Providing senior management, boards of directors, and audit committees with concise information on governance-related topics.

Issue 117 | June 2023

Al: The Governance Imperatives

The modern miracles of machine learning, predictive analytics, and other innovations driven by artificial intelligence (AI) provide significant enticing business opportunities. Various technology advancements, including improved computer processing power, affordable and accessible data storage and cloud computing options, and the ease with which workers access applications remotely, have combined to bring AI within reach for more and more organizations.

But is AI a board-level concern? There is a danger that organizations—and boards—will mistakenly see AI as something that fits into the information technology silo and fail to understand the potential pervasiveness of its impact, and the governance imperatives involved.

Technologies in this category have the potential to change nearly every aspect of how business is done, and new AI products, such as ChatGPT, starkly demonstrate the significant impact that these technologies can have and the accelerating pace of the changes they are driving. However, before diving into AI, business leaders should consider questions about its possible impact on workplace culture and on emerging regulations, as well as on the deeper legal, ethical, and moral questions about how it can and should be used.

Because of the many related governance considerations, Al needs to be on directors' agendas. "Artificial Intelligence is a board level issue because of its singular capability for exponential disruption," according to a Forbes magazine article.¹

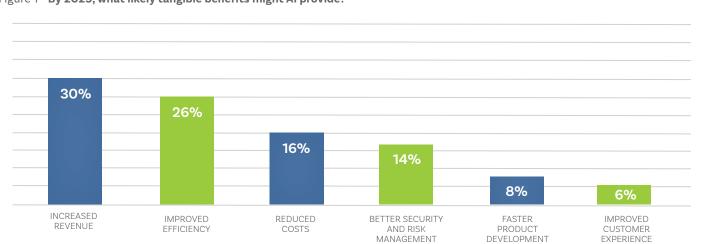


Figure 1 - By 2025, what likely tangible benefits might AI provide?

Source: : CIO Vision 2025: Bridging the Gap between BI and AI, MIT Technology Review Insights, 2022.



Key Considerations

Here's a look at some of the questions board members should be asking in their AI governance role, and the ways that internal audit can help them develop answers. Issues for boards include:

What does Al encompass? Al processes and analyzes vast volumes of data to produce analyses and recommend or even make decisions in a way that simulates human intelligence. It isn't one thing, but rather a catchall term for an array of applications such as natural language processing, expert systems, and machine learning, all of which can be used for a wide range of applications.

Al has long been a part of our everyday life. At the most basic levels, Al is behind the autocorrect feature on our devices and the responses from our smart speakers. In business settings, it is also used in medical diagnostics, forensic investigations, enhancing supply chain operations, and automating numerous operations and processes. Expected uses within the next two years include faster clinical trials, micro-fulfillment centers driven by AI and robotics, more precise anticipation of inventory needs, optimizing water and energy consumption in manufacturing, and improving product design and engineering, according to a report from MIT Technology Review Insights and Databricks.² The technology has also shown itself able to write, edit, or translate content or create graphics, while other kinds of artificial intelligence are developing everything from toys to therapeutic antibodies.3

What risks do Al applications pose? Al can pose threats on many levels. Indeed, given the uncertainty around Al, more than 1,000 tech leaders, researchers, and others recently called for a pause in the development of the most advanced Al systems, pointing to "profound risks to society and humanity." ⁴

- Employment concerns. This is one of the most significant social considerations. Goldman Sachs economists estimate that up to 300 million jobs worldwide could be automated in some way using generative artificial intelligence such as ChatGPT, predicting that 18% of work globally could be computerized, CNN reported.⁵
- Imperfect technology. Al still has its limitations, as early experiments with driverless cars have shown.

The same is true with other types of AI. For example, AI currently doesn't have the same context or judgment that a person would bring to an analysis of information. What's more, a machine-learning based tool may pick up and replicate certain biases, which can mean, for example, that some categories of people are left out of the recruiting process or that valuable data are omitted from calculations or analyses. "Despite its advanced state, AI in 2023 remains just as prone to biases as its human counterparts," according to VentureBeat, a publication that focuses on transformative technology.⁶

Spoken language used by an AI application might be misunderstood or misconstrued, leading to incorrect results or analyses. AI "hallucinations," where generative AI tools create false information, have been reported. Together these limitations mean that not only can AI tools provide incorrect or inappropriate responses, but also that it may repeat or spread erroneous data in other tasks or share it on social media. This can undermine processes and decision making, and potentially lead to liability concerns and potential failure of confidence in the organization's technology.⁷

- *Privacy*. While AI can aid in cybercrime mitigation, it gathers a wide range of personal data, heightening privacy risks for organizations. Ninety-two percent of security professionals in a Cisco study said their organization should do more to reassure customers about how their data is used in AI.8 Privacy policies may need to be updated to address any new challenges related to AI and to reassure customers, business partners, and other stakeholders that the organization is aware of related concerns. Directors should also consider the legal questions related to board oversight over AI-powered technology, according to an NACD BoardTalk article.9
- Missed opportunities. Companies may not have sufficient resources to make the most of AI. "While AI tools can be user-friendly, businesses still need to have specialized expertise to use the tools effectively," an ISACA article notes. In addition, AI tools need access to large sets of data to learn and improve, and gaining access to and analyzing the necessary amount of data may be a challenge for some businesses.¹⁰

About The IIA

The Institute of Internal Auditors (IIA) is a nonprofit international professional association that serves more than 230,000 global members and has awarded more than 185,000 Certified Internal Auditor (CIA) certifications worldwide. Established in 1941, The IIA is recognized throughout the world as the internal audit profession's leader in standards, certifications, education, research, and technical guidance. For more information, visit theiia.org.

The IIA

1035 Greenwood Blvd. Suite 401 Lake Mary, FL 32746 USA

Complimentary Subscriptions

Visit theiia.org/Tone to sign up for your complimentary subscription.

Reader Feedback

Send questions/comments to Tone@theiia.org.

How Can Internal Audit Contribute to Al Governance?

Internal audit is uniquely positioned to offer boards a holistic view of an organization's risks and Al's impact across the company. Boards can turn to internal audit for objective, independent assessments on whether the company has appropriately designed Al controls and is effectively implementing and monitoring governance over Al. Among other things, internal audit can offer assurance that Al use is in line with the organization's governance principles for accountability, transparency and robustness, fairness and inclusivity, and privacy, security, and safety. To

"A well-trained internal audit function that is well-versed in AI will be an invaluable asset to any board," according to Julio Tirado, CIA, director of internal audit at SpiritBank. He identified three roles for internal audit in this evolving risk area.

- Consultant. By collaborating with management in the design phase of any AI systems, internal auditors can offer a preemptive evaluation of risks, making it possible for the organization to build a safe and secure system. "When companies bring in internal audit on a consultative basis, they can spend more time on the business and less time putting out fires," Tirado said.
- Assurance. Internal audit can research and identify risks that can have an impact on crucial considerations such as privacy, security, compliance, and third-party risk management, the last of which may be a key challenge with AI, Tirado said. "We can add unique value in our traditional role of performing audit procedures that identify risks."
- Idea leadership. Internal audit can use its global view of the company to take a leadership role in understanding Al's impact on the current environment as well as emerging challenges and opportunities. For example, internal audit can brief the board and the audit committee on the use of tools such as ChatGPT not only in audit but also from the perspective of managers in various functions, Tirado noted.

Failure to make use of internal audit as a resource in addressing AI carries its own risks, Tirado said, including:

- Inadequate identification of risks, controls, and potential process improvements.
- Noncompliance with relevant rules, regulations, and policies, including potential regulation of Al.
- Missed opportunities to enhance stakeholder confidence—including shareholders and regulators—with independent and objective assurance on Al issues.

"Oversight of strategy and risk management are key to directors' role," Tirado said, and internal audit can enhance their oversight of Al governance on many levels.

A Fast-Moving Target

Although regulators at all levels are closely following developments in AI, the rapid pace of change in this area may prevent them from providing timely oversight guidelines. Consider that while it took Facebook 10 months to get 1 million users and 2.5 months for Instagram to reach the same milestone, ChatGPT did so in five days.¹²

An independent Al governance audit by internal auditors can help organizations ensure their Al policies and practices are sufficient. Internal auditors' in-depth knowledge of the organization enables them to identify the many areas that are or will be touched by existing and emerging Al technologies.



QUESTIONS FOR BOARD MEMBERS

- » Is our current governance approach to AI up to date and sufficient, and does it include a dedicated AI strategy?
- » Does the board have the appropriate level of expertise to understand and address AI governance and risk concerns?
- » Does the organization have the appropriate level of expertise?
- » What kinds of information and advice could internal audit provide the board on critical AI concerns?
- » How can internal audit help the organization address internal control gaps related to AI?





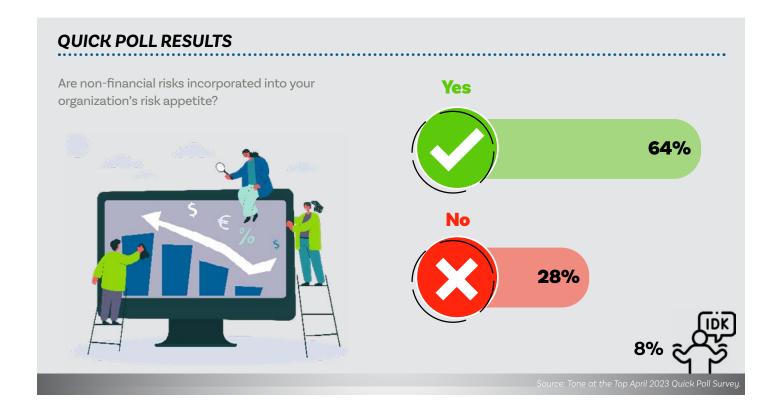
How is your organization using artificial intelligence (AI)?

- It is an integral part of one or more critical functions.
- We are beginning to explore the best uses of AI in one or more areas.
- We have not explored AI use at all.
- Don't know.

Visit theiia.org/Tone to answer the question and learn how others are responding.

Copyright @ 2023 by The Institute of Internal Auditors, Inc. All rights reserved.





¹⁴Al in Business: The One Thing Every Board Member Asks," Glenn Gow, Forbes, June 2, 2022.

²CIO Vision 2025: Bridging the Gap between BI and AI, MIT Technology Review Insights and Databricks, 2022.

³ ibid

^{4&}quot;How Businesses Are Experimenting with ChatGPT-like Services," The Economist, April 19, 2023.

⁵⁴¹300 Million Jobs Could Be Affected by Latest Wave of Al, says Goldman Sachs," Michelle Toh, CNN, March 29, 2023.

[&]quot;Escalating Concerns for AI in 2023 and What Can Be Done," Ramprakash Ramamoorthy, VentureBeat, January 3, 2023.

⁷ "When the Robots Come," Andrew C. Oliver, InfoWorld, March 8, 2023.

^ePrivacy's Growing Importance and Impact, Cisco 2023 Data Privacy Benchmark Study, Cisco, 2023.

^{*&}quot;Artificial Intelligence: The New Frontier for Board Oversight?", Sarah Eichenberger, Jonathan Rotenberg, and Caroline Sabatier, NACD BoardTalk, December 20, 2022.

[&]quot;The Urgent Need for Al in GRC and Security Operations: Are You Ready to Face the Future?", Rahul Pandey, @ISACA, March 22, 2023.

[&]quot;"Auditing Al Governance," Kitty Kay Chan and Tina Kim, Internal Auditor, February 21, 2022.

[&]quot;"ChatGPT Sprints to One Million Users," Katharina Buchholz, Statista, January 24, 2023.