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Commentary

Agentic AI and Human-AI Collaboration in Auditing: Reframing Roles, Accountability, and Governance

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Artificial intelligence has been discussed in auditing as a set of tools designed to enhance efficiency, expand analytical capacity, and support auditors' professional judgment. A substantial body of accounting information systems (AIS) research has emphasized that technological advances reshape audit processes without displacing the central role of professional judgment (e.g., Vasarhelyi et al., 2004; Kokina et al., 2025). Advances in large language models and multi-agent systems, however, mark a departure from this traditional framing. These developments have given rise to agentic AI, which refers to AI systems capable of decomposing objectives, initiating actions, coordinating subtasks, and iteratively refining outputs. As a result, agentic AI raises qualitatively different questions from earlier generations of audit analytics or computer-assisted audit techniques.

KEYWORDS

Agentic Artificial Intelligence, Human–AI, Collaboration, Auditing, Accountability, AI Governance, Professional Judgment

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1 | INTRODUCTION

Artificial intelligence has been discussed in auditing as a set of tools designed to enhance efficiency, expand analytical capacity, and support auditors' professional judgment. A substantial body of accounting information systems (AIS) research has emphasized that technological advances reshape audit processes without displacing the central role of professional judgment (e.g., Vasarhelyi et al., 2004; Kokina et al., 2025). Advances in large language models and multi-agent systems, however, mark a departure from this traditional framing. These developments have given rise to agentic AI, which refers to AI systems capable of decomposing objectives, initiating actions, coordinating subtasks, and iteratively refining outputs. As a result, agentic AI raises qualitatively different questions from earlier generations of audit analytics or computer-assisted audit techniques.

In this commentary, I suggest that the central challenge is no longer whether AI can assist auditors, but how judgment and accountability should be structured when AI systems operate with a degree of autonomy. Costanza-Chock et al., (2023) cautioned that as AI systems become more autonomous, traditional accountability mechanisms may be strained or obscured. Accordingly, the concept of human-AI collaboration must be revisited not merely as a productivity enhancement narrative, but as a governance problem that reshapes the boundaries of professional skepticism and assurance responsibility.

While existing discussions often emphasize enforcement intensity, legal liability, and ex post inspection outcomes, this commentary adopts a complementary perspective by focusing on ex ante governance and institutional design. Drawing on regulatory developments, professional standards, and industry practices in Taiwan, I highlight how governance-oriented frameworks may shape human-AI collaboration before audit failures occur. Taiwan provides an instructive setting because AI adoption in financial institutions and accounting firms has accelerated rapidly, while regulatory expectations regarding professional responsibility remain stringent and highly person-centered.

2 | WHY AGENTIC AI MAY CHANGE THE AUDIT

Traditional discussions of AI in auditing implicitly assume a unidirectional relationship in which auditors design procedures and AI systems execute predefined analytical tasks. Under this paradigm, responsibility and professional judgment remain firmly anchored in the human auditor, with intelligent systems primarily functioning as decision-support tools rather than autonomous actors. Prior AIS research has consistently emphasized this complementary role of technology, arguing that intelligent systems are designed to support, rather than replace, auditor judgment (e.g., Sutton et al., 2016). Empirical studies of audit analytics similarly portray advanced analytical tools as extensions of auditors' cognitive capacity embedded within human-led audit processes (Cao et al., 2015).

Agentic AI challenges this long-standing assumption by introducing systems capable of prioritizing tasks, generating intermediate hypotheses, and dynamically adapting their strategies based on evolving information. Unlike earlier generations of audit analytics, agentic systems can actively search for corroborating or contradictory evidence and adjust their analytical focus in response to intermediate findings. In an audit context, this enables AI systems to autonomously surface risk signals, suggest areas for procedural emphasis, and synthesize evidence across heterogeneous data sources. Evidence from AI-assisted and co-piloted auditing indicates that emerging AI architectures increasingly participate in audit reasoning processes, rather than merely executing predefined analytical routines (Gu

et al., 2024). Xiong et al. (2025) suggested that such AI systems extend beyond passive analytics to support iterative and goal-directed audit activities.

This shift transforms the core audit question from how auditors use tools to how auditors govern semi-autonomous agents. Langer et al. (2021) cautioned that post-hoc explanations generated by AI systems may create an illusion of transparency rather than genuine interpretability. Without explicit governance structures, human-AI collaboration risks obscuring responsibility rather than strengthening professional judgment.

3 | RE-MAPPING ROLES IN HUMAN-AI COLLABORATION

A useful way to conceptualize human-AI collaboration in auditing is to re-map roles instead of focusing exclusively on specific tasks. Eulerich et al. (2025) emphasized that technology can expand audit coverage and timeliness by enabling more continuous, data-driven forms of assurance, thereby reshaping how auditors organize and perform their work. In an agentic environment, this role-based perspective becomes particularly salient, as AI systems may function as risk scouts or evidence synthesizers that operate across large and heterogeneous datasets. By supporting the identification, aggregation, and preliminary interpretation of audit-relevant information, such roles can meaningfully augment audit effectiveness, especially in data-intensive or complex engagements.

However, the human auditor's role must evolve in parallel. As AI systems assume more proactive analytical roles, auditors increasingly move beyond serving as procedural executors and instead function as governors of the audit process. This governance role involves setting audit objectives, constraining AI autonomy, evaluating AI-generated outputs, and determining when override of AI recommendations is required. Manheim et al. (2024) highlighted that such institutional oversight mechanisms are essential for maintaining accountability and trust in AI-enabled auditing environments, particularly as AI systems become more autonomous.

At the same time, while AI roles may expand, accountability does not shift. Professional standards, ethical obligations, and legal liability continue to reside with human auditors and accounting firms. Effective collaboration therefore depends less on task delegation and more on clearly defined boundaries of authority and review protocols.

4 | BENEFITS AND THEIR UNEVEN DISTRIBUTION

The potential benefits of agentic AI in auditing are substantial. Such systems can process large volumes of transactional data, surface patterns that may escape human attention, and dynamically refine risk assessments over the course of an engagement. Prior research on audit automation and analytics highlights the potential for advanced analytical capabilities to enhance audit quality by enabling more targeted and timely procedures (e.g. Appelbaum et al., 2017; Cao et al., 2015), thereby providing an important foundation for understanding the prospective benefits of agentic AI in auditing.

From a governance perspective, agentic AI may also support more consistent application of firm-wide methodologies and risk frameworks. However, these benefits are unevenly distributed. Large accounting firms are better positioned to invest in AI governance infrastructure, internal controls, and specialized oversight personnel. Smaller firms may rely

on third-party tools with limited transparency, increasing exposure to model risk and documentation gaps.

From a human capital standpoint, agentic AI may provide cognitive support to junior auditors, but also risks narrowing experiential learning if judgment is increasingly deferred to automated reasoning. These concerns echo longstanding discussions in the professional skepticism literature regarding the conditions under which decision aids enhance, rather than impair, auditor judgment (e.g. Nelson, 2009).

5 | RISKS: WHEN COLLABORATION OBSCURES ACCOUNTABILITY

The most significant risks of agentic AI emerge when the parameters of human-AI collaboration are insufficiently specified. In such settings, automation bias can lead auditors to place undue reliance on AI-generated analyses, particularly when outputs are expressed in fluent and seemingly authoritative natural language. At the same time, the distribution of decision-making across human teams and AI agents may blur responsibility, making it more difficult to attribute accountability and conduct meaningful ex post evaluations of audit failures (Costanza-Chock et al., 2023). Another emerging risk is the illusion of explainability. While agentic AI systems can generate explanations for their outputs, these narratives may function as plausible rationalizations rather than faithful representations of underlying reasoning processes (Langer et al., 2021). In such cases, apparent transparency may mask substantive opacity. Governance mechanisms must therefore require not only explanations, but also traceable reasoning logs and documented human review.

6 | A TAIWAN PERSPECTIVE: GOVERNANCE-ORIENTED REGULATION

Taiwan offers a distinctive regulatory and professional context for examining agentic AI in auditing. Although no regulation explicitly targets agentic AI use by auditors, several parallel developments collectively shape expectations for human-AI collaboration.

First, Taiwan's Financial Supervisory Commission (FSC) has issued comprehensive guidelines governing AI use in the financial industry. These guidelines emphasize lifecycle governance, risk-based implementation, accountability for outcomes, and third-party oversight (FSC, 2024). While directed at regulated financial institutions rather than auditors, these principles indirectly elevate expectations for audit assurance over AI-enabled processes and internal controls.

Second, Auditing Standards in Taiwan, aligned with International Standards on Auditing (ISA), explicitly acknowledge the use of automated tools and data analytics in risk assessment and analytical procedures. Auditing Standard No. 75 in Taiwan recognizes that auditors may employ automated tools to analyze data and identify areas requiring further procedures, while retaining responsibility for interpretation and judgment (Accounting Research and Development Foundation in Taiwan, 2021).

Third, audit quality oversight mechanisms in Taiwan increasingly incorporate innovation-related dimensions. The FSC's audit quality indicator (AQI) framework encourages audit committees to consider firms' technological capability training and innovation capacity as part of audit quality assessment. This embeds technology adoption within a governance and comparability framework rather than treating it as a purely technical enhancement.

Compared with jurisdictions where audit regulation relies heavily on ex post inspection and legal enforcement, Taiwan's approach places relatively greater emphasis on ex ante governance, risk management, and institutional coordination. This orientation is particularly relevant for managing agentic AI, whose risks are best addressed through boundary-setting, oversight design, and accountability allocation before adverse outcomes materialize.

7 | IMPLICATIONS FOR RESEARCH, PRACTICE, AND REGULATION

For researchers, agentic AI opens new avenues to examine how professional judgment is exercised under conditions of partial automation and how governance structures shape human-AI interaction. Continuous auditing research has shown that technological advances can alter the timing, scope, and organization of audit activities while preserving the central role of human oversight and judgment (Vasarhelyi et al., 2004). Against this backdrop, a particularly promising direction for future inquiry lies in distinguishing between the use of AI as a decision-support tool and the delegation of tasks to semi-autonomous agents. Gu et al. (2024) further indicated that this distinction becomes increasingly salient as AI systems begin to participate more actively in audit reasoning processes.

For practitioners, the key implication is that investment in AI capability must be matched by investment in governance. Clear policies defining acceptable AI autonomy, training that emphasizes critical evaluation of AI outputs, and documentation practices that preserve transparent audit trails are essential.

For regulators and standard setters, a central challenge is to articulate principles that remain technology-neutral while still addressing the distinctive governance risks introduced by agentic systems. Manheim et al. (2024) underscored the importance of establishing clear institutional expectations when decision-making authority is partially delegated to autonomous or semi-autonomous systems. In the auditing context, clarifying requirements related to explainability and responsibility attribution is therefore critical for preserving accountability and sustaining trust in the audit function.

8 | CONCLUSIONS

Agentic AI represents a qualitative shift in the relationship between technology and professional judgment in auditing. While its potential benefits are considerable, they are inseparable from risks related to accountability, bias, and over-reliance. The Taiwanese experience illustrates how governance-oriented regulation, professional standards, and institutional oversight can jointly shape human-AI collaboration.

The future of auditing in an agentic AI environment depends less on technological sophistication than on the clarity with which roles and responsibilities are defined. Properly governed human-AI collaboration can strengthen rather than undermine the foundations of audit quality and public trust.

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