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RESEARCH BRIEFINGS

The State of AI Adoption in Audit, Accounting, and Upstream Disciplines in 2026

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I. OVERVIEW

To fully grasp AI's role in audit as well as other accounting and upstream disciplines, particularly internal audit, it is important to start with a foundation of what these systems are, how they function, and their shortcomings. Currently, AI tools are primarily large language models (LLMs) that have generative components; think ChatGPT and Claude. These systems work by identifying language patterns and 'generating' statistically believable results rather than truly 'understanding' things in a human sense, i.e. prediction without context or meaning. MIT research has highlighted this limitation by identifying LLM use runs the risk of 'hallucinated' results, producing convincing yet incorrect answers when faced with new tasks (Zewe, 2025). Another study argues that GenAI, or AI systems that generate or create new content like text, code, images, music, etc., face a 'computational ceiling' that limits creativity because it predicts the most likely next word rather than engaging in critical, or contextual, thinking that a human would (Dolan, 2025).

In professional services, the accounting, audit, and finance industries are often considered bellwethers, meaning their emphasis on standardization, documentation, and regulatory compliance make them ideal candidates to pilot early adoption of AI technologies. These industries offer predictive environments for understanding how automation will alter mental labor.

> The question that pervades the industry and society is whether we are in an evolutionary or a revolutionary stage of change?

The accounting discipline is at a fundamental crossroads, where AI has moved from a buzzword to applied reality. Nowhere is this shift more evident than in auditing. This brief examines the current state of AI adoption in the auditing profession with particular attention to emerging risks and the gap between promise and practice. Our research addresses three broad categories of risk; 1) Physical and infrastructural vulnerabilities; 2) Employment and workforce disruptions; and 3) Professional and reputational concerns related to judgment, accountability, and quality. We begin with a review of the deployment landscape, followed by an assessment of operational and financial risks and then an assessment of the quality gap. We conclude with an appraisal of education paradigms and the future of governance.

II. THE PROMISE

According to Thomson Reuters (2025), 21% of tax firms already use GenAI, and over half are considering it. Institutional investors recognize this shift in that 64% believe AI is most beneficial for improving audit accuracy and efficiency, 45% see potential in risk assessment, and 41% expect it to identify fraud (CAQ and KRC Research, 2025).

> The Big Four accounting firms are investing billions in AI platforms and agents, a trend that is reshaping the audit process.

PwC expects end-to-end AI automation by 2026 (Gaetano, 2025), while Deloitte has tripled the number of auditors using its AI tools in one year (Booth, 2025). EY alone is investing more than $1 billion annually in AI, with more than 100 internal AI applications and 1,000 AI agents. The firm's global revenue increased to $53.2 billion (Thompson, 2025). However, the UK's Financial Reporting Council found that the six largest accounting firms, including the Big Four, use AI and automated tools in audit work but do not measure their impact on overall audit quality (Kissin, 2025). Rather than developing AI KPIs tied to quality outcomes, firms primarily track usage and licensing, thus measuring adoption rather than impact.

At this early stage, the integration of GenAI into audits is focused on administrative and research tasks rather than core audit procedures. Firms reported using GenAI to primarily assist with drafting internal documents, memos, and presentations, and researching internal accounting and auditing guidance. Larger international firms are farther along than their smaller counterparts in developing and deploying GenAI tools, leading to possible inequality among firms (PCAOB, 2024).

III. THE RISKS

AI systems require massive computational resources like data centers, semiconductor chips, water for cooling, and enormous amounts of electricity. Moreover, semiconductor supply chains are concentrated in Taiwan and South Korea (CubeFabs, 2025); regions currently facing geopolitical tensions. Additionally, energy demands continue to rise, with AI's energy footprint outpacing efficiency gains and raising questions about grid capacity, environmental sustainability, and cost structures (Yu, 2025). For firms building business models around AI-dependent workflows, these risks represent potential points of failure that could threaten entire operational strategies. A single grid disruption or hold-up in the semiconductor supply chain could cause a single point of failure for a firm reliant on AI software or processes (OECD, 2023).

There is a wide perceptual divide in the extent of investment in, and integration with, AI across professional services. There have been warnings that current AI investment resembles the late 1990s dot-com bubble, cautioning that while AI has “extremely high” value, there are “a ton of these investments that will be dead ends” (Metzger, 2025). Warren Buffett’s Berkshire Hathaway recently acquired a significant stake in Alphabet, Google’s parent company, signaling confidence in AI as a long-term growth driver even as market volatility roars on (Berkowitz, 2025). Current optimism about AI is at a standoff with fears of a bubble, not entirely unlike the subprime mortgage crisis (Wilkins, 2025).

More than 50% of fund managers surveyed by the Bank of America believe that AI stocks are currently in a bubble, yet investment continues to rise (CNBC, 2025).

IV. THE PRACTICE

Both professional and consumer trust in AI remains fragile, further slowing adoption. Studies have documented what experts call an ‘illusion of competence,’ meaning users of GenAI struggle to assess their own competencies accurately, feel more knowledgeable than they actually are, and produce lower-quality work; however, these impediments are not reflected in the perceived quality of their work (Dolan, 2025). At the same time, there has also been research that shows individual willingness to reject AI recommendations due to ‘image concerns,’ or the fear that visible reliance on AI signals a lack of competence (Almog, 2025).

The risks of inadequate oversight have already caused embarrassing failures and reputational harm in the industry. Deloitte Australia was compelled to partially refund a government contract after submitting a report containing AI-generated errors, including made-up quotes, fictitious academic references, and inaccurate citations (McGuirk, 2025). The report, which cost approximately $290,000, was produced using Azure OpenAI. A KPMG study found that 57% of employees admit to making mistakes in their work due to AI use (Alexis, 2025). About half of the employees report using AI without knowing if it is permitted, and 44% acknowledge using it improperly (Alexis, 2025).

Kokina et al. (2025) found that simple AI tools are widely adopted in audit practice, while more complex AI applications remain largely in development. They identify several barriers limiting broader adoption of more advanced AI systems in auditing, including concerns about clarity, data quality, bias, and the risk of auditor overreliance on automated outputs. The accounting professionals interviewed emphasized the importance of transparency and interpretability in AI systems, noting that auditors must be able to understand and justify the reasoning behind their conclusions to meet professional and regulatory standards.

The UK government's Department for Business and Trade conducted a trial of Microsoft 365 Copilot. The researchers found no clear evidence of productivity gains (Ticong, 2025). While users reported satisfaction and ease of use, some tasks actually took longer to complete, and the additional oversight or corrections needed to verify the AI-generated outputs still negated any expected time savings. This could change in the future; however, surpluses are currently difficult to identify.

V. THE HUMAN ELEMENT

An EY survey found that 71% of U.S. workers are anxious about AI at work, fearing job loss, falling behind without AI skills, and negative impacts on pay and career advancement (Hemmerdinger, 2023). These concerns are not entirely unfounded, as an MIT study estimates that AI could currently replace work equivalent to approximately 11.7% of the U.S. labor market, representing roughly $1.2 trillion in wages, with particular impact on administrative, financial, and tech roles (Hale, 2025).

Entry-level auditor job postings have fallen 43% in the past year, according to Randstad (Hagy, 2025).

A professor teaching business strategy noted he was surprised just "how scared [his] students are of using [AI]," with many fearing they will 'lose their humanity' entirely through overreliance (Lichtenberg, 2025). Another writer argues that colleges risk 'self-lobotomizing' by rushing to integrate GenAI throughout education without first ensuring students have developed foundational skills like deep reading, critical thinking, and original analysis (Clune, 2025).

The integration of AI into accounting has also created an urgent crisis in higher education. Traditional accounting curricula, designed to prepare students for careers built on technical proficiency and eventual skill development, now face fundamental questions about what knowledge and capabilities will even remain relevant. How do you teach for a profession that is automating its entry-level positions?

One professional declares that the next generation of consultants must transition from PowerPoint to Python, becoming strategist-technologists capable of building deployable AI solutions rather than simply advising on strategy (Sherman, 2025). A shift from knowledge-based expertise to implementation-based competency represents a fundamental change in what it means to be a professional in this field.

VI. THE RESPONSE

Data privacy and security concerns are central, leading many firms to implement strict safeguards on what information can be entered into GenAI tools. Some firms prohibit the use of GenAI in performing audit or attest procedures altogether due to confidentiality risks and concerns about the reliability of GenAI outputs. Despite the potential for AI to transform auditing, accounting and upstream disciplines, firms have emphasized several limitations and risks that prevent full GenAI implementation.

> At the moment, there is still a strong consensus that GenAI is intended to augment, not replace, human judgment in auditing, accounting and upstream disciplines.

AI has moved from experimentation to active deployment, with firms investing billions and expanding internal tools across research, drafting and administrative workflows. Yet the evidence suggests that current adoption is outpacing validation. LLMs, which underpin most currently used systems, generate plausible outputs without true contextual understanding, creating the risk of hallucinations, overreliance, and a false sense of individual ability.

Firms have highlighted the risks associated with GenAI input and output, including the possibility of biased, misleading, or fabricated responses (PCAOB, 2024). Engagement team members remain fully responsible for work performed using GenAI-enabled tools, and supervisors are expected to apply the same level of professional skepticism and diligence when reviewing such work as they would in a traditional audit environment (PCAOB, 2024). Until KPIs track quality outcomes rather than adoption rates, this responsibility remains ambitious. So far the industry's response has been to restrict rather than solve for these complexities.

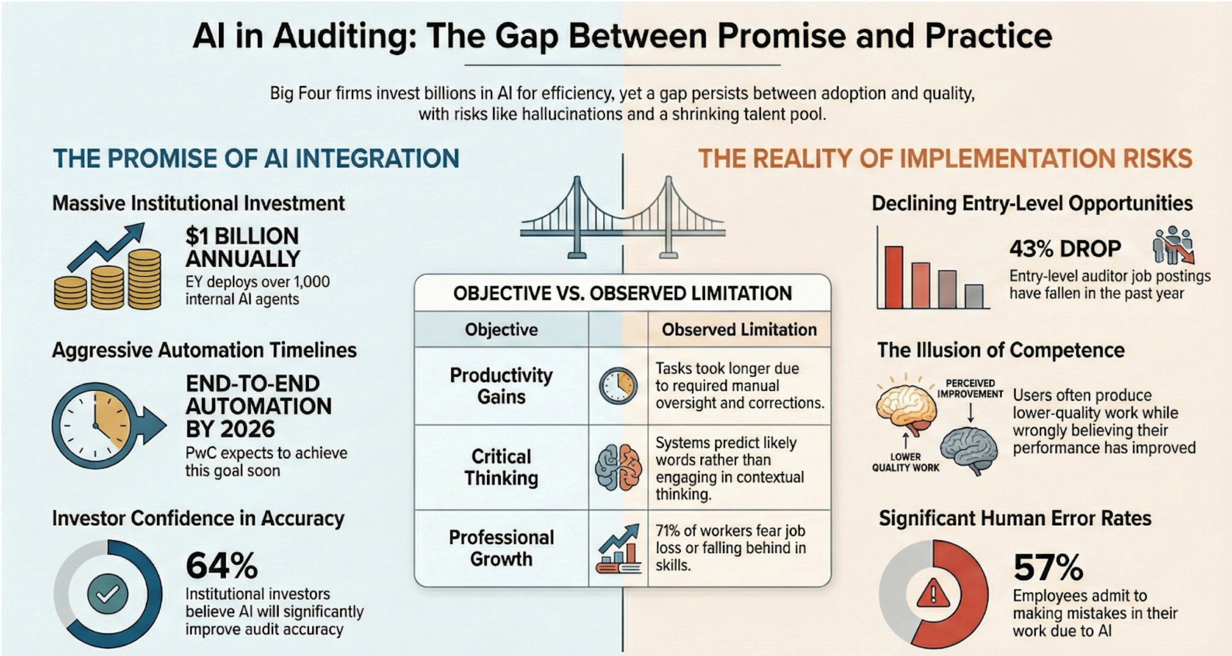

Figure 1 - Infographic Developed by Processing Research Content using NotebookLM

With regard to the education and talent pipeline, New York's recent passing of updated CPA licensing requirements reflects a broader industry trend, with at least 24 states now offering alternative pathways to address the current talent shortage (Webber Sadovi, 2025). This legislation allows candidates to become licensed with 120 college credit hours and two years of experience rather than the previous 150-hour requirement that critics viewed as a barrier to entry (Webber Sadovi, 2025). It is an acknowledgement that workforce disruptions exist, but licensing changes alone do not address what students are, or are not, being prepared for.

As mentioned above, regulators lack metrics to measure an improvement in work quality. Moreover, real-world failures, productivity trials and documented misuse by employees expose a persistent gap between promise and practice. At the same time, infrastructure vulnerabilities, market concerns, workforce anxiety, declining entry-level roles, and unresolved educational challenges complicate the transition. Despite these hurdles, it appears we are still on the march of progress. At the moment, firms emphasize that AI is meant to augment and not replace human judgment, keeping the 'human in the loop;' however, these safeguards often rely on restriction rather than proven reliability.

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