

SPOTLIGHT

Staff Update on Outreach Activities Related to the Integration of Generative Artificial Intelligence in Audits and Financial Reporting

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OVERVIEW

Recent expansion in the development and capabilities of artificial intelligence (AI) is changing the business landscape. While artificial intelligence has existed in different forms for many years, generative AI (“GenAI”) has emerged as a tool with significant potential to affect the business environment, including the way auditors plan and perform audits.

GenAI is a technology that can produce new content, including text, images, audio, or video, when prompted by a user. Unlike traditional AI, which focuses on solving specific tasks using predefined rules or patterns in users’ data, GenAI creates new content in response to user instructions or queries using algorithms that are trained using specified information, often open-source information such as text and images from the internet. These algorithms use iterative training and feedback loops enabling the generative models to create a wide range of content.

In recent months, PCAOB staff conducted limited outreach to several audit firms and companies to understand their perspectives on the integration of GenAI in audits and financial reporting. The purpose of this Spotlight is to provide greater transparency regarding the use of GenAI in audits and financial reporting by sharing observations from that outreach.

PCAOB STAFF OUTREACH

The PCAOB’s standard-setting agenda includes a research project to assess whether there is a need for guidance, changes to PCAOB standards, or other regulatory actions in light of the increased use of technology-based tools in the preparation and subsequent audit of financial statements. The research includes evaluating the role that technology innovation plays in driving audit quality¹ through outreach with various stakeholders, including the PCAOB’s Standards and Emerging Issues Advisory Group,² and other activities.

In connection with this research, we conducted outreach regarding the current state of integration of GenAI tools in audits and financial reporting. We spoke to auditors mainly at larger firms³ and representatives from several companies (i.e., preparers of the financial statements) about their current use of GenAI and the direction in which they expect GenAI will be integrated in audits and financial reporting. As the use of GenAI evolves, we plan to continue outreach with these and other stakeholders and perform other research activities to better understand the effect of GenAI on planning and performing the audit.

¹ PCAOB Standard-Setting, Research, and Rulemaking Projects as of May 2024, available at: <https://pcaobus.org/oversight/standards/standard-setting-research-projects>.

² See, e.g., the June 29, 2023, meeting of the SEIAG which discussed emerging issues in auditing, including artificial intelligence. An archive of the meeting agenda, briefing papers, and webcast is available at <https://pcaobus.org/news-events/events/event-details/pcaob-standards-and-emerging-issues-advisory-group-meeting-june-2023>.

³ Audit firms included in this staff outreach consist of the U.S. global network firms and several U.S. non-affiliated firms that audit more than 100 issuers. Collectively, these firms audit the majority of the market capitalization for issuers.

OBSERVATIONS FROM STAFF OUTREACH

The integration of GenAI in audits and financial reporting is in its early stages but rapidly evolving. The observations below reflect the use of GenAI discussed by auditors and preparers at the time of our outreach. Audit firms and preparers alike emphasized that they are continuing to explore various ways of integrating GenAI-enabled tools in auditing and financial reporting.

Observations Related to GenAI Integration in Audits

Based on the information we obtained, the current integration of GenAI in audits conducted by the firms we spoke to appears to be focused primarily on administrative and research activities. However, most audit firms interviewed noted the potential for using GenAI in certain aspects of planning and performing the audit. These firms indicated that PCAOB auditing standards are not currently viewed as impediments to the development and use of GenAI in the audit. Key observations from our outreach with audit firms include:

- **Current Use of GenAI:** Some firms stated that their staff can use GenAI when preparing certain administrative documents or initial drafts of memos and presentations related to the audit. Some firms also indicated that they had developed and deployed GenAI-enabled tools to assist staff in researching internal accounting and auditing guidance. Generally, the global network firms we spoke to are further along in developing and deploying GenAI-enabled tools than non-affiliated firms are.
- **Investment in GenAI:** Most firms indicated that they are continuing to invest in GenAI-enabled tools either by developing them internally or by partnering with third parties. These firms identified several potential areas where such tools may assist engagement teams in the future with planning and performing audits. The areas could include assisting with summarizing accounting policy and legal documents, evaluating the completeness of audit documentation against relevant documentation requirements, performing certain risk assessment procedures, scoping the audit, evaluating the completeness of financial statement disclosures, and comparing amounts in the financial statements or notes to the financial statements with audited amounts.
- **Limitations on the Use of GenAI:** Data privacy and data security continue to be areas of focus for firms. Some firms described safeguards in place that address what information can be uploaded to firms' GenAI-enabled tools in order to prevent confidential information (e.g., data of companies under audit) from becoming public. Further, some firms also said that they have policies in place that limit the extent to which staff can use GenAI tools in an audit. Some firms currently do not allow GenAI to be used when performing audit or attest procedures due to data privacy concerns and other risks, such as reliability concerns related to GenAI output (discussed below).
- **Supervision and Review of GenAI:** The firms that are investing in GenAI-enabled tools indicated that they expect GenAI to augment, but not replace, humans in auditing or in financial reporting. In their view, human involvement remains essential for auditors and preparers and is needed to review the output from GenAI. Some firms noted that, despite the ongoing integration of GenAI, their policies for the supervision

and review of audits have not changed. These firms indicated that an engagement team member who uses a GenAI-enabled tool is still responsible for the results and documentation of the work. Likewise, these firms indicated that supervisors who review work performed with the assistance of GenAI are expected to apply the same level of diligence as when reviewing work where GenAI was not involved.

- **Risks Related to GenAI Input and Output:** Some audit firms emphasized the importance of the auditability of both the underlying source data (whether from public sources or confidential company information) and GenAI-created content when GenAI-enabled tools are used. For example, some firms are designing their GenAI tools to document the relevant underlying source data used. Further, some firms noted that GenAI output may not always be reliable because GenAI may sometimes generate new content that is false or misleading (so-called “hallucinations”) or may be skewed or biased. To mitigate these risks, some firms are developing more specific instructions or queries for users that are intended to improve the consistency and accuracy of responses provided by GenAI. Some firms also pointed to risks related to the data used in GenAI tools (e.g., using source data in large language models that is incomplete or compromised).
- **Other Risks Related to the Use of GenAI:** Some firms indicated that the use of GenAI by preparers could amplify certain existing information technology risks (e.g., risks related to the segregation of duties), or potentially create new risks that previously did not exist. Firms indicated that identifying and assessing new and emerging risks remain top of mind as GenAI-enabled tools are developed and integrated in audits.

- **Firm Policies Related to GenAI:** Firms emphasized the importance of policies and procedures, internal controls, and training related to the use of GenAI. Some firms said the development of policies, procedures, and controls for GenAI tools was similar to the development for other technology solutions. For example, these firms develop resources and training for staff on the appropriate use of technology tools, including GenAI.

Observations Related to GenAI Integration in Financial Reporting

Our outreach indicated that preparers are exploring how GenAI can be used throughout their operations. While some preparers are exploring opportunities to incorporate GenAI in accounting and financial reporting processes, integrating GenAI in these processes appears to be secondary to integrating GenAI in operational and customer-facing areas. Key observations from our outreach to preparers include:

- **Current Use of GenAI:** Some preparers noted that their personnel use GenAI in creating initial drafts of internal documents (e.g., summaries of accounting standards and interpretations, presentations, and benchmarking of company information with publicly available information from competitors). In addition, some preparers also use GenAI to assist in the performance of less complex and repetitive processes, such as preparing account reconciliations or to assist with identifying reconciling items.
- **Supervision and Review of GenAI:** Preparers emphasized that while GenAI has the potential to improve the efficiency of certain financial reporting processes, human involvement in supervising the

use of GenAI and reviewing GenAI output continues to be important.

- **Governance of GenAI:** Some preparers said the development and integration of GenAI was similar to the development of processes and governance for other types of technology (e.g., running technology in a parallel environment prior to deployment). Other preparers indicated that they are establishing new policies and procedures to ensure appropriate oversight of the development, integration, and use of GenAI tools. Some preparers also emphasized the importance of establishing controls over the reliability and accuracy of the data used to train GenAI models and acknowledged that there may be challenges in establishing these controls for GenAI models that are developed or trained by third parties.
- **Consistency of GenAI Created Content:** Preparers noted certain challenges in the broader use of GenAI within the financial reporting process. They include the “black-box” nature of some GenAI tools and the lack of consistent output produced by GenAI, which raise questions around the auditability of certain GenAI-created output. Some preparers are testing individual use cases to understand the extent of controls that would be needed before GenAI is more widely integrated in the financial reporting processes.

Tell Us What You Think

Was this Spotlight helpful to you? In fulfilling our mission to serve investors and the public, the PCAOB wants to know how we can improve our communication and provide information that is timely, relevant, and accessible. We welcome comments on this publication or other matters. You can fill out our **short reader survey** or email us at info@pcaobus.org.

NEXT STEPS – WE WANT TO HEAR FROM YOU

We are eager to hear from auditors about how they are integrating GenAI in the audit and how the use of this technology is affected by the requirements in PCAOB standards. We are also eager to hear from preparers about how GenAI is used in financial reporting, and from other stakeholders – including audit committee members, investors, and academics – about how GenAI may be used in the audit or financial reporting. We encourage you to share your experiences with the topics discussed in this Spotlight or other related areas. Please reach out to us at TechnologyOutreach@pcaobus.org.

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