

AUDITOR'S PROFESSIONAL JUDGEMENT AND THE EMERGENCE OF ARTIFICIAL INTELLIGENCE IN EXTERNAL AUDITING

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Advanced technological innovation has become a defining feature of modern auditing, gradually transforming auditing procedures. The increasing adoption of technological tools (i.e., robotic process automation, data analytics etc.) is reshaping auditors' decision-making processes, generating both significant benefits and notable risks for auditors and the auditing profession. This paper examines the growing role of technology, specifically artificial intelligence, within the auditing profession, with particular emphasis on its strengths and associated limitations, and the implications for auditors' professional judgement. It briefly reviews auditing pronouncements regarding the use of technology in contemporary audit practice. Furthermore, the paper analyses the key problems, challenges, and opportunities auditors face when exercising professional judgement in technology-enabled audits. The discussion considers the implications of using advanced technology in an audit for auditors and their professional judgement. Also, auditors' responsibilities and accountability are considered. The paper concludes that while technological innovation offers substantial opportunities to enhance audit efficiency and effectiveness, auditors' professional judgement and professional scepticism remain essential to ensuring reliable and high-quality audit outcomes.

DOI
[https://doi.org/
10.18690/um.epf.7.2026.42](https://doi.org/10.18690/um.epf.7.2026.42)

ISBN
978-961-299-166-1

Keywords:
advanced technology,
auditor,
auditing,
artificial intelligence,
challenges,
professional judgement



University of Maribor Press

1 Introduction

Auditor's professional judgement is a multidimensional construct that integrates technical competence, ethical awareness and contextual evaluation (Esmailnozar & Rezaei, 2024). It is recognised as a central determinant of audit quality and credibility, reflecting the auditor's capacity to apply expertise, experience, and ethical reasoning when evaluating information (financial and non-financial) under conditions of uncertainty (Samiolo et al., 2024). IFAC's International Auditing Standards (ISA) define professional judgement as the application of relevant training, knowledge and experience, within the framework of auditing and ethical standards, to make informed decisions throughout the audit engagement (i.e., ISA 200, Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing). Professional judgement permeates all stages of the audit process, including risk assessment, evidence evaluation, materiality determination, and formulation of audit opinion (Hojatifard et al., 2019; Samiolo et al., 2024), making it the "core of the audit". At the same time, the research notes that auditor judgement is inherently subjective and shaped by multiple interacting factors. These are commonly grouped into personal, task-related and environmental dimensions. Personal factors include experience, expertise, professional scepticism, ethical orientation and cognitive biases, all of which influence how auditors interpret evidence and resolve ambiguities (Moustafa Abdallah et al., 2024). Task and contextual factors – such as audit complexity, time pressure, organizational culture, client relationships, and regulatory scrutiny – also significantly affect judgement quality and consistency (Ta et al., 2022). Empirical studies demonstrate that independence, competence and structured decision processes enhance judgement reliability, whereas workload pressure and incentives may impair objectivity and lead to judgement bias (Koch & Salterio, 2017; Ta et al., 2022). An auditor's professional judgement is a critical mechanism through which auditors ensure the reliability and integrity of financial reporting in complex environments (Esmailnozar & Rezaei, 2024).

Auditor's professional scepticism as a foundational attribute shapes the auditor's professional judgement. ISA defines professional scepticism as an attitude that includes a questioning mind and a critical assessment of audit evidence (ISA 200; see IFAC, 2025). This directly links professional scepticism to the quality of judgements formed under uncertainty. Professional scepticism is crucial for mitigating cognitive

biases such as anchoring and confirmation bias, thereby improving risk assessments and fraud detection (Nelson, 2009). Research has shown that higher sceptical orientation strengthens audit evidence evaluation, enhances sensitivity to contradictory information, and supports more conservative and defensible audit conclusions (Hurr, 2010). Conversely, time pressure, client familiarity, and incentive structures may weaken scepticism and impair auditor's judgement quality (Koch & Salterio, 2017). Overall, research frames professional scepticism as a critical cognitive and ethical driver of high-quality auditors' judgement.

Like all sectors of the economy, the auditing profession has been compelled to adopt technological innovations in order to enhance efficiency, accuracy, and overall operational performance. In particular, the rapid advancement of artificial intelligence (AI) has introduced profound transformations in audit practice, reshaping traditional methodologies and expanding the scope of analytical capabilities (Gasperz et al., 2026). More broadly, digitalization stands at the forefront of the contemporary business environment, fundamentally redefining how organizations operate, communicate, and collaborate within increasingly interconnected markets (Deliu, 2024). The aspiration to develop artificial intelligence capable of replicating, and potentially replacing, human cognitive processes can be traced back to the twentieth century. Although artificial intelligence is often perceived as a recent technological breakthrough, the conceptual foundations of creating autonomous, thinking machines are deeply historical. Over the decades, the field has experienced recurring cycles of optimism and disappointment, reflecting both the ambitious expectations placed upon such technologies and the technical limitations encountered in their development (Grzybowski et al., 2024). Nevertheless, the overarching objective has remained consistent: to construct intelligent systems that can enhance productivity and efficiency across various sectors of the economy. A significant milestone in the practical realization of this ambition occurred in the last decade. For example, in 2020, OpenAI introduced GPT-3, a large-scale language model that rapidly attracted widespread public and professional attention. Within a short period following its release, GPT-3 was adopted by a substantial number of users. The system demonstrated an unprecedented capacity to generate human-like text, engage in coherent conversations, write computer code, translate languages, and create original written content in response to natural-language prompts. Its performance marked a notable advancement in the evolution of artificial intelligence and signalled a new phase in

the integration of AI-driven tools into both professional and everyday contexts (Mucci, n.d.). The rapid development of technology has accelerated its widespread implementation across industries, in some instances leading to workforce displacement as specific roles and tasks have been rendered obsolete through automation and advanced technological solutions (Gasperz et al., 2026). Although artificial intelligence offers fast and accurate data processing capabilities, a key question arises: the extent to which trust in algorithms is consistent with the principle of professional scepticism, which has long been an ethical and methodological foundation of audit practice (Tiron-Tudor & Deliu, 2022). Professional scepticism is the one that requires auditors to maintain a critical and objective attitude towards the information received, including claims from management or other evidence (Deliu, 2024). At the organizational level, the implementation of artificial intelligence is accompanied by a range of challenges that individual companies must carefully identify and address within their internal structures and governance frameworks. The integration of AI systems requires not only technological adaptation but also adjustments in managerial processes, risk assessment procedures, and ethical oversight mechanisms (Nohal, 2025). One of the challenges arises from the increasing reliance on algorithms capable of generating automated recommendations based on large-scale data analysis. In such contexts, auditors encounter a fundamental dilemma: whether to rely on the outputs produced by artificial intelligence systems or to uphold the critical and questioning mindset that defines professional scepticism. This tension is particularly significant in light of auditors' responsibilities to safeguard the integrity of financial reporting and to protect and maintain the confidentiality of clients' data (Gasperz et al., 2026). Nevertheless, as Štrukelj and Dankova (2025) caution, for example, in small and medium-sized enterprises (SMEs), effective integration of artificial intelligence requires a balanced approach in which it primarily serves as a tool for data collection and analysis rather than as an autonomous decision-maker.

The emergence of artificial intelligence in external auditing is characterised by the integration of various methods and techniques into auditing. For example, machine learning, natural language processing, data analytics, etc., are all custom-developed and calibrated for audit firms, for risk assessment, substantive testing, and fraud detection (Zdolšek & Zver, 2021). Audit firms (e.g., Big Four) have been investing in AI-enabled platforms, for example, to analyse full data populations and identify anomalies. The exponential rise of artificial intelligence has brought the auditor's

reliance on automated results to the forefront. For example, the question is how artificial intelligence tools reshape cognitive processes in auditing. The ISA postulates that auditors remain responsible for applying judgement and scepticism when using automated tools (ISA 315, Identifying and Assessing the Risks of Material Misstatement). Nevertheless, research is exploring whether artificial intelligence enhances scepticism by improving anomaly detection and expanding evidence coverage, or whether overreliance on algorithms may induce automation bias and reduce critical evaluation (e.g., Dowling & Leech, 2014). While artificial intelligence tools have improved their efficiency, there are concerns regarding explainability, bias, and overreliance. Experimental studies analyse how auditors calibrate trust in AI-generated outputs and how explainability affects judgement quality and accountability. For example, Dierckx et al. (2026) study results reveal that auditors who use generative artificial intelligence differentiate between AI's low-quality and high-quality recommendations. When the quality of AI's results is low, auditors increase reliance on AI's results when AI's reported accuracy is high. Overall, the research frames artificial intelligence as both an enabler and a potential constraint on scepticism-driven professional judgement.

This paper aims to examine the challenges and risks associated with the use of artificial intelligence in auditing, as well as the obstacles encountered in its development and implementation. It further seeks to analyse the skills required for auditors to integrate artificial intelligence into their professional practice effectively and to explore the opportunities these technologies offer to enhance audit quality and efficiency. Additionally, the paper investigates the extent to which artificial intelligence is currently utilized within the auditing profession and assesses whether its increasing adoption poses a threat to professional scepticism, auditors' roles, and their position within the workplace.

2 Methodology

This study employs a narrative literature review methodology to explore the implications of artificial intelligence (AI) for auditor professional judgement in external auditing. Our research question is oriented towards studying how the integration of AI technologies reshapes the nature, boundaries, and application of professional judgement in external auditing, for example, in the audit process. Our approach is consistent with prior literature review practices in auditing research, as

reflected in studies such as DeFond and Zhang (2014), Sutton et al. (2016), and Appelbaum et al. (2017), which emphasise structured yet non-systematic synthesis of relevant scholarly contributions. To enhance the contemporaneity of the analysis, the review was supplemented with recent professional publications and industry news addressing emerging AI applications in auditing practice. Sources were selected based on their relevance to the research objective, scholarly contribution, and temporal proximity to ongoing technological developments. The collected materials were subjected to qualitative thematic analysis to identify AI topics related to auditing. Furthermore, the study incorporates the authors' critical and interpretative perspectives to contextualize the findings and to evaluate their implications for audit quality, professional responsibility, and the future role of auditor

3 Auditing pronouncements regarding the use of technology

Computer-Assisted Audit Techniques (CAATs) are defined as tools that enable auditors to analyse large data sets, test entire populations, and enhance risk assessment and substantive procedures in external audits. ISA 315 requires auditors to understand the auditee and its information systems, which may involve using automated tools and techniques. The pronouncement is clear that, regardless of CAATs usage, the responsibility for risk identification, evidence evaluation, and professional judgement remains with the auditor.

Since the emergence of advanced generative artificial intelligence tools in 2020, most notably ChatGPT developed by OpenAI (<https://chatgpt.com/>), such technologies have increasingly become integrated into professional practice. Generative AI systems are now widely used as supportive tools in various industries, including the audit sector, where they assist in data analysis, documentation review, and process optimization. The Big Four audit firms – Deloitte, EY, KPMG, and PwC – have incorporated artificial intelligence into both their firms' audit methodologies and client-facing digital platforms. They have invested more than 4-5 billion US dollars directly in AI initiatives tailored for auditing, taxation, and business consulting (i.e., tools, platforms, partnerships, internal solutions) by the mid-2020s (The Finance Story, 2024). Audit firms utilize AI-driven solutions to support audit procedures, enhance risk assessment, and improve the analysis of large volumes of financial and non-financial data (Tariq, 2025). For example, Deloitte has introduced generative AI (GenAI) tools and agent-based capabilities within its audit processes (so-called

agentification). These technologies automate repetitive and rule-based tasks, thereby increasing operational efficiency and enabling auditors to allocate more time to complex analytical procedures and professional judgement. As a result, audit engagements may be conducted more quickly, consistently, and with greater analytical depth (Tariq, 2025). In parallel, audit firm Deloitte has invested in advanced technological infrastructure (hardware), including the deployment of its own satellite designed to orbit the Earth and support secure data management (Ryan, n.d.). This initiative aims to enhance the protection of client information and strengthen resilience against cybersecurity threats in an increasingly digital audit environment.

However, the use of artificial intelligence in auditing is not without regulatory oversight. Various professional standards and supervisory bodies have begun to address the implications of emerging technologies for audit quality, documentation, and professional responsibility (PCAOB, 2025). This is reflected in the recent publications and reports issued by the USA's Public Company Accounting Oversight Board (PCAOB) and the International Auditing and Assurance Standards Board (IAASB), which examine the integration of data analytics and AI within audit engagements.

In September 2025, the PCAOB publicly released a study and accompanying recommendations prepared by the Technology Innovation Alliance (TIA) Working Group (2022–2024), a panel of external experts with specialized knowledge of emerging technologies relevant to auditing and financial reporting. The Group's mandate was to produce two key deliverables (PCAOB, 2025):

- A study of the use of emerging technologies by auditors and preparers of financial statements, focusing on their potential impact on audit quality.
- Recommendations on how PCAOB oversight programs – current or future – could adapt to and address the increased use of such technologies.

The PCAOB has published two key documents addressing the role of technology in auditing. The first document provides an overview of the current application of technology in audit practices, including the use of data analytics and automation, while also identifying implementation challenges such as data quality limitations, technological disparities, and resource constraints affecting both auditors and

financial statement preparers (PCAOB, 2024). The second document moves beyond descriptive analysis by offering strategic recommendations to foster technological innovation and improve audit quality, with a particular focus on transforming audit quality through the integration of advanced technologies. A significant development occurred on June 12, 2024, when the Public Company Accounting Oversight Board (PCAOB) adopted amendments to national auditing standards AS 1105, Audit Evidence, and AS 2301, The Auditor's Responses to Risks of Material Misstatement, to provide more explicit guidance on the use of technology-enabled audit procedures (PCAOB, 2024). These amendments are part of the PCAOB's broader goal of aligning auditing standards with technological advances while ensuring that auditors continue to obtain sufficient and appropriate audit evidence when using advanced analytical tools. According to PCAOB Chair Erica J. Williams, the revisions are intended to ensure that auditing standards remain responsive to technological changes and to reduce the risk of issuing audit opinions without reliable and relevant evidentiary support (PCAOB, 2024).

The amendments are intended to enhance audit quality in three principal areas concerning the use of technology-assisted procedures. First, auditors are required to evaluate the reliability of electronic information used as audit evidence by assessing relevant IT general controls and automated application controls to ensure data integrity and accuracy. Second, when technology-assisted procedures are employed to address multiple audit objectives, auditors must design and perform them in a manner that fully achieves each intended objective, rather than presuming that a single analytical process is sufficient. Third, when technology is utilized to identify specific transactions or account balances for testing, auditors are obligated to determine whether the selected items reveal potential misstatements or control deficiencies, either individually or in aggregate, in alignment with the overall audit objectives (PCAOB, 2024).

Some scholars advocate the establishment of a dedicated AI Audit Standards Board, drawing parallels with regulatory frameworks in safety-critical sectors such as aviation, nuclear energy, financial reporting, and pharmaceuticals (Manheim et al., 2025). They contend that the rapidly evolving nature of artificial intelligence technologies necessitates a specialized body capable of continuously updating audit standards to reflect technological advancements and emerging risks. Such an institution would strengthen public trust, foster a culture of safety and ethical

accountability within the AI industry, and ensure that audits with the use of AI remain rigorous, relevant, and responsive. By providing structured oversight, this framework could mitigate the risk of superficial or symbolic compliance and more effectively address the complex ethical and operational challenges associated with the expanding societal role of AI (Manheim et al., 2025).

4 Auditor's professional judgements: problems, challenges and opportunities (when using technology)

Although artificial intelligence offers substantial advantages across industries, its adoption in auditing presents significant challenges that firms must carefully address before integrating it into routine operations. One of the most critical concerns is the limited transparency of certain AI systems, commonly referred to as the “black box” problem. In such cases, the reasoning process underlying algorithmic outputs is not easily interpretable, making it difficult to understand how specific conclusions are generated (Deliu, 2024). This lack of explainability is particularly problematic in the auditing profession. Auditors are responsible for examining companies’ annual financial statements and providing reasonable assurance that the information presented is faithfully stated. Because audit conclusions must be supported by clear evidence and defensible reasoning, the use of non-transparent AI systems may undermine the fundamental principles of accountability and transparency upon which auditing is based. Consequently, audit firms must establish robust governance frameworks to ensure that AI tools enhance, rather than compromise, audit quality. Auditors should critically evaluate and monitor AI-generated outputs, ensuring that these technologies function as supportive instruments within the audit process. Ultimately, the integration of AI must reinforce professional judgement and scepticism, not replace or weaken them (Deliu, 2024). Accounting and auditing education need to further evolve (Cardwell et al., 2025b).

An additional and critically important challenge arising from the implementation of artificial intelligence in auditing concerns cybersecurity and data protection (McKegg, 2025). Audit firms routinely handle extensive volumes of highly sensitive financial and personal client information. The integration of AI technologies into audit processes consequently expands the digital attack surface and increases exposure to cyber threats, including unauthorized access, data manipulation, and large-scale data breaches (Deliu, 2024). In this context, the establishment of

comprehensive cybersecurity frameworks is not solely a technical necessity but a core professional responsibility essential for safeguarding client confidentiality, ensuring regulatory compliance, and preserving public trust in the audit function (Abdelsamee, 2025). A prominent example within the Big Four is Deloitte, which has invested significantly in AI-focused infrastructure and private-cloud delivery models. The firm has established initiatives such as a global AI Infrastructure Centre of Excellence and Silicon-to-Service offerings to help organizations design and operate dedicated AI environments and data centres. These solutions often combine Deloitte's domain expertise with partner technologies – including NVIDIA-accelerated computing and collaborations with cloud providers such as Google Cloud – to deliver scalable yet controlled AI deployments, particularly for clients requiring secure or sovereign data architectures (Deloitte, 2025). This approach reflects a deliberate strategy to mitigate third-party risk, enhance data sovereignty, and improve the operational resilience of AI-driven audit tools. Reducing reliance on external cloud and database providers may lower vulnerability to cyberattacks, as external dependencies can introduce additional security, operational, and compliance risks. The development of proprietary technological infrastructure can also enable AI systems to function within a more secure and controlled ecosystem, thereby strengthening data governance, system integrity, and overall reliability. From a broader strategic standpoint, Deloitte's initiatives illustrate an ambition to position itself as a technologically sophisticated and comparatively autonomous audit firm. By investing in internal technological capabilities, the firm aims to enhance efficiency and innovation in AI-enabled audit services while maintaining cost stability and avoiding substantial increases in audit fees. Accordingly, technological self-reliance may be interpreted not only as a cybersecurity safeguard but also as a competitive strategy designed to support sustainable innovation and long-term market positioning.

Artificial intelligence offers substantial opportunities for the auditing profession by transforming how audit evidence is collected and assessed. Through automated data analytics, AI enables auditors to examine entire datasets rather than relying exclusively on sampling, thereby improving both accuracy and efficiency. Machine learning algorithms strengthen risk assessment by identifying anomalies and hidden patterns, while predictive analytics allows auditors to anticipate potential risks. As a result, auditing increasingly shifts from a purely retrospective function toward a more proactive and strategic role (Priklonskaya & Boersma, n.d.). Moreover,

developments such as Explainable AI (XAI) enhance transparency by clarifying how algorithmic conclusions are reached, supporting interpretability and regulatory compliance. The integration of non-traditional data sources, including ESG and other non-financial information, further broadens the scope of audit analysis. Together, these advancements contribute to higher audit quality, greater stakeholder trust, and enhanced strategic relevance of the profession (Priklońska & Boersma, n.d.).

5 Discussion

Beyond the direct challenges and benefits associated with the implementation of artificial intelligence, there are also broader contextual factors that indirectly influence its adoption and effectiveness within the auditing profession. One of the major risks is in change management and consequent workforce implications. Change management itself refers to a new structured approach in the organization that is used in order to change the individual, teams, and entire organization from the state in which they are into the desired future state. Change management itself involves initial planning, implementing the plan, and following up to see if it is going in the right direction in order to ensure that the organization effectively adopts and integrates. All of these changes in the organization have implications for employees, i.e. the workforce (O'Sullivan et al., 2016).

The auditing profession is experiencing a decline across the globe. The decrease in the number of registered auditors has become a pressing issue, causing audit fatigue and an audit talent gap (i.e., problems in relation to staff retention and staff turnover) (Abrahams & Phesa, 2025). The phenomenon of attractiveness of the auditing profession is diminishing. This is accompanied by a reduction in the number of junior auditors entering the profession. This trend suggests a gradual decrease in interest among new entrants, raising concerns about the long-term sustainability of the audit workforce (Abrahams & Phesa, 2025). One possible contributing factor to this decline is technological advancement within the profession. As audit firms increasingly invest in sophisticated digital tools and artificial intelligence to enhance efficiency and audit quality, the structure of audit teams is evolving. Tasks traditionally performed by junior auditors – such as data extraction, routine testing, and basic analytical procedures – are progressively being automated or supported by AI-driven systems. Consequently, audit firms may reduce their reliance on entry-

level staff, reallocating certain responsibilities to technological solutions. Change in auditing courses curricula is inevitable (i.e., see Kolar, 2024). While technological development undoubtedly improves efficiency and analytical capacity, it may also reshape career pathways within auditing. Reduced demand for traditional junior roles could indirectly discourage new professionals from entering the field, thereby influencing the profession's overall composition and future development.

The implementation of artificial intelligence may also lead to a gradual decline in auditors' practical knowledge of traditional audit procedures (i.e., work-based learning) that have been replaced by automated systems. Over time, this can reduce auditors' understanding of underlying audit workflows, control dependencies, and the reasoning behind specific audit testing methodologies. As artificial intelligence increasingly performs routine and repetitive tasks, auditors may have fewer opportunities to develop hands-on experience with foundational audit techniques. This issue is particularly relevant for newer auditors, who may have limited exposure to traditional manual audit procedures. Without sufficient practical training in these areas, there is a risk that future auditors may rely heavily on technology without fully understanding the audit logic and professional judgement principles that support audit quality. Therefore, continuous professional training and knowledge preservation remain essential to ensure that technological adoption does not weaken core auditing competencies.

Based on preliminary observations, audit firms must carefully consider the potential long-term implications of workforce and knowledge transformation over the next 5 to 10 years. If audit firms increasingly rely on artificial intelligence to perform routine audit procedures without maintaining sufficient human expertise in foundational audit methodologies, there is a risk of losing institutional knowledge related to audit processes, controls testing, and professional judgement application. Methodological redesign is inevitable (Cardwell et al., 2025a). This is particularly important as AI systems increasingly replace certain tasks traditionally performed by junior auditors, while the overall number of new audit professionals appears to be declining. But precautions are warranted. As Xiaoxing et al. (2025) study results reveal, auditors who developed tests themselves act with greater professional scepticism than auditors who adopt tests developed by others. As the study's authors state, auditors who are involved in developing a test feel more responsible for it. If the audit profession were to move toward a fully digital audit model dominated by AI,

machine learning (ML), and intelligent process automation (IPA), concerns may arise regarding market confidence and financial stability. The credibility of financial reporting plays a crucial role in maintaining trust among investors, lenders, and capital market participants. A significant loss of confidence in audited financial statements could negatively affect investment decisions, credit markets, and institutional investment structures. For example, pension investment systems such as the US 401(k) retirement plans, which rely heavily on corporate financial performance and market investments, could be indirectly affected if trust in financial reporting were weakened. Therefore, while technological transformation can significantly improve audit efficiency and analytical capabilities, maintaining a balance between automation and professional expertise is essential to preserve audit quality, market confidence, and financial system stability.

6 Conclusion

In general, our conclusion is that professional judgement and critical scepticism remain fundamental components of the auditing profession and are unlikely to be replaced by technology in the near future. This is reflected in the regulatory emphasis on maintaining auditor judgement, as seen in the practices promoted by IFAC and PCAOB, which continue to strongly emphasize the importance of human professional evaluation in audit quality and decision-making. Moving forward, audit firms must also prioritize cybersecurity and data protection strategies to safeguard sensitive client information from cyber threats. Following examples such as advanced technological investments by leading audit firms, organizations should strengthen their digital infrastructure while maintaining operational security. At the same time, the profession should focus on attracting younger talent by promoting the relevance and long-term career prospects of auditing. Furthermore, the increasing implementation of artificial intelligence will require auditors to develop new technical competencies alongside traditional auditing skills. Future auditors will need to be proficient in using advanced analytical tools, data-driven technologies, and AI-supported audit systems. As a result, the profession will have to evolve rather than disappear, requiring a new combination of technological literacy, analytical thinking, and traditional audit expertise.

Future research opportunities at the intersection of auditor professional judgement and artificial intelligence in the external auditing centre focus on behavioural, ethical, and regulatory directions. First, studies could examine how AI-assisted decision environments influence judgement quality, sceptical mindset development, and susceptibility to automation bias. Second, research may explore explainability mechanisms and how transparency of algorithms affects accountability and documentation under generally accepted auditing standards (i.e., liability implications). Third, longitudinal studies could explore how AI adoption reshapes auditing in general, auditing methodology, competence requirements, training models, and professional identity within audit firms. Finally, interdisciplinary research integrating auditing, information systems, and behavioural science may provide deeper insights into optimal human–AI collaboration models that preserve auditor’s judgement integrity while enhancing audit quality.

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