An Examination of the Utilization of Audit Technology in Influencing Audit Job Performance

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ABSTRACT

Many traditional approaches of accounting and auditing assessment have been transformed by the growth of audit technology. This study aimed to identify key factors driving auditors' adoption of audit technology in a developing country, Malaysia, through the lens of the Technology to Performance Chain (TPC) framework. The results of this study are based on a survey conducted in Malaysia with audit firms of varying sizes and were analyzed using the Structural Equation Modelling-Partial Least Square (PLS) statistical tools. The direct and interaction effects of audit technology and situational support variables in improving auditor work performance, as well as the mediation effect of audit assessment on the connections, were investigated in this study. According to the findings, audit technology and situational support play a larger role in the efficiency and effectiveness of auditors' work. Additional analysis provides proof of audit assessment as well. This study makes several contributions to the literature including identifying new influential factors in the TPC framework. This framework has not been widely applied in auditing research and it looks beyond the individual perspective to that of the organization as a whole.

Keywords: audit performance, auditing, audit technology, situational support, audit assessment

ARTICLE INFO

Article History:
Received: 4 October 2021
Accepted: 8 April 2022
Published: 30 April 2022

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INTRODUCTION

Despite the implementation of several governance systems by authorities, the growth in unethical business activities continues to be a major concern for economies around the world. Furthermore, according to PwC's Global Economic Crime and Fraud Survey for 2020, fraud, corruption, and other economic crime grew from 41% in 2018 to 43% in 2020 in Malaysia. As a result, instances of fraud and corruption, whether in the public or private sector, are common and alarming, and members of the general public question the auditor's ability to carry out their responsibilities with care because they believe the responsibility for detecting fraud lies with the auditor (Tuan Mansor et al., 2020).

Audit technology has been developed to aid auditors in executing audits, detecting fraud risk, and enhancing audit quality as a result of the contemporary environment (Bradford et al., 2020; Omoteso, 2012; Razi & Madani, 2013). Today's company decisions require up-to-date, timely, and accurate financial data for strategic planning and forecasting, capital gain, decision-making, and information for external users (Bradford et al., 2020; Chan & Vasarhelyi, 2011; Khattak & Mustafa, 2019). Understanding audit methods, enhanced knowledge, and transferability of expertise are all advantages afforded by audit technology (Omoteso, 2012). The external auditor should be aware of the nature of audit methods and audit assessment in the audit technology environment, as this affects their job performance.

The external auditor's present challenge is to provide audit opinion and judgement using audit technologies and a real-time methodology (Byrnes et al., 2018). The auditor should employ computer-assisted auditing techniques to acquire more detailed evidence concerning data contained in important accounts or electronic transaction files, according to the Statement of Auditing Standards (SAS) No 316.52. (AICPA, 2006). Audit technology may improve the quality of audit evidence provided to auditors by expanding the scope of transactions tested, delivering evidence on time, integrating continuity equations, analysing complex audit processes, or incorporating artificial intelligence into logical and organised auditing (Brown et al., 2007). As a result, it is worthwhile to investigate the use of audit technology by external auditors in executing audit assessments in order to improve audit work performance.

The use of audit technology, which includes a thorough evaluation of factors such as resistance, cost and benefit, project and training, should yield more favourable results. Computer-assisted auditing and techniques (CAATs) were created to act as a bridge between manual auditing and the ultimate future audit. Significant gains will be obtained if deployed and used as planned, leading to organisations being more open to the idea of moving further into the automation sector (Byrnes et al., 2018). The degree to which the external auditor adopts audit technology is influenced by the situational assistance and infrastructure offered by the organisation in this context (Venkatesh & Brown, 2013).

This study intended to fill the gap in the previous literature by evaluating the nature and situational support in the implementation of audit technology that influences auditor job performance. This study contributes in several ways. First, it identified new influential factors for audit technology adoption that can be added into the Technology to Performance Chain (TPC) framework. Second, findings showed that technological factors and situational support factors are important antecedents to audit technology adoption, whereas the TPC framework has tended to treat all three categories of factors that are task characteristic, technology characteristic and individual characteristic as equally influential to performance impact.

The next section presents the literature review of audit technology and situational on audit job performance of effectiveness by auditors. The overview of previous research leads to the development of hypotheses of this study. Next is the discussion on the research methodology used in this study and detailed findings from the survey with respect to each hypothesis. The last section summarises the findings, sets out the limitations of the research and provides implications for future research.

LITERATURE REVIEW

Due to several fraud cases around the world, auditors' performance is being questioned, and evidence reveals that auditors are still hesitant to blow the whistle on their clients or colleagues (Zakaria et al., 2020). Furthermore, the Association of Certified Fraud Examiners (ACFE) revealed in its 2020 report to the nation that just 4% of fraudulent operations were initially uncovered

by external audits. As a result, the function of external auditors is being called into question in terms of their effectiveness and ability to uncover fraud in firms in order to prevent unethical behavior and safeguard public interest. According to the International Standard Auditing (ISA) 200, an external auditor must maintain professional skepticism throughout the audit, acknowledging the possibility of material misstatement due to fraud, but rely on his auditor's prior experience with the entity's management and those charged with governance (International Federation of Accountants, 2014).

The performance of a single person is critical in determining an organization's overall performance. As a result, the business is working hard to find personnel who are dedicated and capable of doing responsibilities as needed (Krishnan et al., 2018). Individual job performance is defined as a person's capacity to carry out his/her responsibilities and obligations using his/her abilities, experience, attitude, and motivation (Liu & Li, 2012; Mohd Sanusi et al., 2018). Other researchers define individual work performance as a result of the action or behaviour of employees at the workplace (Zeglat & Janbeik, 2019).

Furthermore, audit firms require comprehensive and innovative information system with some tools to assist them to perform their audit assessment such as exclusive audit technology like the Audit Command Language (ACL) and Interactive Data Extraction and Analysis (IDEA) for better audit job performance of external auditors (Hegazy & Tawfik, 2015). CAATTs is argued to be an essential instrument for internal auditors in the performance of their audit work and this perception is consistent, in principle, with perceived usefulness as comprised in the performance expectancy construct in Unified Theory of Acceptance and Use of Technology (UTAUT), which discusses the degree to which an individual believes that the use of the audit technology will improve their job performance (Mahzan & Lymer, 2014; Szajna, 2008). The adaptation or innovation which involves the equipment and environment provided by the organization influences the performance and effectiveness of auditors (Hayes & Scharkow, 2013).

Audit Technology

The integrity of financial reporting and the adaptation of audit technology have been researched in developing countries to assure the quality and transparency of financial reporting (Thottoli & Thomas, 2020; Widuri et al., 2016). Auditors can use modern technology to collect a huge amount of real-time data, automate repetitive tasks involving few or simple judgements, and achieve complete, fast, and accurate information assurance (Dai & Vasarhelyi, 2016).

The system was created with the intention of maintaining data integrity, safeguarding assets, allowing organizations to fulfil their objectives, and making full use of resources while gathering and reviewing audit evidence (Tajul et al., 2020; Zainal et al., 2017). Computerized assisted auditing refers to computer tools that extract and analyze data from computer programs to guarantee data integrity, completeness, and validity of information acquired, as well as to discover unusual or unexpected relationships (Braun & Davis, 2003; Ferri et al., 2020). In a technological context, increased auditor productivity and audit function permits (Chaveerug, 2010).

GAS will aid the auditor in detecting any misstatement or fraud in the financial statement by achieving the general audit objectives of accuracy, completeness, ownership, valuation, reliability, categorization, and disclosure of the data supplied by audit software (Ahmi & Kent, 2012; Debreceny et al., 2005). Previous studies have only found audit technology acceptance and uptake in audit duties. As a result, more research should be done to see how the use of audit technology affects an auditor's ability to make better audit fraud judgments.

Situational Support

The extent to which the organization's and external environment's infrastructure and facilities are regarded to impact motivation to implement audit technologies (Venkatesh & Brown, 2013). The adequacy of information on what CAATs can do, assistance from vendors or software providers, and support from senior management in their business are all facilitating conditions that might influence a user's motivation in accepting the CAATs' framework (Shagari et al. 2017; Mahzan & Lymer, 2014).

The battle to change is a universal phenomenon; yet, moderate and methodical progress will likely be more manageable. Pushing forward may eventually result in increased subsequent support for the expansion of automated audit procedures and programs, which might considerably boost the possibilities of reaching future audits (Widuri et al., 2016). In addition to the technical considerations mentioned above, training issues should be addressed during the audit function automation process. Curtis and Payne (2008), for example, claim that, despite their ability to improve the efficiency and efficacy of auditing functions, CAATs are underutilized. As a result, appropriately designed and implemented training programs may help practitioners adopt and use CAATs more fully (Janvrin et al., 2008). To maximize the possibility that auditing staff will take full advantage of the benefits that automated tools can give, adequate training will be a vital component of any audit automation initiative (Halbouni et al., 2016).

The key to a more favorable outcome is to design and implement a strategy that includes a thorough evaluation of issues of resistance, cost-benefit tradeoffs, project scope, and training. CAATs have the ability to serve as a bridge between the manual audit and the final future audit, at the very least. Significant gains will be obtained if deployed and used as planned, leading to organizations being more open to the idea of moving further into the automation sector (Byrnes et al., 2018).

Theory and Hypothesis Development

The conceptual approach for this study is based on Goodhue and Thompson's Technology to Performance Chain (TPC) model (1995). This model explains how technology has an effect on individual performance. When job and technology are utilized in concert, or in other words, when they complement one another, persons will utilize or embrace technology in order to complete their work. This has a beneficial effect on individual performance (Goodhue & Thompson, 1995). This model is the result of a mix of utilization and task technology that fits the current study. Essentially, the model investigates the effects of an individual's aptitude, a characteristic of technology, and a task on an individual's performance. While the technology-to-performance-chain model is extensively utilized in the adoption of information technology, there are few studies in accounting that utilized this approach (Alkhalifah & D'Ambra, 2011; Goodhue & Thompson, 1995).

The model of this study that is to be examined as presented in Figure 1 is an adoption from the Technology to Performance Chain (TPC). The model presents hypothesized between audit technology and situational support on audit job performance (outcome). This study proposes a theoretical on audit job performance based on the Technology to Performance Chain. The theory implemented in this study shows how the audit technology environment and situational support impact an auditor's performance and his behaviour in performing tasks to exercise professional decisions for better audit job performance.

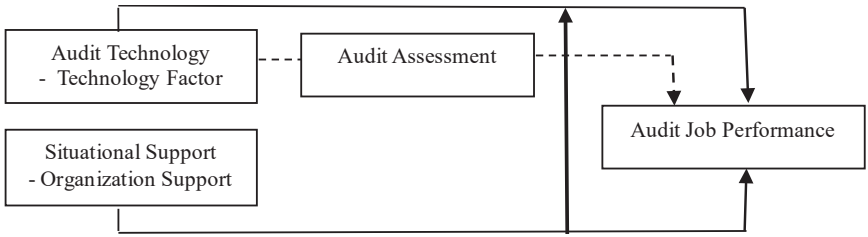

Figure 1: Conceptual Framework

Audit Technology and Audit Job Performance

The adoption of audit technology increases the reliability and integrity of data by automating and simplifying the audit process and by assisting testing of transaction details, account balance, disclosure, and data monitoring. As a result, the quality of information used in decision-making in the audit environment has been predictable and valuable since the audit technology is applied to stakeholders (Chaveerug, 2010). As a result of the application of audit technology to the material supplied by the client's internal audit department, the auditor's confidence in creating audit reports and dependable output increases (Malaescu & Sutton, 2014). It is advantageous in terms of fraud detection since the assistance provided by technology and big data in terms of proof and indication is more dependent than the old or manual method (Veerankutty et al., 2018). However, inexperienced employees, unauthorised access, and a lack of internal controls can pose a significant risk to the company in terms of audit technology adoption, resulting in financial misstatements (Brazel, 2005; Janvrin et al., 2009). Thus, a positive relationship between audit technology and audit job performance is predicted in this paper.

H1: Adoption of audit technology positively influences audit job performance.

Situational Support and Audit Job Performance

According to Tarek et al. (2017), employees can improve their expertise by exchanging information with coworkers (Tarek et al., 2017). Additionally, they will devote their whole efforts to their task if they are happy with their working environment (Kim et al., 2016). As external auditors who work with information technology, it is critical that they have access to cutting-edge technology and equipment. Omoteso (2012) concurred that modern technology can facilitate the completion of difficult jobs. The optimal option is to establish a research centre with enough facilities in which all experts may develop their own abilities in order to improve their work performance (Widuri et al., 2016a). The second hypothesis developed was:

H2: Situational support positively influences audit job performance.

Audit Technology and Audit Assessment

The audit assessment with the assistance of audit technology is expected to deliver high quality and valuable information to stakeholders in their decision making (Chaveerug, 2010). Consequently, productivity has been identified as a critical factor that drives auditors to adopt and deploy various computer-based tools to assist in audit assessment procedures in preparation of the audit report (Ahmi, 2012; Bradford et al., 2020). Thus, there is an increase in auditor confidence in producing audit reports and reliable output due to the application of audit technology from the information submitted by the client's internal audit department (Malaescu & Sutton, 2014). The auditor should execute noble analytics audit assessment and monitor audit trials of the audit technology to identify any discrepancies or fraud by an organization (Chan & Vasarhelyi, 2011). Therefore, the following hypothesis was proposed:

H3: Adoption of audit technology positively influences audit assessment.

Audit Assessment and Audit Job Performance

Due to the nature of audit assessment procedures, the auditor is required to plan and conduct the audit in such a way that reasonable certainty may be obtained regarding whether the financial statements are free of significant misrepresentation due to mistake or fraud (Alleyne et al., 2010). Thus, auditors are responsible for overseeing the client's internal controls and management characteristics, as well as attempting to identify related party activities and ensuring that audit findings are communicated to the board of directors or audit committees (Alleyne & Howard, 2005). Generally, certain audit exams are rated as extremely complicated and tough, whilst others are rated as relatively plain and simple (Mohd-Sanusi & Mohd-Iskandar, 2007). The increasing complexity of audit assessments may result in the ineffective application of knowledge, impairing audit job performance (Mascha & Miller, 2010; Mohd-Sanusi & Mohd-Iskandar, 2007). Therefore, there is a positive relationship between audit assessment and audit job performance.

H4: Audit assessment positively influences audit job performance

Audit Technology, Audit Assessment and Audit Job Performance

The issue is one of comprehending how technology is implemented for various audit examinations. The guaranteed kinds of audit assessment are inapplicable to audit technology deployment (Ahmi & Kent, 2012). The auditor should do noble analytics and monitor audit trials of the audit technology in order to discover any inconsistencies or fraud committed by the company (Chan & Vasarhelyi, 2011). Additionally, according to the technology acceptance model, the audit assessment, user characteristics, organisational factors, and the advanced processes are recognised as external factors that may affect incidentally the beliefs, attitudes, or intentions associated with the technology acceptance behaviour (Szajna, 2008). Therefore, the audit assessment characteristic mediates the relationship between audit technology and audit job performance.

H5: Audit assessment mediates the relationship between audit technology and audit job performance

Audit Technology, Situational Support and Audit Job Performance

Since the application of audit technology, the quality of information used in decision-making in the audit environment has been predicted to be beneficial (Chaveerug, 2010). As a result of the application of audit technology to the material supplied by the client's internal audit department, the auditor's confidence in creating audit reports and dependable output increases (Malaescu & Sutton, 2014). Computer literacy, database management skills, and database management are necessary for the deployment of the Generalized Audit Software (GAS). Thus, the auditor should attend costly and time-consuming training in GAS application offered by the organization's support (Ahmi & Kent, 2012). Thus, organisational support is critical in complicated audit procedures including the examination of anomalies or exclusions from audit procedures that demand judgement and professional scepticism on the part of the audit profession (Chan & Vasarhelyi, 2011). Therefore, situational support should have a moderate role between audit technology and audit job performance of auditors.

H6: The effect of audit technology on audit job performance differs positively between auditors who received strong situational support versus weak situational support.

METHODOLOGY

The study was designed to gather information on the effect of audit technology and situational support on audit job performance by the external auditors in Malaysia. Questionnaires were distributed to external auditors to gather the quantitative data. The analysing data were obtained from primary data for 2021. Quantitative data analysis was done using structural equation modelling-partial least squares (SEM-PLS) using the bootstrapping method.

Measurement

The audit job performance as a dependent variable was adopted and modified to meet the needs of this research (Kim et al., 2016). Individual factors were measured by four indicator variables; one from job relevance, two from output quality, and one from result demonstration. All variables

were measured with the seven-point Likert scale ranging from "strongly disagree" to "strongly agree".

The measurement item for technology and situational support factor was identified and modified according to this study as an influence of audit technology adoption in an organization (Ahmi & Kent, 2012). The demographic characteristics that are more pertinent to adoption decisions were measured. Several authors mentioned that demographic characteristics of senior executives are useful predictors of their acceptance of information technology (IT) and education level influence the adoption of audit technology (Veerankutty et al., 2018).

The independent variable of audit assessment was measured based on audit procedures and practices which were adapted from Kaawaase, Assad, and Kitindi (2016). Accounting and auditing practitioners' literature is clear on accounting and auditing compliance requirements in which financial statements should not be described as complying with International Accounting Standards unless they comply with all the requirements of each applicable standard and each applicable interpretation of the International Financial Reporting Interpretations Committee (Kaawaase et al., 2016).

Participants

External auditors from small, medium, and big audit companies in Malaysia were surveyed. The external auditors were chosen based on their expertise, abilities, and ability in carrying out their assigned responsibilities in order to present users with a high-quality audit report. The questionnaire was distributed electronically. The participants possessed the necessary experience, capabilities, and expertise in the audit technology environment. The data collection instrument for this study was an online survey, and a total of 150 viable surveys were obtained from the external auditors in Malaysia. All questionnaires received were checked to verify that the obtained data can be analysed. Hair et al. (2010) indicated that a minimum sample size of 50 responders is required for analysis. This study attained an acceptable rate for doing the analysis.

The majority of respondents were working at small size audit firms (37%) and big 4 audit firm (35%) levels. Almost about 57% of respondents

were female and the remainder were males (43%). Most of the respondents were junior auditors (45%) who were field auditors who performed technology-enabled auditing, followed by senior auditors (34%) who were involved in supervising and monitoring the work of junior auditors. Almost 77% of the respondents had auditing experiences of 3 years and about 71% of the respondents had experience using audit technology over 3 years and more.

Data Analysis

The structural equation modelling technique was chosen to test the research model, and partial least squares (PLS) using SmartPLS (Ringle et al., 2020) was used as the statistical tool to examine the measurement and structural model because it makes no assumptions about data distibution and survey research is not normally distributed (Abdi et al., 2013). The research model was evaluated first on the basis of its measurement model (validity and reliability of the measurements), and then on the basis of its structural model (testing the hypothesized correlations) (Hair et al., 2012).

RESULTS AND DISCUSSION

Assessment of the Measurement Model

In this study, there were two types of assessments that were performed in assessing the measurement model which included construct validity, convergent validity, and discriminant validity. As recommended by Hair et al. (2016) the assessment was done by examining loadings, average extracted (AVE) and composite reliability (Rönkkö & Evermann, 2013). Construct validity signifies how well the results obtained from the use of measure fit the theories around which the test is designed (Zhang et al., 2021). A satisfactory measurement model tends to have internal consistency and reliability above the threshold value of 0.708 (Hair et al., 2011). However, Hair et al. (2016) contended that with any outer loading values between 0.4 and 0.7 although considered weak, the researchers should carefully examine the effects of item removal on the composite reliability (CR) as well as content validity of the constructs and should only consider for removal from the scale those that when deleting the indicator leads to an increase in the CR. There is an issue with CR values of 0.95 and higher since they signal that the items are

redundant and that there is a chance of undesired response patterns such as a straight line, which leads to inflated correlations between the indicators' error terms and reduces construct validity (Diamantopoulos et al., 2012; Drolet & Morrison, 2001; Hair et al., 2019). If construct reliability is much greater than the specified minimal level, researchers can utilise bootstrap confidence intervals (Aguirre-Urreta & Rönkkö, 2018; Hair et al., 2019). Most of the loading of the items were more than 0.70 (significant at $p < 0.01$) and met the fit criteria.

Furthermore, the AVE value of 0.5 or higher indicates that the construct has achieved adequate convergent validity (Bagozzi et al., 1991; Fornell & Larcker, 1981) and the construct is able to explain more than half of the variance of its indicators. The loadings for all the items were more than 0.5 and the composite reliabilities were all greater than 0.7 (Hair et al., 2011). The AVE measures the variance captured by the indicators relative to the measurement error and the AVE for this study was in the range from 0.701 to 0.897. Table 1 summarizes the results and shows that all 4 constructs were valid measures for the respective constructs.

Table 1: Results of Measurement Model

Construct	Measurement Items	Loading Range	AVE	CR
Audit Technology	AT1, AT2, AT3, AT4, AT 5	0.806 - 0.865	0.714	0.926
Situational Support	SS1, SS2, SS3, SS5, SS6	0.802 - 0.906	0.720	0.928
Audit Assessment	AA1, AA2, AA3, AA4, AA5, AA6 AA7, AA8 AA9, AA10, AA11, AA12, AA13, AA14, AA15	0.741 - 0.896	0.701	0.972
Audit Job Performance	FRE, IMP, PRO, USE	0.896 - 0.976	0.897	0.972

Note: SS4 & SW were deleted due to low loadings

The discriminant validity of the constructs of this study was assessed using the Fornell and Larcker (1981) technique and the heterotrait-monotrait (HTMT) technique. The measurement model has discriminant validity if the square root of AVE of each construct exceeded the correlation between the items and all other items (Fornell & Larcker, 1981). Table 2 shows the results of Fornell and Larcker's technique and indicates that the square roots of the AVE of the construct (represented diagonally and in bold) were higher than the correlation (represented off-diagonally) for all the reflective constructs.

Table 2: Fornell-Larcker Criterion (Discriminant Validity)

	Audit Assessment	Audit Job Performance	Audit Technology	Situational Support
Audit Assessment	0.837			
Audit Job Performance	0.670	**0.947**		
Audit Technology	0.818	0.659	**0.845**	
Situational support	0.853	0.695	0.841	**0.849**

Further assessment using HTMT techniques as suggested by Henseler et al. (2015) was conducted as per Table 3 which specifies that all the values were less than the HTMT.85 value of 0.85 (Goodboy & Kline, 2017) or a HTMT.90 value of 0.90 (Gold et al., 2001), thus specifiying that discriminant validity has been met (Gold et al., 2001; Henseler et al., 2015).

Table 3: HTMT Criterion (Discriminant Validity)

	Audit Assessment	Audit Job Performance	Audit Technology	Situational Support
Audit Assessment				
Audit Job Performance	0.695			
Audit Technology	0.840	0.660		
Situational support	0.897	0.752	0.890	

Assessment of the Structural Model

The assessment of the structural model for this study was analysed using the five-step procedures proposed by Hair et al. (2014) which includes assessment of collinearity issues; path co-efficient; coefficient of determination (R^2); effect size f^2; and predictive relevance (Q^2). Even if the discriminant validity requirements are met, issues on lateral collinearity may mislead the results due to the strong causal effect (Kock & Lynn, 2012). The variance inflation factor (VIF) measures the collinearity among the indicators. The result as per in Table 4 on the VIF values of each construct indicates that the score of VIF is below the recommended threshold value of 5 (Sarstedt et al., 2014) and there were no collinearity issues in this model.

Table 4: Lateral Collinearity Assessment (VIF)

Construct	Audit Assessment (VIF)	Audit Job Performance (VIF)
Audit Assessment		4.198
Audit Technology	1.000	3.911
Situational Support		4.749

The relationship between variables was investigated by running the SmartPLS 3 Software algorithm and was further analysed using the SmartPLS 3 Software bootstrapping of 1000 was applied to test the level of significance and t-statistics for all paths. Table 5 summarizes the results on R^2, f^2, Q^2 and the respective t-values and the results of the path analysis as shown in Figure 1. The results indicated that the effective audit job performance component which consisted of the situational support ($\beta = 0.359$, $p < 0.05$) and audit assessment ($\beta = 0.217$, $p < 0.05$). Then, the result showed a practical audit assessment on the adoption of audit technology ($\beta = 0.818$, $p < 0.05$). However, audit technology did not influence audit job performance. Thus, the H2, H3 and H4 were supported in this study. The R^2 value was above the 0.35 value as recommended by Cohen (1988) indicating that this was a substantial model.

Table 5: Hypothesis Testing

	Relationship	Std Beta	Std Error	T-Value	P Values	Decision	R^2	f^2	Q^2
H1	Audit Technology → Audit Job Performance	0.180	0.180	0.998	0.159	Not supported	0.665	0.024	0..432
H2	Situational Support → Audit Job Performance	0.359	0.151	2.372	0.009	Supported		0.044	
H3	Audit Technology → Audit Assessment	0.818	0.029	28.677	0.000	Supported			
H4	Audit Assessment → Audit Job Performance	0.217	0.122	1.772	0.038	Supported	0.517	0.023	0.426

Note: **p<0.005 = significant*

Although the p-value is used to measure the statistical significance of each relationship between exogenous constructs and endogenous constructs, it is unable to reveal the size of the effect which also refers to substantive significance (Sullivan et al., 2021). To measure the magnitude of the effect size, this study employed the Cohen (1988) rule of thumb which is 0.02, 0.15 and 0.35, representing small, medium and large effects. Based on the

results of f^2 effect sizeas shown in Table 5, audit technology, situational support and audit assessment had small effect sizes. Hair et al. (2010) had highlighted that the effect size is problematic to establish based on the rule of thumb because the effect size depends on the model complexity and research context as well as the research field (Sullivan et al., 2021).

Furthermore, this study tested the predictive relevance (Q^2) of the model. The predictive Q^2 test is a measure to investigate the predictive power of exogenous constructs over endogenous constructs using the blindfolding technique (Geisser, 1974; Stone, 1974). A value of Q^2 bigger than zero for a specific reflective endogenous construct shows the path model's predictive relevance for a particular dependent construct (Hair et al., 2016). By applying the blindfolding procedure as suggested by Hair et al. (2014), the result showed that the research model had medium predictive relevance (Q^2 = 43.2%).

Assessment of Mediation Model

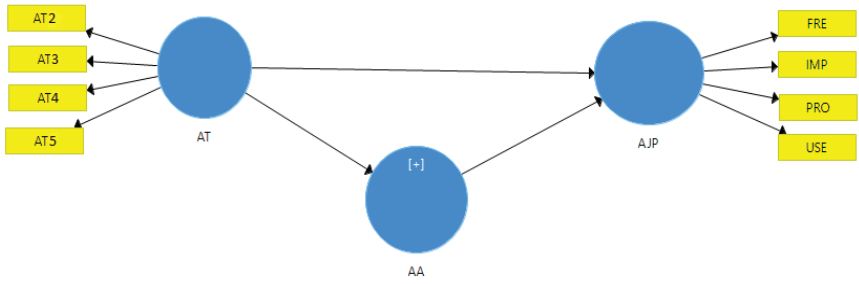

Figure 2: Mediation Model

The bootstrapping analysis as shown in Figure 2 showed that an indirect effect, β = 0.300 was significant with t-value of 3.409. The indirect effects 95% CI Bias Corrected: [LL = 0.100, UL = 0.472], do not straddle a 0 in between indicating that there is mediation (Preacher & Hayes, 2008). Thus, we can conclude that the mediation effects are statistically significant. The result of mediation analysis is presented in Table 6.

Table 6: Hypothesis Testing on Mediation

	Relationship	Std Beta	Std Error	T-Value	P Values	Confident Interval (BC)		Decision
						LL	UL	
H5	Audit Technology → Audit Assessment → Audit Job Performance	0.300	0.088	3.409	0.001	0.100	0.472	Supported

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

Assessment of the Moderation Model

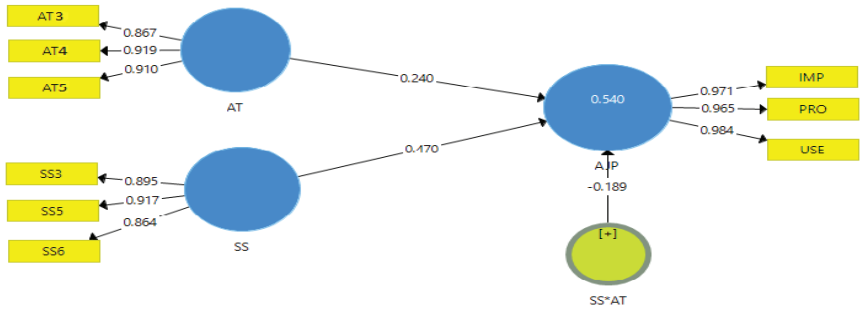

Figure 3: Moderator Model

In moderation analysis, the interaction effect model as shown in Figure 3, the R^2 was 0.540. The R^2 change indicated the addition of interaction term of audit technology and situational support. Based on f^2 of 0.154, we can conclude that the effect size is medium (Cohen, 1988). The results indicated that the effective audit job performance component which consisted of the situational support moderate audit technology ($\beta = -0.189$, $p < 0.05$) that is presented in Table 7.

Table 7: Hypothesis Testing on Moderator

	Relationship	Std Beta	Std Error	T-Value	P Values	Decision	R^2	f^2	Q^2
H6	Situational Support*Audit Technology → Audit Job Performance	-0.189	0.102	1.846	0.033	Supported	0.540	0.154	0.455

Note: **p<0.005 = significant*

CONCLUSION

The purpose of this study was to gain a better understanding of how audit technology adoption choices are made in this country and to address the key issues affecting utilization. The (TPC) paradigm was used to solve these research issues in this study. An online survey was administered to external auditors in Malaysia with varying levels of education, expertise, experience, and abilities in order to ascertain the adoption variables that influenced a firm's usage of audit technology in the Malaysian environment. The majority of participants ranked the following criteria as very influential: system compatibility, fitness for audit assessment, auditors' attitudes toward audit technology, situational assistance, and client demands, and increase auditor work performance.

Numerous findings about audit technology adoption variables were discovered in this study. Specifically, it was discovered that technological and organizational support variables were important for audit technology adoption; yet, these aspects have received less attention in earlier studies. External auditors rely more on encouragement and get unwavering support from businesses when it comes to implementing audit innovation, particularly in developing nations such as Malaysia (Ahmi & Kent, 2012; Kim et al., 2016; Widuri et al., 2016b). While the TPC framework assumes that the influence of technological characteristics, task characteristics, and individual characteristics that are compatible with the technology task on individual performance is relatively equal, our findings indicated that technological factors and situational support were more influential for implementation. As customers expand in size and technology advances at a rapid pace, the necessity to use innovations such as audit technology to better fulfil their requirements and impact the auditor's audit job performance becomes apparent (Thottoli & Thomas, 2020; Veerankutty et al., 2018; Widuri et al., 2016b).

Another intriguing conclusion is that audit technology adoption is mostly a result of management assistance to ease the adoption choice and enhanced audit job performance by auditors (Kim et al., 2016; Raudeliuniene et al., 2020; Veerankutty et al., 2018; Widuri et al., 2016b). Assuming that favorable organizational and technical conditions exist, such as robust policy and support and adequate IT skills for auditors, the choice to buy and use audit technology will follow.

This study contributes two significant pieces to the TPC literature. To begin, prior research has revealed other important criteria for audit technology adoption that may be incorporated into the TPC framework (Ahmi & Kent, 2012; Thottoli & Thomas, 2020; Widuri et al., 2016b). Second, data indicated that technological and situational support variables are significant antecedents of audit technology adoption, although the TPC framework has historically treated all three types of factors equally influential (Goodhue & Thompson, 1995).

Additionally, this study identified many shortcomings. To begin, this study examined the audit companies' use of all forms of audit technology, both publicly accessible and internally produced. Second, the conclusions are based on a small sample size of individuals from a single nation. Third, data may be skewed as a result of participants' replies being adjusted to match what they believe is socially desirable or what they believe the researchers would want to hear. The outcomes of this study hint to future research prospects. Researchers might concentrate on commercially accessible audit technologies and establish a direct relationship between its use and specific sorts of audits. For future research, it would be interesting to examine how audit technology usage has changed and how this compares to other nations and IT systems in order to improve audit job performance.

ACKNOWLEDGEMENTS

This paper and the research behind it would not have been possible without the exceptional support of my supervisors Professor Dr Zuraidah Mohd Sanusi and Associate Professor Dr Razana Juhaidah Johari. Their enthusiasm, knowledge and exacting attention to detail have been an inspiration and kept my work on track. Additionally, the authors would like to thank the support of the Accounting Research Institute HICoE in completing this research. I would like to thank Dr Ahmed Abdullah Saad Al-Dhubaibi, Dr Ataina Hudayati and Pn Nurshuhaida Abd Razak for their knowledge and for sharing this paper's invaluable information. I am also grateful for the insightful comments offered by the peer reviewers of the Asia-Pacific Management Accounting Journal (APMAJ). The generosity and the expertise of one and all have improved this study in innumerable ways.

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