

The Mediation Effect of Audit Assessment on Audit Competency and Digital Audit to Audit Work Performance Effectiveness

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Abstract

The relationship between auditor competency and the use of digital audit has been recognized as a potential factor that could enhance audit evaluation and enhance auditor performance. This study examines the direct impact of audit competency and digital audit variables on the efficiency of auditor work performance. It also explores the role of audit assessment as a mediator in these connections. The data used in this study is obtained from external auditors. A survey was conducted in Malaysia to determine the direct impact of audit competence and digital audit on the efficiency of audit work carried out by the external auditor. Based on the findings, it appears that increasing the efficiency and effectiveness of auditors' work performance was largely dependent on their competency as well as their usage of modern digital audits. Further investigation reveals the impact of audit competency and digital audit on audit assessment, which is a necessary process for enhancing the performance effectiveness of the external auditor. This research enhances our understanding of audit assessment as an essential tool for evaluating audit proficiency and the auditor's competency and effective utilization of digital audit in evaluating the auditor's work performance.

Keywords: Audit Performance, Audit, Audit Competency, Digital Audit, Audit Assessment

INTRODUCTION

Audit reports are utilised by both internal and external stakeholders to inform decision-making. The involvement of external auditors is crucial in ensuring the production of reports that meet high standards of quality. The audit report must be prepared by applicable auditing standards to ensure that the financial statements accurately represent the organization's historical financial performance and current financial position, as the auditors' assessment is crucial in determining the organization's true and unbiased status (Kassem, 2018). Pursuant to the International Standard Auditing (ISA) 200, an external auditor is required to have competence, hold the requisite specialised abilities, and maintain professional scepticism throughout the audit (International Federation of Accountants, 2014). This is to recognise the possibility of false information due to fraudulent activities, but to place trust in the auditor's previous experience in terms of honesty, integrity, and professional judgement while assessing the audit.

The absence of sufficient audit expertise leads to erroneous assessments during the presentation of audit conclusions, compromising the efficacy of auditors' performance. The Security Commission Malaysia (SC) fined Deloitte RM2.2 million in December 2020 for its failure to report violations pertaining to an RM2.4 billion Islamic bond (Sukuk) issued by Bandar Malaysia Sdn Bhd (BMSB), a subsidiary of 1Malaysia Development Berhad (1MDB), in the case of Malaysia. Deloitte was found to have violated two provisions, specifically Sections 276(3)(b) and 276(1) of the Capital Markets and Services Act 2007 (CMSA), for failing to promptly report anomalies to the commission. This might significantly impact BMSB's capacity to fulfil its obligations under the Sukuk programme, perhaps resulting in the failure to submit financial reports to MTrustee Berhad. Hence, the proficiency of the audit and the effectiveness of the auditor play a crucial role in producing audit reports that instill trust and furnish dependable information for decision-making.

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Audit competency refers to the specialised knowledge and skills that an auditor acquires through formal education, practical experience, and rigorous training. An auditor must possess a significant level of audit proficiency, education formality in the fields of auditing and accounting, relevant knowledge, sufficient practical experience, and exceptional expertise in their profession while performing the audit (Akbar & Suraida, 2017). The auditor's main responsibility is to collect data in order to recognize, quantify, and identify the risks related to major errors brought on by fraudulent activity. They also assess the audit evidence and communicate and record their findings to management, the audit committee, and other relevant parties (Raudeliuniene et al., 2020). To ensure a high-quality audit report, it is essential to possess sufficient audit knowledge when conducting the audit.

The company adopts digital audit software solutions to shift from a manual audit process to a computerised control environment (Kim et al., 2016). Ferri et al., (2020) asserted that the primary task for auditors nowadays is to deliver an audit opinion by employing audit technologies and adopting a real-time methodology. Businesses have experienced a significant surge in the adoption of digital audits. As per Statement of Auditing Standards (SAS) No. 316.52, auditors are required to use computer-assisted audit procedures to gather additional evidence about data found in significant accounts or electronic transaction files (AICPA, 2006). By examining a wider range of transactions, assuring prompt delivery of evidence, analysing complex audit procedures, and integrating artificial intelligence into systematic and structured auditing, the usage of digital audit can augment the quality of audit evidence presented to auditors (Vasarhelyi et al., 2012).

Previous research has largely concentrated on the application of digital auditing for internal auditing, which has distinct goals than external auditing. This present study aims to address a gap in the current body of research by investigating the qualities and abilities of auditors in utilising digital audit, which impacts the effectiveness of external auditors' performance (Veerankutty et al., 2018). This study has multiple contributions. In order to execute digital audit, it first created audit proficiency components that could be incorporated into the Technology to Performance Chain (TPC) framework. Furthermore, the results suggest that both the audit profession and technological factors play a crucial role in predicting the adoption of digital audit. In contrast, the TPC framework has treated task characteristics, technological characteristics, and individual characteristics as equally influential in terms of their impact on performance.

The following part offers a comprehensive analysis of the audit competency and digital audit, and how they influence the performance and effectiveness of auditors in their work. The development of the hypothesis for this present study led by the examination from previous study. Subsequently, this study will delve into the research methodology utilised, and present the precise results obtained from the survey pertaining to each hypothesis. Ultimately, they condense the results, acknowledge the constraints of the study, and propose suggestions for further investigations.

LITERATURE REVIEW

Audit Work Performance

Despite the use of governance instruments such as accounting rules and auditing standards by authorities to provide guidance to auditors in creating audit reports, unethical practices within companies persist (Tuan Mansor et al., 2020). The users of the audit report expressed scepticism regarding the auditor's responsibility and proficiency. The term "performance" has a narrow range of meanings, as it is based on either the actual accomplishment of a task or the attainment of job-related goals. Performance, in the context of job achievement, pertains to the outcome of an employee's work in terms of both its quality and quantity, as it aligns with the assigned responsibilities (Said Suwaidan & Qasim, 2010).

Numerous research studies suggest that the implementation of digital audit and associated technologies, such as COBIT, will enhance the caliber of audits and improve the performance of auditors (Mahzan & Lymer, 2014). In the present day, it is crucial for companies to have financial information that is delivered promptly, is precise, and can be trusted. This information is vital for making decisions on strategic planning, predicting future outcomes, achieving financial gains, and providing information to external stakeholders (Vasarhelyi et al., 2012). Therefore, before the implementation, it is crucial to understand the fundamentals of audit

procedures and audit assessment in the perspective of digital auditing.

In addition, audit firms need a sophisticated and advanced information system that includes tools to aid in conducting audit assessments. These tools may include proprietary digital audits like Audit Command Language (ACL) and Interactive Data Extraction and Analysis (IDEA), which enhance the performance of external auditors (Hegazy & Tawfik, 2015). CAATs are considered essential for internal auditors to effectively carry out their audit tasks. This viewpoint aligns with the concept of perceived usefulness in the Unified Theory of Acceptance and Use of Technology (UTAUT), which explores an individual's belief that utilising digital audit will enhance their job performance (Mahzan & Lymer, 2014).

Audit Competency

Competency, as defined by the International Federation of Accountants (2014), refers to the aptitude of both novice and senior professional accountants must fulfil their obligations in a manner that meets the expectations of the public and employers. The key metrics for enhancing one's proficiency as a performance auditor involve possessing expertise and technical proficiency in carrying out audit tasks with a professional demeanour (Alam et al., 2017). In addition, the auditor should possess the qualities of independence, experience, competency, and responsibility. In addition, being proficient as an auditor necessitates possessing communication skills, interpersonal skills, fundamental business knowledge, accounting knowledge, problem-solving skills, information technology competence, personal attitudes and capabilities, as well as computer skills (Palmer et al., 2004).

Auditors are responsible for verifying the precision of financial records and the reliability of the systems that handle the storage, transportation, and processing of transactions. Their objective is to identify instances of fraud and errors in transactions and to offer management an assessment of the subject matter for which management is held responsible (Tuan Mansor et al., 2020). Through the utilisation of ongoing evaluation, the auditor is able to examine intricate transactions, consolidate the data, and identify discrepancies and other signs of fraudulent activity. The ability and knowledge of the auditor are vital in utilizing the instruments required to make judgements about the audit of fraud risks (Vasarhelyi et al., 2012).

The auditor's expertise and familiarity with the industry are essential for enhancing audit quality (Mostafa Mohamed & Hussien Habib, 2013). As the auditor becomes more knowledgeable and acquainted with the client's industry, they become more adept at detecting significant errors and speculating about industry-specific routine mistakes (Tuan Mansor et al., 2020). Furthermore, when an auditor has a lengthier period of service with a client, their level of effort in conducting the audit will diminish as they significantly depend on their previous experience. Consequently, the probability of detecting significant errors or misstatements would decline (Palmer et al., 2004).

Digital Audit

Auditors utilise computer-assisted auditing technologies to accelerate and automate the audit process. These tools enable them to scrutinise transaction details, balances of accounts, data management, and disclosures in order to verify the integrity of the data (Akbar & Suraida, 2017). Formulating anticipations based on diverse sources to assist the auditor in detecting anomalous or unforeseen connections by employing digital audit (Ferri et al., 2020).

The adoption of Generalised Audit Software (GAS) helps auditors identify any errors or fraudulent activities in financial statements. It assists auditors accomplish the overall audit goals of making sure that the data supplied by audit software is accurate, complete, owned, evaluated, valid, classified, and disclosed (Ahmi & Kent, 2012). The AICPA's SAS No. 3 addressed the influence of information technology (IT) on the auditor's assessment and evaluation of internal controls. As part of their overall audit assessment, it directed auditors to perform audit assessments in IT settings (AICPA, 2006). SAS No. 48 addressed the effect of computer processing on financial statement examination. The Audit Standard Board (ASB) advised auditors to explore the techniques of data processing using digital audit that could influence audit evaluation and task execution (AICPA, 2006).

Digital audit facilitates and assists auditors in generating audit reports during their audit tasks (Janvrin et al., 2009). A digital audit will aid auditors in preventing fraud and error during the auditing and transaction process by verifying the accuracy of financial records and the reliability of the systems used to store and transfer them. The implementation of this auditing system has the capacity to greatly enhance the identification of fraudulent activities and substantial inaccuracies in financial reporting. Every transaction is evaluated in real time using the digital audit to optimise their current efficiency (Mahzan & Lymer, 2014). The implementation of this technology can lead to a decrease in labor-intensive audit tasks and a boost in production efficiency (Vasarhelyi et al., 2012). Consequently, a sufficient level of expertise in digital audit is necessary to adapt the methods and approaches employed in performing audit assessments.

Audit Assessment

The introduction of digital audit has enhanced the auditor's capacity to conduct audit assessments, encompassing audit applications, audit productivity methods, and audit working paper review (Janvrin et al., 2009). The auditors employ a computerised audit system that allows for automated audit procedures, streamlines the application of audit frameworks, allows auditors to concentrate on areas of significant risk, decreases the duration and resources required for audits, and enhances confidence in the effectiveness of internal controls (Thottoli & K.V, 2020). Therefore, implementing digital audit can assist auditors in reducing the time required for computational and audit tasks, as well as streamlining the process of making audit decisions. Ultimately, this results in an enhancement of the audit task performance's general quality (Janvrin et al., 2009).

Hypothesis and Theory Development

The study makes use of the theoretical framework founded on Goodhue and Thompson's Technology to Performance Chain (TPC) model, which was released in 1995. This approach clarifies the influence of technology on individual performance. When employment and technology are used together in a synergistic manner, individuals will apply technology to efficiently perform their tasks. The effect of this is beneficial for individual performance (Goodhue & Thompson, 1995). This model was created through a combination of utilisation and task technology fit studies.

The approach looks at how a task, a person's aptitude, and a technical attribute affect their performance. Though the technology-to-performance chain model is frequently employed in the adoption of IT, there is a dearth of research in accounting that uses this methodology (Alkhalifah & D'Ambra, 2011; Goodhue & Thompson, 1995). The model used in the study, as illustrated in Figure 1, is derived from the Technology to Performance Chain (TPC). The model postulates the impact of audit competency and digital audit on the effectiveness of an auditor's work performance (outcome).

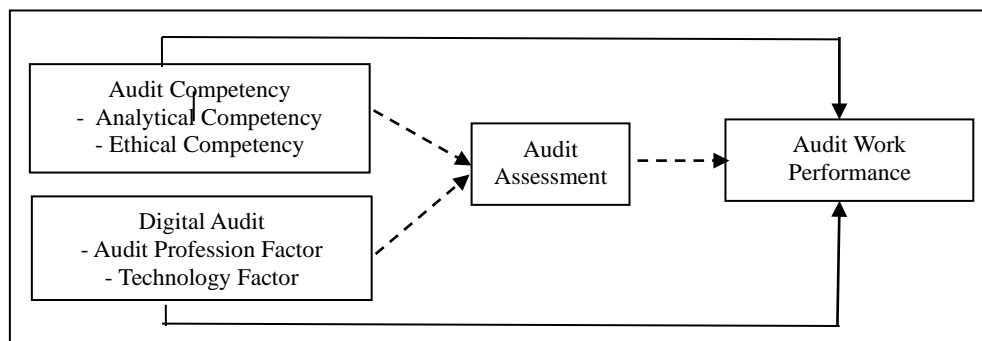


Figure 1: Conceptual Framework

Audit Competency and Audit Work Performance

The auditor's intelligence, education, and training should all contribute value to the firm when evaluating audit competency performance (Wu et al., 2017). The selection of qualified auditors is based on various criteria, including the level of education, years of experience, professional certifications, computer literacy, and communication skills. These talents encompass technical, analytical, appreciative, interpersonal, and organisational qualities. Consequently, the audit profession will enhance its ability to handle intricate audit procedures related to detecting anomalies or exclusions, as well as exercising judgement and professional skepticism throughout audit procedures (Vasarhelyi et al., 2012). Consequently, there exists a direct relationship between the level of audit competency and the effectiveness of audit performance. Thus, the subsequent hypothesis is put forth:

H1: Audit competency positively influences audit work performance.

Digital Audit and Audit Work Performance

Implementing digital audit enhances the dependability and trustworthiness of data by automating and streamlining the audit process, as well as aiding in the examination of transaction details, account balances, disclosures, and data monitoring controls. By utilising digital audit on the information provided by the client's internal audit department, the auditor's assurance in generating audit reports and reliable results is enhanced (Ferri et al., 2020). The utilisation of technology and big data in fraud detection is advantageous due to their increased reliability in providing evidence and indications, surpassing the effectiveness of traditional manual methods (Veerankutty et al., 2018). However, when it comes to putting digital audit into practice, people with no experience, unauthorised access, and a lack of internal controls can pose a serious risk to the business. This can lead to financial inaccuracies (Janvrin et al., 2009). Consequently, there exists a positive association between the use of digital audit and the accomplishment of audit tasks. Thus, the subsequent hypothesis is put forward:

H2: Adoption of digital audit positively influences audit work performance.

Audit Assessment and Audit Work Performance

Given the characteristics of audit assessment procedures, the auditor must strategically organise and execute the audit to ensure a high level of confidence in determining if the financial statements are accurate and not significantly distorted by mistakes or fraudulent activities (Alam et al., 2017). Auditors have the responsibility of supervising the client's internal controls, assessing any issues related to the client's ability to continue operating, evaluating the characteristics of the client's management, and making efforts to identify any activities involving related parties. Furthermore, auditors have to make sure that the audit committee or board of directors are informed of any findings in an efficient manner and effectively communicated (Alam et al., 2017). The growing intricacy of audit assessments might lead to the inefficient utilisation of knowledge, hence hindering the performance of audit work (Kaawaase et al., 2016). As a result, audit task performance and audit evaluation are positively correlated. Thus, the subsequent hypothesis is put forward:

H3: Audit assessment positively influences audit work performance

Audit Competency, Audit Assessment and Audit Work Performance

The matter pertains to comprehending the utilisation of technology for various audit evaluations. The application of Generalised Audit Software (GAS) in audit assessment processes necessitates auditors to possess competence in computer literacy, as well as knowledge and management skills in handling databases (Ahmi & Kent, 2012). Furthermore, the technology acceptance model (Veerankuthy et al., 2018) notes that external elements such as the advance process, user characteristics, organizational characteristics, and audit assessment might inadvertently affect beliefs, attitudes, or intents in technology acceptance behaviour. In order to effectively audit financial accounts, auditors need possess advanced proficiency in Generalised Audit Software (GAS), as the bulk of organisations now rely on technology to document their accounting activities (Thottoli & K.V, 2020). Thus, the subsequent hypothesis is put forth:

H4: Audit assessment mediates the relationship between audit competency and audit work performance

Digital Audit, Audit Assessment and Audit Work Performance

The use of digital audit in the audit assessment is anticipated to offer stakeholders with valuable and superior information to aid in their decision-making process (Mahzan & Lymer, 2014). In recent times, auditors have seen productivity as a crucial factor and have thus started utilising several computer-based technologies to aid in the assessment procedures of audits (Wu et al., 2017). To find any discrepancies or fraudulent activity carried out by the company, the auditor must undertake advanced data analysis and attentively watch the audit trails of the digital audit (Vasarhelyi et al., 2012). The deployment of digital audits ensures higher quality and up-to-date information through efficient transaction data processing and easy accessibility at any given time (Ahmi & Kent, 2012). Thus, the subsequent hypothesis is put forward:

H5: Audit assessment mediates the relationship between digital audit and audit work performance

METHODOLOGY

Survey Instrument Development

The study has modified the dependent variable, which is audit work performance, to align with the research aims (Kim et al., 2016). Two distinct variables are included to evaluate the competency in conducting audits. The audit competency in this study is an independent variable consisting of measurement items that assess analytical and ethical competency. These items were included and modified specifically for this research (Alias et al., 2019). In this study, the measuring item for digital audit was revised to incorporate the impact of adopting digital audit within the organisation (Ahmi & Kent, 2012). Several authors have argued that the demographic characteristics of senior executives can be used to predict their acceptance of IT. Additionally, it has been suggested that their level of education influences their adoption of digital audit (Veerankutty et al., 2018). Using the audit assessments and techniques described by Kaawaase et al. (2016), the audit evaluation was carried out. Every variable has its measurement done on a seven-point Likert scale that goes from "strongly disagree" to "strongly agree."

Participants

This study focuses on conducting analyses at the individual level, with the external auditor being the unit of analysis. The sample was selected from a population of enterprises that are registered as members of the Malaysia Institute of Accountants (MIA). According to the MIA's 2021 data, there were a total of 3,260 registered member firms offering audit services. An auditor certified by MIA serves as a reliable indicator of professionalism and competence, demonstrating a high level of skills and expertise in the accounting and audit domain. This study utilised a probability sampling design by implementing a basic random sampling approach. A simple random sample is a method by which a researcher can select a subset of individuals from a larger population. One of the main benefits of this technique is its simplicity and lack of bias.

The survey was disseminated digitally. For this study, an online survey served as the primary means of data collecting, and a total of 150 external auditors in Malaysia provided credible surveys. Every questionnaire received has undergone verification to guarantee that the collected data is appropriate for analysis. Hair et al. (2011) proposed that a minimum sample size of 50 individuals who responded is necessary for analysis. The G*Power software, a standalone power analysis programme for social and behavioural studies, provides the sample size computation. The final sample size of 150 is significantly larger than the computed sample size of 84 as determined by the G*Power software (Hair et al., 2011). Consequently, this present study has achieved a satisfactory rate for doing the analysis.

Data Analysis

The statistical technique adopted to assess the measurement and structural model was the partial least square (PLS) utilising SmartPLS (Ringle et al., 2020). This tool was chosen because it can handle data without making assumptions about its distribution, and it is suitable for survey research that is not normally distributed. The evaluation of the research model consisted of two main steps. Firstly, the measurement model was examined to check the validity and reliability of the measures. Secondly, the structural model was evaluated in order to

verify the hypothesized connections (Hair et al., 2012).

RESULTS AND DISCUSSION

Evaluation of the Measurement Model

The measuring model was evaluated using two types of assessments: construct validity, convergent validity, and discriminant validity. The evaluation was carried out by Hair et al. (2011) by analysing loadings, average extracted (AVE), and composite reliability, as stated. The degree to which the findings of a measurement align with the basic assumptions that underpin the test is known as construct validity (Zhang et al., 2021). A measurement model is considered acceptable when its internal consistency reliability exceeds the threshold value of 0.708 (Hair et al., 2011). Most of the item loadings above 0.70, indicating statistical significance at a p-value below 0.01, and also met the criteria for a satisfactory fit.

Moreover, a value of 0.5 or above for the Average Variance Extracted (AVE) suggests that the concept demonstrates sufficient convergent validity (Bagozzi et al., 1991; Fornell C & Larcker F D, 1981) and is capable of explaining over 50% of the variability in its indicators. All items had loadings exceeding 0.5, and the composite reliabilities were all above 0.7 (Hair et al., 2011). In comparison to measurement error, the Average Variance Extracted (AVE) measures how much variance is explained by the indicators. In this investigation, the AVE ranged from 0.701 to 0.897. Table 1 presents a summary of the results, indicating that all four constructs are valid measures for their respective constructs.

Table 1: Measurement Model Outcome				
Construct	Measurement Items	Loading Range	AVE	CR
Audit Competency	AC1, AC2, AC3, AC4, AC5, AC6	0.807 - 0.878	0.731	0.942
Digital Audit	AT1, AT2, AT3, AT4, AT5, AT6, AT7, AT8, AT9, AT10	0.767 - 0.914	0.724	0.963
Audit Assessment	AA1, AA2, AA3, AA4, AA5, AA6 AA7, AA8 AA9, AA10, AA11, AA12, AA13, AA14, AA15	0.743 - 0.897	0.701	0.972
Audit Work Performance	FRE, IMP, PRO, USE	0.897 - 0.976	0.897	0.972
Note: SW were deleted due to low loading				

The heterotrait-monotrait (HTMT) technique and Fornell and Larcker's technique were used to evaluate the discriminant validity of the study's components. Discriminant validity is demonstrated in a measuring model when the square root of the AVE for each construct exceeds the correlation between the items and all other items (Fornell C & Larcker F D, 1981). The results of Fornell and Larcker's approach suggest that the square roots of the AVE for each construct, which are highlighted in bold along the diagonal, are higher than the correlation values, which are shown off-diagonally, for all reflective constructs. A further assessment was conducted utilising HTMT procedures, as suggested by Henseler et al. (2015). The findings, presented in Table 2, demonstrate that all the values fell below the specified thresholds of 0.85 for HTMT.85 (Goodboy & Kline, 2017) or 0.90 for HTMT.90 (Gold et al., 2001). This verifies the attainment of discriminant validity, as asserted by Henseler et al. (2015). To sum up, the measurement model showed acceptable degrees of discriminant validity and convergent validity.

Table 2: The Criterion of HTMT (Discriminant Validity)

	Audit Assessment	Audit Competency	Audit Work Performance	Digital Audit
Audit Assessment				
Audit Competency	0.891			
Audit Work Performance	0.695	0.618		
Digital Audit	0.890	0.831	0.737	

Evaluation of the Structural Model

The structural model was evaluated by conducting the five-step procedures as per outlined by Hair et al. (2014). These steps involve examining collinearity concerns, analysing path coefficients, calculating the coefficient of determination (R^2), determining the effect size f^2 , and assessing predictive relevance (Q^2) (Hair et al., 2014). Despite meeting the conditions for discriminant validity, the presence of lateral collinearity might nevertheless lead to misleading results due to its substantial causal effect (Kock and Lynn 2012). The Variance Inflation Factor (VIF) quantifies the degree of collinearity between the indicators. The VIF values for each construct, as shown in Table 3, imply that the results fall short of the suggested threshold of 5 (Sarstedt, Ringle, Henseler, et al., 2014). As a result, this model has no collinearity issues.

Table 3: Evaluation of Lateral Collinearity (VIF)		
Construct	Audit Assessment (VIF)	Audit Work Performance (VIF)
Audit Assessment		4.276
Audit Competency	2.616	3.331
Digital Audit	2.616	3.756

The interaction between variables was examined using the SmartPLS 3 Software algorithm. Additionally, SmartPLS 3 Software bootstrapping with a sample size of 1000 was employed to assess the significance level and t-statistics of all routes. Table 4 presents a summary of the results for R^2 , f^2 , Q^2 , as well as the corresponding t-values. Additionally, it includes the outcomes of the route analysis depicted in Figure 1. The results indicate that the component of effective audit work performance, including of digital audit ($\beta = 0.506$, $p < 0.05$) and audit assessment ($\beta = 0.289$, $p < 0.05$), had a favorable correlation with audit job performance. Nevertheless, the performance of audit work is unaffected by the level of audit expertise. Therefore, the H2 and H3 hypotheses were corroborated.

Table 4: Hypothesis Testing

	Relationship	Std Beta	Std Error	T-Value	P Values	Decision	R^2	f^2	Q^2
H1	Audit Competency → Audit Work Performance	-0.043	0.147	0.295	0.384	Not Supported		0.273	
H2	Digital Audit → Audit Work Performance	0.506	0.154	3.291	0.001	Supported		0.146	
H3	Audit Assessment → Audit Work Performance	0.289	0.161	1.794	0.037	Supported	0.532	0.042	0.440

Note: * $p < 0.005$ = significant

Though the p-value is used to evaluate the statistical significance of the interactions between exogenous and endogenous components, substantive significance—the size of the effect—is not disclosed by the p-value (Sullivan et al., 2021). The effect size magnitude can be measured using the rule of thumb, which assigns values of 0.02, 0.15, and 0.35 to indicate small, medium, and large effects, respectively. Table 4 indicates that the f^2 effect size data demonstrate that only the audit assessment has tiny effect sizes. Hair et al. (2011) have emphasised that establishing the impact size based on the rule of thumb is tricky due to its dependence on factors such as model complexity, research setting, and the specific topic of study (Sullivan et al., 2021).

Furthermore, the predictive validity (Q^2) of the model was evaluated in this study. One technique for evaluating how well exogenous constructs can predict endogenous constructs is the predictive Q^2 test. It employs the blindfolding methodology, as described by Sarstedt, Ringle, and Hair (2014). A positive value of Q^2 for a certain reflective endogenous construct indicates the predictive significance of the path model for a particular

dependent construct (Hair et al., 2019). By implementing the blindfolding technique proposed by Hair et al. (2014), The findings show that there is a moderate degree of predictive relevance in the study model ($Q^2 = 44\%$).

Evaluation of the Mediation Model

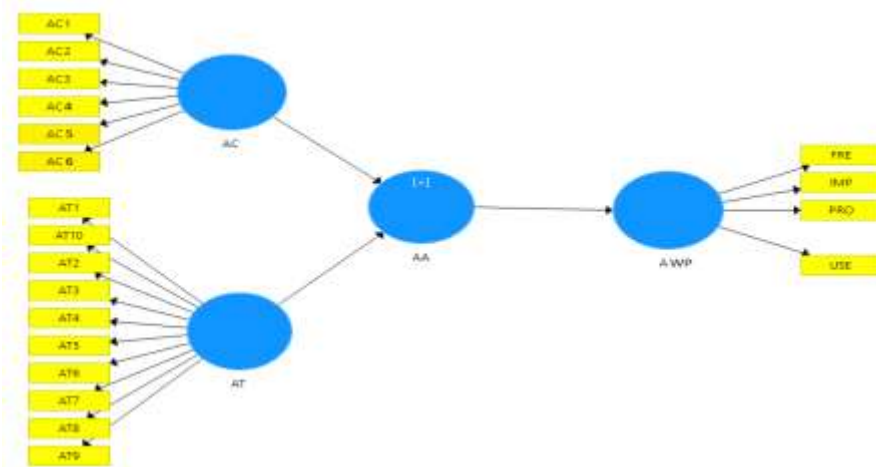


Figure 2: Mediation Model

The results of the bootstrapping analysis show that two indirect effects, $\beta = 0.319$ and $\beta = 0.327$, are statistically significant, with t -values of 5.766 and 5.830, respectively. The bias of the 95% confidence interval for indirect effects. Revised: The intervals [LL = 0.218, UL = 0.429] and [LL = 0.222, UL = 0.435] do not encompass a value of 0, suggesting that there is no mediation (Preacher & Hayes, 2008). Consequently, we can conclude that there is a statistically significant influence from the mediation effects. The outcome of the mediation analysis is displayed in Table 5.

Table 5: Hypothesis Testing on Mediation

	Relationship	Std Beta	Std Error	T-Value	P Values	Confident Interval (BC)		Decision
						LL	UL	
H4	Audit Competency → Audit Assessment → Audit Work Performance	0.319	0.055	5.766	0.000	0.218	0.429	Supported
H5	Digital Audit → Audit Assessment → Audit Work Performance	0.327	0.056	5.830	0.000	0.222	0.435	Supported

Note: $*p < 0.005$ = significant, BC= Bias Corrected, UL = Upper Level, LL = Lower Level

CONCLUSIONS

This study aims to investigate the major factors influencing the use of digital audit and to improve knowledge of the decision-making process surrounding its adoption in this nation. The research concerns are resolved by employing the Technology to Performance Chain Model (TPC). Malaysian external auditors with varying degrees of education, experience, skill, and talent participated in the online survey. The aim was to identify the variables that affect audit firms' usage of technology in the Malaysian setting. The majority of participants considered the variables of system compatibility, auditability, auditors' attitudes towards digital audit, situational assistance, client needs, and the enhancement of auditor work performance to be highly influential.

The results of this research, as previously said, have multiple implications and contribute to the body of knowledge in auditing and accounting. In addition, this research provided new insights into audit evaluation's function as a mediator in the interaction between digital audit and audit competency, as well as its influence on audit job performance and audit task performance. This study is interesting since it is the first to analyse this

subject from an auditing perspective. Expertise in understanding the mediation effect of audit assessment is crucial as it directly impacts the completion of audit job. This aligns with the central idea of the study, which argues that considering audit practice as audit competency leads to a professional approach to evaluating audits, with the goal of ensuring that audit work is carried out with efficiency and effectiveness (Kaawaase et al., 2016). The combination of proficiency and the moderating influence of audit assessment outcomes leads to the implementation of digital audit to enhance audit work effectiveness (Thottoli & K.V, 2020; Veerankutty et al., 2018).

The implementation of digital audit allows auditing firms to adopt a more sophisticated approach to their auditing procedures, hence enhancing the productivity of auditors and the integrity of financial statements. The study's findings suggest a significant favourable link between the installation of digital audit and the performance of audit tasks. The findings show that installing digital audit influences auditor performance significantly and enables audit organizations to make good use of it. Specifically, research has found that technology-related factors and the audit profession have a substantial influence on the adoption of digital audit (Thottoli & K.V, 2020; Widuri et al., 2016). Due to the increasing number of clients and the quick changes in technology, it is necessary to implement innovations like digital audit to meet their needs and improve the effectiveness of auditors' job, as mandated by audit standards (Kim et al., 2016; Widuri et al., 2016).

There are two significant additions made by this study to the body of knowledge on TPC. Initially, it found additional relevant elements that influence the use of digital audit and audit evaluation, which might potentially be integrated into the TPC framework. This study achieved a significant theoretical breakthrough by demonstrating that the audit profession and technological elements influence the execution of audit job. Thottoli and K.V (2020) found that audit competency, specifically in analytical and ethical aspects, plays a crucial role in the adoption of digital audit. This is mediated by audit assessment. However, the competency, assessment, and technology adoption are the three categories of characteristics that the TPC framework has historically viewed as equally important according to Goodhue and Thompson (1995).

Furthermore, this study identified other deficiencies. This study investigated the implementation of all accessible digital audit in Malaysia. Moreover, this study's conclusions are based on a small sample size that came from a single nation, where the study's limited sample size and exclusive emphasis on external auditor perceptions may introduce bias into the results. The results of this study show potential avenues for future research. Researchers ought to concentrate on digital audit that is easily accessible and establish a definitive connection between the utilization of digital audit and certain audit sorts as well as internal auditors. To enhance fraud risk audit judgement, it would be valuable to observe the progression of digital audit usage in the future and make comparisons with other countries and IT environments.

REFERENCES

- Ahmi, A. (2016). IT Adoption by Internal Auditors in Malaysian Public Sector: A Preliminary Finding. 667–673. <https://doi.org/10.15405/epsbs.2016.08.94>
- Ahmi, A., & Kent, S. (2012). The utilisation of generalized audit software (GAS) by external auditors. *Managerial Auditing Journal*, 28(2), 88–113. <https://doi.org/10.1108/02686901311284522>
- AICPA. (2006). “Consideration of fraud in a financial statement audit”, Responses involving the nature, timing, and extent of procedures to be performed to address the identified risk, Statement of Audit Standard. 2006.
- Akbar, M. S., & Suraida, I. (2017). Competence and Professional Care of External Auditor on Information Technology Audit. 21(1), 21–27.
- Alam, T., Hassan, T., & Ferdous, K. (2017). Competency of Shariah Auditors: Issues and Challenges in Pakistan. *Journal of Internet Banking and Commerce*, 22(2), 1–12. <https://doi.org/10.12816/0024798>
- Alias, N. F., Nawawi, A., & Salin, A. S. A. P. (2019). Internal auditor's compliance to code of ethics: Empirical findings from Malaysian Government-linked companies. *Journal of Financial Crime*, 26(1), 179–194. <https://doi.org/10.1108/JFC-07-2017-0066>
- Alkhalifah, A., & D'Ambra, J. (2011). Applying Task-Technology Fit to the Adoption of Identity Management Systems. *Australian Conference on Information Systems*, 31.
- Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing Construct Validity in Organizational Research. *Administrative Science Quarterly*, 36(3), 421. <https://doi.org/10.2307/2393203>

- Bradford, M., Henderson, D., Baxter, R. J., & Navarro, P. (2020). Using generalized audit software to detect material misstatements, control deficiencies and fraud: How financial and IT auditors perceive net audit benefits. *Managerial Auditing Journal*, 35(4), 521–547. <https://doi.org/10.1108/MAJ-05-2019-2277>
- Ferri, L., Spanò, R., Ginesti, G., & Theodosopoulos, G. (2020). Ascertaining auditors' intentions to use blockchain technology: evidence from the Big 4 accountancy firms in Italy. *Meditari Accountancy Research*. <https://doi.org/10.1108/MEDAR-03-2020-0829>
- Fornell C & Larcker F D. (1981). 36. Fornell _ Larcker 1981.pdf. In *Journal of Marketing Research* (Vol. 18, Issue 1, pp. 39–50).
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185–214. <https://doi.org/10.1080/07421222.2001.11045669>
- Goodboy, A. K., & Kline, R. B. (2017). Statistical and Practical Concerns With Published Communication Research Featuring Structural Equation Modeling. *Communication Research Reports*, 34(1), 68–77. <https://doi.org/10.1080/08824096.2016.1214121>
- Goodhue, D. L., & Thompson, R. L. (1995). Task-Technology Fit and Individual Performance. *MIS Quarterly*, 19(2), 213–236.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The Use of Partial Least Squares Structural Equation Modeling in Strategic Management Research: A Review of Past Practices and Recommendations for Future Applications. *Long Range Planning*, 45(5–6), 320–340. <https://doi.org/10.1016/j.lrp.2012.09.008>
- Hair, Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hegazy, M., & Tawfik, M. (2015). Performance measurement systems in auditing firms. *Journal of Accounting in Emerging Economies*, 5(4), 395–423. <https://doi.org/10.1108/jaee-04-2012-0014>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- International Federation of Accountants. (2014). Competence Requirements for Audit Professionals. International Education Standard IES 8, April, 82–98. <http://www.ifac.org/sites/default/files/publications/files/ies-8-competence-requirem-1.pdf>
- Janvrin, D., Lowe, D. J., & Bierstaker, J. (2009). An Investigation of Factors Influencing the Use of Computer-Related. *Journal of Information System*, 23(1), 97–118.
- Kaawaase, T. K., Assad, M. J., Kitindi, E. G., & Nkundabanyanga, S. K. (2016). Audit quality differences amongst audit firms in a developing economy. *Journal of Accounting in Emerging Economies*, 6(3), 269–290. <https://doi.org/10.1108/JAEE-08-2013-0041>
- Kassem, R. (2018). Exploring external auditors' perceptions of the motivations behind management fraud in Egypt – a mixed methods approach. *Managerial Auditing Journal*, 33(1), 16–34. <https://doi.org/10.1108/MAJ-11-2016-1470>
- Kim, H. J., Kotb, A., & Eldaly, M. K. (2016). The use of generalized audit software by Egyptian external auditors: The effect of audit software features. *Journal of Applied Accounting Research*, 17(4), 456–478. <https://doi.org/10.1108/JAAR-10-2015-0079>
- Kock, Ned, and Gary Lynn. 2012. Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems* 13: 546–80.
- Mahzan, N., & Lymer, A. (2014). Examining the adoption of computer-assisted audit tools and techniques. *Managerial Auditing Journal*, 29(4), 327–349. <https://doi.org/10.1108/maj-05-2013-0877>
- Mostafa Mohamed, D., & Hussien Habib, M. (2013). Auditor independence, audit quality and the mandatory auditor rotation in Egypt. *Education, Business and Society: Contemporary Middle Eastern Issues*, 6(2), 116–144. <https://doi.org/10.1108/EBS-07-2012-0035>
- Palmer, K. N., Ziegenfuss, D. E., & Pinsker, R. E. (2004). International knowledge, skills, and abilities of auditors/accountants: Evidence from recent competency studies. *Managerial Auditing Journal*, 19(7), 889–896. <https://doi.org/10.1108/02686900410549411>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <https://doi.org/10.3758/BRM.40.3.879>
- Raudeliuniene, J., Albats, E., & Kordab, M. (2020). Impact of information technologies and social networks on knowledge management processes in Middle Eastern audit and consulting companies. *Journal of Knowledge Management*, 25(4), 871–898. <https://doi.org/10.1108/JKM-03-2020-0168>
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2020). Partial least squares structural equation modeling in HRM research. *International Journal of Human Resource Management*, 31(12), 1617–1643. <https://doi.org/10.1080/09585192.2017.1416655>
- Said Suwaidan, M., & Qasim, A. (2010). External auditors' reliance on internal auditors and its impact on audit fees: An empirical investigation. *Managerial Auditing Journal*, 25(6), 509–525. <https://doi.org/10.1108/02686901011054845>

- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2014). PLS-SEM: Looking Back and Moving Forward. *Long Range Planning*, 47(3), 132–137. <https://doi.org/10.1016/j.lrp.2014.02.008>
- Sarstedt, M., Ringle, C. M., Henseler, J., & Hair, J. F. (2014). On the Emancipation of PLS-SEM: A Commentary on Rigdon (2012). *Long Range Planning*, 47(3), 154–160. <https://doi.org/10.1016/j.lrp.2014.02.007>
- Sullivan, J. H., Warkentin, M., & Wallace, L. (2021). So many ways for assessing outliers: What really works and does it matter? *Journal of Business Research*, 132(March), 530–543. <https://doi.org/10.1016/j.jbusres.2021.03.066>
- Szajna, B. (2008). Empirical Evaluation of the Revised Technology Acceptance Model. *Management Science*, 42(1), 85–92. <https://doi.org/10.1287/mnsc.42.1.85>
- Thottoli, M. M., & K.V, T. (2020). Characteristics of information communication technology and audit practices: evidence from India. *VINE Journal of Information and Knowledge Management Systems*. <https://doi.org/10.1108/VJIKMS-04-2020-0068>
- Tuan Mansor, T. M., Mohamad Ariff, A., & Hashim, H. A. (2020). Whistleblowing by auditors: the role of professional commitment and independence commitment. *Managerial Auditing Journal*, 35(8), 1033–1055. <https://doi.org/10.1108/MAJ-11-2019-2484>
- Vasarhelyi, M. A., Alles, M. G., Kuenkaikaw, S., & Little, J. (2012). The acceptance and adoption of continuous auditing by internal auditors: A micro analysis. *International Journal of Accounting Information Systems*, 13(3), 267–281. <https://doi.org/10.1016/j.accinf.2012.06.011>
- Veerankutty, F., Ramayah, T., & Ali, N. (2018). Information Technology Governance on Audit Technology Performance among Malaysian Public Sector Auditors. *Social Sciences*, 7(8), 124. <https://doi.org/10.3390/socsci7080124>
- Widuri, R., O'Connell, B., & Yapa, P. W. S. (2016). Adopting generalized audit software: an Indonesian perspective. *Managerial Auditing Journal*, 31(8–9), 821–847. <https://doi.org/10.1108/MAJ-10-2015-1247>
- Wu, T. H., Huang, S. M., Huang, S. Y., & Yen, D. C. (2017). The effect of competencies, team problem-solving ability, and computer audit activity on internal audit performance. *Information Systems Frontiers*, 19(5), 1133–1148. <https://doi.org/10.1007/s10796-015-9620-z>
- Zhang, M. F., Dawson, J. F., & Kline, R. B. (2021). Evaluating the Use of Covariance-Based Structural Equation Modelling with Reflective Measurement in Organizational and Management Research: A Review and Recommendations for Best Practice. *British Journal of Management*, 32(2), 257–272. <https://doi.org/10.1111/1467-8551.12415>



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The Mediation Effect of Audit Assessment on Audit Competency and Digital Audit to Audit Work Performance Effectiveness

[Noor, Nurul Fitri Mohd^a](#) ; [Sanusi, Zuraidah Mohd^b](#) ; [Jusoh, Zeti Suzila Mat^a](#) ; [Johari, Razana Juhaida^b](#) ; [Kasbun, Nur Fatin^c](#) [Save all to author list](#)^a Faculty of Business and Accountancy (FABA), Universiti Poly-Tech Malaysia (UPTM), Kuala Lumpur, Malaysia^b Faculty of Accountancy, Universiti Teknologi MARA, Selangor, Shah Alam, Malaysia^c Accounting Section, Business School, Universiti Kuala Lumpur (UniKL), Malaysia [View PDF](#) [Full text options](#) [Export](#) [Abstract](#)[Author keywords](#)[Sustainable Development Goals](#)[SciVal Topics](#)**Abstract**

The relationship between auditor competency and the use of digital audit has been recognized as a potential factor that could enhance audit evaluation and enhance auditor performance. This study examines the direct impact of audit competency and digital audit variables on the efficiency of auditor work performance. It also explores the role of audit assessment as a mediator in these connections. The data used in this study is obtained from external auditors. A survey was conducted in Malaysia to determine the direct impact of audit competence and digital audit on the efficiency of audit work carried out by the external auditor. Based on the findings, it appears that increasing the efficiency and effectiveness of auditors' work performance was largely dependent on their competency as well as their usage of modern digital audits. Further investigation reveals the impact of audit competency and digital audit on audit assessment, which is a necessary process for enhancing the performance

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Behavioral Intention to Use Audit Software using DeLone-McLean and Technology Acceptance Model

Handoko, B.L. , Meinarsih, T. , Sarjono, H.

(2023) *2023 IEEE 9th International Conference on Computing, Engineering and Design, ICCED 2023*

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1

Ahmi, A.
(2016) *IT Adoption by Internal Auditors in Malaysian Public Sector: A Preliminary Finding*, pp. 667-673.
<https://doi-org.uptm.remotexs.co/10.15405/epsbs.2016.08.94>



2

Ahmi, A., Kent, S.
The utilisation of generalized audit software (GAS) by external auditors

(2013) *Managerial Auditing Journal*, 28 (2), pp. 88-113.
doi: 10.1108/02686901311284522

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3

Consideration of fraud in a financial statement audit
(2006)
Responses involving the nature, timing, and extent of procedures to be performed to address the identified risk, Statement of Audit Standard. 2006



4

Akbar, M. S., Suraida, I.
(2017) *Competence and Professional Care of External Auditor on Information Technology Audit*, 21 (1), pp. 21-27.



5

Alam, T., Hassan, T., Ferdous, K.
Competency of Shariah Auditors: Issues and Challenges in Pakistan
(2017) *Journal of Internet Banking and Commerce*, 22 (2), pp. 1-12.
<https://doi-org.uptm.remotexs.co/10.12816/0024798>

- ☐ 6 Alias, N.F., Nawawi, A., Salin, A.S.A.P.
Internal auditor's compliance to code of ethics: Empirical findings from Malaysian Government-linked companies
(2019) *Journal of Financial Crime*, 26 (1), pp. 179-194.
<http://www.emeraldinsight.com/journal/jfc>
doi: 10.1108/JFC-07-2017-0066

View at Publisher
-
- ☐ 7 Alkhalifah, A., D'Ambra, J.
Applying task-technology fit to the adoption of identity management systems
(2011) *ACIS 2011 Proceedings - 22nd Australasian Conference on Information Systems*
<http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1030&context=acis2011>
ISBN: 978-174210239-9
-
- ☐ 8 Bagozzi, R. P., Yi, Y., Phillips, L. W.
Assessing Construct Validity in Organizational Research
(1991) *Administrative Science Quarterly*, 36 (3), p. 421.
<https://doi-org.uptm.remotexs.co/10.2307/2393203>
-
- ☐ 9 Bradford, M., Henderson, D., Baxter, R.J., Navarro, P.
Using generalized audit software to detect material misstatements, control deficiencies and fraud: How financial and IT auditors perceive net audit benefits
(2020) *Managerial Auditing Journal*, 35 (4), pp. 521-547.
<http://www.emeraldinsight.com/info/journals/maj/maj.jsp>
doi: 10.1108/MAJ-05-2019-2277

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-
- ☐ 10 Ferri, L., Spanò, R., Ginesti, G., Theodosopoulos, G.
Ascertaining auditors' intentions to use blockchain technology: evidence from the Big 4 accountancy firms in Italy
(2020) *Meditari Accountancy Research*, 29 (5), pp. 1063-1087.
www.emeraldinsight.com
doi: 10.1108/MEDAR-03-2020-0829

View at Publisher
-
- ☐ 11 Fornell, C, Larcker, F D.
36. Fornell _ Larcker 1981.pdf
(1981) *Journal of Marketing Research*, 18 (1), pp. 39-50.
-

- ☐ 12 Gold, A.H., Malhotra, A., Segars, A.H.
Knowledge management: An organizational capabilities perspective
(2001) *Journal of Management Information Systems*, 18 (1), pp. 185-214.
doi: 10.1080/07421222.2001.11045669
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-

- ☐ 13 Goodboy, A.K., Kline, R.B.
Statistical and Practical Concerns With Published Communication Research Featuring Structural Equation Modeling
(2017) *Communication Research Reports*, 34 (1), pp. 68-77.
<https://www.tandfonline-com.uptm.remotexs.co/toc/rcrr20/current>
doi: 10.1080/08824096.2016.1214121
[View at Publisher](#)
-

- ☐ 14 Goodhue, D.L., Thompson, R.L.
Task-technology fit and individual performance
(1995) *MIS Quarterly: Management Information Systems*, 19 (2), pp. 213-233.
<http://misq.org/misq/downloads/>
doi: 10.2307/249689
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-

- ☐ 15 Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M.
When to use and how to report the results of PLS-SEM
(2019) *European Business Review*, 31 (1), pp. 2-24.
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[View at Publisher](#)
-

- ☐ 16 Hair, J.F., Sarstedt, M., Pieper, T.M., Ringle, C.M.
The Use of Partial Least Squares Structural Equation Modeling in Strategic Management Research: A Review of Past Practices and Recommendations for Future Applications ([Open Access](#))
(2012) *Long Range Planning*, 45 (5-6), pp. 320-340.
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-

- ☐ 17 Hair, J.F., Ringle, C.M., Sarstedt, M.
PLS-SEM: Indeed a silver bullet ([Open Access](#))
(2011) *Journal of Marketing Theory and Practice*, 19 (2), pp. 139-152.
<https://www.tandfonline-com.uptm.remotexs.co/loi/mmtp20>
doi: 10.2753/MTP1069-6679190202
[View at Publisher](#)

-
- ☐ 18 Hair Jr., J.F., Sarstedt, M., Hopkins, L., Kuppelwieser, V.G.
Partial least squares structural equation modeling (PLS-SEM):
An emerging tool in business research

(2014) *European Business Review*, 26 (2), pp. 106-121.
doi: 10.1108/EBR-10-2013-0128

[View at Publisher](#)
-
- ☐ 19 Hegazy, M., Tawfik, M.
Performance measurement systems in auditing firms:
Challenges and other behavioural aspects

(2015) *Journal of Accounting in Emerging Economies*, 5 (4), pp. 395-423.
<https://www.emeraldinsight.com/journal/jaee>
doi: 10.1108/JAEE-04-2012-0014

[View at Publisher](#)
-
- ☐ 20 Henseler, J., Ringle, C.M., Sarstedt, M.
A new criterion for assessing discriminant validity in variance-
based structural equation modeling

(2015) *Journal of the Academy of Marketing Science*, 43 (1), pp. 115-135.
<http://www.springer.com/business/journal/11747>
doi: 10.1007/s11747-014-0403-8

[View at Publisher](#)
-
- ☐ 21 Competence Requirements for Audit Professionals
(2014) , pp. 82-98.
International Education Standard IES 8, April
<http://www.ifac.org/sites/default/files/publications/files/ies-8-competence-requirem-1.pdf>
-
- ☐ 22 Janvrin, D., Bierstaker, J., Jordan Lowe, D.
An investigation of factors influencing the use of computer-
related audit procedures

(2009) *Journal of Information Systems*, 23 (1), pp. 97-118.
<http://aaapubs.aip.org/getpdf/servlet/GetPDFServlet?filetype=pdf&id=JINFE3000023000001000097000001&idtype=cvips&prog=normal>
doi: 10.2308/jis.2009.23.1.97

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-

-
- ☐ 23 Kaawaase, T.K., Assad, M.J., Kitindi, E.G., Nkundabanyanga, S.K.
Audit quality differences amongst audit firms in a developing economy The case of Uganda ([Open Access](#))

(2016) *Journal of Accounting in Emerging Economies*, 6 (3), pp. 269-290.
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doi: 10.1108/JAEE-08-2013-0041

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-
- ☐ 24 Kassem, R.
Exploring external auditors' perceptions of the motivations behind management fraud in Egypt – a mixed methods approach

(2018) *Managerial Auditing Journal*, 33 (1), pp. 16-34.
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doi: 10.1108/MAJ-11-2016-1470

[View at Publisher](#)
-
- ☐ 25 Kim, H.-J., Kotb, A., Eldaly, M.K.
The use of generalized audit software by Egyptian external auditors: The effect of audit software features

(2016) *Journal of Applied Accounting Research*, 17 (4), pp. 456-478.
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-
- ☐ 26 Kock, N., Lynn, G.S.
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(2012) *Journal of the Association for Information Systems*, 13 (7), pp. 546-580.
<http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1615&context=jais>
doi: 10.17705/1jais.00302

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-
- ☐ 27 Mahzan, N., Lymer, A.
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(2014) *Managerial Auditing Journal*, 29 (4), pp. 327-349.
doi: 10.1108/MAJ-05-2013-0877

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-

- ☐ 28 Mohamed, D.M., Habib, M.H.
Auditor independence, audit quality and the mandatory auditor rotation in Egypt

(2013) *Education, Business and Society: Contemporary Middle Eastern Issues*, 6 (2), pp. 116-144.
doi: 10.1108/EBS-07-2012-0035

[View at Publisher](#)

- ☐ 29 Palmer, K.N., Ziegenfuss, D.E., Pinsker, R.E.
International knowledge, skills, and abilities of auditors/accountants: Evidence from recent competency studies

(2004) *Managerial Auditing Journal*, 19 (7), pp. 889-896.
doi: 10.1108/02686900410549411

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- ☐ 30 Preacher, K.J., Hayes, A.F.
Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models

(2008) *Behavior Research Methods*, 40 (3), pp. 879-891.
doi: 10.3758/BRM.40.3.879

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- ☐ 31 Raudeliuniene, J., Albats, E., Kordab, M.
Impact of information technologies and social networks on knowledge management processes in Middle Eastern audit and consulting companies

(2020) *Journal of Knowledge Management*, 25 (4), pp. 871-898.
<http://www.emeraldinsight.com/journal/jkm>
doi: 10.1108/JKM-03-2020-0168

[View at Publisher](#)

- ☐ 32 Ringle, C.M., Sarstedt, M., Mitchell, R., Gudergan, S.P.
Partial least squares structural equation modeling in HRM research

(2020) *International Journal of Human Resource Management*, 31 (12), pp. 1617-1643.
<http://www.tandf.co.uk/journals/titles/09585192.asp>
doi: 10.1080/09585192.2017.1416655

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-
- ☐ 33 Said Suwaidan, M., Qasim, A.
External auditors' reliance on internal auditors and its impact on audit fees: An empirical investigation ([Open Access](#))

(2010) *Managerial Auditing Journal*, 25 (6), pp. 509-525.
doi: 10.1108/02686901011054845

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-
- ☐ 34 Sarstedt, M., Ringle, C.M., Hair, J.F.
PLS-SEM: Looking Back and Moving Forward ([Open Access](#))

(2014) *Long Range Planning*, 47 (3), pp. 132-137.
doi: 10.1016/j.lrp.2014.02.008

[View at Publisher](#)
-
- ☐ 35 Sarstedt, M., Ringle, C.M., Henseler, J., Hair, J.F.
On the Emancipation of PLS-SEM: A Commentary on Rigdon (2012) ([Open Access](#))

(2014) *Long Range Planning*, 47 (3), pp. 154-160.
doi: 10.1016/j.lrp.2014.02.007

[View at Publisher](#)
-
- ☐ 36 Sullivan, J.H., Warkentin, M., Wallace, L.
So many ways for assessing outliers: What really works and does it matter?

(2021) *Journal of Business Research*, 132, pp. 530-543.
<https://www-elsevier-com.uptm.remotexs.co/locate/jbusres>
doi: 10.1016/j.jbusres.2021.03.066

[View at Publisher](#)
-
- ☐ 37 Szajna, B.
Empirical evaluation of the revised technology acceptance model ([Open Access](#))

(1996) *Management Science*, 42 (1), pp. 85-92.
<http://mansci.journal.informs.org/>
doi: 10.1287/mnsc.42.1.85

[View at Publisher](#)
-

- ☐ 38 Thottoli, M.M., K.V, T.
Characteristics of information communication technology and audit practices: evidence from India ([Open Access](#))

(2022) *VINE Journal of Information and Knowledge Management Systems*, 52 (4), pp. 570-593.
<http://www.emeraldinsight.com/journal/vjikms>
doi: 10.1108/VJIKMS-04-2020-0068

[View at Publisher](#)
-
- ☐ 39 Tuan Mansor, T.M., Mohamad Ariff, A., Hashim, H.A.
Whistleblowing by auditors: the role of professional commitment and independence commitment ([Open Access](#))

(2020) *Managerial Auditing Journal*, 35 (8), pp. 1033-1055.
<http://www.emeraldinsight.com/info/journals/maj/maj.jsp>
doi: 10.1108/MAJ-11-2019-2484

[View at Publisher](#)
-
- ☐ 40 Vasarhelyi, M.A., Alles, M., Kuenkaikaew, S., Little, J.
The acceptance and adoption of continuous auditing by internal auditors: A micro analysis

(2012) *International Journal of Accounting Information Systems*, 13 (3), pp. 267-281.
doi: 10.1016/j.accinf.2012.06.011

[View at Publisher](#)
-
- ☐ 41 Veerankutty, F., Ramayah, T., Ali, N.A.
Information technology governance on audit technology performance among Malaysian public sector auditors

(2018) *Social Sciences*, 7 (8), art. no. 124.
<http://www.mdpi.com/2076-0760/7/8/124/pdf>
doi: 10.3390/socsci7080124

[View at Publisher](#)
-
- ☐ 42 Widuri, R., O'Connell, B., Yapa, P.W.S.
Adopting generalized audit software: an Indonesian perspective

(2016) *Managerial Auditing Journal*, 31 (8-9), pp. 821-847.
<http://www.emeraldinsight.com/info/journals/maj/maj.jsp>
doi: 10.1108/MAJ-10-2015-1247

[View at Publisher](#)
-

- 43 Wu, T.-H., Huang, S.-M., Huang, S.Y., Yen, D.C.

The effect of competencies, team problem-solving ability, and computer audit activity on internal audit performance

(2017) *Information Systems Frontiers*, 19 (5), pp. 1133-1148.

[http://www.springeronline.com/sgw/cda/frontpage/0,11855,4-170-70-35673075-0,00.html?](http://www.springeronline.com/sgw/cda/frontpage/0,11855,4-170-70-35673075-0,00.html?detailsPage&contentItemPagecontentItemId=140346&CIPageCounter=CI_FO)

[R_AUTHORS_AND_EDITORS_PAGE1](#)

doi: 10.1007/s10796-015-9620-z

[View at Publisher](#)

-
- 44 Zhang, M.F., Dawson, J.F., Kline, R.B.

Evaluating the Use of Covariance-Based Structural Equation Modelling with Reflective Measurement in Organizational and Management Research: A Review and Recommendations for Best Practice ([Open Access](#))

(2021) *British Journal of Management*, 32 (2), pp. 257-272.

[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1467-8551](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1467-8551)

doi: 10.1111/1467-8551.12415

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