Accounting Studies and Tax Journal (COUNT)

Vol 2 (3) 2025 : 557-569

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON AUDIT QUALITY AND AUDITOR JUDGEMENT: A MULTI COUNTRY ANALYSIS

DAMPAK KECERDASAN BUATAN TERHADAP KUALITAS AUDIT DAN PERTIMBANGAN AUDITOR: ANALISIS MULTI NEGARA

Vince Ariany

Politeknik Ganesha Medan *vinceariany76@gmail.com

*Corresponding Author

ABSTRACT

The rapid integration of Artificial Intelligence (AI) into audit practice has revolutionized the professional process by improving accuracy and efficiency, especially in fraud detection, business continuity analysis, and risk assessment. However, there is no global consensus on how auditors assess and respond to AI outputs, leading to potential variability in audit quality. Auditors' perceptions of the reliability and transparency of AI systems are key factors that shape their level of trust and maintain professional skepticism, which are significantly influenced by the cultural and regulatory contexts in different jurisdictions. This study aims to examine how auditors' perceptions of the reliability and transparency of AI affect their level of reliance and skepticism in a cross-border audit context. Using a narrative literature review approach, this study explores scientific literature from leading databases such as Scopus, Web of Science, ScienceDirect, and Emerald Insight over the period 2013 to 2025. The data are analyzed thematically to identify key patterns and build a conceptual framework that integrates the Technology Acceptance Model, Trust in Automation Framework, and Audit Judgment and Decision-Making Framework. The results of the analysis show that positive perceptions of the reliability and transparency of AI significantly increase auditors' propensity to rely on the technology. Factors such as explainable AI, user control, provider reputation, and organizational culture contribute to the formation of auditor trust. However, a high level of reliance without adequate professional skepticism can reduce audit quality. In addition, contextual factors such as differences in national culture, legal systems (rules-based versus principles-based), and regulatory frameworks also influence auditor responses to the use of AI. These findings emphasize the importance of balancing the use of AI with the application of professional skepticism to maintain audit integrity and quality. Practical implications include the need for clear regulatory guidelines, transparent AI system design, and comprehensive auditor training to optimize the use of technology without neglecting the principles of professionalism.

Keywords:Artificial Intelligence, audit quality, professional skepticism, AI reliability, AI transparency, cross-jurisdiction.

ABSTRAK

Integrasi pesat Artificial Intelligence (AI) dalam praktik audit telah merevolusi proses profesional dengan meningkatkan akurasi dan efisiensi, terutama dalam deteksi kecurangan, analisis kelangsungan usaha, dan penilaian risiko. Meskipun demikian, belum terdapat konsensus global mengenai bagaimana auditor menilai dan merespons keluaran AI, sehingga menimbulkan potensi variabilitas dalam kualitas audit. Persepsi auditor terhadap keandalan dan transparansi sistem AI menjadi faktor kunci yang membentuk tingkat kepercayaan serta menjaga skeptisisme profesional, yang secara signifikan dipengaruhi oleh konteks budaya dan regulasi di berbagai yurisdiksi. Penelitian ini bertujuan untuk mengkaji bagaimana persepsi

auditor terhadap aspek keandalan dan transparansi AI mempengaruhi tingkat ketergantungan dan sikap skeptis mereka dalam konteks audit lintas negara. Dengan menggunakan pendekatan narrative literature review, penelitian ini mengeksplorasi literatur ilmiah dari database terkemuka seperti Scopus, Web of Science, ScienceDirect, dan Emerald Insight dalam rentang waktu 2013 hingga 2025. Data dianalisis secara tematik guna mengidentifikasi pola-pola utama serta membangun kerangka konseptual yang mengintegrasikan Technology Acceptance Model, Trust in Automation Framework, dan Audit Judgment and Decision-Making Framework. Hasil analisis menunjukkan bahwa persepsi positif terhadap keandalan dan transparansi Al secara signifikan meningkatkan kecenderungan auditor untuk mengandalkan teknologi tersebut. Faktor seperti kemampuan penjelasan algoritma (explainable AI), kontrol pengguna, reputasi penyedia, serta budaya organisasi berkontribusi terhadap pembentukan kepercayaan auditor. Namun, tingkat ketergantungan yang tinggi tanpa disertai dengan skeptisisme profesional yang memadai dapat menurunkan kualitas audit. Selain itu, faktor-faktor kontekstual seperti perbedaan budaya nasional, sistem hukum (rules-based versus principles-based), dan kerangka regulasi turut mempengaruhi respons auditor terhadap penggunaan AI. Temuan ini menekankan pentingnya keseimbangan antara pemanfaatan AI dengan penerapan skeptisisme profesional guna menjaga integritas dan kualitas audit. Implikasi praktis mencakup perlunya pedoman regulasi yang jelas, desain sistem AI yang transparan, serta pelatihan auditor yang komprehensif untuk mengoptimalkan penggunaan teknologi tanpa mengabaikan prinsip-prinsip profesionalisme.

Kata kunci: Artificial Intelligence, kualitas audit, skeptisisme profesional, keandalan Al, transparansi Al, lintas yurisdiksi.

1. INTRODUCTION

The rapid development of Artificial Intelligence (AI) technology has brought significant changes to the audit world in recent years. Major audit firms such as Deloitte, KPMG, EY, and PwC have integrated AI technologies—including natural language processing, machine learning, and continuous auditing—into their audit processes to improve the accuracy, efficiency, and scope of audit testing. Globally, around 72% of companies have used or are testing AI technology in their financial reporting systems. In Australia, the AI adoption rate has even reached 76%, and globally it is projected to reach 100% in the next three years (The Australian, 2024). This widespread adoption is largely driven by Al's ability to improve core audit tasks such as fraud detection, going concern analysis, and risk assessment. Al-based audit systems are reported to have an accuracy rate of around 85% in detecting accounting anomalies and have successfully identified more than USD 2 billion in fraudulent transactions in 2022 alone (Gitnux, 2024). Additionally, 70% of finance professionals state that real-time risk and fraud detection is a key benefit of AI, and another 60% use it for trend analysis and impact prediction (KPMG, 2024). The use of AI has also been reported to speed up the audit risk assessment process by up to 30%, and reduce the likelihood of material misstatements by 20% (Datricks, 2024).

As AI systems become more integrated into the audit process, auditors are increasingly relying on AI-generated information to support their professional decisions. A survey in the UK found that over 90% of auditors felt their level of confidence in audit conclusions increased when using AI support (DataSnipper, 2024). In fact, 84% of audit and finance professionals view AI not as a threat, but as a partner that supports their work effectiveness and improves the quality of decision-making (DataSnipper, 2024). However, the impact of AI on auditor judgment is not only determined by the functionality of the technology. Auditors' perceptions of the reliability and transparency of AI systems play a significant role in shaping the level of trust in this technology, as well as whether auditors maintain the professional skepticism required in the audit process. These perceptions can vary greatly depending on the cultural, regulatory,

and institutional context of each country. Therefore, it is important to examine the adoption and perception of AI in audit through a cross-jurisdictional analysis.

Although the adoption of Artificial Intelligence (AI) technology in audit practice has increased significantly in various countries, there is still no clear global consensus on how auditors assess, process, and respond to the output or results generated by AI systems. This difference in approach can create variability in audit quality and raise serious questions about professional standards and global consistency in technology-based audit processes. The diversity of auditors' perceptions of the reliability and transparency of AI systems adds complexity to professional decision-making. On the one hand, AI can be considered an objective tool that can improve audit accuracy and efficiency. However, on the other hand, excessive reliance without adequate skepticism can threaten the principles of prudence and professional skepticism that are the foundation of audit integrity (Kokina & Davenport, 2017).

In addition, differences in national culture, legal systems, and the level of maturity of audit regulations between countries contribute to the disharmony in auditors' acceptance and use of AI. For example, countries with a principles-based approach may allow for greater interpretative space in the use of audit technology, while countries with a rules-based approach tend to set stricter limits on the application of automated systems. This suggests that jurisdictional context plays a significant role in shaping how auditors understand and interact with AI (Hofstede, 2001; Simnett, 2020). Against this backdrop, there is an urgent need to examine in more depth how auditors' perceptions of AI systems, particularly in terms of reliability and transparency, impact their levels of reliance and professional skepticism, across diverse cross-country contexts.

In line with the problems that have been identified, this study is designed to answer the following main questions: "Does the perception of AI reliability and transparency affect auditor reliance and professional scepticism in different jurisdictions?". This research aims to explore in depth the relationship between auditors' perceptions of AI technology and its implications for two core elements of the audit process, namely reliance and professional skepticism, and how this relationship is influenced by the cultural and regulatory contexts across countries. This research aims to develop a conceptual and empirical understanding of the influence of perceptions on Artificial Intelligence (AI) systems in the context of cross-country audits. Specifically, this research examines how auditors' perceptions of reliability (reliability) and openness (transparency) AI systems affect the level of dependency (reliance) on the results produced by the technology. Auditors who view AI as a reliable and open tool in the decision-making process tend to be more accepting and rely on the output of AI systems. However,Thus, this study also highlights the importance of being aware of potential biases and risks over reliance which can have a negative impact on the quality of audit judgment.

In addition, this study evaluates the influence of perceptions of AI on the auditor's professional skepticism attitude. Skepticism is a crucial part of audit ethics and procedures that must be maintained so that decisions are audit remains objective and valid. This study will examine whether the level of auditor trust in AI systems has the potential to reduce or increase their level of professional skepticism in carrying out audit tasks. Furthermore, this study seeks to identify cross-country differences in the relationship between AI perceptions, auditor dependence, and professional skepticism. By considering factors such as national culture, regulatory structure, and level of technology adoption, this study explores geographic variations in auditor behavior and attitudes toward the use of AI in audit practice.

This research has important significance, both in terms of theory and practice. Theoretically, this research contributes to the development of audit science and technology by expanding the understanding of the interaction between humans and machines in the context of audit decision making. By integrating concepts from several relevant theories such as the Technology Acceptance Model (TAM), Judgement and Decision-Making Theory, and the Professional Skepticism Framework, this research is expected to build a new, more

comprehensive conceptual framework in explaining the dynamics of AI use in the auditor's judgment process.

Practically, the results of this study provide valuable input for developers of Al-based audit systems, especially in designing features that support information transparency (explainability), decision tracking, and algorithmic transparency. A deeper understanding of how auditors respond to systems that are perceived as reliable and transparent will help developers create technology solutions that better meet the needs and expectations of audit professionals. In addition, this study also provides implications for regulators and audit professional standard-setting bodies. The insights gained can be used to formulate more appropriate guidelines and policies regarding the use of Al in auditing. This is important to avoid over reliance on automated systems and at the same time maintain the integrity and credibility of the audit profession in the increasingly advanced digital era.

2. METHODS

2.1 Research Design

This study uses a narrative literature review approach as the main design. Unlike systematic literature reviews that emphasize a very strict and quantitatively structured literature search, narrative reviews allow researchers to conduct more flexible exploration of various literatures relevant to the topic being studied. This approach is considered appropriate considering that the main focus of this study is to explore in depth theoretical concepts related to auditors' perceptions of the reliability and transparency of Artificial Intelligence (AI) systems, as well as their impact on reliance and professional skepticism in various jurisdictions.

Narrative review also provides space for researchers to develop a critical synthesis that not only describes existing findings but also compares theoretical and conceptual approaches used in previous studies. This approach is very relevant to identify research gaps, build relationships between concepts, and form a conceptual framework that will be the basis for further research, both theoretically and empirically.

2.2 Literature Search Strategy

The literature search strategy was carried out systematically but flexibly through various methods.leading academic databases, that is: Scopus, Web of Science, ScienceDirect, Emerald Insight. The selection of this database is based on its international reputation and the breadth of peer-reviewed scientific articles, thus guaranteeing the quality and relevance of the sources used. The search was conducted using a combination of keywords designed to cover aspects of technology, auditor perceptions, and cross-country contexts. The keywords used include:

- "AI in auditing"
- "auditor scepticism"
- "Al transparency"
- "trust in automation"
- "audit judgement"
- "cross-country audit"
- "AI reliability"

The search is focused on the time span between 2013 to 2025. This time span was chosen to ensure that the literature reviewed reflects the most recent and significant developments in AI technology in audit practice, especially given the accelerated adoption of this technology in the last decade. The search process also included backward citation tracking And forward citation tracking to find studies that are thematically relevant but may not appear immediately in the initial search results.

2.3 Inclusion Criteria

To ensure the suitability and focus of the study, the selected literature must meet the following inclusion criteria:

- 1. Type of study: Empirical studies (both quantitative and qualitative), conceptual studies, and review articles that explicitly address the relationship between AI and the audit process, particularly regarding user perceptions of AI systems.
- 2. Main topic: A study that discusses auditors' perceptions of AI reliability and openness, and its implications for reliance And professional skepticism.
- 3. Audit context: Articles that examine the dynamics in audit practices, whether conducted by individual auditors, audit teams, or audit firms.
- 4. Cross-border or jurisdictional context: Studies that examine or compare audit practices and perceptions of technology across different countries or legal systems, especially in relation to cultural and regulatory influences.
- 5. Academic publications: Articles that have been published in reputable journals (indexed by Scopus or WoS) or leading academic conferences.

Studies that were not relevant to the audit world, or that focused on AI technology without relating it to auditor perceptions or the context of the audit profession, were excluded from the review.

2.4 Data Analysis

The data obtained from selected literature will be analyzed through short for the purpose thematic synthesis, which allows the identification of patterns, similarities and differences between the studies reviewed. Thematic analysis was conducted iteratively with the following steps:

- 1. Extraction of key information of each article, including background, theory used, methodology, main findings, and implications.
- 2. Grouping by main theme, such as: Al reliability, system openness, auditor perception, dependence on Al, and professional skepticism.
- 3. Cross-jurisdictional comparative analysis, to highlight the influence of culture, legal systems and regulations on relevant research outcomes.
- 4. Mapping the relationships between themes, which will be used to build conceptual framework as a basis for answering research questions.

Through this analysis, this study will not only describe the existing findings, but will also evaluate the quality, consistency, and generalization potential of the literature reviewed.

3. RESULTS

3.1 Conceptualizing AI Reliability and Transparency

In the context of auditing, reliability and transparency of Artificial Intelligence (AI) systems are critical for supporting auditors in their professional decisions. AI reliability is understood as the capacity of these systems to consistently generate accurate and relevant information, essential for identifying errors and transaction irregularities that can signify audit risks. The literature indicates that AI significantly enhances audit quality by streamlining labor-intensive tasks, reducing human error, and improving accuracy in audit outcomes. For instance, Rahman et al. point out that the integration of AI in auditing processes can lead to substantial improvements in audit efficiency and effectiveness by automating repetitive auditing tasks, thus decreasing the likelihood of overlooking critical errors (Rahman et al., 2024). Furthermore, Ríkharðsson et al. discuss how the adoption of AI can help build trust

among stakeholders, showcasing that enhanced quality at reduced costs could lead to a preference for Al-augmented audits over traditional methods (Ríkharðsson et al., 2022).

Transparency, on the other hand, refers to the auditor's ability to discern and understand the internal algorithms, processes, and decision-making frameworks of AI systems. A lack of transparency can lead to skepticism regarding the reliability of AI outputs. Kim et al. emphasize the importance of developing interpretative frameworks that allow auditors to comprehend AI decision-making processes better, thereby promoting trust and effective utilization of AI technologies in audit practices. The authors suggest that defining clear methodologies and guidelines for transparency can help mitigate concerns associated with AI's "black-box" nature (Kim et al., 2023). Additionally, Rhea et al. highlight that the frequent updates to AI algorithms can introduce challenges in maintaining transparency, further complicating the auditing process (Rhea et al., 2022). This is echoed in the work by Thottoli, who calls for more empirical research to clarify how effectively integrating AI can enhance transparency in the auditing field (Thottoli, 2024).

Moreover, continuous auditing of AI provides an innovative path toward ensuring both reliability and transparency. Minkkinen et al. propose a conceptual framework for continuous auditing that allows for nearly real-time oversight of AI systems, ensuring that they operate within defined norms and standards, thereby fostering trust (Minkkinen et al., 2022). This aligns with the findings of Almufadda and Almezeini, who emphasize the necessity of establishing reliable and transparent AI applications to enhance overall audit qualities effectively (Almufadda & Almezeini, 2021). Finally, a consensus exists across various studies that while AI can substantially improve audit quality, it is imperative to approach the adoption of these technologies cautiously, considering ethical practices, biases, and the need for auditor training to interpret AI-generated information effectively (Noordin et al., 2022; Balasubramaniam et al., 2022; Seethamraju & Hecimovic, 2022). In summary, the intersection of AI reliability and transparency in auditing is crucial for reinforcing audit quality and fostering stakeholder trust. Addressing these elements through clear frameworks, continuous auditing mechanisms, and careful application of AI technology will be pivotal in the future of audit practices.

Perceptions of the reliability and openness of AI systems are influenced by several interconnected factors, each playing a crucial role in shaping how auditors and users at large perceive these technologies.

Firstly, algorithmic explainability is paramount, as research indicates that AI systems which provide clear explanations for their outputs foster greater trust among their users. According to Mehrotra et al., the proliferation of Explainable AI (XAI) is essential for users to understand the internal workings and decision-making processes of these systems, thereby enhancing transparency and trust (Mehrotra et al., 2023). Similarly, Alvarado discusses the concept of epistemic trust, noting that individuals need to comprehend the reliability mechanisms incorporated into AI to foster confidence in its outputs (Alvarado, 2022). This assertion is further supported by research highlighting that when users are informed about how AI derives its conclusions, their trust levels correspondingly increase (Cath, 2018).

Next, the level of user control over AI systems significantly affects trust. Siau and Wang highlight that auditors who are able to customize or oversee the settings of the AI systems they use report higher trust levels. This aligns with findings from Thielsch et al., who argue that user involvement and control over the system enhance not only transparency but also trust in the outcomes produced by AI (Thielsch et al., 2018). User engagement and the ability to manipulate AI functionalities contribute to fostering a sense of reliability. The reputation of technology providers is another critical factor influencing trust. The identity and credibility of the vendor directly impact user perceptions. Studies have shown that those who perceive their AI vendors as trustworthy or reputable are more likely to exhibit trust toward the AI systems they produce (Bodemer, 2023; Jermutus et al., 2022). It has been shown that strong

organizational alliances and positive market standings of AI providers significantly enhance trust towards the technologies they develop.

Furthermore, the complexity of AI systems tends to reduce user understanding, thereby adversely affecting perceptions of transparency. It has been illustrated that increased complexity can lead to user skepticism, as individuals often find it challenging to engage with or comprehend multifaceted algorithms. This complexity can obscure the operating principles of AI systems, leading to distrust and a reluctance to utilize such technologies (Wang et al., 2023; Tang & Cai, 2023). Simplifying explanations and enhancing user familiarity with AI mechanisms is crucial for elevating trust levels.

Lastly, the organizational culture and technology readiness play a pivotal role in shaping user perceptions of AI. Yoon et al. posit that a culture of innovation and openness within an organization enhances employees' and auditors' receptivity towards AI technologies. They argue that providing training and support enhances organizational readiness for AI integration and fosters a more trusting environment (Fujimori et al., 2022; Bach et al., 2022). This aligns with the broader consensus in the literature that supportive organizational environments are crucial for technology adoption. In conclusion, the interplay between algorithmic explainability, user control, the reputation of providers, system complexity, and organizational culture collectively shapes perceptions of reliability and openness in AI systems. These factors highlight the necessity for continuous efforts in enhancing user trust through transparency, education, and effective design in AI technologies. Thus, perceptions of reliability and openness are determined not only by the technical characteristics of the system, but also by psychological, organizational, and institutional factors.

3.2 Auditor Reliance on AI Systems

The perception of the reliability of artificial intelligence (AI) systems significantly affects auditor reliance on AI-generated output. Research has shown that auditors who assess AI systems as consistent and accurate are more likely to weigh the system's recommendations heavily in their decision-making process. Commerford et al. Commerford et al. (2024) note that the obstructive nature of AI as a "black-box" can lead to hesitance among auditors, as they feel they cannot control these systems in the same way they can with human professionals. Such apprehensions underscore the importance of perceived reliability in fostering auditor reliance on AI. This notion is further supported by findings that emphasize how understanding and familiarity with the technology enhances trust and reliance upon its outputs Commerford et al. (2021).

Familiarity and prior experience with AI systems also play pivotal roles in fostering trust among auditors. In their study, Brown-Liburd et al. Commerford et al. (2021) articulate the concept of "learned trust," which emphasizes that auditors who have interacted positively with AI systems are more inclined to trust these technologies in future engagements. This aspect is critical, as repeated exposure leads to a comfort level that enhances the likelihood of relying on the recommendations provided by AI without rigorous scrutiny. Such interactions create a learning curve that molds the auditor's approach toward technological tools in auditing processes.

Nevertheless, increasing reliance on AI does not come without risks. Overreliance can lead to a diminished application of professional skepticism, which is crucial in the auditing profession. Kusumawati and Syamsuddin Kusumawati & Syamsuddin (2018) highlight that auditors with less professional skepticism tend to compromise audit quality, especially in fraud detection scenarios. This perilous path could result in auditors placing excessive trust in AI systems, potentially leading to a lack of critical evaluation of the findings they present. While AI can enhance audit efficiency and quality, it is essential for auditors to maintain a balanced approach, ensuring that their trust in technology does not eclipse their responsibility to apply professional skepticism. Thus, careful consideration is imperative to navigate the complexities

of integrating AI in audit processes effectively. In summary, the interplay between perceived reliability, familiarity, and professional skepticism shapes the dynamics of auditor reliance on AI outputs. While the benefits of AI in audit practices are manifold, auditors must remain vigilant to avoid the pitfalls of overreliance, ensuring that their expert judgment complements technological tools.

3.3 Professional Skepticism and AI Output

Professional skepticism remains a fundamental principle in audit practice, requiring auditors to rigorously question and critically assess audit evidence. While the integration of artificial intelligence (AI) into auditing processes can enhance efficiency and improve data quality, it is crucial that auditors maintain a skeptical stance towards AI-driven outputs. Research indicates that auditors who overly rely on AI without applying professional skepticism may yield less accurate results and increase the risk of judgment errors. For instance, Kusumawati and Syamsuddin assert that a lack of professional skepticism directly contributes to diminished audit quality and a higher likelihood of fraud detection failures, emphasizing the necessity of auditors maintaining a questioning attitude in all engagements (Kusumawati & Syamsuddin, 2018).

Moreover, the adoption of AI is not devoid of risks, particularly concerning its limitations in understanding business contexts, management intentions, and the nuances of non-quantitative manipulations (Rahman et al., 2024; (Seethamraju & Hecimovic, 2022; . While AI tools can automate repetitive tasks and potentially decrease human errors, they may also embed biases or produce opaque results, referred to as "black box" algorithms, where the decision-making process is not transparent to auditors (Ananda et al., 2024; Mpofu, 2023). This introduces a significant challenge that underscores the critical need for professional skepticism to act as a counterbalance against these biases inherent in AI systems.

Furthermore, the infusion of AI into auditing is examined through various lenses, including its ability to enhance audit quality through improved fraud detection and efficiencies in performing substantive testing (Seethamraju & Hecimovic, 2022; Ayling & Chapman, 2021; Noordin et al., 2022). However, it is crucial that auditors do not relinquish their evaluative responsibilities to these tools. Ríkharðsson et al. highlight that while AI can create efficiencies, the unique judgment that auditors bring is irreplaceable and necessary to substantiate the outputs generated by AI systems (Ríkharðsson et al., 2022).

The skepticism applied by auditors also facilitates careful scrutiny of data sources and modeling assumptions that AI systems rely on, ensuring that the conclusions drawn are justifiable (Kim et al., 2018; Nugrahaeni et al., 2019). Techniques such as algorithmic audits can play a role in addressing these concerns, enabling auditors to scrutinize AI-driven processes rigorously and maintain ethical standards (Brown et al., 2021). Therefore, while AI can offer significant advancements in audit practice, embracing professional skepticism remains paramount to uphold audit integrity and quality. In conclusion, the dual application of AI in auditing alongside essential professional skepticism forms a symbiotic relationship that can significantly enhance the audit process. However, auditors must remain vigilant, questioning not just the outputs of AI but the very infrastructure they are integrated into to safeguard against bias and ensure thorough evaluations of all audit evidence.

3.4 Cross-Jurisdictional Comparisons

Cross-country studies indicate that national culture, legal systems, and audit profession regulations significantly influence auditors' acceptance, assessment, and response to artificial intelligence (AI) in the audit process. For instance, auditors in jurisdictions with rigid, rule-based civil law systems, such as Germany and Japan, tend to exhibit a more cautious and skeptical approach toward adopting innovative technological solutions due to their legal frameworks emphasizing compliance over flexibility. In contrast, auditors in more

principle-based, common law jurisdictions, such as the United States and Australia, demonstrate a greater propensity to embrace technological advancements, including AI (Seethamraju & Hecimovic, 2022; , Kend & Nguyen, 2022). This dichotomy may be attributed to the varying regulatory environments and incentive structures governing audit operations within these countries, as identified in prior research (Bik & Hooghiemstra, 2018).

Furthermore, the dimensions of uncertainty avoidance and power distance within national cultures considerably impact auditors' attitudes towards technology adoption. Those in cultures characterized by high uncertainty avoidance often perceive new AI technologies as threatening to traditional accountability mechanisms, leading to resistance against incorporating such innovations into decision-making (Bik & Hooghiemstra, 2016; , Hu et al., 2020). Conversely, countries with lower uncertainty avoidance exhibit a more open attitude toward change, displaying readiness to integrate AI into auditing practices, thereby enhancing operational efficiencies and audit quality (Rodrigues et al., 2023; , Fedyk et al., 2022). This contrast in cultural perception emphasizes the necessity for a nuanced understanding of the interplay between national culture and technology adoption in auditing.

Local regulations and ethical standards further shape auditors' capabilities concerning technology use. In several jurisdictions worldwide, the absence of formal guidelines governing Al utilization poses a significant challenge, compelling auditors to exercise considerable professional discretion, which can lead to disparities in audit practices on a global scale (Mpofu, 2023). The lack of harmonized standards can hinder the effective integration of Al technologies into auditing workflows, underscoring the urgent need for international collaboration in developing consistent regulatory frameworks that accommodate emerging technologies (Kend & Nguyen, 2020). As the global landscape of auditing evolves in response to the digital revolution, aligning standards across borders will be pivotal in fostering both innovation and accountability in the audit profession. In conclusion, the intersection of cultural dimensions, legal systems, and regulatory frameworks plays a crucial role in the acceptance and adaptation of Al technologies by auditors. Understanding these dynamics is essential for instituting supportive environments conducive to technological innovation while maintaining ethical and professional integrity in the auditing process.

4. DISCUSSION

4.1 Theoretical Implications

The results of this literature synthesis provide an important contribution to the development of a theoretical framework in the field of auditing which is now entering the digitalization era with the presence of Artificial Intelligence (AI). This study integrates several main theories, namelyTechnology Acceptance Model (TAM), Trust in Automation Framework, And Audit Judgment and Decision-Making Framework, to explain how auditors' perceptions of AI influence their professional behavior.

First, Technology Acceptance Model (TAM)which emphasizes perceived usefulness and perceived ease of use as the basic framework in understanding how auditors accept AI technology. However, the findings show that in addition to these factors, perceptions regarding reliability And transparencyAI greatly determines the level of auditor acceptance and dependence, so there is a need to expand the TAM model to include a more explicit trust dimension.

Second, the framework Trust in Automation Emphasizes that trust in automated systems must be based on system transparency and reliability. Without both, the risk of overreliance or blind reliance increases, which can potentially damage the quality of audit judgment. The findings in this study support the importance of algorithm transparency and output explainability in building and maintaining auditor trust.

Third, in the contextAudit Judgment and Decision-Making Framework, the use of AI requires a revision of the traditional model that has so far focused solely on the psychological

and cognitive factors of auditors. The integration of technology as an actor that plays a role in the judgment process requires the model to take into account the interaction between humans and machines, as well as the variable of technology perception as part of the determinant factors of audit decisions.

Thus, this study opens up opportunities for the development of a more comprehensive audit model, which includes the role of AI and auditor perception variables as key components in determining audit quality in the digital era.

4.2 Practical Implications

The findings of this study have significant practical implications for various stakeholders in the audit world. For regulators and audit standard setters, these results underscore the need to develop clear guidelines regarding the use of AI in audit practice. Regulations should include provisions on reliability standards, algorithmic transparency, and mechanisms for monitoring and evaluating AI systems to ensure that auditors do not neglect the professional skepticism they are required to maintain. For AI technology developers, this study emphasizes the importance of designing systems that are not only technically effective, but also have adequate transparency and explainability features. Algorithmic transparency and explainability are crucial so that users—in this case auditors—can understand and critically evaluate AI output, thereby increasing the level of trust and reducing the risk of blind dependence. For auditors and audit firms, these results underscore the urgency of training and competency enhancement, not only in terms of technology use, but also in maintaining a balance between trust in AI and professional skepticism. Training that emphasizes understanding the limitations of AI and developing critical judgment skills will help auditors make optimal use of AI without losing professional integrity.

4.3 Limitations of Current Literature

Although the available literature provides important insights, there are several limitations that should be noted for further research development.

First, lack of cross-country studies directly comparing auditors' perceptions of Alresulting in limitations in the generalization of findings. Many studies are contextual and limited to one jurisdiction, so they cannot describe complex global dynamics. Second, there is a lack of exploratory and qualitative field research involving auditors from different cultural backgrounds and regulatory systems. This hinders in-depth understanding of how perceptions are formed and developed in real practice. In addition, the literature is also still limited in explaining how perceptions of AI change over time, especially with the rapid development of technology.

4.4 Future Research Directions

Based on these limitations, some recommended future research directions include:

- 1. Cross-cultural experiments which examine differences in auditor reliance and skepticism toward AI across jurisdictions. Such research can leverage experimental quantitative methodologies to isolate the effects of culture and regulation.
- 2. DevelopmentAI evaluation model that can be adopted in international audit standards, which includes the dimensions of reliability, openness, and impact on auditor judgment. This model must be developed collaboratively between academics, practitioners, and regulators.
- 3. Studieslongitudinalwhich traces changes in auditors' perceptions and behaviors toward AI over time, as technology evolves and experience expands. This approach is important for understanding the dynamics of technology adaptation in the audit profession.

5. CONCLUSION

This study confirms thatAuditor perceptions of the reliability and transparency of Artificial Intelligence (AI) systems have a significant influence on the level of reliance and professional skepticism in audit practices.. Auditors who view AI as a trustworthy and transparent system tend to rely more on the output of the technology, but this also requires the application of adequate skepticism to prevent the risk of overreliance that can reduce the quality of audit judgment. In addition, this study highlights that jurisdictional context and cultural differences, legal systems, and audit regulations play an important role in shaping auditors' perceptions and behaviors towards the use of AI.. Cross-country variations demand a multidisciplinary and cross-cultural analytical approach to gain a more comprehensive understanding of this phenomenon. With the rapid development of AI technology, these findings have profound implications for the audit profession, especially in maintaining a balance between the application of advanced technology and the principles of professionalism that are the foundation of audit integrity. Therefore, synergy is needed between technology development, auditor training, and the preparation of adaptive regulations so that audit quality is maintained in the digital era.

6. REFERENCES

- Almufadda, G. and Almezeini, N. (2021). Artificial intelligence applications in the auditing profession: a literature review. Journal of Emerging Technologies in Accounting, 19(2), 29-42. https://doi.org/10.2308/jeta-2020-083
- Alvarado, R. (2022). What kind of trust does ai deserve, if any?. Ai and Ethics, 3(4), 1169-1183. https://doi.org/10.1007/s43681-022-00224-x
- Ananda, R., Rahmadhani, S., Pane, A., & Wiratama, N. (2024). Assessment audit: how artificial intelligence affected audit quality of sustainability report based on auditors perspective. Information Management and Business Review, 16(3(I)S), 152-158. https://doi.org/10.22610/imbr.v16i3(i)s.4049
- Ayling, J. and Chapman, A. (2021). Putting ai ethics to work: are the tools fit for purpose?. Ai and Ethics, 2(3), 405-429. https://doi.org/10.1007/s43681-021-00084-x
- Bach, T., Khan, A., Hallock, H., Beltrão, G., & Sousa, S. (2022). A systematic literature review of user trust in ai-enabled systems: an hci perspective. International Journal of Human-Computer Interaction, 40(5), 1251-1266. https://doi.org/10.1080/10447318.2022.2138826
- Balasubramaniam, N., Kauppinen, M., Hiekkanen, K., & Kujala, S. (2022). Transparency and explainability of ai systems: ethical guidelines in practice., 3-18. https://doi.org/10.1007/978-3-030-98464-9_1
- Bik, O. and Hooghiemstra, R. (2016). The effect of national culture on auditor-in-charge involvement. Auditing a Journal of Practice & Theory, 36(1), 1-19. https://doi.org/10.2308/ajpt-51487
- Bik, O. and Hooghiemstra, R. (2018). Cultural differences in auditors' compliance with audit firm policy on fraud risk assessment procedures. Auditing a Journal of Practice & Theory, 37(4), 25-48. https://doi.org/10.2308/ajpt-51998
- Bodemer, O. (2023). Artificial intelligence in governance: a comprehensive analysis of ai integration and policy development in the german government.. https://doi.org/10.36227/techrxiv.24639588
- Brown, S., Davidovic, J., & Hasan, A. (2021). The algorithm audit: scoring the algorithms that score us. Big Data & Society, 8(1). https://doi.org/10.1177/2053951720983865
- Cath, C. (2018). Governing artificial intelligence: ethical, legal and technical opportunities and challenges. Philosophical Transactions of the Royal Society a Mathematical Physical and Engineering Sciences, 376(2133), 20180080. https://doi.org/10.1098/rsta.2018.0080

- Commerford, B., Dennis, S., Joe, J., & Ulla, J. (2021). Man versus machine: complex estimates and auditor reliance on artificial intelligence. Journal of Accounting Research, 60(1), 171-201. https://doi.org/10.1111/1475-679x.12407
- Commerford, B., Eilifsen, A., Hatfield, R., Holmstrom, K., & Kinserdal, F. (2024). Control issues: how providing input affects auditors' reliance on artificial intelligence. Contemporary Accounting Research, 41(4), 2134-2162. https://doi.org/10.1111/1911-3846.12974
- DataSnipper. (2024). Al: Improving trust in audit and finance. Retrieved from https://www.datasnipper.com/resources/ai-improving-trust-audit-finance
- Datricks. (2024). All and auditing: Addressing the PCAOB's audit inspection priorities. Retrieved from https://datricks.com/blog/ai-and-auditing-addressing-the-pcaobs-audit-inspection-priorities
- Fedyk, A., Hodson, J., Khimich, N., & Fedyk, T. (2022). Is artificial intelligence improving the audit process?. Review of Accounting Studies, 27(3), 938-985. https://doi.org/10.1007/s11142-022-09697-x
- Fujimori, R., Liu, K., Soeno, S., Naraba, H., Ogura, K., Hara, K., ... & Goto, T. (2022). Acceptance, barriers, and facilitators to implementing artificial intelligence—based decision support systems in emergency departments: quantitative and qualitative evaluation. Jmir Formative Research, 6(6), e36501. https://doi.org/10.2196/36501
- Gitnux. (2024). Al in the accounting industry statistics. Retrieved from https://gitnux.org/ai-in-the-accounting-industry-statistics
- Hu, K., Chen, F., Hsu, M., & Tzeng, G. (2020). Identifying key factors for adopting artificial intelligence-enabled auditing techniques by joint utilization of fuzzy-rough set theory and mrdm technique. Technological and Economic Development of Economy, 27(2), 459-492. https://doi.org/10.3846/tede.2020.13181
- Jermutus, E., Kneale, D., Thomas, J., & Michie, S. (2022). Influences on user trust in healthcare artificial intelligence: a systematic review. Wellcome Open Research, 7, 65. https://doi.org/10.12688/wellcomeopenres.17550.1
- Kend, M. and Nguyen, L. (2020). Big data analytics and other emerging technologies: the impact on the australian audit and assurance profession. Australian Accounting Review, 30(4), 269-282. https://doi.org/10.1111/auar.12305
- Kend, M. and Nguyen, L. (2022). The emergence of audit data analytics in existing audit spaces: findings from three technologically advanced audit and assurance service markets. Qualitative Research in Accounting & Management, 19(5), 540-563. https://doi.org/10.1108/qram-01-2021-0005
- Kim, C., Gadgil, S., DeGrave, A., Cai, Z., Daneshjou, R., & Lee, S. (2023). Fostering transparent medical image ai via an image-text foundation model grounded in medical literature.. https://doi.org/10.1101/2023.06.07.23291119
- Kim, S., Kim, T., Pae, S., & Kim, S. (2018). Audit fees via an indirect payment channel and professional skepticism. Managerial Auditing Journal, 33(5), 517-534. https://doi.org/10.1108/maj-12-2016-1490
- KPMG. (2024). Al in financial reporting survey 2024. Retrieved from https://kpmg.com/us/en/media/news/ai-in-financial-reporting-kpmg-2024.html
- Kusumawati, A. and Syamsuddin, S. (2018). The effect of auditor quality to professional skepticsm and its relationship to audit quality. International Journal of Law and Management, 60(4), 998-1008. https://doi.org/10.1108/ijlma-03-2017-0062
- Kusumawati, A. and Syamsuddin, S. (2018). The effect of auditor quality to professional skepticsm and its relationship to audit quality. International Journal of Law and Management, 60(4), 998-1008. https://doi.org/10.1108/ijlma-03-2017-0062
- Mehrotra, S., Jorge, C., Jonker, C., & Tielman, M. (2023). Building appropriate trust in ai: the significance of integrity-centered explanations.. https://doi.org/10.3233/faia230121

- Minkkinen, M., Laine, J., & Mäntymäki, M. (2022). Continuous auditing of artificial intelligence: a conceptualization and assessment of tools and frameworks. Digital Society, 1(3). https://doi.org/10.1007/s44206-022-00022-2
- Mpofu, F. (2023). The application of artificial intelligence in external auditing and its implications on audit quality? a review of the ongoing debates. International Journal of Research in Business and Social Science (2147-4478), 12(9), 496-512. https://doi.org/10.20525/ijrbs.v12i9.2737
- Noordin, N., Hussainey, K., & Hayek, A. (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, 15(8), 339. https://doi.org/10.3390/jrfm15080339
- Nugrahaeni, S., Samin, S., & Nopiyanti, A. (2019). The effect of auditor professional skepticism, competence, independence and audit complexity on audit quality. Equity, 21(2), 181. https://doi.org/10.34209/.v21i2.643
- Rahman, M., Zhu, H., & Li, Y. (2024). Does the adoption of artificial intelligence by audit firms and their clients affect audit quality and efficiency? evidence from china. Managerial Auditing Journal, 39(6), 668-699. https://doi.org/10.1108/maj-03-2023-3846
- Rhea, A., Markey, K., D'Arinzo, L., Schellmann, H., Sloane, M., Squires, P., ... & Stoyanovich, J. (2022). An external stability audit framework to test the validity of personality prediction in ai hiring. Data Mining and Knowledge Discovery, 36(6), 2153-2193. https://doi.org/10.1007/s10618-022-00861-0
- Ríkharðsson, P., Þórisson, K., Bergthorsson, G., & Batt, C. (2022). Artificial intelligence and auditing in small- and medium-sized firms: expectations and applications. Ai Magazine, 43(3), 323-336. https://doi.org/10.1002/aaai.12066
- Rodrigues, L., Pereira, J., Silva, A., & Ribeiro, H. (2023). The impact of artificial intelligence on audit profession. Journal of Information Systems Engineering & Management, 8(1), 19002. https://doi.org/10.55267/iadt.07.12743
- Seethamraju, R. and Hecimovic, A. (2022). Adoption of artificial intelligence in auditing: an exploratory study. Australian Journal of Management, 48(4), 780-800. https://doi.org/10.1177/03128962221108440
- Tang, Y. and Cai, J. (2023). Impact and prediction of ai diagnostic report interpretation type on patient trust. Frontiers in Computing and Intelligent Systems, 3(3), 59-65. https://doi.org/10.54097/fcis.v3i3.8567
- The Australian. (2024, April 2). Most Australian companies now using AI for financial processes.

 Retrieved from https://www.theaustralian.com.au/business/financial-services/most-australian-compa nies-now-using-ai-for-financial-processes/news-story/6d589b08a1ab7373bc7964ac486 a2b7e
- Thielsch, M., Meeßen, S., & Hertel, G. (2018). Trust and distrust in information systems at the workplace. Peerj, 6, e5483. https://doi.org/10.7717/peerj.5483
- Thottoli, M. (2024). Leveraging information communication technology (ict) and artificial intelligence (ai) to enhance auditing practices. Accounting Research Journal, 37(2), 134-150. https://doi.org/10.1108/arj-09-2023-0269
- Wang, B., Asan, O., & Mansouri, M. (2023). What may impact trustworthiness of ai in digital healthcare: discussion from patients' viewpoint. Proceedings of the International Symposium on Human Factors and Ergonomics in Health Care, 12(1), 5-10. https://doi.org/10.1177/2327857923121001