



Executive Knowledge Brief

AI Adoption in Internal Audit Functions

A 2023-2024 Comparison



**Audit Leaders
Network**

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About the Experts

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Imran Nashir MSc RE CISSP is a seasoned internal audit executive primarily operating within regulated environments, specifically the financial and telecommunications industries. With a strong foundation in business economics and IT, Imran is adept at making high-level strategic assessments while also having the capability to dive into the “nitty-gritty” details of complex issues. Currently, he serves as the Senior Audit Manager IT at Royal KPN N.V., the largest telecommunications provider in The Netherlands. Additionally, he is a member of the AI Advisory Group at IIA, Inc., and the Professional Practices Committee at IIA Netherlands.

Marc Eulerich

Prof. Dr. Marc Eulerich, CIA, is the chair for Internal auditing and the dean at the Mercator School of Management, University Duisburg-Essen, Germany. He also heads the Center for Internal Auditing Excellence and the Mercator Audit & Artificial Intelligence Research Center (MAARC), both at the same university. He has published over 150 scientific and practitioner articles and books about corporate governance, internal auditing, and strategy. His research is published in numerous national and international journals. Prof. Dr. Eulerich also supports the global internal audit profession with numerous talks and consulting projects to intensify the relationship between theory and practice.

Introduction

More audit functions adopt AI

Artificial intelligence (AI) may not be new, but the fervor surrounding it certainly is. In the last few years, the public's eyes have been opened to the nearly limitless possibilities of generative AI tools such as ChatGPT, Scribe, Bard, and GitHub Copilot, among others. Simultaneously, the public also has become more aware of the many risks these technologies pose. Regardless of one's views on AI's risks and rewards, one fact remains clear: AI is here to stay.

This is abundantly apparent in the organizational landscape — including in internal audit functions, as recent findings from The IIA's monthly Pulse Check surveys show. Conveyed through simple, digestible infographics, Pulse Checks are designed to give Audit Leaders Network members a quick snapshot of the position of peer internal audit functions on any given risk or relevant topic. In August 2023, The IIA released its inaugural Pulse Check report on the topic of AI adoption. Less than one year later, Pulse Check revisited the topic, revealing a striking escalation of AI adoption in a short time. This Audit Leaders Network Executive Knowledge Brief offers some context as to why this might be.



The Data

AI is here to stay

Pulse Check highlights

The escalation of AI adoption can be seen in several data points taken from the Audit Leaders Network members surveyed, which can be viewed in their entirety in Exhibit 1 and Exhibit 2. Highlights include:

- Internal audit functions currently using AI in some capacity increased from 14% of respondents in 2023 to 36% in 2024.
- Internal audit functions that plan to implement AI in some capacity in one to three years increased from 29% of respondents in 2023 to 53% in 2024.
- Internal audit functions that plan to implement AI in three or more years decreased significantly from 46% of respondents in 2023 to just 8% in 2024.
- Internal audit functions that have no plans to implement AI in any capacity decreased from 11% of respondents in 2023 to 3% in 2024.

Clearly, internal audit functions across the board are either reconsidering their AI adoption strategies and timetables or escalating plans already underway. The reasons for this can be divided into two different categories, each of which will be discussed in further detail.

Exhibit 1

In which phase of internal auditing do you feel AI could be most beneficial?

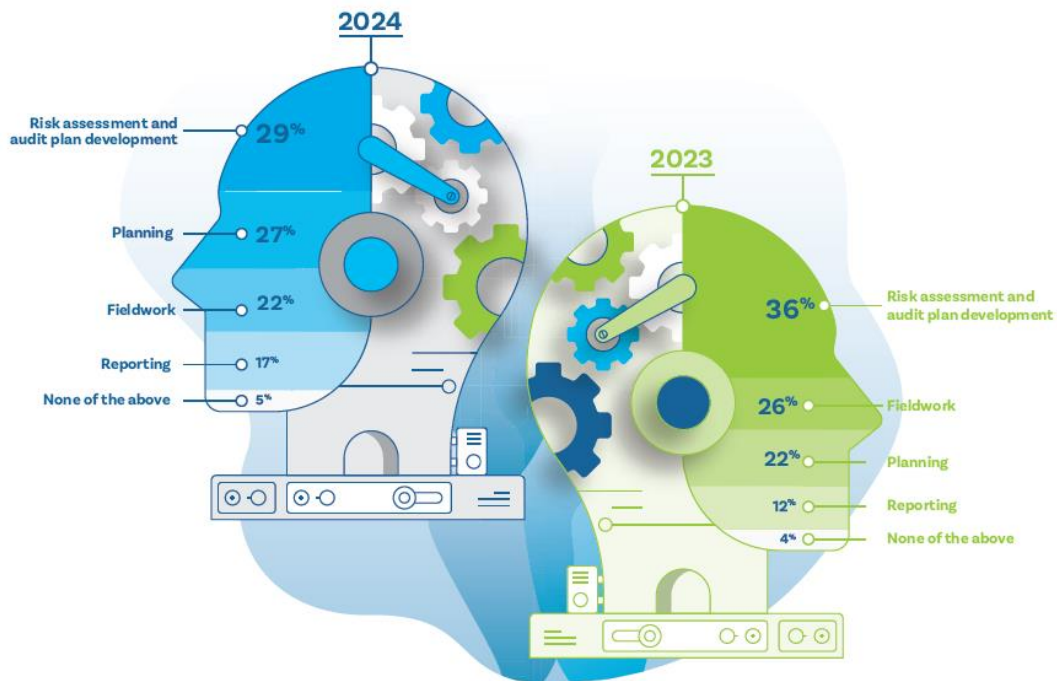
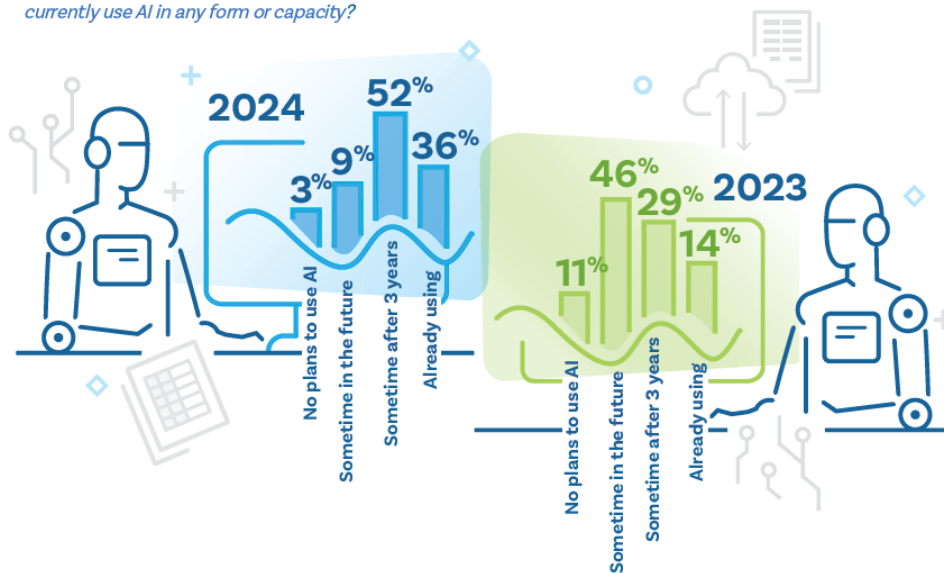


Exhibit 2

Does your internal audit function currently use AI in any form or capacity?



The Analysis

Why the rapid increase in AI adoption?

1. Pressure to adopt

First, as AI becomes more refined and ingrained into the business landscape, internal audit functions simply have no choice but to adopt the technologies. For example, as regulations across the world solidify regarding AI use in organizations, in some cases, compliance will become difficult – or even impossible – without internal audit adopting the technology in some capacity.

“Internal audit will be less effective in assessing AI if there is a lack of understanding of the technology, potentially increasing the risk of regulatory noncompliance,” says Imran Nashir, Senior Audit Manager IT at KPN, a Holland-based telecommunications provider. “If you examine some regulations, you will find that they often require some form of quality system for assessing high-risk AI systems, with some specifically mentioning audit or internal audit.”

Take for example the EU Artificial Intelligence Act, which was approved by the EU Parliament in March 2024. Regarding the surveillance of an approved quality management system, the legislation states, “The notified body shall carry out periodic audits to make sure that the provider maintains and applies the quality management system and shall provide the provider with an audit report.”

With future regulations from other governing bodies likely to use elements of this act as a model, it appears internal audit will legally play a vital role in AI risk mitigation. Thus, the time for audit functions to adopt the technology is now, or at least far sooner than initially anticipated.

The regulatory environment is not the only element adding pressure. The ongoing internal audit talent shortage, especially in technical areas that will be relevant to the future of organizational processes, is another factor. If an organization’s internal audit function has a perceived resistance to AI, prospective talent may be less inclined to consider employment there. “You might be less productive without AI, but equally important is the fact that skilled talent will likely not look at a function that doesn’t use something as increasingly common as AI,” says Nashir. “A lot of the new, fresh talent out there is now used to working with technology. If that isn’t offered, there is a risk they will look elsewhere.”

Finally, if internal audit is slow to adopt AI, it can severely limit the value the function can provide. “Delaying or rejecting AI adoption poses several risks,” says Marc Eulerich, professor at the Dean Mercator School of Management, Universität Duisburg-Essen, Germany. “Reliance on manual processes remains less efficient and more prone to error, leading to missed opportunities that AI could otherwise uncover.”

2. Benefits

Factors causing pressure to move toward AI are hardly the only reasons internal audit functions must embrace the technology. There are just as many, if not more, benefits in play that are enticing functions to incorporate it into nearly every internal audit responsibility (see Exhibit 2).

“With the boosts to speed, consistency, productivity, and quality – especially with the current talent shortage – the benefits of AI are too great to ignore,” Nashir says.

AI has even developed to the point where it can generate insights. “I have used AI to analyze employee engagement surveys,” Nashir explains. “Two years ago, that would have required advanced data analysis techniques using specialized software. But with tools such as Copilot, I can do that by just copy-pasting text into a chat window.”

Another benefit to consider is how much additional time AI can free up for internal audit to operate on a more strategic level within the organization, Eulerich adds. “The benefits of AI adoption in internal audit include increased efficiency, as automation of repetitive tasks allows auditors to focus on more complex and value-added activities,” he says. “Real-time monitoring and reporting enabled by AI lead to more timely decision-making, and the efficiency gained can free up resources for higher-priority tasks..”

Conclusion

Overcoming resistance

While the Pulse Check data indicates AI adoption has accelerated greatly overall, it also suggests there is still a small percentage that are delaying over a longer term, or even ignoring AI adoption altogether. For some, a delay may be justified.

Internal audit prioritizes risk mitigation, and depending on the current capabilities of the internal audit function and the organization as a whole, there are situations where restraint might be prudent.

Regarding AI risks, data management is arguably at the top of the list. AI, by definition, uses the data fed to it to train itself to operate effectively. This, naturally, raises the question of where that data goes and who has access to it.

“One of the biggest concerns I hear is regarding AI data protection,” Nashir says. “That’s a barrier to delaying or rejecting AI adoption at the moment. If AI is adopted and data protection issues arise, it could damage the reputation of the internal audit function, which is still responsible in the end for providing reasonable assurance.”

“Data security and privacy concerns arise from the need for AI systems to access large amounts of data or require the input of data,” Eulerich adds. “Furthermore, there may be a lack of trust in the decisions and outputs of AI systems.”

Finally, AI adoption could be delayed simply due to a CAE taking a conservative approach to aligning with company AI policies, which in the current environment could be in flux. “I often hear that the audit function is still waiting for a corporate policy,” Nashir says. “Most audit functions want to align with the corporate policy. So, if the company is slow in adoption, internal audit might follow that approach.”

More traditional – and familiar – issues such as lack of budget and resources can also be seen as barriers. “Outright rejection or delay of AI use can be attributed to a lack of understanding of AI and its benefits, limited financial and human resources, a low tolerance for risk, cultural resistance to change within organizations, and other strategic priorities taking precedence over AI adoption,” says Eulerich.

“Most internal audit functions are very small, less than 10 people, and they might have the perception that they just don’t have the resources, time, or budget to consider new technologies,” Nashir adds. “There are still functions that store their workpapers on their shared group drives. That’s just the reality on the ground.”

There is no one-size-fits-all solution or timetable. However, if recent trends are any indication, the longer AI adoption is delayed, the greater the likelihood that peers, the regulatory and corporate landscape, and the many evolving associated risks will leave internal audit behind. This is something internal audit should keep in mind when finalizing its strategy to establish organizational buy-in and alignment on all AI can offer.



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