Audit Quality in the Digital Era: A Study of Competence, Technological Impact and Integrity

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Abstract

This study investigates the influence of auditor competence, technology utilization, and auditor integrity on audit quality. High-quality audits are essential for maintaining stakeholder trust, ensuring the credibility of financial reports, and supporting effective corporate governance. Despite advances in standards and technology, concerns about declining audit quality persist, particularly in the Indonesian context. This research employs a quantitative approach using Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze data collected from 61 auditors working in Public Accounting Firms (PAFs) in Jakarta and Bandung. The findings reveal that all three independent variables—auditor competence, technology utilization, and auditor integrity—positively and significantly affect audit quality. Among them, auditor integrity has the strongest impact, highlighting the critical role of ethical behavior and professionalism in audit processes. Auditor competence also significantly improves audit quality by enhancing technical accuracy and judgment. Meanwhile, the use of technology contributes to audit quality by increasing efficiency, accuracy, and the ability to handle large volumes of data. These results underscore the importance of integrating ethical values, technical skills, and digital capabilities to ensure high-quality audits. The study contributes to existing literature by validating a new measurement model and emphasizing the need for holistic auditor development. Practical implications suggest that audit firms and regulators should invest in ethical training, continuous professional education, and digital transformation initiatives. Future research is recommended to expand sample coverage, explore additional influencing variables, and adopt mixed-method approaches for deeper insights.

Keywords*: audit quality, auditor competence, technology utilization, auditor integrity, PLS-SEM*

INTRODUCTION

Financial statements serve as the basis for investor decision-making, and their quality reflects the level of a company's compliance with applicable regulations (Marliana & Nurcahya., 2023). Before publication, corporate financial statements must be examined by independent auditors from Public Accounting Firms (KAP) who apply Financial Accounting Standards (SAK) and assess their fairness to ensure the quality of financial statements beneficial to shareholders and investors (Fauzi et al., 2023).

Public accountants, as independent and objective professionals, provide assurance that financial statements are presented accurately and materially. Consequently, users of financial statements expect reliability from audit results performed by competent and certified auditors (Herwidyawati

et al., 2022). Public accountants play a crucial role in enhancing the credibility of financial information and strengthening good corporate governance. Thus, their services are widely utilized by investors, creditors, and governments (Supriyanto et al., 2022). Stakeholders expect auditors to produce high-quality audit reports as a foundation for decision-making, as inappropriate audit opinions can mislead financial statement users (Sari & Kurniawati, 2021).

Quality audits can essentially be achieved when auditors apply auditing standards and principles, maintain independence, comply with regulations, and uphold professional ethics (Dewita & NR, 2023). However, the revelation of various corporate financial scandals globally has sparked controversy, with audit quality identified as a contributing factor to corporate value decline (Hubais et al., 2023). According to Herusetya (2023), audit quality in

Indonesia currently faces serious challenges, and the role of external auditors as gatekeepers is critical in preventing financial statement manipulation. For example, Indonesia's Financial Services Authority (OJK, 2023) imposed administrative sanctions in the form of registration suspension on KAP Anderson & Rekan. Additionally, OJK (2023) revoked the registration certificates of three parties: Nunu Nurdiyaman, Jenly Hendrawan, and KAP Kosasih, Nurdiyaman, Mulyadi Tjahjo & Rekan (KNMT). These sanctions followed investigations into the AP and KAP providing audit services for the Annual Financial Statements of PT Asuransi Adisarana Wanaartha (Wanaartha Life/WAL) from 2014 to 2019. OJK imposed sanctions because the respective KAP failed to implement quality control standards in audit services, did not detect indications of financial statement manipulation, and lacked the required competence and knowledge as a Public Accountant serving the financial sector (OJK, 2023). Furthermore, **Herusetya (2023)** states that such cases indicate a decline in audit quality in Indonesia.

Toharudin (2023) emphasizes that in an era of increasing demands for transparency and accountability, improving human resource quality is crucial to support national accounting standards and regulations not only through new professionals but also through educators and professors focused on research and scientific development to contribute to government policy. This aligns with prior research by Saifudin et al. (2022), which found that competence positively influences audit quality: the higher the auditor's competence, the higher the audit quality. However, a gap exists, as research by Wati et al. (2024) yielded contrasting results, showing that the competence variable has no significant effect on audit quality.

On the other hand, with evolving business environments and accounting practices, auditors must continuously enhance their skills and adapt to current auditing standards and technologies (Judijanto, 2024). Purwanto (2024) states that in the digital era, industries continuously adapt to technology to improve efficiency and effectiveness. The audit sector is undergoing significant transformation through cloud-based global audit platforms, enabling real-time updates and making audits more efficient, transparent, and accurate. This aligns with findings by Judijanto (2024), indicating that audit technology adoption has a positive and significant effect on audit effectiveness, as advanced tools enhance efficiency and accuracy.

Hubais et al. (2023) reveal that respondents believe financial information quality is severely compromised without integrity, as its absence undermines auditor neutrality and significantly impairs audit quality. This resonates with Febrianisa & Kuntadi (2024), who found integrity has a positive effect on audit quality, as high-integrity auditors tend to be honest, transparent, and consistent, thereby enhancing quality. Conversely, Paranoan et al. (2023) found integrity negatively affects audit quality. This may stem from sensitive questionnaire items causing insignificant results, as auditors might prioritize personal/organizational interests to justify regulatory violations, exhibit blame-shifting behavior, or face superior interference.

Based on these phenomena, this study's novelty lies in its distinction from prior research, such as Qader & Cek (2024), which focused solely on blockchain and artificial intelligence Cisadani & Wijaya (2022), centered on professional skepticism and auditor competence and Prabowo & Suhartini (2021), examining independence, integrity, and E-Audit.

Additionally, the novelty of this study lies in its self-developed questionnaire. The instrument was designed through an in-depth approach by deconstructing each variable into dimensions, indicators, and research statements. This resulted in a relevant, measurable, and contextually aligned instrument.

LITERATURE REVIEW

Audit Quality

Audit quality reflects an auditor's ability to identify violations within a client's accounting system during a financial statement audit and report these findings in the audit report, adhering to applicable ethical codes and auditing standards (Novaldi et al., 2023). It refers to the probability that an auditor will both detect and report violations in the audited company's accounting system. The likelihood of identifying violations depends on the auditor's professional competence, while their independence influences the decision to report such violations. Consequently, audit quality should be measured primarily through the quality of the auditor's work **(Fauzi et al., 2023).** The objective of audit quality is to enhance the performance of financial statement audits, making them more useful to financial statement users while strengthening their credibility. This ensures that the information presented particularly for investors is more reliable and helps mitigate risks associated with the accuracy of accounting information **(Alecya & Pangaribuan, 2022).**

Alsughayer (2021) contends that high-quality audits can only be achieved by teams possessing requisite knowledge, skills, and experience while strictly adhering to professional ethics, regulations, and audit procedures; consequently, audit firms bear significant responsibility in implementing robust quality control procedures to evaluate their teams and audit processes, thereby identifying and remediating deficiencies that may compromise audit quality. Conversely, **Dewita & NR (2023)** assert that effective audit quality fundamentally requires auditors to apply established auditing standards and principles, demonstrate complete independence, maintain regulatory compliance, and uphold professional codes of ethics.

Auditor Competence

Competence is defined as the characteristics appropriately and consistently applied by individuals to achieve more effective and efficient performance, encompassing knowledge, skills, mindset, social motives, self-concept attributes, and cognitive approaches (Ismanidar, 2022). It refers to the knowledge, skills, or abilities demonstrated by an individual (Susanto, 2024)

Within auditing, auditor competence necessitates that professionals execute services with due care, expertise, and diligence while maintaining current knowledge and skills. This ensures clients or employers receive services aligned with the latest developments in practice, legislation, and techniques. Such competence further empowers auditors to resolve potential challenges encountered during engagements (Muhidin & Arigawati, 2023). Auditor competence specifically denotes the ability to apply knowledge and experience in conducting audits through a diligent, intuitive, and objective approach (Susanto et al., 2020). It comprises an individual's capacity to develop technical knowledge, specialized expertise, and an understanding of audited entities' processes and capabilities (Susanto, 2024).

Technology Utilization

Information technology constitutes a critical element in modern life due to its capacity to manage and distribute information efficiently and effectively across business, governance, education, healthcare, and other sectors (Apriadi et al., 2024). Technological advancements have revolutionized auditing by enabling more efficient and accurate evaluations through software tools, data analytics, and automation (Judijanto, 2024). Auditors may leverage information technology within audit procedures particularly for managing data related to audited information systems where technological proficiency and understanding of information controls facilitate financial statement evaluations and overcome operational barriers (Febriantoko, 2024). Rapid technological progress has ushered auditing into a transformative era: Audit 4.0. This paradigm integrates artificial intelligence, big data analytics, and blockchain technology to establish more dynamic and efficient audit methodologies (Gaffar & Gaffar, 2024).

Auditor Integrity

Integrity is a strong personal commitment of an individual who understands their responsibilities, acts honestly, and remains accountable in carrying out their duties (Salsadilla et al., 2023). According to Ardianingsing and Setiawan (2023), integrity refers to the quality, nature, or condition that reflects unity and wholeness, thereby demonstrating potential, capability, obligation, and honesty. Integrity is a core principle for auditors, reflecting honesty, courage, wisdom, and responsibility in performing audit tasks. It also serves as the foundation of public trust and a benchmark for evaluating decisions with transparency, knowledge, and professionalism (Siregar, 2021). In performing their duties and supporting the improvement of their performance, auditors must uphold the principle of integrity by acting consistently with ethical values and complying with applicable regulations, thereby building trust as the basis for reliable decision-making (Rifai & Mardijuwono, 2020).

Hypothesis

H1: Auditor competence has a positive effect on audit quality.

The competence of an auditor plays a crucial role in enhancing audit quality, as it ensures the auditor possesses the necessary knowledge, abilities, and skills to perform audits accurately and professionally (Dwi et al., 2024). If auditor competence increases, their ability to detect fraud will also improve (Kartim & Sutisman, 2022). Research by Novaldi et al. (2023) demonstrates that competence has a significant influence on audit quality. This finding aligns with studies by Mohsin et al. (2023), Fauzi et al. (2023), and Lenggono (2022), all of which state that auditor competence positively affects audit quality.

Public Accounting Firms (PAFs) with a higher number of professional staff produce better audit quality, particularly during the busy season compared to off-season audits, underscoring the importance of qualified human resource availability for audit quality (Nagy et al., 2023). Auditors must possess high expertise in performing their duties. As professionals, auditors must continually update their knowledge and understand the latest developments in applicable rules and regulations within their field, since greater auditor competence leads to better audit quality (Nur Aprilia & Hidayah, 2023).

H2: Technology utilization has a positive effect on audit quality.

The integration of technology into the audit process is essential for enhancing the effectiveness of fraud detection, enabling auditors to utilize advanced tools and methods to strengthen audit capabilities, accelerate procedures, and improve the accuracy of findings (Susanto, 2024). The application of data analytics improves audit quality by offering deeper insights into client processes and allowing auditors to build databases containing knowledge from each engagement, which can be reused in subsequent years (Hezam et al., 2023). Through big data analytics, auditors can also compare clients' financial data against benchmarks and expectation models to identify potential inconsistencies (De Santis & D'Onza, 2020).

A study by Abdelwahed et al. (2024) found a positive and significant relationship between big data analytics and audit quality. This is consistent with findings by Putra et al. (2023), which concluded that the use of big data analytics has a positive and significant impact on audit quality indicating that the more extensively big data analytics is utilized, the higher the resulting audit quality. Furthermore, the implementation of artificial intelligence (AI) enables public accounting firms and auditors to collect and process data and audit reviews across the entire population of audited entities, significantly increasing audit efficiency and effectiveness (Hu et al., 2021).

AI adoption has contributed to improvements in audit quality by helping ensure that audit processes are completed on time, accurately, and comprehensively (Noordin et al., 2022). According to Law and Shen (2024), AI technology can assist audit firms in identifying previously undetected risks, such as internal control weaknesses and going concern risks. Moreover, greater access to non-auditor specialists through AI integration can also enhance audit quality. Research conducted by Fedyk et al. (2022) reported a positive impact of AI on both audit quality and efficiency. Similarly, a study by

Albawwat and Frijat (2021) found that auditors perceive all types of AI as significantly contributing to audit quality, with assisted AI systems having the highest contribution, followed by augmented AI systems.

*H3: Auditor integrity has a positive effect on audit quality.*
Integrity is an essential characteristic for auditors, encompassing honesty, accuracy, firmness, independence, and fairness, ensuring audit findings are trustworthy for stakeholders (Prabowo & Suhartini, 2021). A high level of honesty enables auditors to improve audit quality, fostering acceptance of unintentional errors and sincere differences of opinion, while maintaining zero tolerance for fraud or principle violations (Wulandhari et al., 2023).

Hubais et al. (2023) found unanimous agreement among respondents that integrity significantly influences audit quality, describing it as the "core spirit" of an effective audit process and a primary determinant of high-quality outcomes. Their research emphasizes that without integrity, even robust systems, competence, experience, and auditor capabilities cannot prevent compromised audit quality, potentially leading auditors astray and generating detrimental results.

This finding aligns with studies by Alecya and Pangaribuan (2022), Aprilianti and Badera (2021), and Evia et al. (2022), all confirming that integrity has a significant positive effect on audit quality.

Framework

Figure 1. Conceptual Model.
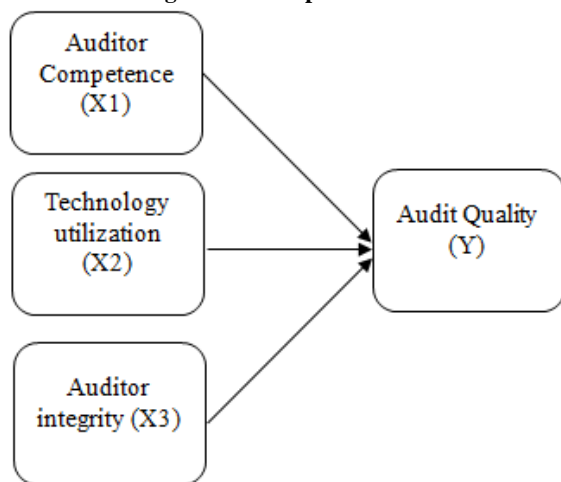
Source created by authors

METHODOLOGY
Research design
This study employs a quantitative research methodology. Quantitative research is an approach that relies on precise measurement, calculation, formulas, and numerical data to organize experiments, develop hypotheses, implement procedures, analyze data, and draw conclusions (Abdillah et al., 2024). According to Hidayat et al. (2024), quantitative research focuses on objective measurement and statistical analysis of data collected through surveys, questionnaires, or experiments. It aims to test hypotheses or theories by analyzing relationships between variables, using numerical data and statistical techniques to generalize findings from a representative sample.

Sample method and sample size
This study employs a non-probability sampling method, specifically purposive sampling. According to Cohen's statistical analysis table, a minimum sample size of 59 auditors is required for 3 constructs with a 5% significance level and a minimum R^2 value of 0.25 (Musyaffi et al., 2022). In this method, researchers deliberately select sample members based on specific characteristics or research objectives. This technique is typically used when targeting specific subgroups within a population for analysis (Triansyah et al., 2023). The sample selection criterion was respondents with a minimum of 3 years of work experience.

Data collection techniques
This study utilizes primary data collected through the distribution of closed-ended questionnaires, supplemented by interviews. The questionnaire method is employed when researchers aim to understand the perceptions or habits of a population based on respondent feedback (Abdillah et al., 2021). Surveys were administered by distributing hard-copy questionnaires and through online media via Google Forms for data collection.

Data Analysis Technique
This study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) with the help of the Smart PLS program (Version 3.0) through several stages of analysis. According to Hair et al. (2010) as cited in Jaya (2024), SEM is a multivariate statistical technique integrating factor analysis and path analysis to examine structural relationships between variables. PLS-SEM enables researchers to test models containing both latent variables (unobservable constructs) and measured variables through causal pathways.

The selection of PLS is justified by its minimal requirements for sample size and distributional assumptions of residuals, making it suitable for this research context (Evi & Rachbini, 2023).

RESULT ANALYSIS
Data were gathered from 61 professional auditors based in Public Accounting Firms across two of Indonesia's key metropolitan areas Bandung and Jakarta. The analytical process employed SmartPLS 3 to ensure robust and comprehensive results

Outer Model Evaluation
Validity Test
The validity of the indicators measured in the questionnaire can be seen with convergent validity through the outer loading or loading factor values on endogenous and exogenous variables. In research models that have been relatively widely studied, the recommended value for convergent validity is >0.7, while for newly developed research models the value can be tolerated up to 0.5 (Wati, 2018).

Table 1. Outer Loading

Variable	AC	TU	AI	AQ
AC.1	0,960			
AC.2	0,843			
AC.3	0,893			
AC.4	9,965			
TU.1		0,755		
TU.2		0,857		
TU.3		0,904		
TU.4		0,904		
AI.1			0,809	
AI.2			0,811	
AI.3			0,824	
AI.4			0,787	
AQ.1				0,950
AQ.2				0,925
AQ.3				0,942
AQ.4				0,957

Source: SmartPLS3

Based on the results of the convergent validity test, the outer loadings value for the variables of auditor competence, technology utilization, auditor integrity and audit quality is > 0.7, so that all indicators are stated to have high validity.

Discriminant Validity
Discriminant validity assessment ensures that latent variables are unique and distinct from other variables measured using the research indicators. Discriminant validity is established when the Average Variance Extracted (AVE) exceeds 0.50 (Sekaran & Bougie, 2016). The discriminant validity test results are presented in table:

Table 2. Average Variance Extracted (AVE)

Variable	Average Variance Extracted (AVE)
Auditor Competence	0,840
Technology Utilization	0,735
Auditor integrity	0,653
Audit Quality	0,891

Source: SmartPLS3

As presented in the table above, all constructs in the model demonstrate AVE values well above the minimum threshold of 0.50. The construct Audit Quality exhibits the highest AVE value of 0.891, indicating that 89.1% of the variance in its indicators is captured by the latent variable. Similarly, Auditor Competence has an AVE value of 0.840, which also reflects strong convergent validity. The constructs Technology Utilization and Auditor Integrity yield AVE values of 0.735 and 0.653, respectively, both of which are acceptable and indicate that a substantial portion of the variance in their indicators is accounted for.

Based on these results, it can be concluded that all latent constructs in this study meet the criteria for convergent validity, ensuring that the indicators reliably measure their respective theoretical concepts.

Reliability Test
The measure for measuring the reliability of an indicator is using composite reliability and Cronbach alpha values. The composite reliability value is expected to be at least 0.7 (Sarstedt et al, 2021). Meanwhile, the Cronbach alpha value of each indicator to measure internal consistency is at least 0.7.

**Table 3. Cronbach's Alpha & Composite Reliability**

Variable	Cronbach's alpha	Composite reliability
Auditor Competence	0,937	0,954
Technology Utilization	0,879	0,917
Auditor integrity	0,824	0,883
Audit Quality	0,959	0,970

Source: SmartPLS3

The results of the construct reliability assessment using Cronbach's Alpha and Composite Reliability indicate that all variables in the model demonstrate strong internal consistency. Specifically, Auditor Competence shows a Cronbach's Alpha of 0.937 and a Composite Reliability of 0.954, suggesting excellent reliability and internal consistency among its indicators. Similarly, Technology Utilization yields a Cronbach's Alpha of 0.879 and a Composite Reliability of 0.917, indicating that the construct is reliably measured. The Auditor Integrity construct also demonstrates acceptable reliability, with a Cronbach's Alpha of 0.824 and a Composite Reliability of 0.883, both of which surpass the minimum threshold of 0.70 recommended by Hair et al. (2017). Lastly, Audit Quality presents the highest reliability values, with a Cronbach's Alpha of 0.959 and a Composite Reliability of 0.970, confirming that its indicators are highly consistent in capturing the construct. These results collectively confirm that all constructs in the model meet the criteria for construct reliability, supporting the robustness of the measurement model used in this study.

Inner Model Evaluation

Figure2. Complete Model Path Diagram (For Inner Model).
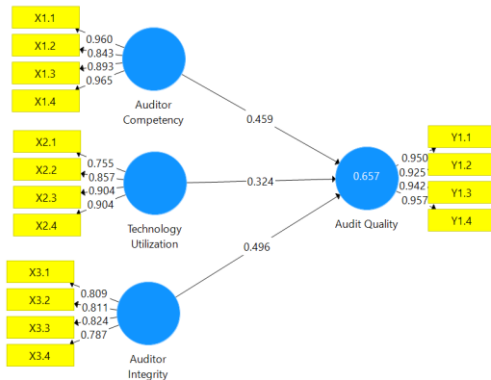
Source: SmartPLS3

The R-Square Value

Table 4. R Square

	R Square	R Square Adjusted
Audit Quality	0,657	0,639

Source: SmartPLS3

Based on the result table from SEMPLS The R Square value for the Audit Quality construct is 0.657, which means that about 65.7% of the variance in audit quality is explained by three predictor variables: auditor competence, technology utilization, and auditor integrity. The adjusted R Square is 0.639, which takes into account the complexity of the model and confirms substantial explanatory power. Overall, the model shows a strong fit and highlights the importance of human and technological factors in determining audit quality.

Hypothesis Testing

Table 5: Bootstrapping Test Results

	Original Sample (O)	T Statistics	P Values	Information
Auditor Competency → Audit Quality	0.459	4.328	0.000	Significant
Technology Utilization → Audit Quality	0.324	3.578	0.000	Significant
Auditor Integrity → Audit Quality	0.496	5.504	0.000	Significant

Source: SmartPLS3

According to Table The path coefficient significance test was conducted using bootstrapping procedures in SEM-PLS. As shown in Table 3, all three predictor variables Auditor Competency, Auditor Integrity, and Technology Utilization have significant effects on Audit Quality, as indicated by p-values less than 0.05 and T-statistics greater than 1.96.

1. The relationship between Auditor Integrity and Audit Quality shows the strongest and most statistically significant effect, with a path coefficient of 0.496, T-statistic of 5.504, and p-value of 0.000. This result emphasizes that integrity is a key determinant of audit quality.
2. Auditor Competency has a path coefficient of 0.459, T-statistic of 4.328, and p-value of 0.000, indicating that auditor skills and knowledge significantly enhance the quality of audits.
3. Technology Utilization also demonstrates a significant positive influence on Audit Quality, with a path coefficient of 0.324, T- statistic of 3.578, and p-value of 0.000. Although it has the smallest coefficient among the three variables, its effect remains substantial and statistically meaningful.

DISCUSSION

The Influence of Auditor Competence on Audit Quality

Hypothesis 1 (H1) proposed that auditor competency has a positive effect on audit quality. The results of the structural model analysis support this hypothesis, as evidenced by a path coefficient of 0.459, T-statistic of 4.328, and p-value of 0.000. These results indicate a significant and positive relationship, suggesting that higher levels of auditor competency are associated with higher audit quality.

Auditor competency encompasses the technical knowledge, analytical skills, training, and professional experience necessary to conduct effective audits. Competent auditors are better equipped to assess risks, evaluate internal controls, detect material misstatements, and apply appropriate audit procedures in accordance with established standards. As a result, their work tends to produce more reliable and credible audit outcomes.

The influence of technology utilization on audit quality

Hypothesis 2 (H2) stated that technology utilization has a positive effect on audit quality. The results of the SEM-PLS analysis support this hypothesis, with a path coefficient of 0.324, a T-statistic of 3.578, and a p-value of 0.000. These findings indicate that the use of technology in audit processes contributes significantly and positively to improving audit quality.

Technology utilization in auditing refers to the application of digital tools such as audit software, data analytics, artificial intelligence, cloud systems, and automated testing procedures. These tools enhance the efficiency, accuracy, and scope of audit activities by enabling auditors to process large volumes of data, identify anomalies, and perform real-time analysis. As a result, auditors can provide more timely and reliable assurance services.

Although the effect size of technology utilization is lower compared to other constructs in the model, its statistical significance underscores its growing role in modern auditing. This supports the argument that technological capability is an important complement to auditor expertise and ethical behavior.

However, the effectiveness of technology in auditing is also dependent on factors such as auditor training, system integration, and the technological maturity of audit firms. Therefore, while technology presents clear advantages, its optimal impact on audit quality requires adequate investment in infrastructure and digital competence.

The influence of auditor integrity on audit quality

Hypothesis 3 (H3) posited that *auditor integrity has a positive effect on audit quality*. This hypothesis is strongly supported by the empirical findings, which reveal a path coefficient of 0.496, a T-statistic of 5.504, and a p-value of 0.000. These results demonstrate that auditor integrity is the most influential factor among the three independent variables examined in this study, highlighting its essential role in enhancing audit quality.

Auditor integrity reflects the ethical values, honesty, objectivity, and moral commitment of auditors in carrying out their professional responsibilities. Auditors with high integrity are more likely to resist pressure from clients, avoid conflicts of interest, and uphold the principles of independence and fairness. Such ethical behavior directly influences the credibility, transparency, and trustworthiness of the audit process.

This finding further reinforces the argument that audit quality is not solely determined by technical proficiency or the availability of advanced tools, but also by the ethical foundation upon which audit decisions are made. In situations involving complex judgments or high-risk areas, integrity serves as a guiding principle that ensures auditors remain objective and impartial. The strong effect of integrity observed in this study illustrates that even in the presence of competence and technology, the ethical orientation of auditors continues to play a decisive role in shaping audit outcomes and public confidence in the profession.

Conclusion

This study aimed to examine the influence of auditor competence, technology utilization, and auditor integrity on audit quality using Partial Least Squares Structural Equation Modeling (PLS-SEM) with data from 61 auditors in Jakarta and Bandung. The findings reveal that all three independent variables significantly and positively impact audit quality.

1. Auditor integrity emerged as the most influential factor, underscoring the crucial role of ethical values and honesty in delivering high-quality audit services.
2. Auditor competence also showed a strong and significant relationship with audit quality, indicating that knowledge, expertise, and professional experience enhance auditors' effectiveness.

3. Technology utilization, while having the lowest coefficient among the three, still contributed significantly, highlighting the importance of digital tools in modern auditing practices.

Collectively, these results emphasize that improving audit quality requires not only technical skills and technological adaptation but also a strong ethical foundation. Audit firms and regulatory bodies should therefore prioritize comprehensive auditor development strategies that integrate these three dimensions.

Limitations

Despite offering valuable insights, this study has several limitations:

1. Sample Size and Scope: The research involved only 61 auditors from two major cities (Jakarta and Bandung), limiting the generalizability of findings to broader populations or other regions.
2. Cross-Sectional Design: The study uses a cross-sectional approach, which restricts the ability to observe changes over time or draw causal inferences.
3. Self-Reported Data: The use of questionnaires introduces the possibility of response bias, especially in self-assessment items related to integrity and competence.
4. Focus on Perceptions: The study measures perceived audit quality rather than actual audit outcomes or performance metrics, which could differ.

Further Research

To build upon this study, future researchers are encouraged to:

1. Expand the Sample: Involve a larger and more diverse group of auditors across different regions and organizational sizes to enhance generalizability.
2. Use Longitudinal Methods: Apply a longitudinal research design to track changes and developments in auditor behavior and audit quality over time.
3. Include Additional Variables: Examine other factors that may influence audit quality, such as organizational culture, audit firm size, workload pressure, or client complexity.
4. Employ Mixed Methods: Combine quantitative analysis with qualitative approaches (e.g., interviews or case studies) to gain deeper insights into ethical dilemmas and technology adoption challenges in auditing.
5. Evaluate Actual Audit Outcomes: Future studies could use performance-based indicators (e.g., restatements, litigation, or inspection results) to assess audit quality more objectively.

Implication

Theoretical Implications

This study contributes to the literature by reinforcing the significant role of auditor integrity, competence, and

technology utilization in enhancing audit quality. It also validates the conceptual model using a newly developed instrument, offering a foundation for future research in audit behavior and performance. The findings support prior theories on ethics and competence while highlighting the growing importance of digital tools in the auditing profession.

Practical Implications

1. For Audit Firms: Emphasize ethical training and internal control mechanisms to strengthen auditor integrity. Continuous professional development is also essential to maintain high auditor competence.

2. For Regulators: Enhance oversight and update certification standards to ensure auditors are both technically competent and ethically grounded.

3. For Audit Technology Adoption: Invest in digital infrastructure and auditor training to fully leverage technology's potential in improving audit accuracy and efficiency.

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