



INTERNATIONAL JOURNAL OF RESEARCH IN SOCIAL SCIENCES & HUMANITIES

An International Open-Access Peer Reviewed Refereed Journal

Impact Factor: 6.064

E-ISSN: 2249 – 4642

P-ISSN: 2454 - 4671

EFFECTS MODERATING ROLE OF INFORMATION TECHNOLOGY IN THE AUDIT PROFESSION

Mohammed Jaber Kadhim, Dr. Mohammed Ali Hassan

The General Education of Qadisiyah Education, Ministry of Education, Iraq

DOI: <http://doi.org/10.37648/ijrssh.v12i04.025>

Paper Received:

05 August 2022

Paper Accepted:

29 September 2022

Paper Received After Correction:

10 November 2022

Paper Published:

18 November 2022



How to cite the article: Mohammed J.K., Mohammed A.S.(2022)

Effects Moderating Role of Information Technology in the Audit Profession, *International Journal of Research in Social Sciences & Humanities*, Oct-Dec 2022 Vol. 12, Issue 4; 457-478

DOI: <http://doi.org/10.37648/ijrssh.v12i04.025>

ABSTRACT

By examining the impact of auditor competence, time budget pressure, and audit complexity using information technology as a modifier of the assumed relationships, this study examines the impact of auditor competence, time budget pressure, and audit complexity on the audit profession. This study included 232 auditors working for professional audit firms in Iraq, with samples taken using the purposeful sampling method from up to 171 people. In addition, a questionnaire was distributed to research participants as the data source for this study. The data in this study were analyzed using the structural equation model (SEM) and partial least squares (PLS) with the Smart analysis tool PLS-SEM 4.0. Audit quality is positively impacted by auditor efficiency and time budget pressure, whereas audit complexity negatively impacts audit quality. Furthermore, understanding information systems can mitigate the impact of competence on the audit profession. In contrast, understanding information systems cannot mitigate the impact of time budget pressures and audit complexity.

Keywords: *audit profession, auditor qualifications, information systems, audit complexity*

INTRODUCTION

The purpose of audits is to ensure that financial statements and reports are reliable and accurate. Including the external auditor, the facility management, and the beneficiaries of the financial reports, this service provides financial reports prepared by the audited facility's management (Van Caneghem, 2004).

A high-quality audit process is essential to the credibility of the auditor's report. Therefore, the facility's management is keen to conduct the audit process with high quality so that the financial statements prepared with their knowledge are accurate. Additionally, beneficiaries want a high-quality audit process to ensure the accuracy and fairness of the data in the audited financial statements on which their

decisions will be based. The audit process must be of high quality to ensure the accuracy and fairness of the audited financial statements on which their decisions will be based (D. Lee et al., 2011; Peecher et al., 2007).

Various organizations regulate the profession to preserve all parties' interests and ensure its application (D. Lee et al., 2011). Audit opinions expressed by the external auditor should always reflect compliance with generally accepted auditing standards to a reasonable degree. Quality control standards are required by all audit offices that issue financial statements to clients, regardless of whether these statements are audited. Advisory and tax services can also implement quality control policies and procedures. It is also possible for audit offices to implement

quality control policies and procedures in advisory and tax services. The model will be based on behavioral and agency theories.

For users to make rational economic decisions, the audit process must be developed, improved, and made more efficient (Ebrahim, 2001). Identifying the pressure faced is vital to developing the audit profession (Hutchins, 2001; Kaziliūnas, 2008). According to studies, obtaining a job free of pressure is difficult.

Individuals respond to these pressures differently depending on their profession and their response to these pressures. Time-balancing pressures are among the pressures he faces as an auditor, which affect his behavior and judgment. Audit offices use time budgets to estimate costs, determine fees, control completion, evaluate performance, and assign individual tasks (Owusu-Ansah, 2000). The study examined the time budget pressure variable, its impact on audit quality, and the variables that modified this relationship (information technology).

Management personnel use audits to examine and evaluate financial activities, whether administrative or operational and to control and protect assets and operations under their responsibility (Harati-Mokhtari et al., 2007; Ruggeri & Rizza, 2017) . Thus, audits provide management with

independent and objective assurances to rationalize their decisions. In addition, audits provide consulting services to improve operations values through independent review, evaluation of operations effectiveness, and objectivity to management. Lastly, audit services ensure the integrity of operations by evaluating risks, controls, and the integrity and quality of administrative and internal systems (Anggadini, 2015; Qatanani & Hezabr, 2015).

A thorough audit ensures the accuracy of the information, reports, and financial statements produced by accounting information systems. It enhances their credibility and reliability and ensures that policies and procedures are followed (Kocsis, 2019). As a result of information technology systems mediating relationships and the impact of auditor efficiency, complexity of tasks, and time budget on audit quality, errors are controlled to prevent manipulation and embezzlement of organizations' assets and safeguard their continuity of work.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Audit Quality

Audit quality refers to the ability of the audit process to detect and report material misstatements in financial statements. It

also refers to reducing information asymmetries between management and the beneficiaries. The level of audit quality is related to the quality of the information contained in the financial statements (D. Lee et al., 2011).

The audit quality of a client's accounting system is defined by De Angelo (1981). For the auditor to find and report a violation, his technical ability must be high, and his independence must be high.

There are two main steps in the auditing process: data collection and data design. Additionally, it has been enhanced to include some primary functions, such as preparing reports.

Sufficient, appropriate, and credible data must be collected about the fairness of financial statements as part of auditing. Considering the limited resources available to the references, the auditor should gather data to reach an informed conclusion (Pomeroy & Thornton, 2008).

Professional auditors, who judge whether evidence is appropriate and reliable, are crucial in this field despite international auditing standards that provide guidelines for appointing auditors. It is critical to understand that the reference to the evidence in terms of its relevance and adequacy, as well as the extent of the implementation of the revised methodology in the review and the

introduction of the updated technology, will now have a small amount of relative weight. The manual reference for specific suitability for the review indicates that if the review of the property is appropriately conducted, there will be a significant increase in the efficiency and effectiveness of the audit process due to the updated methodology and enhanced cutting-edge technologies used in the process of gathering evidence and evaluation (Van Caneghem, 2004). However, some people have considered using technology in the audit process, such as information technology, which allows professional judgment. Thus the efficiency and effectiveness of the audit process can be improved (Ebrahim, 2001).

Auditor Competence

Accounting and auditing standards are among the competencies required for the audit process and knowledge of the entity's environment, programs, and activities. Competence can be viewed from an individual and a team perspective, according to De Angelo (1981). Competence affects success in the workplace or predicts excellent performance (Alyaarubi et al., 2021). Members can provide services with ease and ingenuity by utilizing their understanding and knowledge.

An individual's competence can be defined as an essential characteristic related to the reference criteria. This is, for example, excellent or superior performance at work or in certain situations. Auditor's responsibility is to conduct audits carefully and objectively.

Knowledge and abilities are necessary for auditing to be successful. After understanding the entity being audited, the auditor must work in a team and analyze problems. Therefore, this study targets competent auditors who possess the Auditor character (Anggadini, 2015).

Audit quality has been associated with auditor competence in previous research.

According to Shah (2012), competence affects audit quality. Competent auditors can therefore ensure that audits are of high quality. When the auditor is competent, audit quality can be achieved. Competency is composed of two sub-variables: experience and knowledge. Auditors must continuously improve their knowledge to remain at the forefront of audit implementation. Cameran et al., (2010) report that competence significantly affects audit quality. A competent auditor produces a higher-quality audit. Therefore, the auditor's knowledge and experience are proxy variables for the competence variable. Based on the discussion and

research above, the following hypotheses can be proposed:

H1. The level of audit quality is positively correlated with the level of auditor competence

Time budget pressures

Time budget pressure and deadline pressure are identified as distinct forms of time pressure in audit environments (DeZoort, 1998; Pierce & Sweeney, 2004a; Kelley, Margheim & Pattison, 2005; Gundry, L. 2006). Auditor hours are assigned to firms based on their specific procedures. The difficulty of completing work by the deadline is described as time-deadline pressure by Kelly et al., 2005. A time-limited budget puts pressure on auditors to produce quality reports. Jamarang and Kartini, (2022) found auditors act ineffectively under depressive (timely) conditions, such as signing prematurely, relying too much on client explanations, and failing to investigate related issues Nugrahanto & Alhadi,(2021) found that this led to poor reports and audits. Since auditors often work within deadlines, regulators must establish a time budget for audit activities. Time budget pressure is a characteristic of auditor control systems.

Time budget pressure is always associated with ineffective behavior. Time budget

pressure indicates that the auditor must perform efficiently, or that budget and time constraints are severe JayAanti & Kawisana, (2022). In audit assignments, time budget pressure results from an imbalance between tasks and time.

According to Wagoner and Cashell (1991), the less time available, the greater the significance of transactions that are not tested. Often, auditors are confronted with budget pressures and substantive testing, which reduce the quality of their audits. Auditors who work under time pressure will use behaviors that decrease audit quality. A recent study conducted by JayAanti & Kawisana, (2022) found that auditor quality is negatively affected by time budget pressure. The quality of audits decreases with an increase in time budget pressure.

High time budget pressure can decrease audit quality. As a result of thinning the implemented programs to meet the deadline, the auditor cannot conduct the audit thoroughly and carefully. A positive effect of time budget pressure on audit quality has been found in contrast to Jamarang & Kartini, (2022) research. The following are some hypotheses that can be derived from the above explanation and research:

H3. The level of audit quality is positively correlated with the level of Time budget pressure

Audit complexity

Auditors' situations are complicated because they must satisfy different interests. Auditing becomes increasingly complex as a result of audit difficulty and diverse tasks. The study defined task complexity as a task with many interrelated parts. Audits are complex because auditors are aware of their limited capabilities and the difficulty of the audit task. Irrelevant information, i.e., conflicting information with predictions, is affected by audit complexity (Owusu-Ansah, 2000). Additionally, there is a high level of ambiguity, i.e., different results expected from the reporting entity.

The auditor can integrate problems encountered in the audit that determines the complexity of the audit (Beattie & Fearnley, 1995).

There are two primary purposes for audit complexity tests. The complexity of a task significantly impacts the audit profession's performance. Moreover, understanding the complexity of the task can help the audit team find the most appropriate solution (Vanstraelen & Schelleman, 2017; Warhurst, 2005)

Complexity emerges across primary and secondary tasks. Data cannot be obtained, and the output is unpredictable when tasks are unstructured and ambiguous (JayAanti & Kawisana, 2022). Limited capacities and memories affect decision-maker's perceptions of a task.

In response to Nugrahanto & Alhadi, (2021) research, complexity improves audit quality. According to the study, audit complexity negatively impacts audit quality, contrary to JayAanti & Kawisana, (2022). As audit complexity increases, audit quality decreases, and vice versa, as audit complexity decreases, audit quality improves. According to Jamarang and Kartini, (2022; JayAanti and Kawisana, (2022) research, audit complexity has a positive influence on the quality of examination results, in agreement with (Peecher et al., 2007). In complex audits, the Inspectorate produces better audit quality. These hypotheses can be proposed based on the research and explanation above:

H3. The level of audit quality is negatively correlated with the level of audit complexity

INFORMATION TECHNOLOGY AS MODERATION VARIABLE

Changing technology has caused organizations to change rapidly in recent

years, and any change to the accounting information system depends on data. High-quality data must be collected for the accounting system to generate high-quality information about this organization. The accounting information system is crucial for every organization (Jawabreh, O. A., & Alrabei, A. M. 2012). The system can achieve common product objectives by accepting inputs and outputs through a structured transformation process (Mazza, 2015).

Moderating variables are interconnected components that interact to achieve a goal. Information technology combines people, technology, and organized procedures to provide information for decision/policy making. Supporting operations and management and information technology are combined (Saeidi & Prasad, 2014). It will handle daily transactions, support operations, management, and strategic activities, and deliver reports to certain outside parties. To produce better audit reports, the auditor should have a deep understanding of the information system (Adrian-Cosmin, C. 2015). Information technology is expected to enable auditors to provide information more quickly, accurately, and reliably (Mazza, 2015).

Auditor competence and audit Quality– the mediating role of Information technology.

Through IT, auditors can reduce time and costs, minimize audit risk, and improve the audit process. They can exercise professional judgment with increased confidence (Al-Waeli et al., 2020; Pan & Seow, 2016). Using analytical review programs, the actual and planned numbers may be compared and analyzed, and information can be stored and retrieved using references, for example. This facilitates rapid auditing and accurate implementation (Steinbart et al., 2012). In addition, do the references used to support programs in testing, and opinion formation support professional judgment by the auditor (Almasani et al., 2019). Audit quality is influenced by more than just time, budget pressure, task complexity, and competence. Audit quality is likely to be undermined or strengthened by understanding Information Systems. Technology can change what auditors do and how they work. Due to environmental changes, Ladan Shagari et al., (2017) explains that auditors must master information systems. Auditor information can be presented more quickly, accurately, and reliably with the help of information technology (Qatanani & Hezabr, 2015).

An auditor's understanding of information systems can reduce the complexity of auditing activities, reduce the pressure caused by limited time budgets, and assist inexperienced auditors. IT and controls better understand financial reporting information systems and their constraints. Computers help auditors prepare audit work papers, obtain audit information, detect fraud, create audit reports, store audit files, and analyze data (S.-C. Lee et al., 2016). In light of the explanation and research above, the following hypotheses can be proposed:

H4: Audit Quality and auditor competence interacted by the mediating role of Information technology

Time budget pressure and Audit Quality– the mediating role of Information technology.

Since audits have become routine procedures, offices and audit firms cannot fulfill the needs of groups relying on auditors' reports, which is why information technology is used. In addition to improving the image of auditors and the profession, it improves the efficiency and effectiveness of the audit process (Onodi et al., 2021).

Changing from manual procedures to automated ones is possible with an

understanding of information technology. Additionally, it reduces the negative impact of time budget pressure on audit quality. By understanding the information system, auditors can facilitate auditing activities (to shorten auditing times). A higher-quality audit report can be produced. When budget pressures are high, understanding this information system helps determine the appropriate audit procedures (Nguyen & Nguyen, 2020).

Lee et al., (2016) found that record-keeping quality increased each time budget pressure interacted with the information system by one unit. Time budget pressure can therefore be moderated by the information system. In contrast, Almasani et al., (2019) study found no link between time budget pressure and information systems understanding. Adrian-Cosmin, C. (2015) research shows that auditor experience and understanding of information systems do not affect audit quality (Al-Waeli et al., 2020). By understanding information systems, auditors can streamline audit assignments, reducing time budget pressure's adverse effects on audit quality. Thus, understanding information systems and time constraints enhance audit quality. Therefore, the following hypothesis is proposed.

H5: Audit Quality and Time budget pressure interacted with the mediating role of Information technology

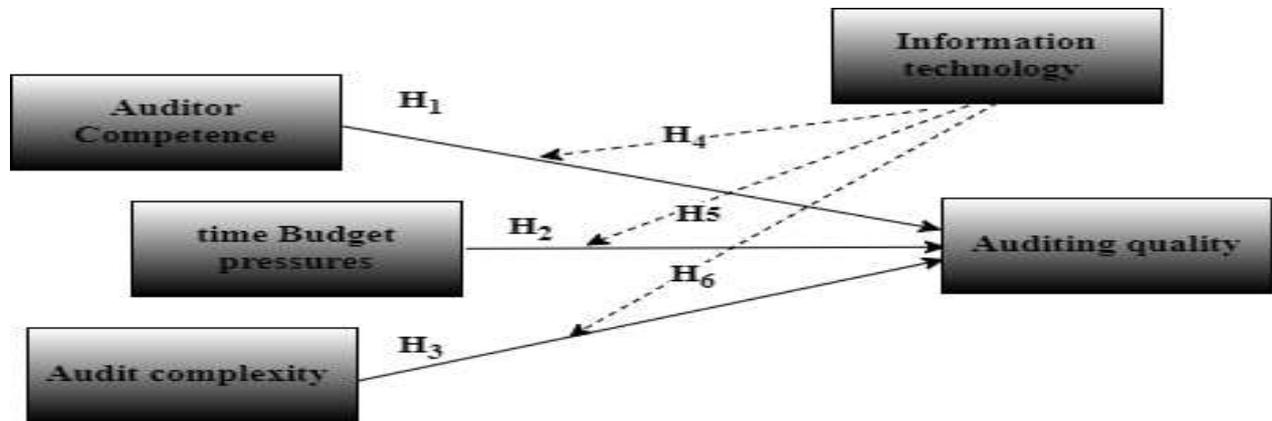
Audit complexity and Audit Quality–the mediating role of Information technology.

An examination requires knowledge of information technology. Having this understanding will make selecting audit procedures easier. By understanding information systems, auditors can determine appropriate audit procedures that reduce auditing complexity and optimize performance. Lee et al., (2016) found that audit complexity does not moderate the impact of understanding information systems. According to Adrian-Cosmin, C. (2015) research, audit complexity and understanding of information systems do not affect audit quality.

Even though auditors face complex audits, their information technology knowledge cannot assist them. This information technology needs to make it easier to assess internal and external risks or to choose audit procedures (Almasani et al., 2019). These hypotheses can be put forward based on the explanation and research above:

H6: Audit Quality and Audit complexity interacted by the mediating role of Information technology

Figure 1 summarizes the relationships in the proposed hypotheses.



Auditor Competence, time budget pressures, audit complexity, and information technology as moderating variables have the most significant impact on auditing quality.

METHODOLOGY

Data Collection and variables measurement

This study examined the cohort of external auditors in Iraq. In this study, purposeful sampling was used to determine the sample size from 171 auditors or examiners in the community. The research sampled auditors with a minimum of ten years of experience.

This research uses primary data. A questionnaire tool is used in this study to collect data by asking respondents questions.

Studies have measured variables on a Likert scale from 1-7 (eg., Al-Waeli et al., 2020; Almaliki et al., 2019; Hla & Teru, 2015; Ruggeri & Rizza, 2017).

Data Analysis

Smart PLS-SEM 0.4 software was used for data analysis in this study. Because the variables studied (independent and dependent) are latent, the author applies PLS-SEM. Indicators can be used to measure the latent variable. In addition, PLS-SEM is a Structural Equation Modeling (SEM) technique that can analyze latent variables.

PLS-SEM compares multiple independent and dependent variables in (Almaliki et al., 2019). A variant-based SEM method, PLS can address specific data problems, including small samples, missing data, and Multicollinearity.

Three parameters can be estimated in PLS-ESM. The weight estimate is used to

calculate the latent variable score. Furthermore, it reflects the means and locations of indicators and latent variables, and thirdly, it reflects the path estimate connecting latent variables and their indicators.

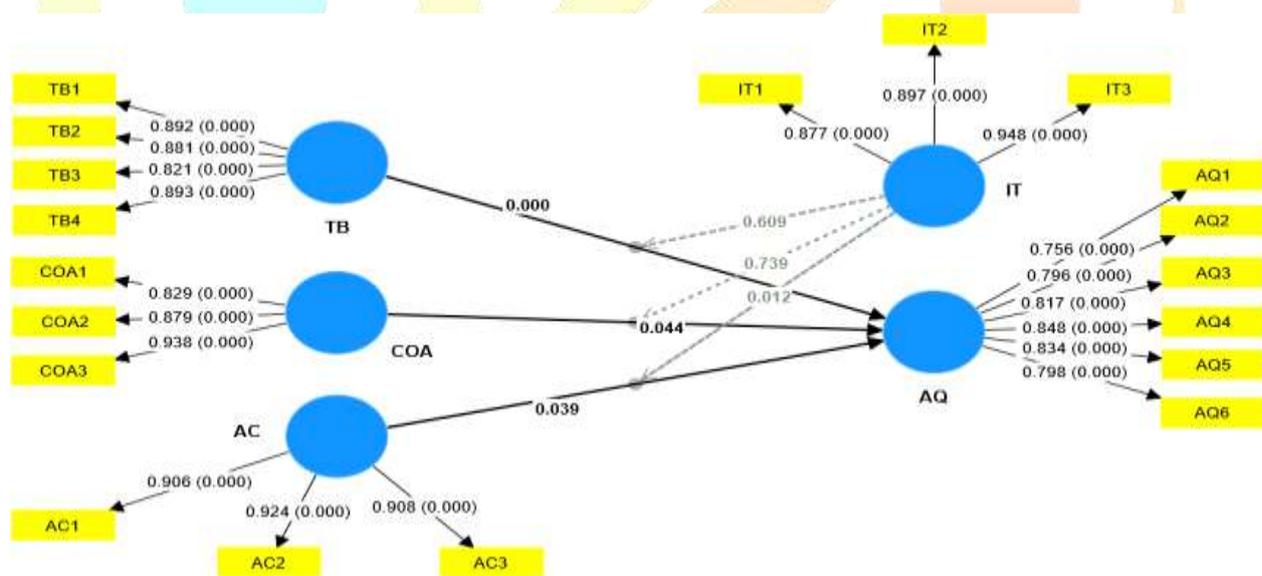
Results of Partial Least Square PLS-SEM, 0.4

A method for determining auditor competence (AC), time budget pressure (TB), and audit complexity (COA) influence audit quality (AQ) was used.

Partial Least Square (PLS), processed with Smart PLS-SEM, 0.4, was used as a moderating variable. PLS is the overall model of measurement, influence, and structural models.

In influence model testing, partial least squares - structural equation modeling is used as a first-order approach. Figure 2 shows the results of the overall PLS-SEM,0.4 analysis in the form of a PLS model diagram.

Figure 2 the estimated output of Smart PLS-SEM 0.4 for structural model testing



Evaluation of measurement model

The reflective outer model is evaluated based on 3 (three) criteria, namely convergent validity, discriminant validity, and composite reliability. Explanation of the evaluation of the outer model, as follows:

Convergent Validity

Indicators with high loading values are related to first-order constructs. All indicators with loading factors above 0.70 reflect first-order constructs. Based on the test results, the strength of the indicator describes the first-order structure.

A loading threshold of 0.70 will be used in this study. Table 1 indicates that all indicators have loading factors above 0.70, so all indicators are valid. The construct loading factor must be greater than 0.70. The indicators and constructs are well correlated.

Table 1 loading Factors – Matrix of variables adequacy

Construct	AC	AQ	COA	IT	TB
AC1	0.906				
AC2	0.924				
AC3	0.908				
AQ1		0.756			
AQ2		0.796			
AQ3		0.817			
AQ4		0.848			
AQ5		0.834			
AQ6		0.798			
COA1			0.829		
COA2			0.879		
COA3			0.938		
IT1				0.877	
IT2				0.897	
IT3				0.948	
TB1					0.892
TB2					0.881
TB3					0.821
TB4					0.893

Discriminant Validity

Correlation value between discriminant validity and first-order construct. Assume the structural indicators reflect the first-order structure. Thus, these indicators must correlate more strongly with each other than with other first-order constructs. All first-order constructs were declared valid based on table 2 and table 3. Indicator and first-order construct correlation values are greater than other first-order constructs, demonstrating this.

Table 2 Discriminant Validity HTMT- Matrix

	AC	AQ	COA	IT	TB
AC					
AQ	0.475				
COA	0.302	0.335			
IT	0.430	0.604	0.908		
TB	0.344	0.668	0.635	0.763	

Table 3 discriminant validity Fronell-larcker criterion

	AC	AQ	COA	IT	TB
AC	0.809				
AQ	0.430	0.813			
COA	0.302	0.604	0.883		
IT	0.387	0.543	0.798	0.908	
TB	0.313	0.600	0.635	0.819	0.972

Composite Reliability

An indicator's composite reliability value measures its stability and internal consistency. A stable and consistent outer model must have a composite reliability value above 0.70 ($\beta > 0.70$). PLS analysis shows that **CR** is higher than 0.70 in all outer models. The outer model in the study has reasonable internal stability and consistency.

Table 4 constrict reliability and validity

Construct	Alpha	CR (rho_a)	CR (rho_c)	AVE
AC	0.900	0.909	0.937	0.833
AQ	0.894	0.896	0.919	0.654
COA	0.859	0.895	0.914	0.780
IT	0.893	0.907	0.933	0.824
TB	0.895	0.899	0.927	0.761

Evaluation of Structural Model or Inner Model

Testing the measurement model is followed by testing the structural model. A path relationship test and R Square (R²) are used to evaluate the structural model, including the significance of the moderating variable. R² measures how much the independent variable affects the dependent variable. Table 5 shows the R² value. The interaction effect can also be seen to determine what contribution the moderating variable makes.

Table 5 testing R Square and R-square adjusted

Construct	R-square	R-square adjusted
AQ	0.530	0.519

As shown in Table 4, Audit Quality has a R-Square of 0.530. According to these results, 53% of changes in audit quality can be explained by AC, BT, and COA, while the remainder is explained by other factors.

Research variables can be related based on the significance of the estimated parameters. Output Path Coefficients provide the basis for testing the hypothesis. Figure 2 and table 5 show the estimated output for structural model testing.

Simulated PLS-SEM 0.4 is used to test each hypothesized relationship. In this case, bootstrapping is used. Bootstrapping also minimizes the problem of abnormal data. Based on the Smart PLS-SEM 0.4 analysis, the bootstrapping test results are as follows:

Table 6 Smart PLS-SEM 0.4 results for the direct effect

Construct	Path Coefficient	Beta	Std. Error	t-statistic	P values
AC -> AQ	0.145	0.137	0.07	2.063	0.039
TB -> AQ	0.335	0.337	0.079	4.248	0.000
COA -> AQ	-0.126	0.134	0.063	2.015	0.044

Smart PLS-SEM 0.4 analysis results for the hypothesis

H1: Effect of Auditor Competency (AC) on Audit Quality (AQ)

Table 6 shows that the path coefficient value of the competency (AC) variable is 0.145. At the level of significance 0.05, this value indicates that AC affects AQ positively.

Auditors must analyze problems, work in a team, and understand the entity. The auditor will be able to detect errors more quickly, finish audit tasks more promptly, and classify errors based on audit objectives and accounting systems more quickly. Thus, audit tasks can be performed with minimal error.

Audit tasks will be efficiently performed if the auditor is competent, and vice versa. As a result, the auditor will have difficulties carrying out his duties, resulting in low audit quality. Testing this hypothesis agrees with De Angelo's belief that the auditor's ability to find misstatements depends on his or her understanding (competence). According to this study, auditor competence significantly affects audit quality, with auditors receiving adequate education, training, and certification. According to Lee et al., (2011) competence affects audit quality. Audit quality will improve by increasing auditor competence.

The results of this study also align with the findings of Van Caneghem, (2004) that the higher the level of competence, the better

the audit quality. This study also supports the behavioral theory that a competent auditor will ultimately have a positive performance evaluation. Affects the behavior of auditors, which will then affect audit quality.

H2: Impact of time budget pressure(TB) on audit quality (AQ)

According to the path coefficient test in table 6, the time budget pressure variable has a path coefficient of 0.335. The significance level is 0.05 ($0.000 < 0.05$). Time budgeting positively impacts audit quality (AQ).

Despite high budget pressure, audit quality remains high. Despite being under time and budget pressure to complete their audit assignments, they must maintain audit quality (Otley & Pierce, 1996).

By mastering the audit subject, all members of the financial control team can deliver the financial control team's mission. The auditor will respond to time budget pressure in two ways, namely functionally and dysfunctional, according to the current theory of behavior, which is the behavioral theory. Therefore, time budget pressure can influence auditor behavior, resulting in lower audit quality (De Zoort & Lord, 1997). The study found auditors use audit techniques efficiently and work harder (Otley & Pierce, 1996; & Coram, 2003). Lee et al., (2016) found

that time budget pressure reduced audit quality.

Time budget pressure decreases audit quality. Consequently, the greater the pressure on the auditor, the higher the audit quality.

H3: The Impact of audit complexity (COA) on audit quality (AQ)

Table 6 shows that audit complexity (COA) reduces audit quality (AQ) based on statistical calculations. According to the path factor significance test on the structural model, the path parameter for the time budget pressure variable is (-0.126). At the 0.05 significance level, this value is significant.

A complex audit negatively impacts its quality; the complexity can be attributed to planned unstructured tasks and information that doesn't support the audit. Since auditors do not only audit tasks, but also other tasks, audit complexity arises when tasks are complex or changed.

Similarly, Lee et al., (2016) found that the audit complexity variable negatively impacts audit quality. Audit complexity positively affects audit quality, contrary to previous research. Audit quality increases as audit complexity increases.

To fulfill responsibilities to stakeholders, the auditor must provide professional opinions on financial statements. However, the auditor also tries to satisfy the

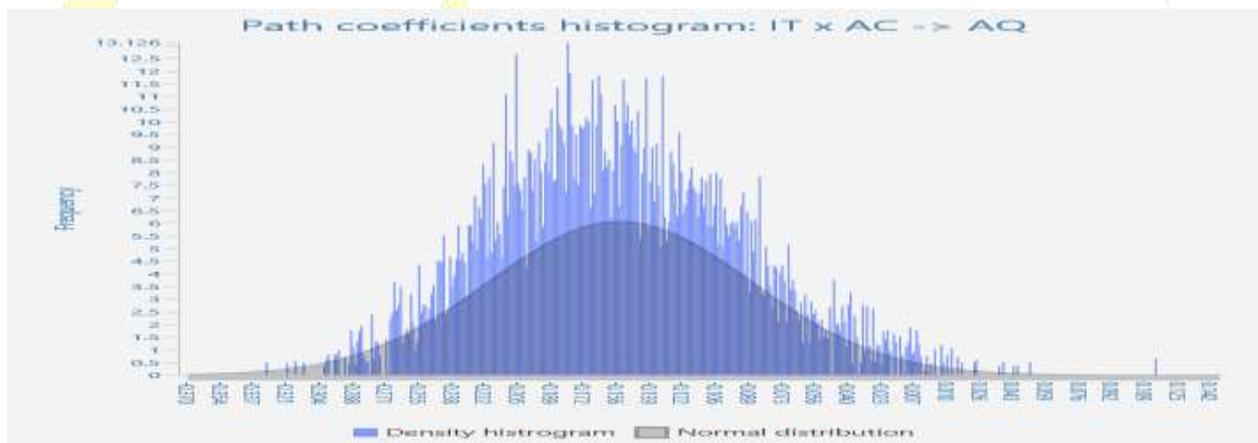
manager. According to behavioral theory, auditors exposed to high levels of complexity tend to malfunction, resulting in poor performance.

Effects Role of moderating effect

H4: The effect of Auditor Competency on audit quality is moderated by the information technology

Based on table 7 and figure 3, quality auditors can improve their efficiency by understanding information technology. Based on the path parameter significance test on the structural model, 0.165 is evident. At the significance level of 0.05, understanding information technology strengthens the auditor's competence, improving audit quality

Figure 3 path coefficient of IT x AC -> AQ



Technology can change how auditors work. An understanding of information systems can help inexperienced auditors deal with environmental changes. Steinbart et al., (2012) state that auditors must master information techniques. Almasani et al., (2019) stated that the interaction of auditor experience and an understanding of information systems does not affect audit quality, contrary to this study.

Information systems can be understood when individuals use technology routinely. Information techniques are integrated into each job based on individual choices and organizational delegations to determine audit quality. The auditor must exert considerable effort to achieve a high-quality performance appraisal.

Table 7 Smart PLS-SEM 0.4 results for the moderating effect

Construct	Path Coefficient	Beata	Std. Error	t-statistic	P values
IT x AC -> AQ	0.165	0.154	0.066	2.51	0.012
IT x TB -> AQ	-0.038	-0.042	0.073	0.512	0.609
IT x COA -> AQ	-0.020	-0.031	0.059	0.333	0.739

H5: Effect of Time Budget Pressure on Audit Quality Moderated by Information technology.

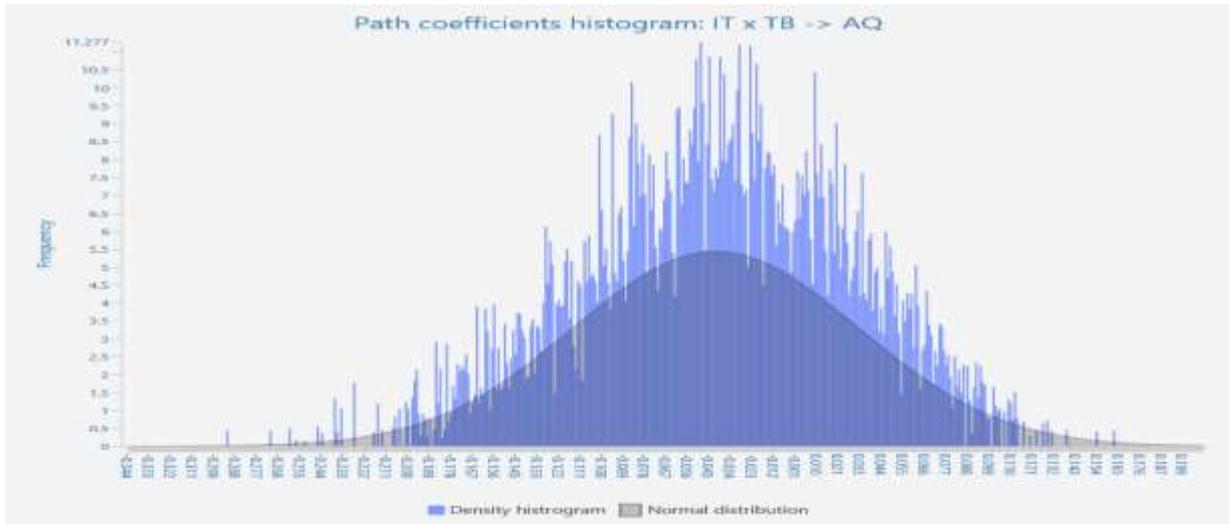
Table 7 and figure 4 show that understanding information technology does not increase time budget pressure on quality. Path coefficient significance test results on the structural model show a value of -0.038 for the path coefficient. This value is insignificant at a 0.05 level of significance ($0.609 > 0.05$).

Limited time will not allow the auditor to produce a quality audit report. Information systems help in shortening audit time and selecting appropriate audit procedures. IT only facilitates the work of auditors on audit tasks, among which is reducing processing time. Deviant and Badera (2017) found that information systems can moderate the effect of time budget pressure on audit quality.

Nevertheless, this study confirms the findings of Almasani et al., (2019), who found no interaction between time budget pressure variables and moderating understanding of information systems. The behavioral theory explains how time and budget pressures affect audit quality. To understand information systems, individuals must understand how technology is used to complete routine tasks. Individual choices or organizational mandates affect the degree to which information systems are integrated into every job (Al-Waeli et al., 2020).

IJRSSH

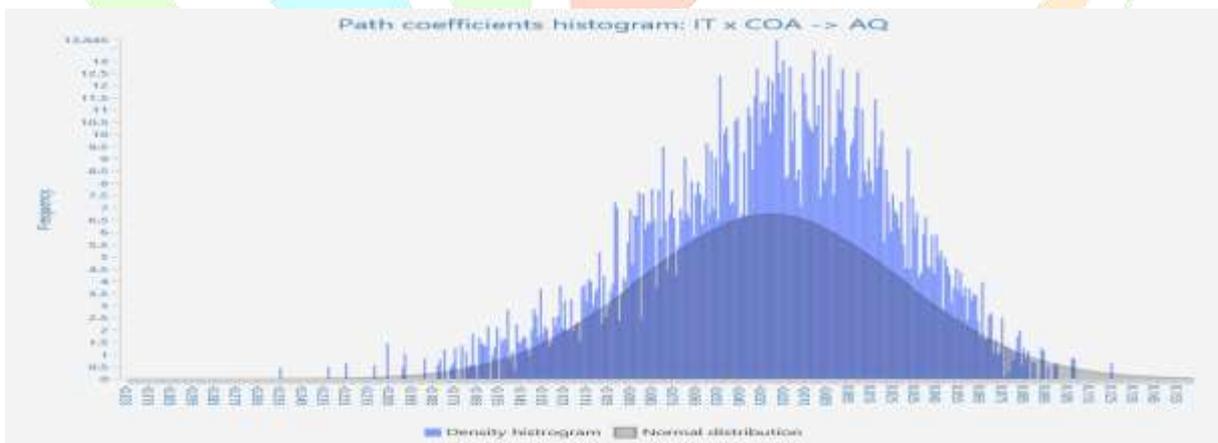
Figure 4 path coefficient of IT x TB -> AQ



H6: Effect of Audit Complexity on Audit Quality Moderated by Information technology

Figure 5 and table 7 show that understanding information technology does not moderate audit quality complexity. According to the path coefficient significance test on the structural model, the path coefficient value is -0.020. The value is insignificant at 0.05 ($0.739 > 0.05$).

Figure 5 path coefficient of IT x COA -> AQ



Information technology does not moderate the relationship between audit complexity and quality. Although auditors often face complex audits in carrying out their duties,

they cannot conduct the audit using their knowledge of the information system. As a result, understanding this information system makes identifying the audit

procedure and identifying internal and external risks difficult. As Almasani et al., (2019) found, understanding information techniques do not moderate the relationship between audit complexity and audit quality. Audit complexity and information systems impact audit quality according to behavioral theory. Understanding information systems is related to individual behavior to use technology in completing routine items, namely how far technology is integrated into every job, either due to individual choice or mandate from the organization, will affect audit quality (Hla & Teru, 2015).

CONCLUSION LIMITATIONS AND FUTURE DIRECTIONS

According to the research, audit quality is positively impacted by the auditor's competence.

In addition to competent auditors, time constraints and budget pressures improve audit quality. Audit topics are repeated yearly, so the auditor's work area is determined based on these topics. This study demonstrated that complexity negatively affects auditing.

Technology can change how auditors work and what they do if they understand information systems and the difficulty level of audit tasks.

Audit quality cannot be mitigated by understanding information systems. Auditors can only perform an audit task with the help of an information system. Shortening the processing time is one of them.

Audit complexity cannot be mitigated by understanding information systems. As a result, it is difficult to understand how internal and external risks impact audits and define audit procedures using this information system.

This research limits that the variables studied in this study have little effect on the quality of audit results. This research data is generated from the tool based on the perception of the respondent's answers. Further research can add additional variables that can be predicted to influence the quality of audit results, such as auditor ethics, auditor experience, and reward as intermediate variables. Qualitative approaches are needed to support conclusions since respondents' perceptions don't reflect their actual situation. Observations can be made in an institution where research is conducted.

The financial control team can improve audit quality by providing auditors with work according to their areas of expertise.

Audit training and seminars related to information systems will help the auditor understand and master information

systems. This increased understanding will help reduce the complexity of audit assignments to assist the auditor in producing quality reports.

Financial support and sponsorship: Nil

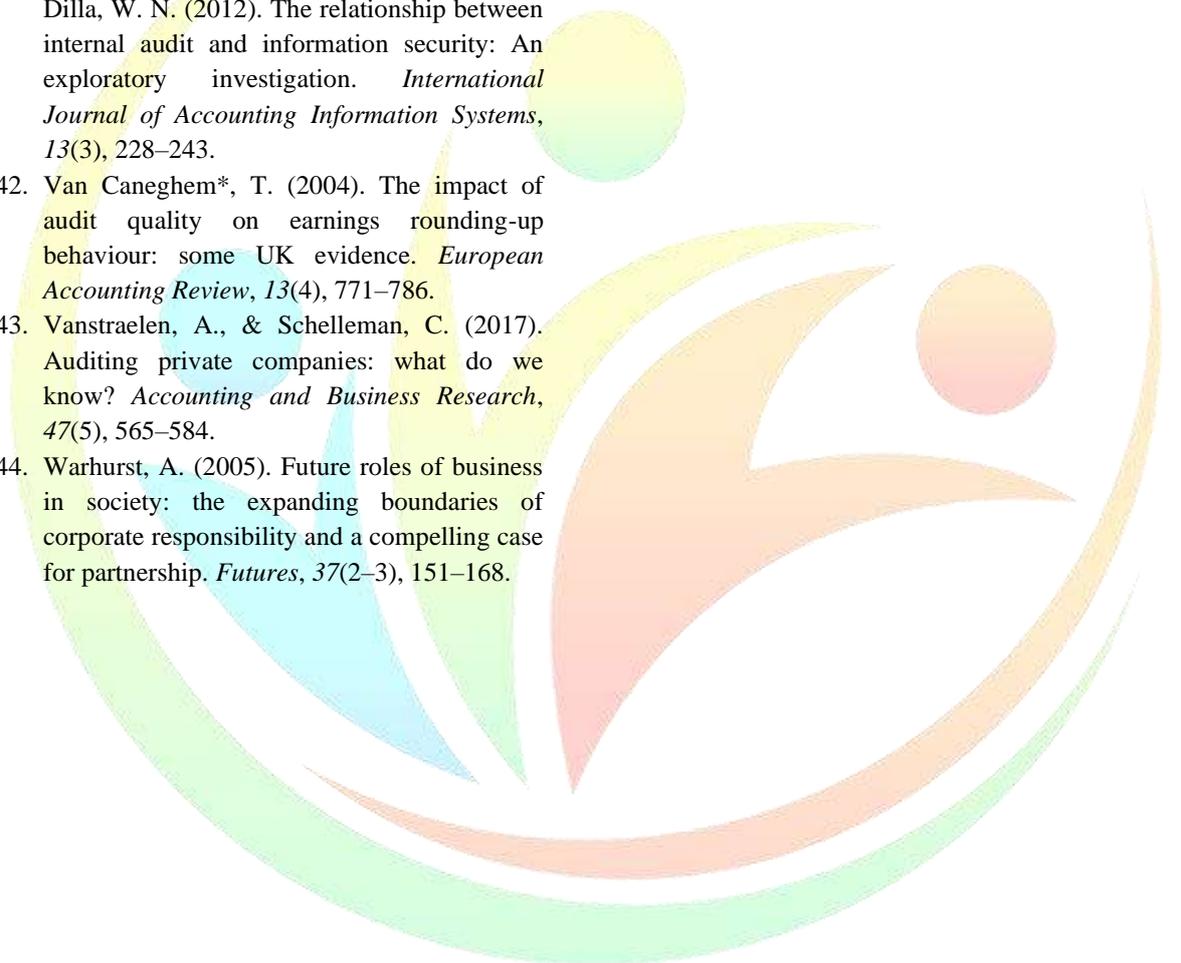
Conflict of Interest: None

REFERENCES

- Adrian-Cosmin, C. (2015). Accounting information system-qualitative characteristics and the importance of accounting information at trade entities. *Annals-Economy Series*, 2, (1), 168-174.
- Al-Waeli, A. J., Hanoon, R. N., Ageeb, H. A., & Idan, H. Z. (2020). Impact of accounting information system on financial performance with the moderating role of internal control in Iraqi industrial companies: An analytical study. *Jour of Adv Research in Dynamical & Control Systems*, 12(8), 246–261.
- Almaliki, O. J., Rapani, N. H. A., Khalid, A. A., & Sahaib, R. M. (2019). Structural equation model for the relationship between accounting information system and internal audit effectiveness with moderating effect of experience. *International Business Education Journal*, 12, 62–82.
- Almasani, A. A., Azam, S. F., Ahmed, S., & Yusoff, S. (2019). The Mediation Effect of Audit Quality on the relationship between Auditor-Client Contracting Features and the Reliability of Financial Reports in Yemen. *International Journal of Business Society*, 3(10), 58–69.
- Alyaarubi, H. J., Alkindi, D. S., & Ahmed, E. R. (2021). Internal Auditing Quality and Earnings Management: Evidence from Sultanate of Oman. *Journal of Governance and Integrity*, 4(2), 115–124.
- Anggadini, S. D. (2015). The effect of top management support and internal control of the accounting information systems quality and its implications on the accounting information quality. *Information Management and Business Review*, 7(3), 93–102.
- Beattie, V., & Fearnley, S. (1995). The importance of audit firm characteristics and the drivers of auditor change in UK listed companies. *Accounting and Business Research*, 25(100), 227–239.
- Cameran, M., Moizer, P., & Pettinicchio, A. (2010). Customer satisfaction, corporate image, and service quality in professional services. *The Service Industries Journal*, 30(3), 421–435.
- Coram, Paul, Ng, Juliana dan Woodliff, David. 2003. A Survey of Time Budget Pressure and Reduced Audit Quality Among Australia Auditors. *Australia Accounting Review* .13(1): h: 38 – 44
- De Angelo, L. (1981). Auditors Size and Audit Quality. *Journal of Accounting and Economics*, h :183-199.
- DeZoort, T. (1998). Time pressure research in auditing: Implications for practice. *The Auditor's Report*, 22, pp. 11–13.
- Ebrahim, A. (2001). Auditing quality, auditor tenure, client importance, and earnings management: An additional evidence. *Rutgers University*, 1–20.
- Gundry, L. (2006). Dysfunctional Behavior in the Modern Audit Environment: The Effect of Time Budget Pressure and Auditors' Personality Type on Reduced Audit Quality Practices (Unpublished Masters thesis). University of Otago, Dunedin, New Zealand
- Harati-Mokhtari, A., Wall, A., Brooks, P., & Wang, J. (2007). Automatic identification system (AIS): Data reliability and human error implications. *Journal of Navigation*, 60(3), 373–389. <https://doi.org/10.1017/S0373463307004298>
- Hla, D., & Teru, S. P. (2015). Efficiency of accounting information system and performance measures. *International Journal of Multidisciplinary and Current Research*, 3(2), 976–984.
- Hutchins, G. (2001). The state of quality auditing. *Quality Progress*, 34(3), 25.
- Jamarang, S., & Kartini, G. T. P. (2022). Effect of Time Budget Pressure and Audit Complexity on Audit Quality with Management Intervention as Moderating Variable. *Journal of Positive School Psychology*, 7463–7472.
- Jawabreh, O. A., & Alrabei, A. M. (2012).

- The impact of accounting information systems in planning, controlling, and decision-making processes in Jodhpur Hotels. *Asian Journal of Finance & Accounting*, 4,(1), 173-188.
19. JAYANTI, L. G. P. S. E., & KAWISANA, P. G. W. P. (2022). The Effect Of Audit Complexity Of Budget Pressure Time And Auditor Experience On Audit Quality With An Understanding Of Information Systems As A Moderate Variable. *Journal of Tourism Economics and Policy*, 2(2), 93–97.
 20. Kaziliūnas, A. (2008). Problems of auditing using quality management systems for sustainable development of organizations. *Technological and Economic Development of Economy*, 14(1), 64–75.
 21. Kelley, T., Margheim, L. & Pattison, D. (2005). An empirical analysis of the effects of auditor time budget pressure and time deadline pressure. *Journal of Applied Business Research*, 21, pp. 23-35.
 22. Kocsis, D. (2019). A conceptual foundation of design and implementation research in accounting information systems. *International Journal of Accounting Information Systems*, 34(C), 1.
 23. Ladan Shagari, S., Abdullah, A., & Mat Saat, R. (2017). Accounting information systems effectiveness: Evidence from the Nigerian banking sector. *Interdisciplinary Journal of Information, Knowledge, and Management*, 12, 309–335.
 24. Lee, D., Lim, T., & Arditi, D. (2011). An expert system for auditing quality management systems in construction. *Computer-Aided Civil and Infrastructure Engineering*, 26(8), 612–631.
 25. Lee, S.-C., Su, J.-M., Tsai, S.-B., Lu, T.-L., & Dong, W. (2016). A comprehensive survey of government auditors' self-efficacy and professional Development for improving audit quality. *SpringerPlus*, 5(1), 1–25.
 26. Mazza, T., & Azzali, S. (2015). Effects of Internal Audit Quality on the Severity and Persistence of Controls Deficiencies. *International Journal of Auditing*, 19, (3), 148-165.
 27. Nguyen, H., & Nguyen, A. (2020). Determinants of accounting information systems quality: Empirical evidence from Vietnam. *Accounting*, 6(2), 185–198.
 28. Nugrahanto, A., & Alhadi, I. (2021). A Tax Audit Quality: An Empirical Analysis of the Use of Information Technology, Competence, Task Complexity And Time Pressure. *INFO ARTHA*, 5(2), 75–92.
 29. Onodi, B. E., Ibiyam, O., & Akujor, J. C. (2021). Management accounting information system and the financial performance of consumer goods firms in Nigeria. *European Journal of Business and Management Research*, 6(1), 112–120.
 30. Oktavianto, D. D., & Suryandari, D. (2018). The factors affecting the audit quality with understanding information systems as the moderating variable. *Accounting Analysis Journal*, 7(3), 168-175.
 31. Otley, D.T., and Pierce, B. J. 1996. Audit Time Budget Pressure: Consequence and Antecedents. *Accounting, Auditing and Accountability Journal*. Vol. 9 No.1. pp. 31-58.
 32. Owusu-Ansah, S. (2000). Timeliness of corporate financial reporting in emerging capital markets: Empirical evidence from the Zimbabwe Stock Exchange. *Accounting and Business Research*, 30(3), 241–254.
 33. Pan, G., & Seow, P.-S. (2016). Preparing accounting graduates for digital revolution: A critical review of information technology competencies and skills development. *Journal of Education for Business*, 91(3), 166–175.
 34. Peecher, M. E., Schwartz, R., & Solomon, I. (2007). It's all about audit quality: Perspectives on strategic-systems auditing. *Accounting, Organizations and Society*, 32(4–5), 463–485.
 35. Pierce, B. & Sweeney, B. (2004a). Management control in audit firms: A qualitative examination. *Accounting, Auditing and Accountability Journal*, 17, pp. 779 – 812.
 36. Pomeroy, B., & Thornton, D. B. (2008). Meta-analysis and the accounting literature: The case of audit committee independence and financial reporting quality. *European Accounting Review*, 17(2), 305–330.
 37. Qatanani, K. M., & Hezabr, A. A. (2015). The effect of using accounting information systems to improve the value chain in business organizations-empirical study. *European Journal of Accounting Auditing and Finance Research*, 3(6), 1–11.
 38. Ruggeri, D., & Rizza, C. (2017). Accounting information system innovation in interfirm

- relationships. *Journal of Management Control*, 28(2), 203–225.
39. Saeidi, H., & Prasad, B. (2014). Impact of accounting information systems (AIS) on organizational performance: A case study of TATA consultancy services (TCS)-India. *Journal of Management and Accounting Studies*, 2(03), 54–60.
40. Shah, M. (2012). Ten years of external quality audit in Australia: Evaluating its effectiveness and success. *Assessment & Evaluation in Higher Education*, 37(6), 761–772.
41. Steinbart, P. J., Raschke, R. L., Gal, G., & Dilla, W. N. (2012). The relationship between internal audit and information security: An exploratory investigation. *International Journal of Accounting Information Systems*, 13(3), 228–243.
42. Van Caneghem*, T. (2004). The impact of audit quality on earnings rounding-up behaviour: some UK evidence. *European Accounting Review*, 13(4), 771–786.
43. Vanstraelen, A., & Schelleman, C. (2017). Auditing private companies: what do we know? *Accounting and Business Research*, 47(5), 565–584.
44. Warhurst, A. (2005). Future roles of business in society: the expanding boundaries of corporate responsibility and a compelling case for partnership. *Futures*, 37(2–3), 151–168.

The logo for the International Journal of Research in Social Sciences and Humanities (IJRSSH) is a large, stylized graphic. It features a central figure that resembles a person or a flame, composed of several curved, overlapping shapes in shades of green, yellow, orange, and red. The figure is set against a background of a large, light-colored circle. Below the graphic, the acronym 'IJRSSH' is written in a bold, orange, sans-serif font.

IJRSSH