Audit Financiar, XXIV No. 3(183)/**2026**, *527-536*
ISSN on-line: 1844-8801

The Auditor Prepared for the Era of Artificial Intelligence:

Competencies, Roles, and Implications for Professional Bodies

Elena Claudia BADEA (FLOREA), Ph. D. Student,
Bucharest University of Economic Studies, Romania
e-mail: claudiaflorea9737@gmail.com

Andreea Larisa OLTEANU (BURCĂ), Ph. D. Student,
Bucharest University of Economic Studies, Romania
e-mail: andreea.larisa.olteanu@gmail.com

Lecturer Mariana BUNEA, Ph. D.,
Bucharest University of Economic Studies, Romania
e-mail: mariana.bunea@cig.ase.ro

Biljana GRUJIĆ VUČKOVSKI, Ph. D.,
Institute for Research and Development "Tamiš", Pančevo, Serbia e-mail: grujic@institut-tamis.rs

Abstract

Artificial intelligence (AI) is fundamentally reshaping the auditing profession, challenging traditional competency frameworks and redefining the scope of the auditor's role. This study is based on the premise that, beyond traditional financial audit tasks, the contemporary auditor is increasingly expected to contribute to audit committee governance, sustainability (ESG) assurance, as well as the direct application of AI-based tools in audit engagements. Despite the growing academic and professional interest in AI adoption, a comprehensive and integrated framework capturing the full spectrum of AI-related competencies required across all auditor roles remains insufficiently developed in the literature. This paper addresses this gap through a Structured Literature Review (SLR) that examines 22 peer-reviewed articles indexed in Web of Science and published between 2019 and 2025, identifying and synthesizing evidence on how AI is reshaping auditor competencies across four interconnected roles: financial auditor, audit committee member, ESG assurance provider, and user of AI tools. Based on the synthesized evidence, the authors propose an integrated competency framework for the auditor prepared for the AI era, structured around six competency dimensions and four professional roles, with direct implications for professional bodies, Continuing Professional Development (CPD) programmes, and certification requirements.

Key words: *artificial intelligence; auditing profession; competency framework; ESG assurance; structured literature review; continuing professional development;*

JEL Classification: *M40, M42, O33*

To cite this article:
Badea (Florea), E. C., Olteanu (Burcă), A. L., Bunea, M., Grujić Vučkovski, B. (2026), The Auditor Prepared for the Era of Artificial Intelligence: Competencies, Roles, and Implications for Professional Bodies, *Audit Financiar*, vol. XXIV, no. 3(183)/2026, pp. 527-536,
DOI: 10.20869/AUDITF/2026/183/016

To link this article:
http://dx.doi.org/10.20869/AUDITF/2026/183/016
Received: 27.05.2026
Revised: 31.05.2026
Accepted: 19.06.2026

Introduction

Artificial intelligence is rapidly transforming auditing practices worldwide, redefining both the tools used in audit engagements and the competencies required of professionals in the field (Binh, 2025; Abdo-Salloum et al., 2026). The progressive adoption of machine learning technologies, robotic process automation (RPA), and advanced data analytics is changing not only the efficiency of audit processes but also the nature of professional judgment, oversight, and auditor accountability (Kokina et al., 2025). In a context in which leading audit firms are investing billions of dollars in AI infrastructure (Libby and Witz, 2025), the pressure to adapt is rapidly extending to smaller firms as well as to professional bodies responsible for defining competency standards.

The academic literature has progressively documented the impact of AI on financial auditing, highlighting opportunities such as test automation, real-time anomaly detection, and improvements in audit quality (Sawaya et al., 2026; Pérez-Calderón et al., 2025). At the same time, recent studies identify a profound transformation of auditor roles, from retrospective inspections to continuous monitoring and AI-assisted decision-making (Leitner-Hanetseder et al., 2021). This transformation no longer concerns only the traditional financial auditor but extends to emerging roles: the audit committee member overseeing AI-generated risks at the organizational level, the ESG assurance provider using AI to verify sustainability data, and the professional who directly integrates AI tools into audit practice.

With that said, the existing literature addresses these roles in a fragmented manner. Studies focused on the technical competencies of financial auditors do not integrate the perspectives of audit committee governance or ESG assurance. Likewise, studies on AI and sustainability do not establish systematic connections with the auditor competency framework (Minkkinen et al., 2024; Yang et al., 2025). This fragmentation limits the ability of professional bodies to design coherent training and certification programmes adapted to the complexity of the new professional landscape.

This paper seeks to address this gap through a Structured Literature Review (SLR), identifying and synthesizing the available evidence on how AI is reshaping auditor competencies across the four interconnected roles mentioned above. Drawing on recent academic literature in accounting, auditing, and digital transformation, the study proposes an integrated competency framework for the auditor prepared for the AI era, with implications applicable to the updating of CPD programmes, certification requirements, and competency standards established by international and national audit oversight bodies.

The study period was established between 2019 and 2025, reflecting the acceleration of AI adoption in auditing following the widespread diffusion of machine learning technologies and large language models (Leitner-Hanetseder et al., 2021; Kokina et al., 2025). Prior to 2019, publications related to AI in auditing were scarce and predominantly conceptual; the post-2019 period marks a shift toward empirical investigations of the practical impact of AI on auditing competencies.

The novelty of this study lies in its integrative approach: unlike previous research that examines individual auditor roles in isolation, the present paper proposes a unified competency framework that simultaneously covers four interconnected roles, providing a consolidated basis for professional bodies seeking to update competency standards and CPD programmes.

Accordingly, the study seeks to answer the following research questions:

RQ1: What AI competencies are required of the financial auditor in the era of digital transformation?

RQ2: What specific competencies are required of audit committee members in the context of AI proliferation?

RQ3: How is the role of the ESG assurance provider being reconfigured under the influence of AI?

RQ4: What are the cross-cutting implications for professional bodies regarding CPD, certification, and competency standards?

The remainder of the paper is structured as follows. Section 1 presents a review of the existing literature on AI and auditor competencies across the four roles examined. Section 2 describes the research methodology, including the SLR protocol and selection criteria. Section 3 presents the analysis and findings, including the proposed integrated competency framework. The paper concludes with conclusions, limitations, and directions for future research.

1. Literature review

Academic research on the impact of AI on auditing has intensified significantly in recent years, reflecting both the proliferation of the technology and the urgency of professional adaptation. Recent literature reviews (Binh, 2025; Abdo-Salloum et al., 2026) identify dominant themes including AI integration into audit processes, data security, ethical implications, and the transformation of professional competencies. However, an analysis of the existing literature reveals a predominantly fragmented treatment of competencies, without an integrated framework encompassing the full range of auditor roles.

1.1. Artificial intelligence and the financial auditor

Empirical and qualitative studies indicate that AI tools currently adopted in auditing practice primarily include data extraction technologies, optical character recognition, and machine learning models for anomaly detection (Kokina et al., 2025; Abdo-Salloum et al., 2026; Gambhir et al., 2025). Large audit firms are investing particularly in generative AI, although the implementation of these complex technologies currently remains at an experimental stage (Kokina et al., 2025). AI adoption among small firms, which predominantly audit SMEs, is constrained by a lack of qualified human capital and high implementation costs (Rikhardsson et al., 2021).

The findings of Libby and Witz (2025) demonstrate that auditors' use of AI may contribute to mitigating legal liability by enhancing perceptions of objectivity and reducing the influence of apparent independence conflicts. At the same time, studies conducted in emerging economies confirm that AI improves audit efficiency and the quality of consolidated financial statements, although challenges related to technological infrastructure and ethical compliance persist (Sawaya et al., 2026; Pérez-Calderón et al., 2025). Gambhir et al. (2025) emphasize that audit professionals perceive AI as a catalyst for transforming their role—from transaction processing toward interpretation, judgment, and strategic advisory activities—while also highlighting the need for an expanded set of digital competencies.

1.2. The Audit Committee and AI governance

The expansion of audit committee responsibilities in the context of AI represents a relatively new theme in the academic literature. Correia and Água (2023) propose a conceptual framework demonstrating how AI can augment corporate governance mechanisms by improving transparency and the capacity for ethical decision-making. The authors identify the need for audit committee members to possess at least a minimum level of understanding of the AI systems used by the organizations they oversee.

The AI governance dimension within audit committees has also attracted academic attention. Manheim (2025) and Lassiter and Fleischmann (2024) emphasize that the absence of credible and uniform AI oversight standards creates significant competency gaps among audit committee members, who are increasingly expected to question and assess AI-related risks without adequate reference frameworks. This highlights the need for audit committee members to develop structured AI governance competencies that go beyond general technological literacy.

1.3. The ESG assurance provider and artificial intelligence

The intersection between AI and ESG assurance constitutes an emerging area of research with profound implications for auditor competencies. Minkkinen et al. (2024) demonstrate that, although the use of AI in investors' ESG analyses is increasing, the specific mechanisms for assessing companies' responsible AI practices are not standardized, creating a competency deficit among ESG assurance providers. The authors identify the need for standardized metrics of AI accountability as an essential tool for ethics-based ESG auditing.

Yang et al. (2025) analyze the potential of emerging AI tools to enhance corporate social responsibility (CSR) accounting and corporate accountability, concluding that large language models (LLMs) and algorithmic analysis can generate more reliable sustainability reports while also improving stakeholder engagement. Genovesi and Mönig (2022) contribute to this discussion by proposing an ethical AI certification framework that incorporates sustainability dimensions, emphasizing that ESG assurance providers must be equipped with specific competencies for evaluating AI systems from a sustainability perspective.

1.4. Implications for the profession and professional bodies

The impact of AI on professional competencies in accounting and auditing represents one of the central themes of recent literature. Brabete et al. (2024) conduct a systematic literature review from the perspective of accounting education, identifying universities as key actors in curriculum redesign and professional associations as crucial stakeholders in updating CPD programmes. The study highlights that accounting and auditing professionals must acquire not only technical AI competencies but also ethical judgment, critical analysis, and the capacity for continuous adaptation to rapidly evolving technologies.

Leitner-Hanetseder et al. (2021) document the transformation of the accounting profession through AI, identifying new actors, tasks, and roles emerging in the AI-driven era. The authors emphasize that this transformation requires a proactive approach by professional bodies with respect to redefining competency standards. Fülöp et al. (2023) add an ethical perspective, showing that professionals in accounting firms possess limited knowledge of AI and that training needs are pressing, particularly regarding the ethical implications of AI use. Genaro-Moya et al. (2025) extend the analysis to the public sector, demonstrating that Supreme Audit Institutions (SAIs) must adapt both their human and technological resources to address the new scenarios created by AI penetration.

2. Research methodology

To address the gaps identified in the academic literature, the present study adopts the Structured Literature Review (SLR) methodology, following the framework proposed by Massaro et al. (2016). This methodology is appropriate for fields characterized by fragmented evidence and heterogeneous methodologies, providing a transparent and replicable framework for the selection and synthesis of studies (Massaro et al., 2016; Tranfield et al., 2003). Unlike traditional content analysis, SLR follows an explicit and predefined protocol for identifying, filtering, and synthesizing studies, reducing selection bias and enhancing reproducibility (Tranfield et al., 2003).

The research utilized the Web of Science (WoS) database due to its strict indexing standards and its recognized position as a primary reference source for high-quality, peer-reviewed research in the fields of business, accounting, and management (Massaro et al., 2016; Binh, 2025). Web of Science has been widely adopted in structured literature reviews in accounting and auditing, providing comprehensive coverage of the most rigorous academic journals in these disciplines. The search strategy employed combinations of keywords such as: “artificial intelligence”, “audit”, “competency framework”, “ESG assurance”, “audit committee”, “professional development”, covering the period 2019–2025.

The selection process followed a multi-stage filtering procedure, with explicit inclusion and exclusion criteria applied at each step. In the first stage, out of the 103 articles initially identified, 47 articles were retained after applying filtering criteria related to: publication period (2019–2025), document type (peer-reviewed research article), language (English or Romanian), and relevant subject areas (Business Finance, Accounting, Management, Computer Science AI). Studies from irrelevant fields (engineering, medicine), articles published outside the selected period, and other document types were excluded. In the second stage, 32 articles were retained from the 47 articles based on title and abstract analysis; studies that did not explicitly address auditor competencies, professional roles, or AI tools in the context of audit practice were excluded. In the third stage, 24 articles were assessed as eligible following full-text review, applying criteria of thematic relevance and methodological quality; studies with an exclusively technical or algorithmic focus, lacking relevance for audit practice, and those that did not meet minimum academic rigor standards were excluded. In the final stage, 22 studies were included in the final analysis from the 24 eligible articles, as they provided evidence directly relevant to at least one of the research questions RQ1–RQ4; articles that did not offer implications for auditor competencies or professional development frameworks were excluded.

The selection process follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework adapted for structured literature reviews in accounting (Massaro et al., 2016). The 22 articles included in the final analysis were systematically coded using an analytical framework adapted from Massaro et al. (2016), examining: research methodology; the auditor role addressed; identified AI competencies; implications for professional bodies and CPD; and research gaps and future research directions.

The coded data were synthesized through thematic analysis, enabling the identification of dominant themes, recurring patterns, and gaps in the literature. A summary of the SLR stages is presented in **Table no. 1**.

Table no. 1. SLR process stages and number of retained articles

SLR Stage	Description	No. of articles
1	Articles initially identified in WoS (search terms: "artificial intelligence" AND "audit" AND ("competence" OR "role" OR "skills" OR "professional"))	103
2	After applying filters (2019–2025 period; peer-reviewed articles; English and Romanian languages; relevant fields: Business Finance, Accounting, Management, Computer Science AI)	47
3	Selection based on titles and abstracts (thematic relevance to auditor roles and AI)	32
4	Full-text assessment (inclusion/exclusion criteria; alignment with RQ1–RQ4)	24
5	**Articles included in the final analysis**	**22**

Source: Author's own research

3. Results

The results of the structured literature review are organized around the four research questions, providing a thematic synthesis of the available evidence regarding the AI competencies required in each auditor role, followed by the proposal of an integrated framework. The analytical synthesis of the reviewed studies is presented in **Table no. 2**.

Table no. 2. Analytical synthesis of the reviewed studies

No.	Authors (year)	Methodology	Auditor role addressed	Identified AI competencies
1	Kokina et al. (2025)	Qualitative (interviews)	Financial auditor; AI user	Adoption of AI tools; management of overreliance risk; AI documentation
2	Pérez-Calderón et al. (2025)	Empirical (survey)	Financial auditor	AI efficiency in auditing; client communication; data security
3	Libby & Witz (2025)	Experimental	Financial auditor	AI as an objectivity tool; mitigation of legal liability
4	Gambhir et al. (2025)	Qualitative (Atlas.ti)	Financial auditor; AI user	Digital competencies; adaptation to AI; human–machine collaboration
5	Binh (2025)	Bibliometric (LDA)	Financial auditor	Emerging AI themes in auditing; data security; AI ethics
6	Abdo-Salloum et al. (2026)	SLR	Financial auditor; AI user	AI operational efficiency; fraud detection; professional training
7	Sawaya et al. (2026)	Empirical	Financial auditor	AI adoption in emerging economies; quality of consolidated financial statement audits
8	Noordin et al. (2022)	Empirical (survey)	Financial auditor	AI perception; audit quality; local/international differences
9	Rikhardsson et al. (2021)	Empirical (survey)	Financial auditor (SMEs)	Expectations regarding AI; competencies required in small firms
10	Correia & Água (2023)	Conceptual	Audit committee; Governance	AI in corporate governance; decision-making transparency; AI ethics
11	Manheim (2025)	Conceptual	Audit committee; Professional bodies	AI audit standards; need for external regulation

12	Lassiter & Fleischmann (2024)	Qualitative	AI user; Audit committee	AI audit standards; trust building; diversity of methods
13	Minkkinen et al. (2024)	Calitativ (interviuri)	ESG assurance provider	AI in ESG analyses; responsible AI metric standards
14	Yang et al. (2025)	Bibliometric	ESG assurance provider; AI user	AI for CSR reporting; LLMs for automated reporting; algorithmic auditing
15	Genovesi & Mönig (2022)	Conceptual	ESG assurance provider	Ethical AI certification; sustainability within certification frameworks
16	Genaro-Moya et al. (2025)	Mixed Empirical	Financial auditor (public sector)	AI adaptation in the public sector; SAI challenges; training
17	Lehner et al. (2022)	Narrative Review	AI user; Financial auditor	Ethical AI challenges: objectivity, transparency, accountability
18	Leitner-Hanetseder et al. (2021)	Empirical	Financial auditor; AI user	Professional transformation; new roles; digital competencies
19	Brabete et al. (2024)	SLR (bibliometric)	SLR (bibliometric)	Educational redesign; CPD; curriculum; professional associations
20	Fülöp et al. (2023)	Empirical (NVivo)	Financial auditor; AI user	Ethical AI challenges; limited AI knowledge; digital transformation
21	Staszkiewicz et al. (2026)	Empirical	AI user; Financial auditor	Attitudes toward accountability; AI application; implications for professional bodies
22	Badea (Florea) et al. (2025)	Bibliometric	Financial auditor	Bibliometric analysis of AI impact in auditing; emerging themes

Source: Author's own research

3.1. AI competencies of the financial auditor

The analysis of the reviewed studies highlights that the role of the financial auditor in the AI era requires a set of competencies that go beyond technical knowledge of tools, focusing on the ability to critically integrate AI into professional judgment. The literature identifies three central dimensions: (1) technical competencies for understanding the functioning of AI audit tools (machine learning, RPA, and data analytics) and the ability to configure, document, and validate AI solutions used in audit engagements; (2) professional skepticism adapted to the critical evaluation of AI outputs, the identification of algorithmic biases, and the avoidance of overreliance on automated results (Kokina et al., 2025; Lehner et al., 2022); and (3) AI ethics and accountability for addressing issues related to data confidentiality, transparency, and accountability in the use of AI tools (Lehner et al., 2022; Fülöp et al., 2023).

The competency deficit across these dimensions is empirically documented in the recent literature. Gambhir et al. (2025) demonstrate that audit professionals perceive AI as a structural transformation of their role, from data processing to advisory and interpretive activities, a shift that requires human–machine collaboration competencies and continuous adaptability. This transformation does not affect all categories of auditors uniformly: Rikhardsson et al. (2021) show that firms serving SMEs face additional constraints arising from the shortage of qualified personnel and the high costs of implementation, which further widen competency gaps among independent practitioners. Binh (2025) confirms that the topic of AI in auditing represents a significant share of recent academic publications, reflecting an increasingly urgent need for the standardization of competencies at the professional level.

3.2. AI competencies of the Audit Committee members

Audit committee members face a distinct set of competency requirements centered on the oversight of AI governance at the organizational level, rather than on the direct use of AI tools. Correia and Água (2023) demonstrate that AI can enhance the effectiveness of corporate governance by increasing transparency and improving decision-making quality, provided that audit

committee members possess a minimum level of AI literacy that enables them to critically question and evaluate AI-generated reports presented by management.

Manheim (2025) emphasizes that, in the absence of credible external standards for the auditing of AI systems, internal audit committees become vulnerable to the phenomenon of "safety-washing"—the appearance of compliance without its substance. This finding implies the need for competencies related to assessing the credibility of AI audits, including those performed by third parties. Lassiter and Fleischmann (2024) further argue that the diversity of AI auditing methods and the lack of standardization create additional challenges for committee members, who are required to evaluate the quality and relevance of such audits.

The AI competencies required of audit committee members therefore include: an understanding of AI governance principles and the risks generated by organizational AI systems (Correia and Água, 2023); the ability to establish and monitor internal policies for the responsible use of AI (Manheim, 2025); the appropriate assessment of ethical and security compliance (Lassiter and Fleischmann, 2024); and the critical questioning of AI-generated reports presented during committee meetings (Correia and Água, 2023). These competencies are not technical in the strict sense; rather, they are AI oversight and governance competencies, representing a distinct set that goes beyond the traditional competency frameworks of the financial auditor (Leitner-Hanetseder et al., 2021; Brabete et al., 2024)

3.3. AI competencies of the ESG assurance provider

The role of the ESG assurance provider in the context of AI is undoubtedly the most emerging and least covered by the existing literature. Minkkinen et al. (2024) demonstrate that consideration of the responsible use of AI in ESG analyses does not yet represent an established practice, although AI is recognized as a material factor across various industries and companies. The authors identify the need for standardized metrics for AI accountability as an essential tool for ethics-based ESG auditing.

Yang et al. (2025) argue that emerging AI tools, particularly large language models (LLMs) and machine learning algorithms, can significantly improve CSR reporting and stakeholder engagement through the generation of more reliable automated reports and the algorithmic auditing of corporate behaviour. However, the use of these tools requires specific competencies: the ability to assess the quality of ESG datasets analyzed using AI, an understanding of the limitations and biases of AI models applied to non-financial data, and knowledge of AI-enhanced ESG reporting frameworks.

Genovesi and Mönig (2022) contribute to this perspective by proposing an ethical AI certification framework that incorporates sustainability dimensions, emphasizing that ESG assurance providers must possess competencies for evaluating AI systems from the perspective of sustainability and ethical accountability.The synthesis of the evidence relevant to this research question confirms that the competencies required of ESG assurance providers in the AI era include: AI literacy applied to sustainability data, knowledge of ESG reporting standards, and the ability to critically assess the use of AI in sustainability reporting.

3.4. Cross-cutting competencies of the user of AI tools

Beyond the specific roles discussed above, the analysis highlights a set of cross-cutting competencies required of all auditors who use AI tools, regardless of their primary role. Lehner et al. (2022) identify five ethical challenges associated with the use of AI in accounting decisions: objectivity, confidentiality and data protection, transparency, accountability, and credibility—all of which require specific ethical competencies.

Fülöp et al. (2023) demonstrate that professionals working in accounting firms possess limited knowledge of AI and that training needs are pressing, particularly with regard to ethical dimensions. Staszkiewicz et al. (2026) examine the role of attitudes toward accountability in the application of AI, concluding that responsible auditing practice requires not only technical competencies but also a profound understanding of the implications of professional accountability in an AI context. Brabete et al. (2024) emphasize that universities and professional associations bear the primary responsibility for ensuring a system of continuing education that is rapidly adapted to developments in AI, proposing active collaboration among academia, professional associations, and the business environment as a solution for the design of relevant curricula.

3.5. Integrated competency framework for the auditor prepared for the AI era

The synthesis of evidence from the 22 reviewed studies makes it possible to propose an integrated competency framework for the auditor prepared for the AI era, structured around six competency dimensions and four interconnected professional roles. The framework is presented in **Table no. 3** and represents the central contribution of the present research.

Table no. 3. Integrated competency framework – the auditor prepared for the AI era

Competency dimension	Financial auditor	Audit Committee member	ESG assurance provider	User of AI tools
AI Knowledge and Digital Tools	Understanding ML, RPA, and AI-driven audit analytics	Competence in overseeing the organization's AI projects	Knowledge of AI tools for ESG data analysis	Practical use of AI audit platforms
Professional Skepticism in an AI Context	Critical evaluation of AI outputs; avoidance of overreliance	Critical questioning of AI-generated results presented by management	Evaluation of the accuracy of AI-generated ESG reports	Testing and validation of AI solutions used in engagements
AI Ethics and Accountability	Management of algorithmic bias; data protection	Oversight of AI governance and ethical compliance	Ensuring the impartiality and accuracy of ESG data	Transparency in the use of AI; documentation and explainability
AI Governance and Standards	Compliance with IAASB and PCAOB standards relating to AI	Establishment of AI governance policies at the organizational level	Application of AI-enhanced ESG reporting frameworks	Compliance with internal protocols for AI tools
Data Analytics and Interpretation	Analysis of large datasets; 100% audit coverage	Interpretation of AI analytical reports for oversight decisions	Analysis of complex non-financial data (environmental and social)	Configuration and interpretation of AI-driven audit analytics tools
Continuing Professional Development (CPD)	Regular training in emerging AI audit technologies	CPD sessions on AI governance and risk oversight	Training in ESG standards and specific AI applications	Certification in AI tools; continuous updating of competencies

Source: Author's own research based on the synthesis of the 22 reviewed studies.

The proposed framework contributes to the existing literature by integrating the four auditor roles into a coherent structure based on six competency dimensions, thereby moving beyond the fragmented approaches identified in the reviewed literature (Binh, 2025; Abdo-Salloum et al., 2026). The six competency dimensions are directly grounded in the evidence synthesized from the 22 reviewed studies: AI knowledge and digital tools (Kokina et al., 2025; Gambhir et al., 2025); professional skepticism (Lehner et al., 2022); AI ethics and accountability (Fülöp et al., 2023; Lehner et al., 2022); AI governance and standards (Correia and Água, 2023; Manheim, 2025); data analytics (Binh, 2025; Noordin et al., 2022); and CPD (Brabete et al., 2024; Leitner-Hanetseder et al., 2021). Each competency dimension applies differently depending on the auditor's role, enabling professional bodies to design CPD programmes and certification requirements tailored to the specific profile of the professional.

Conclusions

This paper examined how artificial intelligence is reshaping auditor competencies across four interconnected roles and proposed an integrated competency framework based on the synthesis of 22 reviewed studies published between 2019 and 2025 and indexed in Web of Science. The findings confirm that none of the existing studies within the analyzed sample provides an integrated perspective encompassing all four roles simultaneously (financial auditor, audit committee

member, ESG assurance provider, and user of AI tools), thereby highlighting the original contribution of the present research.

From the perspective of implications for professional bodies, the results suggest that IFAC, IAASB, and national professional bodies, including the Chamber of Financial Auditors of Romania (CAFR), could benefit from reviewing and updating existing competency frameworks to better reflect the transformation of the auditing profession driven by AI. It is recommended that CPD programmes incorporate at least the six competency dimensions identified in the proposed framework: AI knowledge, adapted professional skepticism, AI ethics, AI governance and standards, data analytics, and continuous training (Brabete et al., 2024; Kokina et al., 2025). Brabete et al. (2024) and Manheim (2025) emphasize that such updates are most effective when implemented through active collaboration among academia, professional associations, and standard-setting bodies.

The findings also have direct implications for certification requirements. The AI competencies of audit committee members and ESG assurance providers represent distinct areas of specialization that justify the development of dedicated certification modules or differentiated CPD requirements. Badea (Florea) et al. (2025) demonstrate, through bibliometric analysis, that research on AI in auditing has grown substantially in recent years, underscoring the increasing relevance of this topic for both academic research and professional practice.

The paper has several limitations. First, the analysis relies exclusively on the Web of Science database, which may exclude relevant studies indexed in other databases such as Scopus or EBSCO. Second, the proposed competency framework is based on the synthesis of existing literature and has not been empirically validated through consultation with practitioners or professional bodies. Third, the 2019–2025 period captures an early stage in the adoption of AI in auditing, and the rapid developments in this field may require some findings to be updated in the coming years. These limitations restrict the generalizability of the conclusions but open clear opportunities for future research.

Future research could extend the analysis by incorporating the Scopus and EBSCO databases, by empirically validating the proposed competency framework through qualitative studies or surveys addressed to practitioners and decision-makers within professional bodies, and by examining how different jurisdictions and audit regulatory systems integrate AI competencies into certification requirements and CPD programmes. In the Romanian context, a valuable avenue for future research would be the examination of how CAFR and ASPAAS can adapt CPD programmes and certification requirements to incorporate the six competency dimensions identified in the proposed framework.

In conclusion, the transformation of the auditing profession under the influence of AI does not represent a temporary phenomenon but rather a structural change that requires a reconceptualization of professional competency frameworks. The proposed integrated framework provides professional bodies with an operational foundation for updating training and certification programmes, thereby contributing to the preparation of the auditing profession for the challenges and opportunities brought about by the era of artificial intelligence.

Statement on the use of generative AI in the writing process

In preparing this paper, the authors used Claude AI (Anthropic) to assist with literature synthesis and document structuring. Following the use of this tool, the authors reviewed and edited the content as necessary and assume full responsibility for the published content.

References

1. Abdo-Salloum, A.M. (2026), The role of artificial intelligence in transforming accounting and auditing practices: A systematic review, *SAGE Open*, vol. 16, no. 1, pp. 1–13, https://doi.org/10.1177/21582440251403296
2. Badea (Florea), E.C. (2025), Impact of artificial intelligence in audit: Bibliometric analysis, Proceedings of the International Conference on Business Excellence, vol. 19, no. 1, pp. 131–145, https://doi.org/10.2478/picbe-2025-0010
3. Binh, N.T.T. (2025), Transforming auditing in the AI era: A comprehensive review, *Information*, vol. 16, no. 5, p. 400, https://doi.org/10.3390/info16050400
4. Brabete, V., Barbu, C.M., Cîrciumaru, D., Goagără, D. și Berceanu, D. (2024), Redesign of accounting education

to meet the challenges of artificial intelligence – A literature review, *Amfiteatru Economic*, vol. 26, no. 65, pp. 275–293, https://doi.org/10.24818/EA/2024/65/275
5. Correia, A., Água, P.B. (2023), Artificial intelligence to enhance corporate governance: A conceptual framework, *Corporate Board: Role, Duties and Composition*, vol. 19, no. 1, pp. 29–35, https://doi.org/10.22495/cbv19i1art3
6. Fülöp, M.T. (2023), Ethical concerns associated with artificial intelligence in the accounting firms, *Journal of Business Economics and Management*, vol. 24, no. 4, pp. 783–801, https://doi.org/10.3846/jbem.2023.19251
7. Gambhir, B. (2025), AI in audit and accounting: A qualitative exploration, *Asian Journal of Accounting and Governance*, vol. 24, pp. 57–72, https://doi.org/10.17576/AJAG-2025-24-6
8. Genaro-Moya, D., López-Hernández, A.M., Godz, M. (2025), Artificial intelligence and public sector auditing: Challenges and opportunities for supreme audit institutions, *World*, vol. 6, no. 2, p. 78, https://doi.org/10.3390/world6020078
9. Genovesi, S., Mönig, J.M. (2022), Acknowledging sustainability in the framework of ethical certification for AI, *Sustainability*, vol. 14, no. 7, p. 4157, https://doi.org/10.3390/su14074157
10. Kokina, J., Blanchette, S., Davenport, T.H., Pachamanova, D. (2025), Challenges and opportunities for artificial intelligence in auditing: Evidence from the field, *International Journal of Accounting Information Systems*, vol. 56, p. 100734, https://doi.org/10.1016/j.accinf.2025.100734
11. Lassiter, T.B., Fleischmann, K.R. (2024), „Something fast and cheap" or „a core element of building trust"? AI auditing professionals' perspectives on the role of AI audits in trust in AI, *Proceedings of the ACM on Human-Computer Interaction*, vol. 8, no. CSCW2, pp. 1–33, https://doi.org/10.1145/3686963
12. Lehner, O.M., Ittonen, K., Silvola, H., Ström, E., Wührleitner, A. (2022), Artificial intelligence based decision-making in accounting and auditing: Ethical challenges and normative thinking, *Accounting, Auditing & Accountability Journal*, vol. 35, no. 9, pp. 109–135, https://doi.org/10.1108/AAAJ-09-2020-4934
13. Leitner-Hanetseder, S., Lehner, O.M., Eisl, C., Forstenlechner, C. (2021), A profession in transition: Actors, tasks and roles in AI-based accounting, *Journal of Applied Accounting Research*, vol. 22, no. 3, pp. 539–556, https://doi.org/10.1108/JAAR-10-2020-0201
14. Libby, R., Witz, P.D. (2025), Artificial intelligence in auditing: How auditor AI use can mitigate legal liability, *Current Issues in Auditing*, vol. 19, no. 2, pp. P49–P59, https://doi.org/10.2308/CIIA-2024-029
15. Manheim, D. (2025), The necessity of AI audit standards boards, *AI & Society*, advance online publication, https://doi.org/10.1007/s00146-025-02320-y
16. Massaro, M., Dumay, J., Guthrie, J. (2016), On the shoulders of giants: Undertaking a structured literature review in accounting, *Accounting, Auditing & Accountability Journal*, vol. 29, no. 5, pp. 767–801, https://doi.org/10.1108/AAAJ-08-2015-2151
17. Minkkinen, M., Niukkanen, A., Mäntymäki, M. (2024), What about investors? ESG analyses as tools for ethics-based AI auditing, *AI & Society*, vol. 39, pp. 329–343, https://doi.org/10.1007/s00146-022-01415-0
18. Noordin, N.A., Hussainey, K., Hayek, A.F. (2022), The use of artificial intelligence and audit quality: An analysis from the perspectives of external auditors in the UAE, *Journal of Risk and Financial Management*, vol. 15, no. 8, p. 339, https://doi.org/10.3390/jrfm15080339
19. Pérez-Calderón, E., Alrahamneh, S.A., Milanés Montero, P. (2025), Impact of artificial intelligence on auditing: An evaluation from the profession in Jordan, *Discover Sustainability*, vol. 6, p. 251, https://doi.org/10.1007/s43621-025-01058-3
20. Rikhardsson, P., Thórisson, K.R., Bergthorsson, G., Batt, C. (2022), Artificial intelligence and auditing in small- and medium-sized firms: Expectations and applications, *AI Magazine*, vol. 42, no. 2, pp. 56–72, https://doi.org/10.1002/aaai.12066
21. Sawaya, C., Khalil, F.C., Jabbour Al Maalouf, N., Kaspard, J. (2026), Revolutionizing audit practice in emerging economies: The role of artificial intelligence in enhancing the audit of consolidated financial statements, *Cogent Business & Management*, vol. 13, no. 1, https://doi.org/10.1080/23311975.2026.2625974
22. Staszkiewicz, P. (2026), The role of attitudes towards responsibility in applying artificial intelligence in auditing, *Meditari Accountancy Research*, advance online publication, https://doi.org/10.1108/MEDAR-08-2024-2613
23. Tranfield, D., Denyer, D., Smart, P. (2003), Towards a methodology for developing evidence-informed management knowledge by means of systematic review, *British Journal of Management*, vol. 14, no. 3, pp. 207–222, https://doi.org/10.1111/1467-8551.00375
24. Yang, Z., Liu, J. (2025), Emerging artificial intelligence applications in CSR accounting and reporting, Revista de Contabilidad – Spanish Accounting Review (lucrare citată în articol; referința detaliată urmează a fi completată de autori).