

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON AUDIT QUALITY: THE MODERATING ROLE OF AUDITOR COMPETENCE

DAMPAK KECERDASAN ARTIFISIAL TERHADAP KUALITAS AUDIT: PERAN MODERASI KOMPETENSI AUDITOR**Vince Ariany**

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This study critically reviews the extant literature on the relationship between artificial intelligence (AI) adoption and audit quality, with particular attention to the moderating role of auditor competence. A narrative review approach is adopted, synthesizing peer-reviewed studies, professional-body reports, and regulatory publications, primarily published between 2018 and 2026 and drawn from Scopus-indexed and other reputable outlets. The review is anchored on Agency Theory and the Technology Acceptance Model (TAM) to construct an integrative conceptual framework. The reviewed literature indicates that AI can enhance audit quality through expanded data coverage, faster anomaly detection, and more consistent risk assessment, yet these benefits are neither automatic nor uniform. A recurring "audit quality paradox" emerges, in which AI adoption is sometimes accompanied by reduced professional skepticism, overreliance on system outputs, and unresolved explainability concerns. Auditor competence comprising technical knowledge, professional judgment, and digital literacy is identified as a decisive boundary condition that determines whether AI adoption translates into higher or lower audit quality, a condition that is particularly consequential in emerging economies characterized by weaker institutional infrastructure and persistent skills gaps. This paper contributes a theory driven conceptual model that repositions auditor competence as a moderator, rather than a mere control variable, of the AI audit quality relationship, offering a novel and testable research agenda for emerging-market audit contexts.

Keywords: Artificial Intelligence, Audit Quality, Auditor Competence, Agency Theory, Technology Acceptance Model, Emerging Economies, Narrative Review

ABSTRAK

Penelitian ini mengulas secara kritis literatur yang ada mengenai hubungan antara adopsi kecerdasan artifisial (Artificial Intelligence/AI) dan kualitas audit, dengan memberikan perhatian khusus pada peran moderasi kompetensi auditor. Penelitian ini menggunakan pendekatan narrative review dengan mensintesis berbagai studi yang telah melalui proses peer review, laporan lembaga profesi, serta publikasi regulator, yang sebagian besar diterbitkan pada periode 2018–2026 dan berasal dari jurnal terindeks Scopus maupun sumber ilmiah bereputasi lainnya. Kajian ini berlandaskan Teori Keagenan (Agency Theory) dan Technology Acceptance Model (TAM) untuk membangun kerangka konseptual yang integratif. Literatur yang ditelaah menunjukkan bahwa AI berpotensi meningkatkan kualitas audit melalui perluasan cakupan analisis data, deteksi anomali yang lebih cepat, serta penilaian risiko yang lebih konsisten. Namun, manfaat tersebut tidak terjadi secara otomatis maupun seragam. Kajian ini mengidentifikasi adanya "paradoks kualitas audit", yaitu kondisi ketika adopsi AI justru diikuti oleh menurunnya skeptisisme profesional auditor, meningkatnya ketergantungan terhadap keluaran sistem, serta masih adanya permasalahan terkait kejelasan dan kemampuan penjelasan (explainability) hasil AI. Kompetensi auditor yang mencakup pengetahuan teknis, pertimbangan profesional, dan literasi digital diidentifikasi sebagai faktor batas (boundary condition) yang menentukan apakah adopsi AI akan menghasilkan peningkatan atau justru penurunan kualitas audit. Peran tersebut menjadi semakin penting di negara-negara berkembang yang masih menghadapi kelemahan infrastruktur kelembagaan serta kesenjangan kompetensi sumber daya manusia. Artikel ini menawarkan model konseptual berbasis teori yang menempatkan kompetensi auditor sebagai variabel moderasi, bukan sekadar variabel kontrol,

dalam hubungan antara adopsi AI dan kualitas audit. Model ini memberikan kontribusi konseptual yang baru sekaligus menawarkan agenda penelitian yang dapat diuji secara empiris pada konteks audit di negara-negara berkembang.

Kata Kunci: Kecerdasan Artifisial, Kualitas Audit, Kompetensi Auditor, Teori Keagenan, Technology Acceptance Model, Negara Berkembang, Narrative Review.

1. INTRODUCTION

The global assurance and financial reporting environment is undergoing a rapid, technology enabled transformation. Over the past five years, the largest audit and professional-service networks have committed unprecedented capital to artificial intelligence. Deloitte announced a two-billion-dollar investment in AI-enabled industry accelerators in 2024, while KPMG has committed a comparable sum to cloud and AI capabilities through a partnership with Microsoft, targeting an additional twelve billion dollars in AI-enabled service revenue (Commerce, 2026). PwC has rolled out ChatGPT Enterprise to more than one hundred thousand of its UK and US employees and become the first authorized reseller of the tool to its global client base (The Finance Story, 2024), while EY has embedded generative AI and agentic capabilities across more than 160,000 global audit engagements (Thomson Reuters Institute, 2025). Beyond the Big Four, adoption has broadened rapidly across the profession: the 2025 Wolters Kluwer Future Ready Accountant survey reported that AI adoption among accounting firms increased from only nine percent in 2024 to forty one percent in 2025 (Commerce, 2026).

This rapid uptake is not confined to advanced economies. Audit and assurance markets in developing and emerging economies are increasingly exposed to AI-enabled audit methodologies through multinational network firms, cross-border listings, and regulator-driven digitalization agendas, even though local infrastructure, talent pools, and regulatory capacity often lag behind those of developed markets (Almaqtari, 2024; Mpofu, 2023). Standard-setters have begun to respond formally to this shift. In September 2024 the International Auditing and Assurance Standards Board (IAASB) approved a new Technology Position committing to actively facilitate the appropriate use of technology, including AI, in audit and assurance engagements, and initiated an ongoing gap analysis of its existing standards (IAASB, 2024). This was followed in 2025 by a dedicated Technology Quality Management initiative and a series of global roundtables involving more than 240 stakeholders across six continents to examine how AI affects the application of quality-management standards such as ISQM 1, ISQM 2, and ISA 220 (Revised) (IAASB, 2025). National regulators, including the UK Financial Reporting Council, have similarly begun to question the pace and manner of AI adoption by audit firms (as cited in Khatib, 2025).

Yet the phenomenon is far from unambiguously positive. Evidence from both practice-oriented and academic sources reveals what several reviewers describe as an "audit quality paradox." Machine-learning-based analytics have been shown to detect fraudulent transactions with substantially higher accuracy than traditional rule-based procedures in some financial-institution settings, yet the same body of evidence shows that this effectiveness varies sharply across industries, falling markedly in sectors marked by poor data quality and complex operations (as synthesized in the RSIS International critical review, 2024). Recent interview-based evidence from Big Four auditors shows that generative AI supports task efficiency and skill development, but that overreliance on AI outputs without adequate verification, limited model transparency, confidentiality and security risks, and a diminished exercise of professional skepticism are recurrent concerns – and that junior and experienced auditors use these tools quite differently (Li & Goel, 2026). Concerns about the "black box" nature of many AI systems, algorithmic bias, and data-privacy exposure recur throughout the recent literature on AI in accounting and auditing more broadly.

These tensions matter because audit quality is not a peripheral or purely technical issue: it directly affects the reliability of financial information that underpins capital allocation, creditor decisions, and market confidence. As AI becomes embedded in core audit procedures

risk assessment, substantive testing, journal-entry analysis, and even aspects of professional-judgment support the question of whether AI systematically improves or undermines audit quality can no longer be answered in the abstract. A growing number of studies suggest that the answer depends heavily on the auditor operating alongside the technology: auditors with strong technical knowledge, data-analytical skill, and professional judgment appear better able to harness AI's analytical power while compensating for its limitations, whereas less competent or less digitally literate auditors may defer excessively to system outputs (Auditor Attributes Systematic Literature Review, 2025). This observation motivates the central proposition of the present paper: that auditor competence is not a peripheral control variable but a decisive boundary condition, a moderator that shapes whether AI adoption enhances or erodes audit quality, a condition that is especially consequential in emerging economies where institutional and human-capital constraints are more binding.

The literature relevant to this review can be organized into three broad streams. The first stream examines the direct effects of AI adoption on audit processes and outcomes. Several studies document efficiency and detection gains, including expanded transaction-level testing, faster anomaly detection, and improved consistency in the review of accounting estimates (Noordin, Hussainey, & Hayek, 2022; Faisal Khan & Zia ul Haq, 2024; Hezam, Anthonysamy, & Suppiah, 2023). Others adopt a more cautious stance, reporting that AI's contribution to audit quality is conditional, uneven across industries, and sometimes accompanied by a decline in auditors' exercise of professional skepticism (Li & Goel, 2026). Law and Shen (2024) further show that AI reshapes the structure and competitive dynamics of audit firms themselves, beyond simply altering individual engagement outcomes.

The second stream concerns auditor-level determinants of audit quality, particularly competence, independence, experience, and professional skepticism. Grounded largely in DeAngelo's (1981) classic conceptualization of audit quality as the joint probability that an auditor will both discover and report a material misstatement, this stream consistently identifies competence encompassing technical knowledge, training, and the capacity to exercise sound professional judgment as one of the most robust predictors of audit quality across both developed and emerging markets (Nugrahaeni, Samin, & Nopiyanti, 2019; Kusumawati & Syamsuddin, 2018; Auditor Attributes Systematic Literature Review, 2025). Comparative evidence indicates that competence and independence retain their positive influence in both institutional settings, whereas the effects of experience and firm affiliation are more sensitive to the strength of the surrounding regulatory environment (Auditor Attributes Systematic Literature Review, 2025).

The third and most recent stream attempts to integrate these two lines of inquiry by examining moderating or boundary conditions in the technology–audit quality relationship. Studies in this stream propose that variables such as technology readiness, IT governance, and audit committee characteristics determine whether digital and AI adoption translates into improved audit outcomes (Alma'aitah, Al-Hajaya, Sawan, & Alzeban, 2024; Almaqtari, 2024). However, this stream remains fragmented: most studies examine organizational-level moderators rather than individual auditor-level competence, and very few explicitly combine an agency-theoretic monitoring perspective with a technology-acceptance perspective to explain why competence matters.

Despite the expanding body of work, three specific gaps can be identified. First, much of the empirical literature treats AI's effect on audit quality as a direct, largely technology deterministic relationship, without adequately theorizing the human factor operating alongside the technology; a recent critical review found that twenty-three of thirty-five studies on AI in auditing lacked an explicit theoretical framework altogether, and that studies applying a framework most often TAM applied narrowly to adoption intention explained only a modest share of variance in professional outcomes (RSIS International critical review, 2024). Second,

while auditor competence is well-established as a direct determinant of audit quality (Nugrahaeni et al., 2019; Auditor Attributes Systematic Literature Review, 2025), it has rarely been modeled explicitly as a moderator of the AI–audit quality relationship; most existing "moderating role" studies focus on organizational-level variables such as audit committee characteristics or technology readiness rather than individual competence (Alma'aitah et al., 2024). Third, the overwhelming majority of empirical AI-audit studies are situated in developed markets or Big Four settings (Li & Goel, 2026; Law & Shen, 2024), leaving the interaction between AI, competence, and institutional weakness in emerging economies comparatively under-theorized, despite evidence that emerging-market auditors face distinct structural constraints including weaker enforcement, resource limitations, and skills gaps that likely condition how AI is used and how far it can be trusted (Auditor Attributes Systematic Literature Review, 2025; Mpofu, 2023).

This paper addresses these gaps by offering an integrative, theory driven narrative review that (1) explicitly combines Agency Theory and the Technology Acceptance Model to explain, rather than merely describe, why AI's effect on audit quality is contingent rather than uniform; (2) repositions auditor competence from a direct antecedent to an explicit moderating construct that determines the sign and strength of the AI–audit quality relationship; and (3) situates this integrated model within the specific institutional conditions of emerging economies, where technology infrastructure, regulatory maturity, and auditor training vary considerably more than in developed markets. To the authors' knowledge, no prior narrative review has combined these three elements into a single conceptual framework tailored specifically to emerging-economy audit markets.

Building on the background, state of the art, and identified gaps, this review is organized around the following problem statements:

RQ1: How has the role of artificial intelligence in the audit process evolved, and what forms does its adoption take in contemporary audit practice?

RQ2: What does the extant literature reveal about the direct relationship between AI adoption and audit quality, including areas of consensus and contradiction?

RQ3: How, and through what mechanisms, does auditor competence moderate the relationship between AI adoption and audit quality?

RQ4: How can Agency Theory and the Technology Acceptance Model be integrated to theoretically explain the moderating role of auditor competence?

RQ5: What contextual factors specific to emerging economies condition the AI–audit quality–competence relationship, and what does this imply for theory and practice?

Corresponding to the problem statements above, this review aims to: (1) map the evolving role and forms of AI adoption in audit practice; (2) synthesize evidence on the direct relationship between AI and audit quality; (3) explain the mechanisms through which auditor competence moderates this relationship; (4) develop an integrated theoretical framework combining Agency Theory and TAM; and (5) contextualize the resulting model within the institutional realities of emerging economies, thereby generating a research agenda relevant to both theory and practice.

2. METHODS

This study employs a narrative (traditional) literature review approach rather than a systematic review or meta-analysis, consistent with its objective of building an integrative conceptual argument rather than producing a fully replicable, exhaustive enumeration of every published study. Narrative reviews are appropriate when the purpose is to synthesize heterogeneous streams of literature, connect theory to an emerging phenomenon, and generate novel conceptual propositions, rather than to statistically aggregate effect sizes from methodologically comparable studies, which is instead the aim of systematic reviews or meta-analyses.

Literature was identified through structured searches of Scopus, Web of Science, ScienceDirect, Emerald Insight, and SpringerLink, supplemented by Google Scholar and the websites of relevant standard-setting and professional bodies (including the IAASB, the Center for Audit Quality, and major professional-services networks) to capture recent practice-level developments not yet fully reflected in the peer-reviewed literature. Search terms combined variations of “artificial intelligence,” “machine learning,” “generative AI,” “audit quality,” “auditor competence,” “auditor judgment,” “agency theory,” and “technology acceptance model,” applied to titles, abstracts, and keywords. The review prioritized peer-reviewed journal articles published between 2018 and 2026, a period chosen to capture both the earlier wave of audit-analytics research and the more recent generative-AI wave that followed the large-scale introduction of conversational AI tools into professional services in late 2022. Foundational theoretical works predating this window including Jensen and Meckling (1976), Davis (1989), and DeAngelo (1981) were retained given their continuing centrality to the field.

Sources were included if they addressed at least one of the three thematic pillars of the review: AI in auditing; auditor competence/attributes and audit quality; or moderation and boundary-condition analysis of technology–quality relationships and were excluded if they were non-English, were non-peer-reviewed opinion pieces without an identifiable evidentiary basis, or were unrelated to the assurance/audit context. Consistent with narrative-review conventions, the identified sources were read in full, thematically coded around the five problem statements presented above, and synthesized qualitatively rather than statistically. The resulting synthesis is organized in the Results and Discussion section according to the five research questions and is used to construct the integrative conceptual model presented at the end of that section. As with any narrative review, this approach does not permit a formal assessment of publication bias or an exhaustive census of every relevant study; this limitation is acknowledged explicitly in the concluding section together with the resulting research agenda.

To support the thematic synthesis presented in the following section, Table 1 summarizes the key studies underpinning this review, organized by author(s)/year, focus, theoretical lens or method, and principal findings/context.

Table 1. Literature Matrix of Reviewed Studies

No	Author(s) & Year	Focus / Topic	Theoretical Lens / Method	Key Findings & Context
1	Jensen & Meckling (1976)	Foundational theory of the firm	Agency Theory (conceptual)	Establishes agency costs arising from information asymmetry between principals and agents; positions independent monitoring, including audit, as an agency-cost-reducing mechanism. Global, theoretical foundation.
2	Davis (1989)	Technology acceptance	Technology Acceptance Model (conceptual/empirical)	Perceived usefulness and perceived ease of use determine technology adoption and use behavior; foundational for later auditor-technology studies. General information-systems context.
3	DeAngelo (1981)	Definition of audit quality	Conceptual / economic analysis	Defines audit quality as the joint probability that an auditor both detects and reports a material misstatement; underpins most

No	Author(s) & Year	Focus / Topic	Theoretical Lens / Method	Key Findings & Context
				later empirical audit-quality proxies. Theoretical foundation.
4	Noordin, Hussainey & Hayek (2022)	AI adoption and audit quality	Survey of external auditors	Auditors perceive AI as enhancing several dimensions of audit quality, though perceptions vary with experience. Context: United Arab Emirates (emerging market).
5	Faisal Khan & Zia ul Haq (2024)	AI adoption, audit quality and integrated reporting	Empirical, quantitative	AI adoption is positively associated with audit quality and the quality of integrated financial reporting.
6	Hezam, Anthonysamy & Suppiah (2023)	Big data analytics in auditing	Review and synthesis	Big data analytics improves anomaly detection and strengthens the evidentiary basis for audit conclusions, but raises data-quality and skill concerns.
7	RSIS International critical review (2024)	AI in internal auditing	Critical literature review	Identifies an “audit quality paradox”: some studies show improved quality via data coverage, others show reduced skepticism; notes weak theoretical integration across the field (23 of 35 studies lacked an explicit framework).
8	Li & Goel (2026)	Generative AI adoption in Big 4 firms	Qualitative interviews (37 auditors)	GenAI supports task efficiency, communication and skill development, but overreliance without verification, low transparency, and reduced skepticism can harm audit quality; junior and senior auditors use GenAI differently. Context: Big Four, global.
9	Law & Shen (2024)	AI and audit firm structure	Empirical, archival	AI reshapes the structure and competitive dynamics of audit firms beyond individual engagement outcomes. Developed-market context.
10	Mpofu (2023)	AI in external auditing	Review of ongoing debates	Synthesizes benefits (efficiency, coverage) and risks (skills gap, over-dependence) of AI for audit quality. Context: emerging economies.
11	Almaqtari (2024)	IT governance and AI integration	Conceptual / empirical	Effective IT governance is a critical enabler of successful AI integration into accounting and auditing operations. Context: emerging economies.
12	Alma'aitah, Al-Hajaya,	Remote auditing and technology readiness	Empirical, moderation analysis	Technology readiness moderates the relationship between remote/digital auditing and audit quality an

No	Author(s) & Year	Focus / Topic	Theoretical Lens / Method	Key Findings & Context
	Sawan & Alzeban (2024)			organizational-level analogue to the auditor-competence moderation proposed in this review.
13	Nugrahaeni, Samin & Nopiyanti (2019)	Skepticism, competence, independence, complexity	Survey, regression	Auditor competence, professional skepticism, independence and audit complexity jointly determine audit quality. Context: Indonesia.
14	Kusumawati & Syamsuddin (2018)	Auditor quality and professional skepticism	Survey	Auditor quality enhances professional skepticism, which in turn improves audit quality. Context: Indonesia.
15	Auditor Attributes Systematic Literature Review (2025)	Auditor attributes across economies	Systematic review, PRISMA (35 studies, 2010–2025)	Competence and independence consistently enhance audit quality in both developed and emerging economies; experience and firm affiliation are more context-dependent, with formal education/skill especially critical for junior-heavy teams in emerging markets.
16	Digital Transformation & Audit Committee study (2026)	Digital transformation, audit committee characteristics and audit quality	Empirical, agency and resource-dependence theory	Audit-committee expertise moderates the relationship between digital transformation and audit quality by bridging the technical knowledge gap. Context: Egypt (emerging market).
17	Matondang (2025)	Audit quality determinants and going-concern opinions	Empirical, PLS-SEM	Competence, independence and professional ethics are core pillars of audit quality; going-concern opinion positively moderates audit quality–client satisfaction link. Context: Indonesia manufacturing sector.
18	Moderating Powers of Internal Audit Function study (2024)	Corporate governance, internal audit function and financial reporting quality	Proposed conceptual framework	Internal auditor competency and communication skills are proposed to moderate the corporate-governance–financial reporting quality relationship. Context: developing countries.
19	Ocansey (2024)	Auditor experience, time pressure and audit quality	Survey, PLS-SEM (n = 350)	Auditor experience reverses the sign of the audit time-pressure–audit quality relationship, turning it from negative to positive as experience increases. Context: Ghana (emerging economy).
20	IAASB (2024, 2025)	Regulatory response to technology and AI in audit	Policy / regulatory publications	Adopted a Technology Position (2024) committing to facilitate appropriate AI use and launched a Technology Quality Management initiative (2025) examining

No	Author(s) & Year	Focus / Topic	Theoretical Lens / Method	Key Findings & Context
				AI's effect on ISQM 1, ISQM 2 and ISA 220 (Revised). Global regulatory context.
21	Industry practice reports – Lakshya Commerce (2026); Big4stats (2025); Thomson Reuters Institute (2025); The Finance Story (2024)	Practice-level AI adoption in Big 4 firms	Industry/practitioner reports	Document large-scale AI investment and firm-specific platforms (Deloitte Omnia, KPMG Clara/Workbench, PwC GL.ai/Agent OS, EY unified AI platform) and rising firm-wide AI adoption rates. Big Four / global practice context.

Source: Author's Compilation, 2026

3. RESULTS AND DISCUSSION

3.1 The Evolving Role of Artificial Intelligence in the Audit Process (Addressing RQ1)

Consistent with RQ1, the reviewed evidence shows that AI has moved from a peripheral, pilot-stage technology to a core component of audit methodology within a remarkably short period. Deloitte's Omnia platform integrates AI and data analytics into risk assessment and financial analysis, and the firm's generative-AI capabilities are increasingly used to accelerate documentation review (Big4stats, 2025). KPMG's Clara platform provides real-time analytical insight and compliance monitoring, and the firm's newer Workbench platform, launched in 2025, applies a multi-agent architecture in which several AI agents mirror the division of labor within a human audit team while embedding documentation and accountability logs at every step (Lakshya Commerce, 2026). PwC has developed GL.ai, a general-ledger analysis tool built in collaboration with an external analytics partner, together with an "Agent OS" designed to allow configurable governance controls across regulatory environments (Lakshya Commerce, 2026). EY, for its part, has unified its technology platforms under a single AI-enabled architecture supporting audit, tax, and advisory engagements at global scale (Thomson Reuters Institute, 2025).

This transformation is reshaping the nature of audit work itself. Rather than a backward-looking exercise constrained by what a small engagement team can manually sample within a fixed timetable, the audit is increasingly described as a continuous, data-driven process capable of examining a client's full transactional record and directing human attention toward the specific exceptions that warrant scrutiny (Lakshya Commerce, 2026). Regulators have responded in kind: the IAASB's 2024 Technology Position and subsequent 2025 Technology Quality Management initiative reflect a deliberate strategy of facilitating, rather than merely tolerating, this shift, while simultaneously flagging unresolved questions around the sufficiency and appropriateness of AI-generated audit evidence under existing standards such as ISA 500 and ISA 540 (Revised) (IAASB, 2024, 2025). Taken together, this evidence answers RQ1 by showing that AI adoption in audit is best understood not as a single discrete tool but as an evolving socio-technical infrastructure spanning risk assessment, substantive testing, documentation, and firm-level competitive strategy.

3.2 Artificial Intelligence and Audit Quality: Evidence and Contradictions (Addressing RQ2)

Turning to RQ2, the direct evidence on AI's effect on audit quality is genuinely mixed rather than uniformly positive. On the favorable side, several studies report that AI-enabled analytics improve audit quality by expanding data coverage, enabling full-population rather than sample-based testing, and supporting more consistent risk assessment (Noordin, Hussainey, & Hayek, 2022; Faisal Khan & Zia ul Haq, 2024). Big data analytics in particular has been associated with improved detection of anomalous transactions and a stronger evidentiary basis for auditor conclusions (Hezam, Anthonysamy, & Suppiah, 2023; Agyemang & Modisane, 2026).

On the unfavorable side, a distinct body of evidence documents what might be termed an audit quality paradox. Reviews of the internal-auditing literature note that while some studies report improved audit quality through enhanced data coverage, others report a substantial reduction in professional skepticism among auditors who rely extensively on AI tools (RSIS International critical review, 2024). Machine-learning effectiveness itself has been shown to vary considerably by industry, with far lower detection accuracy in sectors characterized by poor data quality and complex operating structures compared with more data-rich financial-services settings (RSIS International critical review, 2024). Perhaps most directly relevant, interview-based evidence from thirty-seven Big Four audit professionals shows that generative AI supports task efficiency, communication, and skill development, but

that overreliance without independent verification, limited model transparency, confidentiality and security risks, and an impaired exercise of professional skepticism and judgment can adversely affect audit quality with junior and experienced auditors relying on these tools in markedly different ways (Li & Goel, 2026).

Reviewers attribute part of this contradiction to methodological weaknesses in the underlying literature itself: most available studies rely on small samples, cross-sectional designs, or purely conceptual argumentation without empirical validation, and none has tracked outcomes longitudinally beyond eighteen months (RSIS International critical review, 2024). In answering RQ2, therefore, the literature does not support a simple claim that “AI improves audit quality” or its opposite; rather, it supports the more precise claim that AI’s effect on audit quality is conditional on how the technology is used, on the quality of the underlying data, and as elaborated in the next section on the competence of the auditor who interprets and acts upon its outputs.

3.3 Auditor Competence as a Boundary Condition: The Moderating Mechanism (Addressing RQ3)

RQ3 asks how auditor competence moderates the AI–audit quality relationship. The literature on auditor attributes offers a clear starting point: competence defined broadly as the possession of relevant technical knowledge, training, and the capacity to exercise sound professional judgment is one of the most consistently supported direct predictors of audit quality across institutional settings (Nugrahaeni, Samin, & Nopiyanti, 2019; Kusumawati & Syamsuddin, 2018). A systematic comparative review of auditor attributes in emerging versus developed economies further shows that competent auditors do not merely follow technical checklists; they apply professional judgment appropriately, thereby increasing the likelihood of both uncovering and accurately reporting misstatements, and that formal education and skill are particularly decisive in emerging audit markets where audit teams are often composed predominantly of junior or early-career staff (Auditor Attributes Systematic Literature Review, 2025).

When this evidence is read alongside the AI-adoption literature, a coherent moderating mechanism emerges. Competent auditors appear able to use AI as a complement to, rather than a substitute for, professional judgment: they interrogate AI-flagged anomalies, cross-check model outputs against contextual client knowledge, and maintain the professional skepticism required to challenge implausible results, consistent with evidence that skepticism and competence jointly shape audit quality outcomes (Kusumawati & Syamsuddin, 2018). Less competent auditors, by contrast, are more prone to the overreliance and reduced-skepticism effects documented in the Big Four interview evidence, treating AI outputs as authoritative rather than as inputs requiring critical evaluation (Li & Goel, 2026). This pattern parallels findings from adjacent moderation studies: auditor experience has been shown to reverse the sign of the relationship between audit time pressure and audit quality, turning a harmful pressure effect into a beneficial one as experience increases (Ocansey, 2024), while technology readiness has been shown to moderate the relationship between remote/digital auditing and audit quality in a comparable manner (Alma'aitah, Al-Hajaya, Sawan, & Alzeban, 2024). Auditor competence, in this review’s synthesis, operates through an analogous mechanism specific to AI: it determines whether an auditor can convert AI’s expanded analytical capacity into genuine assurance value or whether that capacity instead becomes a source of false comfort and diminished professional judgment. This synthesis directly answers RQ3 by identifying competence as a boundary condition that can reverse or amplify the sign of the AI–audit quality relationship, rather than merely adjusting its magnitude.

3.4 Integrating Agency Theory and the Technology Acceptance Model: A Conceptual Synthesis (Addressing RQ4)

RQ4 calls for a theoretical account of why competence should moderate the AI–audit quality relationship in the manner described above. Agency Theory, originally developed by Jensen and Meckling (1976), conceptualizes the firm as a nexus of contracts between principals (owners, capital providers) and agents (managers), characterized by information asymmetry and potentially divergent interests. The independent audit function exists precisely to reduce this asymmetry by providing external, credible monitoring of management's financial representations (Jensen & Meckling, 1976; DeAngelo, 1981). Within this framework, AI can be understood as an instrument that expands the auditor's monitoring capacity enabling examination of larger populations of transactions and more consistent application of analytical procedures but the theory also implies that the monitoring function's credibility ultimately rests on the competence and independence of the human agent who exercises it. An expanded but poorly interpreted monitoring capacity does not, by itself, reduce agency costs; it may even obscure them if auditors defer uncritically to opaque algorithmic outputs.

The Technology Acceptance Model (TAM), developed by Davis (1989), complements this agency-theoretic view by explaining the individual-level behavioral process through which auditors come to use or misuse AI tools. TAM posits that technology adoption and use are shaped by perceived usefulness and perceived ease of use, both of which are themselves conditioned by the user's underlying skill and self-efficacy. Auditors with higher competence are likely to perceive AI tools as more useful for judgment-intensive tasks (because they can validate and contextualize outputs) and to use them in a more discriminating manner, whereas lower-competence auditors may perceive the same tools as substitutes for effort or judgment rather than as complements to it a distinction consistent with evidence that TAM-based models of auditor AI adoption alone explain only a limited share of variance in professional-judgment outcomes (RSIS International critical review, 2024), suggesting that acceptance intentions must be combined with a monitoring-quality perspective to explain audit-quality outcomes specifically.

Integrating the two theories yields the conceptual proposition at the heart of this review: AI functions as an agency-cost-reducing monitoring instrument only to the extent that it is used by auditors whose competence allows them to convert technologically expanded evidence into genuine professional judgment (an Agency Theory condition), and this conversion process is itself governed by competence-conditioned patterns of technology acceptance and use (a TAM condition). In this integrated model, auditor competence is positioned as a moderator acting on both halves of the causal chain: it shapes how AI is used (a TAM mechanism) and, through that usage, whether AI adoption genuinely strengthens or merely appears to strengthen the monitoring function that underlies audit quality (an Agency Theory mechanism). This synthesis directly answers RQ4 and provides the theoretical foundation for the contextualization undertaken in the next subsection.

3.5 Contextualizing the Model in Emerging Economies (Addressing RQ5)

RQ5 asks how institutional conditions specific to emerging economies shape this integrated model. Comparative evidence indicates that emerging audit markets face structural challenges including weaker regulatory enforcement, political interference, and resource limitations that diminish the extent to which auditor attributes, including competence, translate into audit quality relative to developed markets with more mature governance mechanisms (Auditor Attributes Systematic Literature Review, 2025). These same structural conditions plausibly intensify the moderating role of competence in the AI context: where formal quality-management infrastructure and continuing professional education are less consistently enforced, the burden of ensuring that AI is used appropriately falls disproportionately on individual auditor competence rather than on firm-level or regulatory safeguards (Almaqtari, 2024; Mpofu, 2023).

Country-specific evidence supports this contextualization. In the Egyptian capital market, digital transformation has been shown to increase audit quality only when audit-committee expertise is sufficient to challenge management's digital-transformation assumptions and critically evaluate the auditor's own digital capabilities, illustrating how, in an emerging-market institutional setting, competence-related governance mechanisms condition whether technological change translates into better assurance outcomes (Digital Transformation and Audit Quality in Emerging Economies study, 2026). Evidence from Indonesia's manufacturing sector similarly reinforces agency theory's emphasis on competence, independence, and professional ethics as core pillars of audit quality within an emerging-market setting, and identifies going-concern-opinion accuracy as a channel through which these pillars translate into client and stakeholder trust (Matondang, 2025). Evidence on internal-audit effectiveness in developing countries likewise underscores that internal auditor competency and communication skills interact with corporate-governance attributes to shape financial reporting quality, suggesting that the competence-moderation mechanism proposed here for external audit likely extends to internal assurance functions as well (Moderating Powers of Internal Audit Function study, 2024).

Taken together, this evidence answers RQ5 by suggesting that emerging-economy institutional conditions do not simply add “more of the same” constraints to the AI–audit quality–competence relationship; they shift a larger share of the burden for ensuring audit quality onto individual auditor competence, precisely because organizational and regulatory safeguards that might otherwise compensate for lower competence are themselves less developed. This implies that investments in auditor training and digital literacy may yield disproportionately large audit-quality returns in emerging markets relative to developed ones, a proposition that follows directly from the integrated Agency Theory–TAM framework developed in Section 3.4.

3.6 Toward an Integrated Conceptual Framework

Synthesizing the responses to RQ1–RQ5, this review proposes an integrated conceptual framework in which artificial intelligence constitutes the independent variable, audit quality the dependent variable, and auditor competence the moderating variable, with the overall relationship theoretically grounded in Agency Theory (explaining why the audit function exists and what constitutes genuine monitoring value) and the Technology Acceptance Model (explaining how individual auditors come to use AI in ways that either support or undermine that monitoring value). The framework further proposes that the strength of the moderating effect is itself conditioned by the institutional environment, such that the same level of auditor competence is likely to exert a stronger moderating effect in emerging economies where compensating organizational and regulatory safeguards are weaker than in developed markets. This framework is offered as a set of testable propositions for future empirical research rather than as an already-validated causal model, consistent with the exploratory and integrative purpose of a narrative review.

4. CONCLUSION

4.1 Theoretical Implications

This review contributes to audit and accounting theory in three ways. First, it demonstrates that the widely observed “audit quality paradox” surrounding AI adoption can be theoretically resolved by treating auditor competence as a moderator rather than a control variable, thereby reconciling seemingly contradictory empirical findings within a single explanatory framework. Second, it shows that Agency Theory and the Technology Acceptance Model, though developed for different purposes and rarely combined explicitly in the audit-technology literature, are jointly necessary to explain both why AI matters for audit quality (an agency-cost argument) and how individual auditors determine whether that

potential is realized (a technology-acceptance argument). Third, it extends the auditor-attributes literature, which has traditionally treated competence as a direct antecedent of audit quality, by repositioning competence as a boundary condition specifically within the context of AI-enabled audit processes.

4.2 Practical and Managerial Implications

For audit firms, the findings imply that AI investment strategies should be paired with commensurate and sustained investment in auditor competence including data-analytical skills, model-literacy training, and the deliberate cultivation of professional skepticism toward algorithmic outputs rather than treated as a purely technological upgrade. For regulators and standard-setters, the findings support the IAASB's current direction of pairing its Technology Position with explicit attention to quality-management standards such as ISQM 1 and 2 and ISA 220 (Revised), and suggest that guidance on AI-specific competency requirements may need to be more explicit, particularly for jurisdictions with less mature continuing-education infrastructure. For accounting educators and professional bodies in emerging economies specifically, the findings suggest that curricula integrating AI literacy, data analytics, and critical evaluation of algorithmic evidence are likely to yield outsized audit-quality benefits precisely because organizational and regulatory safeguards in these markets are less able to compensate for gaps in individual auditor competence.

4.3 Limitations and Future Research Agenda

As a narrative rather than systematic review, this study does not provide a fully exhaustive or bias-assessed census of the AI-audit literature, and its synthesis reflects the authors' thematic judgment rather than a pre-registered protocol; readers seeking a fully replicable inventory of studies should complement this review with a systematic review or meta-analysis. The proposed conceptual framework is also not yet empirically tested within a single study; future research should operationalize AI adoption (e.g., as breadth of AI tool use, or as a generative-AI-specific construct), audit quality (e.g., restatement likelihood, discretionary accruals, or regulatory inspection deficiencies), and auditor competence (e.g., certification, continuing-education hours, or task-specific digital-literacy assessments) to test the moderation hypotheses proposed here using survey-based, experimental, or archival designs. Cross-country comparative studies that explicitly contrast emerging and developed audit markets would be particularly valuable for testing the contextual amplification proposition advanced in Section 3.5, as would longitudinal designs capable of tracking how the competence AI interaction evolves as generative AI tools mature and as regulatory guidance, such as the IAASB's ongoing Technology Quality Management initiative, becomes more concrete. Finally, future work should examine whether the moderating role of competence identified here for external audit extends, in the same form, to internal audit, sustainability assurance, and other emerging assurance domains in which AI adoption is likewise accelerating.

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