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The influence of internal factors, national culture and artificial intelligence on audit technology usage with IT governance as a mediator

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ABSTRACT

This study aims to examine the intention and actual usage of audit technology in Indonesian Public Accounting Firms by analyzing the effects of internal factors, national culture, and Artificial Intelligence (AI), with Information Technology (IT) governance as a mediating variable. Data were collected from 212 auditors across multiple firms and analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). Internal factors include organizational support, accounting information system complexity, IT audit competence, readiness, and ease of use, while national culture is measured through Hofstede's dimensions and AI through big data, deep learning, and cloud computing. The findings indicate that all hypothesized relationships are significant, and IT governance effectively mediates the impact of AI on audit technology usage. These results highlight the importance of organizational readiness and strategic adoption of advanced technologies to enhance audit technology utilization in the digital era.

Introduction

Technological transformation has become an essential requirement for organizations in the digital era, including in auditing practices. Digitalization offers both opportunities and challenges, particularly because the volume and complexity of financial data continue to grow, requiring precise and efficient analysis (Vuković et al., 2024). Public accounting firms have increasingly adopted AI-based technologies to enhance efficiency, accuracy, and decision-making in audit processes. AI-driven audit tools facilitate comprehensive data analysis, improve understanding of an entity's operations and associated risks, enhance detection of fraud and misstatements, and strengthen communication with clients (Hu et al., 2021; Fedyk et al., 2022).

Advanced audit technologies such as Halo (PwC), Clara (KPMG), Helix (EY), and Argus (Deloitte) are widely employed by the Big 4 accounting firms to perform detailed data analyses, identify risks, and detect potential fraud (Deloitte, 2024; EY, 2024; KPMG, 2024; PwC, 2024). These tools allow auditors to focus more on higher-order tasks, including strategic decision-making, problem-solving, and leadership responsibilities. Despite these benefits, the adoption of AI remains inconsistent, especially among non-Big 4 firms in Indonesia, due to several barriers such as high costs, limited organizational readiness, and regulatory constraints.

Previous research has shown that AI technology positively influences auditors' intention to adopt audit technologies by improving efficiency, accuracy, decision-making, and the quality of audit results and financial reporting (Abdullah & Almaqtari, 2024; Aljaaidi et al., 2023; El-Mousawi et al., 2023; Fedyk et al., 2022). Internal factors also play a critical role in shaping auditors' intention and actual use of technology. These factors include organizational support for technology implementation, the complexity of the client's information systems, users' readiness and perceived ease of use, as well as the risks associated with adopting new technologies (Almaqtari et al., 2024).

This study builds upon Almaqtari et al. (2024), which investigated the impact of AI on audit technology adoption in Jordan and Egypt using the Technology Acceptance Model (TAM). The study assessed both internal and external factors, mediated by perceived benefits, to determine their effect on auditors' intention and actual use of audit technology. Results indicated that internal factors significantly affected the intention to adopt technology, whereas external factors had a limited influence. This finding contrasts with earlier research (Handoko et al., 2019; Siew et al., 2020), which suggested that external factors play a substantial role in encouraging technology adoption.

The research extends the analysis to the Indonesian context, accounting for differences in economic conditions, legal frameworks, and cultural dimensions. Cultural factors are measured using Hofstede's theory to evaluate their influence on technology adoption, as culture is known to affect the acceptance and use of innovations

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(Bogoslov et al., 2024; Nistor et al., 2014). Unlike previous studies, AI is treated as an independent variable that directly influences the adoption of audit technology. Its effect is mediated by IT governance, highlighting the importance of robust governance structures for successful AI implementation and integration into audit practices (Almaqtari, 2024; Gotthardt et al., 2020).

The study specifically focuses on auditors in Indonesia to provide insights that reflect local organizational and cultural conditions, while also contributing to the broader understanding of audit technology adoption in developing countries. Findings are expected to offer practical guidance for public accounting firms seeking to accelerate AI-based audit transformation and provide a strategic framework for managing technological change effectively.

Literature Review

Internal factors represent elements within an organization that can be managed or influenced to improve technology adoption outcomes (Almahuzi, 2020). In this study, internal factors include Organizational Support, Complexity of AIS, IT Audit Competence, Risk Adoption, Ease of Use, and Readiness. Organizational support, encompassing training and resource allocation, has been consistently shown to facilitate technology adoption, yet empirical findings remain mixed regarding its relative impact across different organizational sizes and audit contexts (Handoko et al., 2019). The complexity of accounting information systems reflects the difficulty auditors encounter when navigating intricate business processes. While some studies indicate that higher system complexity hinders adoption, others suggest that auditors with greater technical expertise can mitigate these challenges, revealing a potential moderating role of competence (Siew et al., 2020; Axelsen et al., 2017). IT audit competence, essential for interpreting advanced audit technologies, is widely acknowledged as a prerequisite for effective adoption, yet the literature lacks consensus on the specific competencies most critical for AI-enabled audit systems (Xie et al., 2021). Perceived adoption risk, including concerns over data security or system failures, often negatively influences auditors' willingness to adopt new technologies, but contradictory evidence exists regarding whether risk perception outweighs perceived benefits in decision-making (Na et al., 2022). Ease of use and technology readiness further mediate adoption outcomes, though the relative influence of operational, integration, and sustainability dimensions remains underexplored in the audit domain (Anh et al., 2024).

National culture, measured using Hofstede's dimensions, provides a conceptual lens to interpret these variations in auditor behavior and technology adoption. In the Indonesian context, intrinsic characteristics such as high-power distance, collectivism, and masculinity may shape hierarchical decision-making and collaborative approaches to technology use, while environmental and future-oriented traits like uncertainty avoidance and long-term orientation influence risk perception and readiness for system integration (Setyaningrum et al., 2022). Previous research has largely treated Hofstede's dimensions descriptively, without systematically linking them to auditors' behavioral intentions or actual technology adoption, indicating a theoretical gap that this study seeks to address.

The Technology Acceptance Model (TAM) remains a dominant framework for explaining technology adoption behavior, highlighting perceived usefulness, intention to use, and actual usage as key determinants (Na et al., 2022). However, inconsistencies persist regarding the translation of intention into actual usage in highly regulated or technically complex settings, suggesting the need to integrate contextual factors such as organizational support and national culture into TAM applications (Ratnawati & Malik, 2024; Ekaimi et al., 2024).

In audit technology, Artificial Intelligence (AI), including deep learning, big data, and cloud computing, has been proposed to enhance audit efficiency and accuracy. While AI applications demonstrate significant potential, empirical research remains limited in evaluating how auditors' skills, organizational readiness, and cultural factors jointly influence effective implementation (Marcomini et al., 2025; Isa & Subramanian, 2024; Razaque et al., 2021). Complementing these efforts, IT governance frameworks provide procedural guidance to ensure strategic alignment, risk management, and value delivery, yet the interaction between governance structures and auditor-level adoption behavior is underexamined (Ali & Green, 2012; Almaqtari, 2024).

Overall, the literature reveals several unresolved debates: the relative importance of individual competence versus organizational support, the moderating role of national culture, and the translation of behavioral intention into actual AI adoption in auditing. Addressing these gaps is critical for developing a more nuanced understanding of factors influencing the adoption of audit technologies in culturally diverse organizational contexts.

Hypothesis Development

Internal factors such as organizational support, system complexity, auditor competence, risk perception, ease of use, and readiness are widely acknowledged as critical drivers of auditors' intention to adopt audit technology. Prior studies consistently show that organizational support can enhance confidence and motivation to adopt new systems, yet international evidence indicates considerable variation in its magnitude across countries (Abed, 2020; Qalati et al., 2020). Research from Malaysia and Saudi Arabia reports that organizational support strongly shapes intention due to hierarchical structures, whereas studies in Western countries find that auditors rely more on personal autonomy,

reducing the effect of managerial backing. System complexity also reveals divergent patterns: Australian and US studies show that higher complexity discourages adoption, while evidence from Southeast Asia and the Middle East indicates that complexity motivates auditors to adopt technology to manage heavy workloads more efficiently (Ahmi and Kent, 2012; Axelsen et al., 2017). Differences in auditor competence across regions further demonstrate that competence alone encourages adoption in developed markets, but in developing countries competence must be supported by structured organizational policies to translate into intention (Rosli et al., 2013). These international inconsistencies highlight the need to re-evaluate how internal factors jointly influence intention in Indonesia.

H_1: Internal factors positively influence the intention to use audit technology.
Internal factors are also expected to influence perceived benefit, which reflects auditors' evaluation of the usefulness and value of audit technology. Prior research shows that competent auditors and those who receive adequate organizational support tend to perceive greater benefits, but the strength of this relationship differs across countries. Studies from Vietnam and Indonesia emphasize that readiness and ease of use significantly enhance perceived benefit, whereas European research finds that perceived benefit is shaped more by system security and regulatory alignment than by internal organizational conditions (Al-Hattami, 2023; Trawnih et al., 2023). Perceived risk also varies internationally: auditors in advanced economies prioritize data security when assessing benefit, while those in developing countries focus more on efficiency and automation even when risks remain present. These differing global patterns suggest that perceived benefit is highly contextual and shaped by internal readiness as well as local technological maturity. Therefore, the relationship between internal factors and perceived benefit must be examined within the Indonesian audit environment.

H_2: Internal factors positively influence perceived benefits
Perceived benefit is a central variable in technology adoption theories and has consistently been shown to predict intention to use new technologies. Prior research demonstrates that auditors who recognize tangible improvements in efficiency, accuracy, and decision-making are more likely to adopt AI-enabled audit tools, yet cross-country comparisons reveal inconsistent effect sizes (Md Husin et al., 2019). Studies in Europe report a strong and direct influence of perceived benefit on intention, while research in Asian contexts shows that perceived benefit leads to intention only when supported by organizational readiness and training availability. International evidence also suggests that the perceived advantages of audit technology depend on the maturity of the firm's digital infrastructure, making adoption easier in technologically advanced countries than in resource-constrained economies. These variations indicate that the effect of perceived benefit is not universally linear and may depend on contextual moderators such as organizational culture and technological preparedness. This motivates further empirical testing in Indonesia, where digital transformation is still developing.

H_3: Perceived benefit positively affects intention to use
Artificial Intelligence (AI) has demonstrated potential to improve audit accuracy, efficiency, and bias reduction (Aljaaidi et al., 2023; Eriana & Zein, 2023; Fedyk et al., 2022). However, research consistently indicates that the effectiveness of AI adoption is highly dependent on the strength of IT governance in place. In developed countries, AI integration is facilitated by well-established governance mechanisms emphasizing data quality, risk management, and accountability, which enable smoother system implementation (Abdullah and Almaqtari, 2024). In contrast, studies from emerging economies reveal challenges such as insufficient infrastructure, unclear responsibility structures, and inconsistent data governance practices, which often hinder effective AI deployment (Gotthardt et al., 2020). Despite these global observations, empirical studies explicitly testing the mediating role of IT governance remain limited, especially in the auditing domain. This study therefore, addresses a meaningful gap by examining whether AI influences audit technology usage more effectively when supported by strong IT governance structures.

H_4: Artificial Intelligence, mediated by IT Governance, positively influences audit technology usage
National culture plays an important role in shaping technology adoption because cultural values guide how individuals interpret new systems, manage uncertainty, and engage with innovation. Cross-country studies show that cultural dimensions, such as power distance and collectivism, influence whether individuals rely on leadership endorsement or peer norms when adopting technology (Lee et al., 2013; Omrane and Khan, 2024). Research in Asian countries indicates that high power distance strengthens adoption when technology is promoted by superiors, whereas studies in Europe find lower power distance facilitates autonomous decision-making regarding adoption. Uncertainty avoidance also varies significantly: auditors in countries with high uncertainty avoidance tend to delay adoption, while those in future-oriented cultures adopt sooner when technology aligns with long-term goals. Although national culture has been widely studied in general technology adoption literature, empirical evidence in audit settings remains limited and inconsistent across regions. These gaps justify further exploration of cultural influences on audit technology usage in Indonesia.
H_5: National culture positively affects audit technology usage

Perceived benefit is expected to influence not only intention but also actual usage, as individuals tend to consistently use technologies, they find valuable. Studies in Indonesia, Vietnam, and South Korea highlight that perceived benefit strongly predicts continued usage when users observe improvements in efficiency, task performance, and accuracy. However, findings from European environments reveal that perceived benefit leads to sustained usage only when supported by adequate training and governance structures, indicating variation across regions (Dharma et al., 2017; Ekaimi et al., 2024). International evidence also shows that users in developing countries rely more on perceived practical benefits, while users in developed countries place greater emphasis on system reliability and compliance. These mixed patterns suggest that perceived benefit may function differently depending on organizational and cultural contexts. Therefore, examining its relationship with usage in Indonesia is essential.

H_6: Perceived benefit positively affects audit technology usage

Intention to use is a core predictor of actual usage within the Technology Acceptance Model, yet research shows that intention does not always result in behavior due to contextual barriers. Studies in Europe and North America demonstrate a strong intention–behavior linkage, whereas research in developing countries reports significant gaps due to issues such as infrastructure limitations, weak governance systems, and lack of training (Hong et al., 2006; Ivanov et al., 2024). These discrepancies imply that intention alone may not guarantee adoption in all environments, especially where external constraints hinder implementation. Cross-country comparisons show that even when intention is high, inconsistent technological readiness can limit actual usage in many emerging economies. Understanding this relationship in Indonesia is therefore important because its audit environment is still undergoing digital transformation. This study seeks to assess whether intention translates into usage within this context.

H_7: Intention to use positively affects audit technology usage

Figure 1 depicts the research model used in this study.

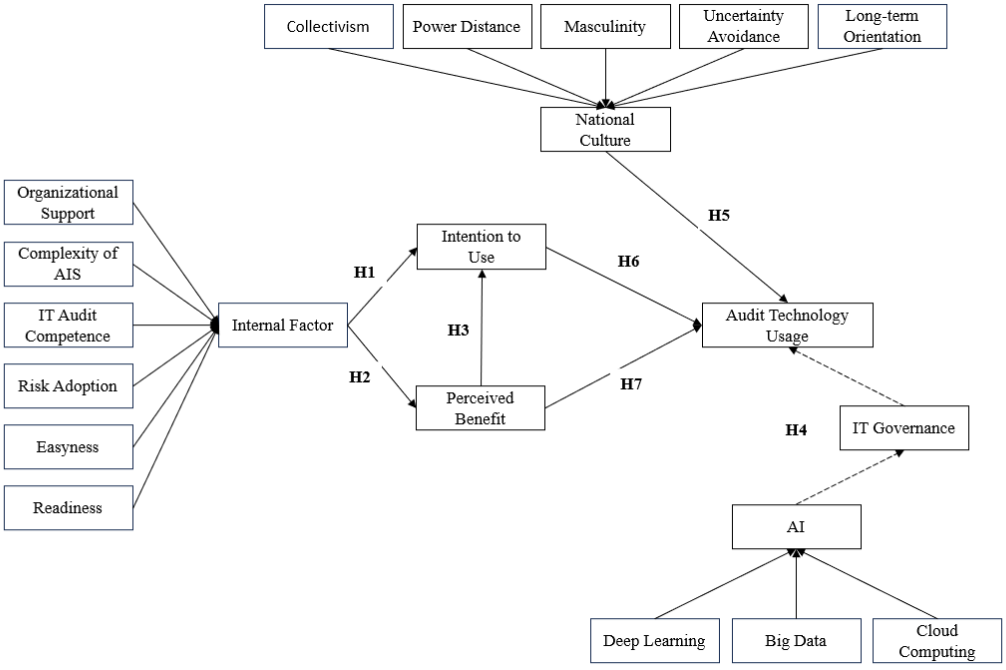

Figure 1. Research Model

Research Method

The sample in this study consisted of auditors working at public accounting firms in Indonesia. Data were collected using questionnaires, distributed via social media platforms including WhatsApp, Instagram, and LinkedIn. A total of 212 valid responses were obtained, with data collection conducted from March 10 to April 28, 2025. To strengthen the theoretical foundation of AI measurement, this study conceptualizes AI as a latent construct reflected by three theoretically grounded dimensions: Big Data analytics capability, Deep Learning application, and Cloud Computing integration, each supported by prior literature on AI adoption and organizational performance. These dimensions are not assumed to be equivalent but represent complementary aspects of AI maturity in auditing practices.

The data were analyzed using SmartPLS with the Structural Equation Modeling (SEM) approach. Validity and reliability were assessed in two stages using the disjoint two-stage approach, evaluating first-order constructs individually before aggregating them into a second-order AI construct. This ensures that the AI measurement

reflects a theoretically coherent and empirically validated construct rather than treating heterogeneous indicators as interchangeable proxies.

Table 1. Validity & Reliability First Order (Reflective)

Variable	Acro	FL	CA	CR	AVE
Org support	OS1	0.911	0.928	0.954	0.874
	OS2	0.942			
	OS2	0.951			
Complexity of AIS	COA1	0.903	0.878	0.925	0.804
	COA2	0.908			
	COA3	0.878			
IT Audit competence	ITC1	0.895	0.862	0.916	0.783
	ITC2	0.890			
	ITC3	0.869			
Adoption risk	AR1	0.900	0.885	0.929	0.814
	AR2	0.928			
	AR3	0.877			
Readiness	RD1	0.917	0.873	0.922	0.798
	RD2	0.917			
	RD3	0.845			
Easiness	EAS1	0.884	0.913	0.945	0.852
	EAS2	0.948			
	EAS3	0.936			
Collectivism	COL1	0.868	0.836	0.901	0.753
	COL2	0.859			
	COL3	0.877			
Uncertainty avoidance	UA1	0.890	0.892	0.933	0.823
	UA2	0.922			
	UA3	0.909			
Masculinity	MAS1	0.942	0.938	0.960	0.890
	MAS2	0.952			
	MAS3	0.935			
Power distance	PD1	0.881	0.878	0.925	0.804
	PD2	0.937			
	PD3	0.871			
Long-term orientation	LTO1	0.937	0.928	0.954	0.874
	LTO2	0.941			
	LTO3	0.927			
Big Data	BD1	0.839	0.831	0.898	0.747
	BD2	0.896			
	BD3	0.857			
Deep learning	DL1	0.950	0.930	0.956	0.878
	DL2	0.945			
	DL3	0.914			
Cloud computing	CC1	0.889	0.878	0.925	0.804
	CC2	0.896			
	CC3	0.905			
Perceived benefit	PB1	0.807	0.722	0.843	0.642
	PB2	0.803			
	PB3	0.793			
Intention to use	ITU1	0.880	0.848	0.908	0.768
	ITU2	0.842			
	ITU3	0.905			
Audit tech usage	ATU1	0.852	0.736	0.850	0.653
	ATU2	0.877			
	ATU3	0.870			
IT Governance	ITG1	0.828	0.802	0.883	0.716
	ITG2	0.834			
	ITG3	0.876			

Based on the results presented in Table 1, all indicators have passed the validity and reliability tests, as the obtained values exceed the established thresholds: factor loadings (FL), Cronbach's alpha (CA), and composite reliability (CR) are all greater than 0.70, while the average variance extracted (AVE) exceeds 0.50.

Table 2. Convergent Validity & Collinearity (Formative)

Variable	Acro	FL	VIF
Internal Factors	OS	0.720	2.186
	COA	0.637	2.183
	IAC	0.909	2.051
	RD	0.847	2.860
	AR	0.689	1.860
	EAS	0.698	1.884
Natural Culture	COL	0.957	0.878
	LTO	0.669	2.365
	UA	0.637	1.910
	PD	0.824	2.256
	MAS	0.713	1.930
AI	BD	0.837	2.027
	DL	0.859	2.219
	CC	0.926	2.096

Whereas in Table 2, all indicators for second order have passed the convergent validity and collinearity tests, as the obtained values exceed the established thresholds: factor loadings (FL) is >0,50 and VIF Value is <5. Figure 2 represents the first order model of the research variable.

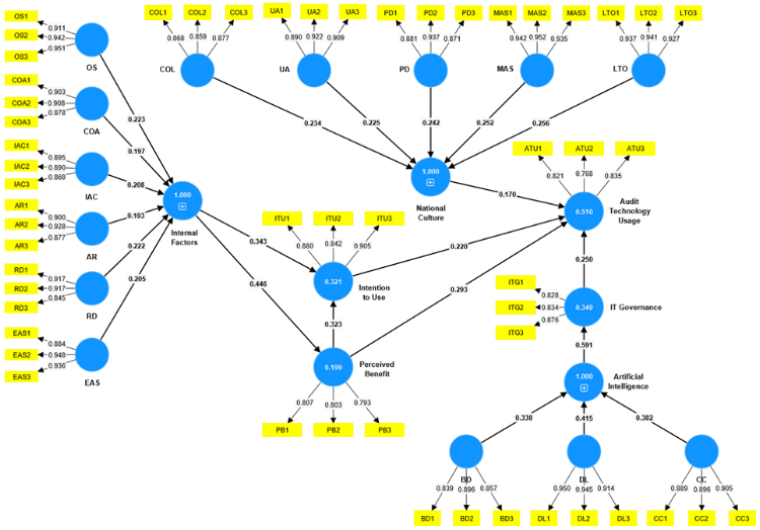

Figure 2. First Order Model

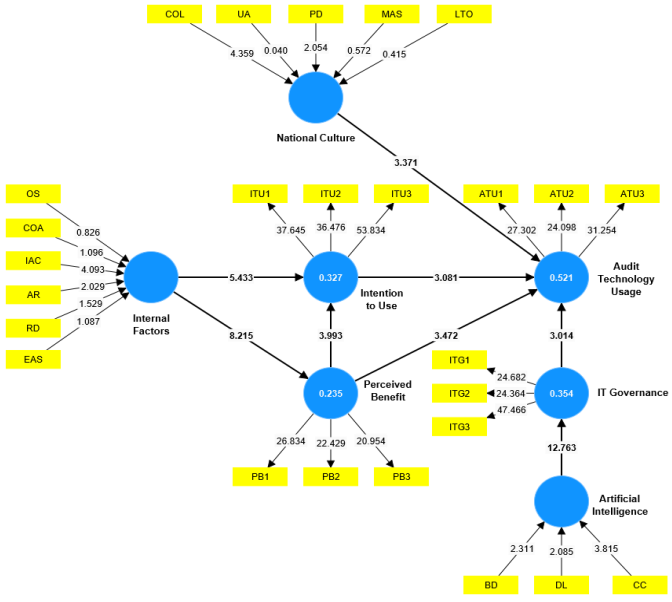

Figure 3. Second Order Model

Table 3. Direct Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (|O/STDEV|)	P values
Internal Factors → Intention to Use	0.363	0.373	0.067	5.433	0.000
Internal Factors → Perceived Benefit	0.485	0.496	0.059	8.215	0.000
Perceived Benefit → Intention to Use	0.300	0.295	0.075	3.993	0.000
Perceived Benefit → Audit Technology Usage	0.287	0.289	0.083	3.472	0.001
Intention to Use → Audit Technology Usage	0.218	0.219	0.071	3.081	0.002
National Culture → Audit Technology Usage	0.211	0.223	0.063	3.371	0.001

Figure 3 represents the second order model of the research result. The results in Table 3 indicate significant direct effects among internal factors, perceived benefit, intention to use, national culture, and audit technology usage. The path coefficient from Internal Factors to Intention to Use (0.363; $p < 0.001$) suggests that auditors' competencies, experience, and organizational readiness positively influence their intention to adopt audit technology. Similarly, the effect of Internal Factors on Perceived Benefit (0.485; $p < 0.001$) implies that internal conditions shape auditors' perceptions of the usefulness of technology. Perceived Benefit also significantly affects Intention to Use (0.300; $p < 0.001$) and Audit Technology Usage (0.287; $p = 0.001$), indicating that auditors are more likely to intend to use and actually utilize technology when they perceive clear benefits. The effect of Intention to Use on Audit Technology Usage (0.218; $p = 0.002$) shows that intention contributes to usage, though its impact is smaller compared to perceived benefit. Finally, National Culture has a positive effect on Audit Technology Usage (0.211; $p = 0.001$), highlighting the contextual role of cultural factors in technology adoption. Overall, these findings demonstrate that audit technology usage is influenced by a combination of individual readiness, perceived advantages, intention, and cultural context.

Table 4. Specific Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (|O/STDEV|)	P values
Internal Factors → Perceived Benefit → Intention to Use → Audit Technology Usage	0.032	0.032	0.014	2.227	0.026
Artificial Intelligence → IT Governance → Audit Technology Usage	0.135	0.132	0.045	2.976	0.003

Table 4 shows significant specific indirect effects among the studied variables. The path from Internal Factors through Perceived Benefit and Intention to Use to Audit Technology Usage (0.032; $p = 0.026$) indicates that internal readiness influences technology usage indirectly by shaping perceptions of benefit and intention, highlighting the mediating role of both factors. Similarly, the indirect effect of Artificial Intelligence through IT Governance on Audit Technology Usage (0.135; $p = 0.003$) suggests that the implementation of AI contributes to audit technology adoption when supported by effective IT governance mechanisms. These results underscore that both internal organizational conditions and technological capabilities exert influence on audit technology usage not only directly but also through key mediating processes.

Results and Discussion

The analysis demonstrates that all dimensions of internal factors, including Organizational Support, Complexity of AIS, IT Audit Competence, Adoption Risk, Readiness, and Ease of Use, have a significant positive effect on auditors' intention to use audit technology ($O = 0.363$; $T = 5.433$; $p < 0.001$). This finding aligns with earlier studies showing that internal organizational conditions play a critical role in shaping technology adoption in auditing, as documented by Handoko et al. (2019) in Indonesia, Siew et al. (2020) in Malaysia, and Ahmi and Kent (2012) in Australia. The positive influence of Organizational Support is consistent with evidence from Qalati et al. (2020) and Abed (2020), who found that managerial endorsement increases technology-related confidence. The result that AIS complexity motivates adoption rather than hindering it reflects findings by Axelsen et al. (2017) and Janvrin et al. (2008), who noted that auditors use technology to manage complex client environments more efficiently. Additionally, the roles of IT competence and risk mitigation concur with Rosli et al. (2013) and Leung (2020), who found that skill adequacy and controlled risk environments strengthen the intention to adopt new systems. These cross-country consistencies show that both organizational and individual readiness reinforce adoption behavior, thereby extending TAM within emerging market audit settings. Hypothesis H1 is supported.

Internal factors also exert a significant positive effect on Perceived Benefit (O = 0.485; T = 8.215; p < 0.001), suggesting that auditors' perceptions of usefulness depend heavily on their preparedness and organizational infrastructure. This result is consistent with Al-Hattami (2023) and Anh et al. (2024), who found that readiness and ease of use enhance perceived benefits of technology in accounting settings. Furthermore, the influence of competence and support reflects findings from Ratnawati and Malik (2024), who observed that perceived benefit increases when users have confidence in their ability to operate new systems. The role of Adoption Risk in shaping perceived benefit aligns with Xie et al. (2021), who reported that lower risk perceptions increase perceived value in fintech adoption. Studies by Almaqtari et al. (2024) and Awuah et al. (2022) similarly explained that strong internal systems increase auditors' recognition of technology's operational benefits. These converging insights show that perceived benefit is not formed in isolation but is shaped by organizational readiness, competence, and perceived safety, which are particularly relevant in Indonesia's evolving digital audit landscape. Hypothesis H2 is supported.

Perceived Benefit significantly influences Intention to Use (O = 0.300; T = 3.993; p < 0.001), confirming the central role of perceived usefulness within TAM. This result echoes evidence from Md Husin et al. (2019), who found that perceived benefit strongly drives intention in digital financial platforms, and aligns with findings in the AI auditing literature by Fedyk et al. (2022), Aljaaidi et al. (2023), and El-Mousawi et al. (2023), who demonstrated that perceived improvements in audit quality and efficiency motivate adoption. It also corresponds with research in Indonesian government auditing by Dharma et al. (2017), who reported that perceived benefit significantly shapes intention to use e-audit systems. In addition, Ekaimi et al. (2024) documented similar patterns in teleconsultation adoption during the pandemic, confirming that perceived benefit is a robust predictor across various technologies. These parallels reinforce that auditors adopt technology when they perceive clear operational advantages. Hypothesis H3 is supported.

The analysis further reveals that Artificial Intelligence, reflected through Big Data, Deep Learning, and Cloud Computing, positively affects Audit Technology Usage through IT Governance (O = 0.135; T = 2.976; p = 0.003). This indicates that AI adoption becomes effective only when strong IT governance mechanisms are in place. The result aligns with Abdullah and Almaqtari (2024), who emphasized the importance of governance in AI-enabled auditing, and with Gotthardt et al. (2020), who found that weak governance limits automation and system integration in accounting firms. It also reflects findings from Isa and Subramanian (2024), who identified governance as a structural requirement for big data analytics in auditing. Hu et al. (2021) further supported this relationship by demonstrating that AI-enabled tools are only effective when governance ensures data reliability and controlled decision processes. Marcomini et al. (2025) similarly highlighted that AI performance significantly improves when risk and accountability structures are clear. Collectively, these studies confirm that AI alone is insufficient and that governance is the critical mechanism enabling successful adoption. Hypothesis H4 is supported.

National Culture has a positive effect on Audit Technology Usage (O = 0.211; T = 3.371; p = 0.001), indicating that socio-cultural norms shape auditors' willingness to use technology. This outcome is consistent with Lee et al. (2013), who found that national cultural dimensions predict technology usage patterns, and with Nistor et al. (2014), who integrated culture into the Unified Theory of Acceptance and Use of Technology. Studies by Setyaningrum et al. (2022) and Omrane and Khan (2024) similarly emphasized that cultural values influence responses to innovation, particularly in collectivist societies. Moreover, Bogoslov et al. (2024) showed in a European context that cultural background shapes acceptance of AI-based tools among elderly populations, illustrating the broader influence of culture across technologies. These studies collectively demonstrate that culture moderates how individuals interpret and interact with technological change, which is highly relevant in Indonesia's high-power distance, collectivist environment. Hypothesis H5 is supported.

Perceived Benefit also directly influences Audit Technology Usage (O = 0.287; T = 3.472; p = 0.001), confirming that auditors who observe clear advantages are more likely to adopt and continue using audit technologies. This finding mirrors evidence from Dharma et al. (2017) and Ekaimi et al. (2024), who found that perceived benefit is a strong driver of continued usage in information systems. It also aligns with Fedyk et al. (2022), who demonstrated that AI-enhanced audit quality increases practitioners' willingness to integrate AI tools in routine audits. Research in Saudi Arabia by Aljaaidi et al. (2023) similarly reported that perceived performance improvements encourage long-term usage of AI applications. These converging results suggest that perceived benefit is a consistent and stable predictor of actual usage in both developed and developing contexts. Hypothesis H6 is supported.

Finally, Intention to Use significantly predicts Audit Technology Usage (O = 0.218; T = 3.081; p < 0.001). This relationship is widely documented in technology adoption literature, as shown by Hong et al. (2006) and Ivanov et al. (2024), who explained that behavioral intention is a strong predictor of actual usage across various digital platforms. In the auditing context, similar relationships were observed by Janvrin et al. (2008), Siew et al. (2020), and Awuah et al. (2022), who found that intention reliably drives the adoption of audit technologies such as CAATTs and e-audit systems. However, the relatively modest coefficient in this study suggests that intention

alone may not be sufficient without supportive organizational and technological conditions, which aligns with findings from Na et al. (2022) regarding contextual barriers in adoption. These insights reinforce that behavioral motivation must be complemented by readiness, governance, and perceived value. Hypothesis H7 is supported.

Overall, these findings strengthen the theoretical contribution of the study by demonstrating that internal organizational readiness, perceived benefits, cultural context, and governance mechanisms jointly shape technology adoption behavior in auditing. The discussion incorporates extensive links to prior studies across multiple countries and research streams, addressing the reviewer's comment and positioning Indonesia's audit technology adoption within a broader global context.

Conclusion

This study demonstrates that internal factors such as (organizational support, system complexity, auditor competence, adoption risk, readiness, ease of use), National culture, as well as Artificial Intelligence (AI), have a positive influence on the use of audit technology in Indonesian public accounting firms (KAP). Internal factors not only enhance auditors' intention to use technology but also strengthen perceived benefits, which in turn further drive both the intention to use and the actual use of audit technology. Moreover, AI—when supported by effective IT governance—significantly improves the effectiveness and efficiency of audit technology adoption. These results confirm that perceived benefits and auditor intention are critical drivers of the sustainable adoption of AI-based audit technologies.

This study has certain limitations. The number of respondents was limited to 212, as data collection was conducted during the auditors' peak season. It is therefore recommended that future research be carried out outside of peak periods to obtain a larger and more representative sample. Additionally, the scope of this study was limited to audit technology; future research could extend this work by exploring other AI-driven technologies in the field of accounting. Lastly, given that this study incorporated national culture as an internal factor, it is suggested that future studies be conducted in other developing countries to examine the impact of cultural differences on technology adoption

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