit Quality & Deloitte Center for Board Effectiveness, *Audit Committee Practices Report: Priorities and Committee Practices* (2024). Retrieved from www.thecaq.org/audit-committee-practices-report

CPA Crossings, *CPA Talent Retention 2024: Keeping Your Best Performers* (2024).

CPA Crossings, *Transforming Your Firm's Business Model: Workforce Transformation and Talent Management Strategies* (2025).

Graison Dangor, *Making Sense of the Big New Auditing Standards*, CFO Brew (May 30, 2024). Retrieved from www.cfobrew.com/stories/2024/05/30/making-sense-of-the-big-new-auditing-standards

International Auditing and Assurance Standards Board, *Survey of Stakeholder Perspectives of Audit Quality - Detailed Discussion of Survey Results*, International Federation of Accountants (IFAC) (December 2012).

KPMG Board Leadership Centre, *Audit Quality: An Audit Committee Survey*, KPMG LLP (July 2020).

Public Company Accounting Oversight Board, *Building Trust and Inspiring Hope in the Accounting and Auditing Profession* (2023). Retrieved from pcaobus.org/news-events/speeches/speech-detail/building-trust-and-inspiring-hope-in-the-accounting-and-auditing-profession

Public Company Accounting Oversight Board, *Guidelines for Technological Adoption in Auditing* (2024). Retrieved from pcaobus.org

PricewaterhouseCoopers (PwC), *2024 Audit Quality Report* (2024). Retrieved from www.pwc.com/us/en/services/governance-insights-center.html

The Accounting Podcast, *Episode 400: Why EY Has the Worst Big Four PCAOB Deficiency Rate* (March 9, 2025). Retrieved from www.accountingpodcast.com/episode-400

Thomson Reuters, *Modernize Your Audit Practice: How AI Is Shaping the Future of Auditing* (June 13, 2024). Retrieved from tax.thomsonreuters.com/en/accounting-solutions/c/modernize-your-audit-practice-tools-shaping-the-future-of-auditing

U.S. Securities and Exchange Commission, *SEC Charges Founder of Nikola Corp. with Fraud* (July 29, 2021). Retrieved from www.sec.gov/newsroom/press-releases/2021-141