The next phase: Al and human collaboration powering internal audit transformation

It's time for internal auditors to embrace a new paradigm by leveraging AI to deliver greater organizational value and strategic insights.



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A note about the design of this paper: Given the AI theme, we elected to follow this path in designing it by employing AI-generated imagery throughout, including on the cover.

At a glance

Look to AI technology enablement as a catalyst to empower CAEs and their teams to deliver stronger strategic oversight and value-added input for the business.

- In today's dynamic landscape, relying solely on traditional audit methodologies and technologies is insufficient. Internal auditors must evolve to embrace AI and the demand for organizational agility.
- The next phase in internal audit's growth and evolution positions Al enablement as an imperative, one that is complemented by an internal audit team possessing the right talent and skills and empowered to focus more on delivering strategic insights and partnering effectively with the business.
- Nearly one in four IT audit functions already is using AI and machine learning tools.
- While it may not be necessary to build a fully AI-enabled internal audit function immediately, what is important now is to get started.

Our AI-enabled, human-empowered view of internal auditing

Transformation isn't optional – it's already underway.

- Internal audit's commitment to AI enablement must align to a talent management approach that pairs the use of these technologies with the right people and skills to ensure these tools deliver maximum relevant insights.
- This combination of AI technology and talent will enable internal audit functions to enhance their current methodologies and

supporting technologies while unleashing new and innovative ways to protect and enhance organizational value.

 Internal auditors are less at risk of being supplanted by AI than they are at being replaced by internal auditors who are more comfortable and adept at using AI.



Internal audit technology integration: AI enablement is imperative

There are ample opportunities for internal audit to leverage AI throughout the end-to-end audit lifecycle.

- Embracing AI enables internal audit functions to enhance processes, deliver insights and improve decision-making.
 Whether in the early or later stages of implementation, prioritizing AI enablement is key to staying relevant and operating at the accelerated pace that is now expected.
- AI can streamline tasks ranging from transcription and scheduling to report generation and contract reviews.
- In today's fast-changing world of AI, the latest developments center around agentic AI; its value-creation potential for internal audit functions is immense. Specialized AI agents can handle complex tasks, allowing auditors to focus on strategic analysis and decision-making.
- As AI technologies evolve, internal audit teams must integrate AI into their workflows to drive innovation and value creation.

Getting started on internal audit's AI journey

Vision-led. Governance-backed. Outcome-driven.

- Successful AI deployment hinges on a shared vision and purpose, aligning AI opportunities with business value. Internal audit functions must identify and prioritize AI use cases that drive meaningful outcomes.
- Best practices include formulating the vision and team, exploring opportunities for employing AI technologies and conducting pilot tests. Emphasizing governance and ROI measurement ensures AI integration enhances decision-making and service innovation.

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Building an Al-ready audit workforce

Technology and talent are now intertwined.

- It's vital for CAEs to be aware of and keep pace with how their organizations are transforming. As AI becomes integral to corporate workforces, CAEs must align talent strategies with technological advancements. Attracting and retaining talent skilled in AI and advanced technologies are critical.
- Internal audit functions must develop strategies that encompass AI-driven

analytics and capabilities. This ensures internal auditors are equipped to leverage AI tools and excel in executing collaborative, value-adding activities.

 Integrating AI into talent sourcing portfolios and training programs will enhance audit capabilities.

A new paradigm

Look to AI technology enablement as a catalyst to empower CAEs and their teams to deliver stronger strategic oversight and value-added input for the business.

Seven years ago, we challenged internal auditors to embrace a next-generation operating strategy underpinned by a strong governance model, sound auditing methodologies and advanced enabling technologies.¹ These are core enablers for internal audit functions that remain just as relevant today. However, they alone are no longer sufficient in an era defined by advancements in artificial intelligence (AI), systemic talent management challenges and opportunities, ongoing global crises fueled by economic uncertainty and geopolitical strife, and the constant call for organizational agility and resilience.

A new approach built on our Next Generation Internal Audit foundation is needed for internal audit to execute its mission, as defined by The Institute of Internal Auditors (IIA), to enhance and protect organizational value by providing risk-based and objective assurance, advice and insight to stakeholders.² To address the evolving landscape, we have refreshed our next-generation framework (see following page) to equip internal audit functions for today and the future.

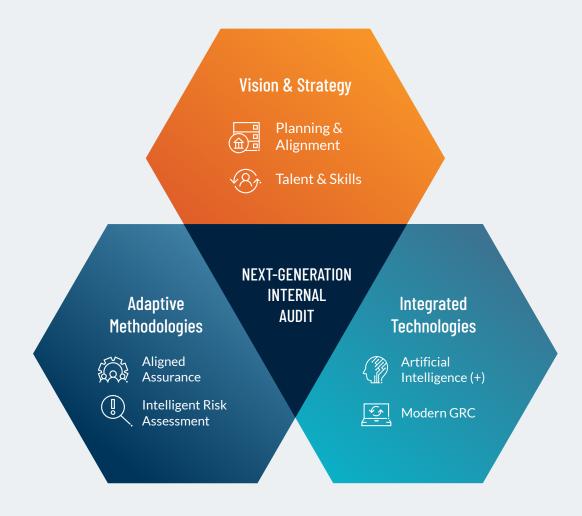
As we see it, the next phase in internal audit's growth and evolution positions AI enablement as an imperative, one that is complemented



by an internal audit team possessing the right experience, skills, and innovation orientation and mindset. This team is empowered to focus more on delivering strategic insights and partnering effectively with the business. Leading internal audit functions prioritize these activities to generate greater value from the human, creative and collaborative facets of the internal auditor's role, underscoring the need to position people at the heart of an AI-enabled future. Specifically, this must involve developing and applying human intelligence effectively as the use of AI continues to expand, while also evolving workforce management strategies - recruiting, upskilling, reskilling and more – to ensure talent evolves in a world being transformed rapidly by AI and other advancements.

² Mission of Internal Audit, The Institute of Internal Auditors: www.theiia.org/en/standards/mission-of-internal-audit/.

¹ The Next Generation of Internal Auditing – Are You Ready?, Protiviti, December 2018: www.protiviti.com/sites/default/files/2022-09/next-generation-internal-audit-protiviti_global.pdf.



Elevating internal audit for the next phase

Protiviti's refreshed Next-Generation Internal Audit Framework empowers internal audit to lead with clarity, insight and agility in a rapidly evolving risk landscape. It redefines the function as a catalyst for enterprise value — integrating strategic vision, modern integrated technologies and adaptive methodologies to meet rising expectations.

It enables:

- Clear alignment with enterprise priorities and stakeholder needs
- Technology-enabled insights that drive smarter, more informed decisions
- Agile, risk-responsive practices that anticipate and adapt to change
- Seamless collaboration across assurance functions for broader impact
- A high-performing, future-ready audit team equipped to lead with confidence

Make no mistake; this is not a distant, aspirational point of view. Al has already made its way into many internal audit functions. According to our latest Global Internal Audit Perspectives on Top Technology Risks Survey, conducted in partnership with The IIA, nearly one in four IT audit functions (23%) is using AI and machine learning tools – nearly double the number reported in our prior year's survey results.3 Also, in their submissions for Protiviti's inaugural Audit Innovator Award series, numerous internal audit leaders cited examples of AI tools their functions are employing, along with successful use cases for activities such as planning, scoping and reporting.⁴ And in a Protiviti-hosted webinar on CAE views shared in our annual Executive Perspectives on Top Risks Survey, 26% of attendees indicated (in their response to a polling question) their internal audit teams already are well-equipped to take advantage of available AI solutions.⁵

When it comes to AI, the opportunities for internal audit are, quite simply, staggering. Imagine elements of an audit plan executed by specialized AI agents, each with its own specialty (data analytics, fraud detection, audit report generation, etc.). In this scenario, these AI agents are overseen by human auditors who can access their company's relevant knowledge and data with plain language instructions or guidance and, most importantly, provide critical oversight along with strategic guidance and recommendations to management and the board. As such scenarios become reality, the human element of internal audit evolves dramatically but never goes away, which should alleviate concerns about internal auditors being replaced by AI.

This future state of internal audit, as we have explored previously, is approaching faster than many might expect.⁶ Our refreshed Next-Generation Internal Audit framework introduces generative AI, emphasizing its transformative potential and evolution into more advanced forms such as agentic AI.

Advancing AI enablement in the internal audit function must be a top priority. While it may not be necessary to build a fully AI-enabled internal audit function immediately, what is important now is to get started. This can involve, for example, establishing a regimen for leveraging generative AI to assist in developing audit reports, using it to support risk assessment and audit planning activities, or merely performing queries in a generative AI tool to produce relevant audit questions. Or, for those internal audit functions further along the AI maturity spectrum, it could involve a deeper dive into leveraging agentic AI and other more recent developments and advanced capabilities along the AI continuum.

- ³ From AI to Cyber Deconstructing a Complex Technology Risk Landscape, Protiviti and The Institute of Internal Auditors, September 2024: www.protiviti.com/us-en/survey/it-audit-survey.
- ⁴ Protiviti Audit Innovator Award: www.protiviti.com/us-en/audit-innovator-award.
- ⁵ "CAEs view cyber threats, talent management and third-party risks as top concerns," Protiviti, February 2025: www.protiviti.com/us-en/survey/top-risks-chief-audit-executives-2025.
- ⁶ Exploring a Universe of Experience as a Launchpad to the Future, Protiviti, July 2024: www.protiviti.com/ us-en/survey/internal-auditing-around-world-20th-edition; "Going Digital: The Future Auditor in Action," Protiviti, The Bulletin, March 2020: www.protiviti.com/us-en/newsletter/bulletin-v7i6-digitalfuture-auditor.

It is equally important to ensure that at every step of the way, internal audit's use of AI is coupled with human-in-the-loop considerations. While in this paper we emphasize the importance of building AI skill sets and experience, human-in-the-loop guidelines are a separate but critical component of internal audit's use of AI. This involves ensuring AI use and outputs are consistent with expectations and free of hallucinations and other unique-to-AI challenges, as well as ensuring adherence to company policies and any applicable regulations.

The extent to which AI can be integrated into internal audit's activities is almost endless (see scenarios and use cases included throughout our paper), limited only by an organization's appetite for AI adoption, the sophistication of its technology systems and data, and the capabilities of internal audit team members to identify and pursue use cases. We already are seeing a level of interconnectedness and interdependency between technology and talent; we expect that to continue and accelerate.

One final note before we dive in: In this paper, our intention is to provide perspectives and practical guidance on building an AI-enabled, human-empowered internal audit function to deliver greater value and vital strategic insights for the business. While internal audit serves a critical role in providing advisory and assurance over the responsible use of AI throughout the enterprise, this is a separate topic, one that we will explore in other thought leadership.

Agentic AI defined

Agentic AI represents the next evolution in artificial intelligence — one that goes beyond generating content to actually planning and executing tasks. These systems use large language models (LLMs) and other technologies to operate with minimal human input, making decisions and taking actions to meet defined objectives.

Unlike generative AI, which assists by producing content or suggestions, agentic AI acts more like a digital team member — analyzing data, creating plans and carrying out tasks autonomously. For internal audit, this means AI can support everything from risk assessments to report generation — but only when paired with strong governance and human oversight to ensure accuracy, compliance and ethical use.⁷

Agentic Al	Generative AI
Plans and executes goals	Provides assistance, general guidance
Evaluates data and appropriate actions to take	Creates content
Acts autonomously	Requires direction

⁷ For further insights, read "Agentic AI: What It Is and Why Boards Should Care," Christine Livingston, Board Perspectives, Protiviti, April 2025: www.protiviti.com/us-en/newsletter/bp186-agentic-ai.

Our Al-enabled, humanempowered vision of internal auditing

Transformation isn't optional – it's already underway.

We developed our original Next-Generation Internal Audit model to serve as both a reference framework and guide as internal audit functions established or refined their transformation priorities. Our approach — structured around effective governance, methodologies and enabling technologies (including AI and machine learning) — focuses on three core objectives:

- 1. Improve assurance by leveraging data-enabled processes to clarify key risks.
- 2. Enhance efficiency and efficacy via technology-enabled audit processes.
- 3. Provide deeper, more valuable insights and risk coverage that help organizations make better decisions and improve performance.

While we first published this guidance four years before ChatGPT ushered in a new AI age in late 2022, it remains both valid and relevant today. However, we recognize that it is now incomplete. Generative AI, agentic AI and subsequent iterations require organizations to operate in a state of continual transformation underpinned by AI enablement. Furthermore, to succeed, internal audit's commitment to AI enablement must align to, and be integrated with, a talent management approach that pairs the use of these technologies with the right experiences, skills, and learning and development programs to ensure the combination of human intelligence and AI (along with the broader use of data and enabling technologies) creates and delivers synergy. Internal auditors are less at risk of being supplanted by AI than they are at being replaced by internal auditors who are more comfortable and adept at using AI. As CAEs and their teams embark on this journey, we advise them to recognize and understand key guideposts along the way:

- AI-enabled auditing is not AI-only auditing; human-in-the-loop remains critical to the safe and effective use of AI. Specifically, generative and agentic AI are used to enable and supercharge human internal auditors, integrated with and as a complement to their use of a broad range of core internal audit technologies, tools, methodologies and analytics.
- Internal audit teams need to embrace the transformative potential of generative AI to enhance audit processes, gain insights and improve decision-making. They also must stay adaptable to incorporate emerging technologies as they develop, including the evolution of AI into more advanced forms, such as agentic AI.
- Despite the evolutionary leaps in generative AI and, more recently, agentic AI, additional breakthroughs in these technologies loom on the horizon, necessitating active monitoring of advancements in this space.
- The benefits of Al-enabled auditing extend far beyond operational efficiency — they include deeper and more targeted risk assessment and monitoring, dynamic scaling, richer insight and benchmarking to support improved decision-making, and a new talent source.
- The talent management implications of AI combined with the market's long-term skills shortages — in the internal audit profession and beyond — are profound.

New talent models recognize AI agents as a complementary source of labor, performing repetitive or analytical tasks to extend capacity.

- Internal auditors are less at risk of being supplanted by AI than they are at being replaced by internal auditors who are more comfortable and adept at using AI.
- Internal audit functions must possess skills that embrace technology and ensure they are well-versed in generative AI and other advanced technologies. This includes understanding and using effective prompts and queries in generative AI tools, as well as – over time – developing more advanced skills to configure and deploy AI agents.
- The half-life of internal audit technologyfocused skills is shrinking as fixed job descriptions become a thing of the past and skills stacking, along with upskilling and reskilling, become the approach that's needed; AI and other forms of automation will help address this challenge.
- The greatest value of AI-enabled, humanempowered internal audit is likely to derive from the creative, relational and judgmentbased activities that AI-enabled human auditors perform.
- Internal audit's transformational work and evolution are ongoing; internal audit leaders must establish and encourage a culture and mindset of exploration, experimentation and continuous improvement.



Internal audit technology integration: Al enablement is imperative

There are ample opportunities for internal audit to leverage AI throughout the end-to-end audit lifecycle.

In our view, the underlying driver for internal audit functions to face the future confidently is through the fusion of AI enablement and talent. Now is the time to embrace this technology. And in whatever stage your function finds itself, there is no such thing as "being behind," other than turning a blind eye toward AI's potential in accelerating internal audit into the future, while simultaneously positioning it as future-ready.

To align with the refreshed next-generation framework, internal audit functions must embrace the transformative potential of AI to enhance processes, generate insights and elevate decision-making. Equally important is identifying and gaining access to the AI solutions that best fit the function's needs — and remaining adaptable as new technologies and capabilities continue to evolve.

The universe of potential AI use within internal audit groups is vast, ranging from relatively simple operational and administrative tasks to complex multi-agentic AI systems that perform value-adding activities throughout the entire auditing lifecycle. AI-enablement scenarios in the internal audit function include, but certainly are not limited to:

 Walkthrough/risk assessment discussion transcription and analysis: AI tools can transcribe and summarize audit meetings, highlight key points, identify controls, and draft initial findings for the auditor to evaluate. Such technology-driven support enables auditors to shift more of their focus to person-to-person qualitative engagement with their audit stakeholders, which will lead to more thoughtful, productive conversations and spark new ideas. A coming-soon evolution in this space is the use of AI agents, with human guidance, to conduct interviews and drive other forms of communication with stakeholders.

For internal audit functions that have advanced further in their AI-enabled capabilities, these tools can:

- "Chat" with the transcript in real time and recommend additional questions to ask during the interview.
- Identify action items for follow-up.
- Use the transcript to generate a process flow diagram or narrative, and identify risks, controls, test plans and evidence requests.
- Generate a summary of themes covered during risk assessment meetings.
- Scheduling and interview preparation: Al can perform most of the administrative aspects of auditing interactions. For example, an auditor can leverage generative Al to prepare for an interview by creating questions (for the auditor) regarding the interview subject's area of oversight, supporting technologies and challenges, and even conduct benchmarking analyses related to controls and performance metrics for the area of focus. Furthermore, using an Al agent, an auditor can schedule interviews with audit subjects and business colleagues.
- Audit report generation: AI-powered audit reporting tools already are being deployed to use all of the content and artifacts an

auditor collects and generates to produce a first draft of an audit report. In our experience, this supporting technology can save days of effort per report section.

- Historical audit and risk information analyses: AI tools can analyze previous years' audits, as well as information from an organization's broader assurance activities (risk, compliance, controls programs, etc.), in ways that help auditors better and more efficiently prepare for upcoming audits. These applications also save considerable time that otherwise would be spent reviewing previous work papers. For example, even if audit reports are in various formats, internal auditors can use AI to generate a summary of key themes across these reports that the CAE can bring to senior leadership and the audit committee.
- Contract and policy reviews: Al-enabled contract review solutions allow internal auditors to assess dozens of contracts (and other standardized artifacts) against organization- and industry-standard templates, and then call out any variations, anomalies and concerns. Al also can be used to compare and validate specific contractual clauses (related to various performance obligations) against actual performance. Agent-based AI solutions make this a near-term opportunity, allowing for highly automated testing of policy and contract compliance and broader third-party performance.

End-to-end deployment of specialized auditing agents: Moving further up the AI maturity scale, there are cases in which an internal auditor can deploy a team of specialized AI agents while overseeing the Al technology's output (human-in-the-loop). For example, one may specialize in data extraction or ERP integration, another on data analytics, another on control testing, and another on generating audit reports along with audio and video to provide alternating methods of communicating audit activities and results. Consider potential AI agent support with a compliance database: Al agents can prioritize and select audits based on the risk data collected, and then automatically create planning documents, schedule audits, assign resources and other Al agents, pull data, and perform testing using an army of AI audit agents, while human auditors review results.

By leveraging AI and other advanced technologies, internal audit functions can provide richer insight and perspective and significantly enhance the timeliness and speed of their work, as well as the efficiency and effectiveness of their operational and audit plan delivery activities. This human-AI integration is a true force multiplier for internal audit teams and enables auditors to focus on highervalue activities, such as strategic analysis and decision-making, as well as those that require the application of emotional intelligence.



Additionally, the use of AI-generated (or AIsupported) imagery, graphics, and audio and video content can help present audit findings and other communications in a more impactful manner, making it easier for stakeholders to understand and act on the insights provided. Internal audit functions that are more advanced in their AI capabilities can have AI agents perform assessments, then have another AI agent select specific samples, then have agentic AI document assessors or custom GPTs perform specific testing tasks for operational effectiveness, and finally, develop a lead sheet generator agent that creates the outputs. Al enablement and adoption are imperative to stay relevant, improve quality and efficiency, and lead the way in the evolving landscape. Embracing AI technologies and integrating them into the audit lifecycle will drive innovation, improve decision-making and create new opportunities for value creation. By leveraging AI and other advanced technologies, internal audit functions can provide richer insight and perspective and significantly enhance the timeliness and speed of their work.

Al use case: Al-powered contract review

How do you review more than 1,000 vendor contracts against new compliance requirements with a tight deadline? Faced with this challenge, an organization partnered with Protiviti, which employed Atlas, its proprietary and secure enterprise AI platform, supported by critical human-in-the-loop oversight. By deploying multiple specialized AI agents through this innovative workflow tool, the Protiviti team achieved faster execution and greater efficiency and elevated the quality of audit outcomes. One agent was assigned to extract key terms from each contract. A second AI agent analyzed each of those terms against the new compliance requirements, which included enhanced data privacy policies, new corporate social responsibility clauses and an updated service-level agreement. The second agent determined whether each of the key contract terms fully complied, partially complied or failed to comply with each stipulation within the three requirement areas. The AI agent also provided evidence and logic for its compliance determinations and suggested adjustments for achieving a state of full compliance.

The promise of agentic AI

While almost every internal audit team sees the value-potential of AI adoption, we recognize that many are just getting started on their AI journey: building awareness, conducting training, gaining access to organizationapproved AI technologies, identifying and prioritizing use cases, and experimenting with and introducing AI solutions. This is positive to see, and even initial uses of generative AI in the internal audit function should bear positive results and lead to further, and potentially exponential, adoption in the use of broader forms of AI. (Later in our paper, we provide recommended steps for getting started.)

Still, it's important to understand that in today's fast-changing world of AI, the latest developments in the technology, at least in terms of value-adding business implications, center around agentic AI. As noted in our earlier sidebar, agentic AI describes an AI system that employs an LLM as well as other technologies as part of its ecosystem to enable autonomous task planning and support reasoning to achieve human-defined objectives. Think of AI agents as digital team members capable of perceiving, deciding and acting without specific instruction or prompting.

While in-house developed AI agents may not be a near-term possibility for most internal audit functions, the value-creation potential of this form of AI technology is immense across industries and business groups, and thus important for CAEs and internal audit leaders to understand, from both an adoption as well as a governance and risk assurance perspective. It also is worth noting that many AI technology vendors and platforms are now integrating and otherwise making available both generative and agentic AI capabilities, including through "marketplaces" and "app stores." These have the potential to accelerate the adoption curve significantly for many internal audit functions, as they offer the opportunity to deploy - with little or no customization or configuration – pre-developed AI agents.

Reinforcing the perceived importance of agentic AI for internal audit, a recent survey conducted by AuditBoard indicated that 64% of internal auditors are exploring or considering AI agent adoption in the next 12 months, and 50% see controls testing and fieldwork as the best use of AI agents.⁸ Furthermore, in answer to a polling question (related to AI and the audit lifecycle) during our Audit Innovator Award program webinar, 41% of attendees indicated they would like to be more innovative in execution (including control testing). Agentic Al offers the potential to support the achievement of this objective.

At a high level, the opportunities that can be realized through agentic AI deployment in internal audit include:

- Boosting productivity and efficiency: Al agents are designed to operate autonomously, make decisions and take actions based on goals or objectives provided and real-time data and learned experiences; adapt to new situations; and improve their performance continuously over time.
- Scaling dynamically as task and data volumes increase: As businesses grow, AI agents can scale their operations to handle varying workloads and adapt to new tasks without human intervention. This flexibility aids their deployment in diverse and expansive ways without significant resource increases.
- Enhancing decision-making: Across most realms, AI agents are able to facilitate smarter, more informed decisions by analyzing large amounts of data in real time, spotting hidden patterns and highlighting key insights, and comparing separate but similar data sets to identify differences.
- Adding another dimension of labor: Al agents can be transformative in performing work along with human staff as part of an integrated workforce, reducing costs and minimizing errors, allowing teams to achieve the oft-requested

⁸ "How AI Agents Will Transform Internal Audit and Compliance," Trent Russell, AuditBoard, March 4, 2025: https://auditboard.com/blog/how-ai-agents-will-transform-internal-audit-and-compliance/. "do more with less" and allowing tasks to be completed better, faster and cheaper.

All deployments of AI, whether using pregenerative AI technologies, static models or agentic AI systems, must be supported by transparency, privacy and data protection, fairness and non-discrimination, accountability and governance, security and resilience, human oversight (human-in-the-loop and/or humanon-the-loop),⁹ and reliability and performance monitoring considerations.

While we cover additional governance considerations a bit later in this paper, it can help to view AI agents as "digital employees" to be supervised — either before actions are taken or after or during AI actions — in a manner similar to human employees. This involves:

Adopting a customer focus in defining the Al agent's job and performance expectations;

- Setting policies articulating the core values and guardrails for the agent's behavior;
- Deploying metrics and measures to facilitate monitoring of the AI agent's performance against expectations;
- Taking remedial action when necessary and ensuring the AI agent can learn and improve continuously; and
- Determining the risk tolerance with respect to the activities to be undertaken by the AI agent (and establishing the required level of human oversight and escalation protocols).

While AI agents are autonomous and function without prescriptive and continuous human intervention, there must be human oversight of their performance and remedial intervention when necessary – just as with the work of people.¹⁰

⁹ "Human-in-the-loop" refers to systems where human judgment is actively involved in the training, operation or oversight of AI models. A human may directly intervene during the AI's decision-making process, either to approve, modify or reject actions before they are executed. "Human-on-the-loop" is a related but distinct concept in which humans oversee AI decisions after or while the system operates autonomously, with the ability to intervene if necessary. But humans are not involved in every decision the AI makes.

¹⁰ "Agentic AI: What It Is and Why Boards Should Care," Protiviti, Board Perspectives, April 2025: www.protiviti.com/us-en/newsletter/bp186-agentic-ai.

Al use case: Leveraging an Al agent to update policies and standards

A global professional association needed to update more than 70 internal audit policy and standards documents with new principles, an updated glossary and various nuanced requirements. The manual effort required to complete these updates would consume excessive hours and resources. Instead, the organization developed a cognitive architecture of AI agents to automate the document update process. The AI agents read, understood and updated all of the documents based on new principles, requirements and human comments while ensuring consistency across all documents. A human review team validated these AI outputs. Enabled with AI agents, this project:

- Achieved an 80% reduction in manual effort required for updating and reviewing the document set.
- Enabled the organization to focus on higher-value tasks by automating repetitive and time-consuming processes.
- Positioned the organization to expand the solution based on successful outcomes and efficiency gains.

Getting started on internal audit's Al journey

Vision-led. Governance-backed. Outcome-driven.

In a Protiviti paper on generative AI, we discuss best practices for deploying the technology throughout the enterprise, outlining a process that is useful to consider for implementing AI within internal audit groups.¹¹

- Formulate the vision and team. The most successful AI deployments orient the team around a shared vision and purpose, while also ensuring a baseline level of awareness of AI capabilities (as well as risks and limitations) and examples of context-specific use cases.
- Identify opportunities. This should involve ideating possibilities and outlining practical opportunities for AI use in the internal audit function that align with the shared vision and

purpose, address key business challenges or opportunities, and have the potential to drive meaningful business value. As part of this process, internal audit also should identify AI tools that the enterprise already is employing.

- Ask where and why. As internal audit leaders and their teams identify and prioritize AI use cases, they should keep in mind that just because an AI tool or agent can be used does not automatically mean it should be deployed. Identify, discuss, assess and prioritize the areas of internal audit's operations and plan-delivery activities that would produce the most value for the enterprise through the introduction and enablement of AI.
- Consider the best options for Al solutions. While the enterprise's existing Al tools are

¹¹ Success With Generative AI Requires Balancing Risk With Reward, Protiviti, October 2023: www.protiviti.com/us-en/whitepaper/success-generative-ai-requiresbalancing-risk-reward.

one option, there are a growing number of third-party AI tools as well as AI features embedded in audit management software that can create narratives and process flows, undertake data extraction of files, and perform other automated audit tasks. These solutions can be leveraged, in coordination with the organization's standard processes, to jumpstart the internal audit function's AI enablement journey.

- Prioritize ideas. Assess each practical opportunity, or use case, for feasibility and complexity while also considering the availability of AI technologies in the internal audit function and/or enterprise to support the desired results. Again, the use cases need not be broad and far-reaching nor fully integrated into internal audit methodologies, particularly if the internal audit function considers itself to be in the earliest stages of AI use.
- Initialize the pilot. Key actions include selecting and procuring the AI technology (e.g., arranging for internal audit team members to access AI tools already in use in the enterprise), procuring data sources and pipelines, and conducting practical AI training for the team.
- Adapt and reflect. Upon completion of the pilot use case, the internal audit team should evaluate the process and application and assess the value delivered. Also during this step, the team should revisit their list of

potential AI use cases and identify the next opportunity.

The above provides a sequenced and proven framework for the alignment, evaluation and adoption of new technologies. We advise any CAE whose team has yet to engage or make progress with this topic to get started, and now.

Internal audit functions that have made the greatest and most impressive strides with innovation have embraced the need to, as well as the inevitability of, change.¹² They also have leaders who set the tone and clear expectations that innovation is not just desired but also required and actively encouraged, recognized and rewarded. Coupled with the allocation of resources (e.g., tooling, training), this creates an innovation culture within the team where exploration, experimentation and the pursuit of improved ways of working are celebrated. It also creates grassroots engagement and a buzz-atthe-bottom to match the tone-at-the-top. With barriers to entry (both technology- and skillswise) at an all-time low, it's time to get started and make this an internal audit teamwide effort.

In addition to these important steps to get started on internal audit's AI journey, there are a number of other key activities for the CAE to prioritize that will support these efforts.

• Secure a seat at the enterprise governance table. Given internal audit's dual role as an AI user and risk assessor, CAEs should advocate for a position

¹² For additional insights on innovation in the internal audit profession, visit our Audit Innovator Award site: www.protiviti.com/us-en/audit-innovator-award. on the steering committees that create and continually update the organization's AI governance policy. This involvement helps fortify enterprisewide AI controls (an important topic but one we are not addressing in this paper), while giving CAEs valuable visibility into AI tools and agents in use throughout the organization as well as additional perspectives on potential new AI use cases for internal audit.

- Measure impact and ROI. If an AI agent reduces an internal auditor's workstream load by 80%, the returns on that agent should extend beyond that efficiency gain. Where will internal auditors redirect their time and efforts, and how will the value that work generates be measured? Keep in mind that efficiency gains are only one of several AIenablement benefits, many of which – e.g., dynamic scaling, enhanced decision-making – can generate far more valuable impacts.
- Test and compare. CAEs should compare the experience, efficacy and efficiency of AI-enabled and traditional/manual auditing processes. This will produce a clearer picture of which activities will benefit most from AIenabled support.

Talent management and knowledge transfer activities are equally crucial elements of internal audit's AI-enablement strategy, a topic that warrants its own discussion.

Internal audit functions that have made the greatest and most impressive strides with innovation have embraced the need to, as well as the inevitability of, change.

Al use case: Accelerating audit work

Numerous large, multinational organizations are leveraging Al in their internal auditing activities to achieve measurable time and cost savings.

- For one organization, an AI SOC report accelerator is enabling the internal audit team to direct more of their focus toward analyzing third-party risk, rather than becoming bogged down in data entry.
- A Fortune 500 company is leveraging AI to assist with drafting audit reports.
- A large healthcare organization reports that AI tools are saving the internal audit team from 100-hour workweeks.
- A global consumer products company has AI-enabled the entire audit lifecycle such that, with human-in-the-loop oversight, the audit work program is automatically built out from an initial set of scoping statements, with automated testing, workpaper preparation and reporting part of the endto-end solution.



Building an Al-ready audit workforce

Technology and talent are now intertwined.

In recent months, technology company CEOs have clarified the magnitude of talent management impacts AI will deliver. Salesforce's CEO has emphasized that AI agents are part of the corporate workforce from this point forward.¹³ More recently, Shopify's CEO issued a memo indicating that the e-commerce company will not greenlight new human hires unless hiring managers demonstrate that AI agents or tools are incapable of performing the role.¹⁴

This is not to say that internal audit functions need to initiate immediate plans to add AI agents to their teams and auditing activities. As we've noted, many internal audit groups may be in the early stages of AI, while even those ready for the next step on their AI journey likely are not in a position to implement agentic AI. But these insights from business leaders indicate how many organizations are thinking and planning for the next wave of AI. In this sense, it's vital for CAEs to be aware of and keep pace with how their organizations are transforming from both the risk assurance and adoption perspectives.

As CAEs know, AI is not the only force upending traditional talent strategies. Like other C-suite leaders and board members, CAEs view a number of talent management-related issues as significant risks, according to the results of our latest Top Risks Survey conducted in partnership with NC State University's ERM Initiative:¹⁵

¹³ "Today's CEOs are the last to manage all-human workforces, says Marc Benioff," Anna Cooban, CNN, January 23, 2025: www.cnn.com/2025/01/23/business/ davos-marc-benioff-salesforce-ai-prediction-intl/index.html.

¹⁴ "Shopify CEO says staffers need to prove jobs can't be done by Al before asking for more headcount," Annie Palmer, CNBC, April 7, 2025: www.cnbc. com/2025/04/07/shopify-ceo-prove-ai-cant-do-jobs-before-asking-for-more-headcount.html.

¹⁵ Executive Perspectives on Top Risks for the Near- and Long-Term, Protiviti and NC State University's ERM Initiative, February 2025: www.protiviti.com/us-en/ survey/executive-perspectives-top-risks.

- The ability to attract, develop and retain top talent, manage shifts in labor expectations, and address succession challenges
- 2. Talent and labor availability

Internal audit functions need to develop a comprehensive talent strategy that includes attracting and retaining high performers, fostering a culture of continuous learning, emphasizing targeted and focused upskilling and reskilling, and building a capable and confident team. This strategy should focus on equipping the workforce with skills such as adaptability and resilience, collaboration and relationship management, critical thinking and decision-making, creative thinking and innovation, complex problem solving, effective communication, leadership and influence, and emotional intelligence. It also should prioritize enhancing business acumen and domain knowledge to stay ahead of industry trends.

Additionally, it is essential to equip the team with skills that embrace technology and ensure they are well-versed in generative AI and other advanced technologies. This includes understanding and using effective prompts and queries in generative AI tools, as well as developing more advanced skills to configure and deploy AI agents.

Sustaining access to top talent – including people with AI and other advanced technology skills – is an increasingly critical priority for CAEs and internal audit leaders.¹⁶ The rapidly evolving nature of internal audit technology talent needs, the lack of availability of these skills and the emergence of AI call for CAEs to assess and, where necessary, pivot or upgrade their talent strategies. In our view, this applies to internal audit functions at any stage of their AI journey. We are seeing that even on the first steps of this journey, internal audit functions require people with strong acumen in and comfort with using AI tools. And as noted earlier in the comments made by CEOs with industry-leading organizations, there is no question that these AI journeys will progress. CAEs and their teams need to be ready.

The rapidly evolving nature of internal audit technology talent needs, the lack of availability of these skills and the emergence of AI call for CAEs to assess and, where necessary, pivot or upgrade their talent strategies.

¹⁶ "CAEs view cyber threats, talent management and third-party risks as top concerns," Protiviti, February 2025: www.protiviti.com/us-en/survey/top-risks-chief-audit-executives-2025.

Key activities to consider include:

- Create and continually update the internal audit function's skills inventory. CAEs need to conduct a comprehensive inventory of their current talent assets and skill sets. expanding them to incorporate AI-centric activities. Next, those assets should be mapped to internal audit's objectives, which correlate to the organization's overall strategy and business objectives, particularly as they relate to the use of AI in the internal audit function. Developing comprehensive skills libraries to which current and future needs can be mapped is often a helpful component. Any identified talent and skills gaps can be addressed by either tapping one or more talent sources (full-time employees, contract and temporary workers, guest auditor or rotational programs, expert external consultants, and managed services and outsourcing providers) or via structured or other forms of training to support upskilling and reskilling. Along these lines, CAEs need to shift their focus from roles-based positions (where team members operate under fixed job descriptions) to skillsbased ones. Skill stacking, micro learnings and programs of continuous learning are more likely to equip internal audit functions for the needs of what is coming next.
- Leverage Al-driven talent analytics to optimize workforce planning. Use Al-driven talent analytics to identify skills gaps, predict future talent needs and optimize workforce planning. This data-driven approach assists internal audit functions in staying equipped with the right skills and capabilities to meet evolving demands.

Identify and address different "tiers" of AI and advanced technology skill needs. Al skills occupy a broad spectrum in the internal audit function, ranging from understanding and using effective prompts and queries in a generative AI tool to coding a new AI agent capable of analyzing, reporting and monitoring internal audit KPIs. Now or at least very soon, most internal auditors will need a basic level of AI fluency and comfort, which can be thought of as having an AI "minor" to complement a core internal audit "major" (in fact, the concept of having multiple minors to supplement a core major is an approach we have observed in organizations that have established focused and disciplined approaches to talent development in an increasingly dynamic environment). Longer term (whether that is 1-2 years or further down the road), a smaller group of auditors will need to be able to configure AI agents. More advanced skills, including coding, also will be needed to develop customized agents.



- Make leadership, communication and collaboration skills development an equal priority. It is just as important for CAEs to recognize that the need for softer human skills is likely to increase markedly as AI enablement gives their internal auditors more time to focus on more collaborative, consultative, value-adding and innovativefocused activities. The auditors of the (near) future need to be AI-enabled. datadriven, and adept at performing all of the creative, relational and judgment-based interpersonal activities that AI agents are unable to conduct. Moreover, as internal audit functions become more technologyand AI-enabled, it is these skills that will empower and differentiate top performers on the team and ensure internal audit is delivering vital, sought-after insights and value to the business.
- Consider training options; deploy AI to enhance performance. AI can be used to enhance and accelerate internal audit training activities. These applications include skills gap analyses, simulation-based training activities, personalized learning assistants and automated feedback (for example, an AI agent can "listen" to an internal auditor's conversation with an auditee, assess efficacy and recommend improvements). Similarly, AI can review an internal auditor's work product and provide not only suggested edits but also feedback to help in the learning process.
- Integrate AI agents into the talent-sourcing portfolio. Seven years ago, Protiviti published a paper on a talent labor model for the digital age. Based on Charles Handy's "shamrock" framework, the model consists of three different talent sources (the leaves of the shamrock): full-time employees, a contractual fringe, and a network of external services and technology partners.¹⁷ Many internal audit functions have deployed a version of this model. With the advent of agentic AI, internal audit functions now have the opportunity to add another leaf, AI agents, to the shamrock framework, creating a four-leaf clover. This introduces another dimension to the internal audit function's performance and capabilities. At the same time, this dimension calls for the right AI talent, skills and experience to develop and deploy these AI agents.

¹⁷ The Labor Model for Finance in the Digital Age, Protiviti, July 2018: www.protiviti.com/sites/default/ files/2022-07/labor-model-for-finance-digital-age-roberthalf_protiviti.pdf.

In closing — it's all about Al-enabled human empowerment

Internal audit functions will soon look and operate very differently than they do today.

We made the above statement prior to the global pandemic and the era defining the introduction of generative AI tools. What was once a forecast is now unfolding in real time.

We are in exciting and dynamic times for the profession, where the opportunities to engage with and adopt truly transformative technologies have never been easier. In our view, the pace of transformation for internal audit functions globally will continue to accelerate, with historically unparalleled opportunities for CAEs and their teams to deliver work faster and more efficiently, provide deeper insight and foresight, and more consistently achieve the position of high-value, strategic adviser.

The journey toward the next phase in internal auditing will be both challenging and exhilarating. By embracing our refreshed nextgeneration internal audit framework focused on AI enablement and empowering auditors to support the business with more strategic, qualitative engagement while also redefining internal audit's talent strategies, CAEs and their internal audit functions can reinforce their role as proactive, value-adding business partners.

The future of auditing is here, and it is driven by technology and talent. As we navigate this transformation, the imperative is clear: Adopt these strategies not only to stay relevant but also to lead the way in internal audit's evolution. The time to act is now, and the potential rewards are immense. More than anything, it's an exciting time to be an internal auditor!



About the authors



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Andrew is Protiviti's Global Leader of Internal Audit & Financial Advisory services. He is responsible for the strategy, offerings, consulting delivery and external alliance partnerships for Protiviti's internal audit capabilities, including technology audit, audit innovation & transformation, strategy & technology enablement, and SOX and controls advisory services. With over 20 years of experience in internal audit, risk management and consulting, Andrew is inspired by and committed to leading a global team that pushes the boundaries for the profession by offering thinking, tooling, services and people that are truly best-in-class. His market focus is on increasing the relevance of and value delivered by internal audit both in the boardroom and across the clients he serves.



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Angelo is global leader of Protiviti's Technology Audit & Advisory practice. His specific areas of concentration include technology risk management, cybersecurity, IT compliance, internal audit and automation. Angelo has over 20 years of experience in all facets of internal controls and frequently works with CAEs, CIOs, CISOs and other leaders to mature their internal audit, technology risk management and cybersecurity capabilities. Angelo also leads Protiviti's Internal Audit Strategy & Technology Enablement services. In this role, he is responsible for driving innovations across Protiviti's client portfolio, as well as enabling Protiviti's workforce with a variety of enabling technologies.



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Ari brings over 23 years of experience advising global organizations on maximizing the value of governance frameworks and managing complex technology-related risks. A seasoned leader with expertise across the full audit lifecycle, Ari has led numerous internal controls initiatives. technology audits and cybersecurity engagements including technical assessments and strategic program reviews. He has been a featured speaker at international internal audit and IT audit conferences, recognized for translating complex risk and technology topics into actionable insights. Ari began his career in Arthur Andersen's Technology Risk Consulting practice and was a founding member of Protiviti at its inception in May 2002.



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Jennifer has nearly 15 years of internal audit and consulting experience. She advises and leads co-sourced and outsourced internal audit teams, applying leading practices to elevate audit performance and influence. Jennifer currently serves as Chief of Staff to Protiviti's Global Internal Audit Leader, where she drives strategic initiatives and partners with industry associations and thought leaders to advance internal audit's impact and operational excellence.



ALEX PSARRAS Director

Alex is a leader in the Internal Audit & Financial Advisory practice at Protiviti UK. He works closely with clients to align internal audit and GRC functions with their objectives, helping them bridge the gap between risk, data and technology. Alex is an expert in implementing AI, data mining, visualization, process mining and robotic process automation solutions, and has considerable experience leading data-driven engagements.

About Protiviti

Protiviti (www.protiviti.com) is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders confidently face the future. Protiviti and its independent and locally owned member firms provide clients with consulting and managed solutions in finance, technology, operations, data, digital, legal, HR, risk and internal audit through a network of more than 90 offices in over 25 countries.

Named to the *Fortune* 100 Best Companies to Work For[®] list for the 10th consecutive year, Protiviti has served more than 80 percent of *Fortune* 100 and nearly 80 percent of *Fortune* 500 companies. The firm also works with government agencies and smaller, growing companies, including those looking to go public. Protiviti is a wholly owned subsidiary of Robert Half Inc. (NYSE: RHI).

About Protiviti's Internal Audit Services

We deliver world-class internal audit services, leveraging leading practices that we have helped define and shape for the profession. Innovation inspires and encourages. Technology and data enable and deliver insight and efficiency. Proven and contemporary methods drive results. Our strategic internal audit sourcing models deliver specialized talent, methodology and technology — including AI — to meet the evolving needs of internal audit functions ranging from full outsourced solutions and delivery centers to tactical staff augmentation.

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