

Examining the role of accounting information systems on a firm's performance: A technology acceptance model approach

 Hamad Alhumoudi¹,  Amar Johri^{2*}

^{1,2}Department of Accountancy, College of Administrative and Financial Sciences, Saudi Electronic University, Riyadh, Saudi Arabia. h.alhumoudi@seu.edu.sa (H.A.) a.johri@seu.edu.sa (A.J.).

Abstract: This study investigates the impact of Accounting Information Systems (AIS) on firm performance (FP) through the lens of the Technology Acceptance Model (TAM). It employs a quantitative and qualitative methodology to analyze the relationship between AIS and firm performance, utilizing data collected from a sample of 408 accountants across various industries in India. An online survey, through a structured questionnaire, was conducted among the respondents to explore their perception towards the effectiveness of AIS on a firm's performance. By measuring critical constructs within the TAM framework, including perceived usefulness and perceived ease of use, this study aims to ascertain the extent to which AIS adoption influences firm performance metrics such as financial efficiency, decision-making effectiveness, and overall competitiveness. The results obtained from the study indicated that all the factors significantly influence the firm's performance; however, ease of use, efficiency, and reliability of AIS have a highly positive impact on the firm's performance. The findings of this study are expected to contribute to both theoretical understanding and practical implications for accountants to understand the value proposition of AIS technologies and for policymakers to design supportive frameworks and incentives to facilitate the widespread adoption of AIS.

Keywords: Accounting information system (AIS), Decision-making effectiveness, Financial efficiency, TAM.

JEL Classifications: M41; L86; O33; M15.

1. Introduction

The use of modern technologies is essential for companies in order to gain a competitive advantage over others. This will also help companies to increase their technical and functional performance. The accounting information system (AIS) helps firms manage and process their financial data more efficiently and effectively, which helps them make more accurate, balanced, and high-quality decisions. The use of AIS provides significant results for individuals and firms, as defined in the DeLone and McLean IS success model.

The present study is based on two critical factors of TAM: perceived usefulness and perceived ease of use. Davis (1989) developed the Technology Adoption Model (TAM), a method for applying rational behaviour theory to study users' adoption of information systems. Perceived usefulness, as defined by Davis (1989), pertains to how individuals believe using AIS will augment their overall job performance. In addition, perceived ease of use relates to the extent to which consumers believe that utilizing an AIS would need minimal exertion (Davis, 1989). TAM serves as an explanation for the applicability of a technology. According to TAM, user behaviour, impacted by perceived utility and ease of use, influences how people utilize technology (Naeem et al., 2023).

Modern technology is essential for firms that wish to increase performance and stay ahead in today's fast-paced, competitive business environment. Modern information technology, which aims to develop

modern accounting information systems, uses accounting information as a trustworthy tool to improve its utility (Fuhong, 2012). Accounting information systems (AIS), one of these technological advances, help firms manage financial data and make decisions. Accounting information systems collect financial data from people and equipment to advise decision-makers (Bodnar & Hopwood, 2010). AIS is an MIS that collects, analyzes, categorizes, addresses, and provides financial information to users, beneficiaries, and managers for decision-making (Saad et al., 2022). AIS allows accountants, managers, auditors, and other concerned staff to access, analyze, and report on a company's financial data. AIS ensures that all financial activities and record-keeping are executed precisely. According to Abdallah (2013), adopting AIS improved the quality of the information and helped management make decisions within the organization. The organization's data are protected, and the essential information is available to the suitable personnel. Despite this, employees' access to sensitive data is restricted.

The motivation behind this study originates from the significance of AIS in contemporary corporate settings. The investigation aims to optimize decision-making, resource utilization, stakeholder confidence, competitive advantage, regulatory compliance, and organizational risk management. This will lead to improved overall performance and competitiveness in the marketplace. Academics aim to shed light on how organizations can enhance decision-making, enhance performance, and gain a competitive edge in their markets by optimizing their accounting information systems by examining these aspects. Examining the impact of AIS efficiency on corporate performance helps identify areas that require improvement and resource optimization. The primary objective of the study was to examine how the utilization of AIS, when perceived as beneficial and user-friendly, improves the overall performance of a company. This insight can help companies strategically allocate resources and leverage these systems to gain a competitive advantage.

Yang et al. (2011) and Mahdi Salehi et al. (2010) suggest that AIS encompasses all components responsible for collecting information, regardless of its form (raw or processed), and converting it into financial data for decision-makers. An Accounting Information System (AIS) is crucial for the acquisition, analysis, and dissemination of financial information necessary for making informed decisions and analyzing a company's financial well-being. Accounting information systems refer to systems that collect, document, store, and analyze data to facilitate decision-making, as defined by Romney and Steinbart (2012, p. 686). Professionals and scholars must comprehend the influence of different AIS components on a company's financial performance. This study focuses on the pivotal role of accounting information systems (AIS) in modern companies. The function of AIS is to collect, analyze, and distribute financial information to aid businesses in making decisions and evaluating their financial well-being. Professionals and academics must grasp how AIS enhances company performance. This study examines the theoretical and practical elements of using AIS to improve business performance in a technology-driven corporate environment.

In conclusion, it is essential to investigate the impact of accounting information systems on a business's performance, including factors such as trust, security, PEU, PU, efficiency, and reliability. The study examines theoretical and practical challenges to shed light on the potential application of AIS in enhancing company performance, particularly in the context of technology-driven business operations.

The paper is organized into eight sections. The first section introduces the study and the factors of AIS that impact the firm's performance. This section also presents the motivation behind the study. The second section includes an analytical literature review of the different constructs used in the present study. The third section presents the study's research model. The fourth section details the research design and methodology, data collection, sampling, tools for data analysis. The fifth section presents the results obtained in the study based on descriptive statistics, reliability test, correlation analysis, regression analysis, and testing of hypotheses. Section 6 presents the discussion, section 7 defines limitations and suggestions for future research, while the study concludes in Section 8.

2. Literature Review and Hypotheses Development

The present study used the two critical constructs of the Technology Acceptance Model (TAM) as its underlying conceptual framework. The Technology Acceptance Model (TAM) was developed by Fred D. Davis (Davis, 1989) as a theoretical framework within the field of information systems. This model explains the factors influencing users' acceptance and utilization of technology. A positive relationship exists between system quality and user happiness in accounting information systems. A study conducted by Souza, Munay de Silva, and Ferreira (2017) identified the utility of the TAM in the context of electronic accounting, using the TAM to explain the acceptance of information technology in the accounting field. Additionally, the study conducted by Apsari et al. (2023) reveals a strong positive impact of perceived utility on user satisfaction of accounting information systems. The study's findings validate a positive correlation between the utilization of Accounting Information Systems (AIS) and their efficacy.

The study investigated the impact of implementing an accounting information system on the operational efficiency of a public sector organization in the province of Jambi. The Technology Acceptance Model (TAM) framework was utilized for this purpose. Kusumathias, Rahayu, and Wiralestari (2023) show how easy, practical, and acceptable people think the Accounting Information System dramatically affects how many people use it. Still, there needs to be a statistically significant link between success and how easy something is to use. Abduljalil and Zainuddin (2015) observed that perceived ease of use and perceived usefulness influence SME owners' intentions to adopt accounting information systems in Malaysia. Much attention was paid to how well the experts could explain what they had found when they looked into what the Public Accounts Committee of Tanzanian public companies does with financial information. How much accounting information is used is statistically significantly higher when people know about and believe it (Kyando et al., 2022).

Efficiency is another crucial factor in determining the impact of AIS on firm performance. Lanlan, Ahmi, and Popoola (2019) found a link between using CAS and thinking it is valuable and easy to use. An investigation was conducted to explore the correlation between the perceived value and perceived ease of use, which are two attributes of the Technology Acceptance Model (TAM), and the adoption of Computerized Accounting Systems (CAS) by accountants in micro and small businesses (MSEs). Patel (2015) conducted a study to analyze the influence of accounting information systems on business performance. The results demonstrated that providing financial and economic decision-making information through accounting information systems had a significant influence on corporate profitability and decision-making processes.

Moreover, it has been seen that the performance of AIS has a beneficial influence on the firm's overall success (Thuan et al., 2022). Lutfi et al. (2022) conducted a study examining the impact of enterprise resource planning (ERP) on the performance of small and medium-sized businesses (SMEs) in Jordan. The researchers discovered a notable correlation between improved performance outcomes and the implementation of ERP systems. The study's findings indicate that the analyzed variables, including effort expectancy, performance expectancy, and facilitating conditions, positively influence accountants' inclination to remain committed to AIS. However, Lutfi (2022) discovered that TMS significantly and adversely affected the inclination to utilize it.

Trust, accuracy, and reliability are essential attributes of AIS that influence their effectiveness in supporting decision-making processes and stakeholder confidence. A study (Kim, 2014) looked at the main issues that need to be fixed to improve the quality of accounting information (AIQ). The study found that trust in accounting information makes people more likely to use it. Lanlan, Ahmi, and Popoola's (2019) study uncovers a positive correlation between the reported simplicity of use, perceived utility, and the utilization of computerized accounting systems (CAS). Rogers (2016) examines how small businesses in Central Ohio adopt CAS. He found a favourable association between perceived ease of use, usefulness, and CAS adoption. When someone thinks using a tool will help them do their job better, that is called perceived usefulness. According to Mangun Buana and Wirawati (2018), jobs that

are easier, more functional, more productive, and better at their job can be used as indicators of perceived usefulness.

Nwinee et al. (2016) examined how accounting information systems affect organizational effectiveness in Nigerian SMEs and found that accounting information systems improve organization effectiveness and cost control. Several dimensions can be used to explain the quality of the accounting information. According to Azhar Susanto (2017), conceptually, the quality of accounting information systems depends upon the cooperation of and reciprocal interface between all elements and sub-elements that join to form an interrelated accounting information system. The study examined how three different types of information system (IS) quality—system quality, service quality, information quality, and internal control quality—affect how people use IS and how happy they are with it. Lutfi (2023) found no statistically significant direct correlations between information quality and AIS user satisfaction or between system quality and AIS usage.

Trust, accuracy, and reliability are essential attributes of AIS that influence their effectiveness in supporting decision-making processes and stakeholder confidence. The study examined how security, information quality, and the quality of the accounting information system affected end-user happiness with the S4/HANA System Application Product (SAP) at PT Hakaaston. Perceived utility was used as a moderating variable. Gunawan and Nengzih (2023) found that accounting information system quality and quality affect S4/HANA System Application Product (SAP) end-user satisfaction, but accounting information system security has no apparent effect. Al-Dalabih (2018) examined how accounting information systems affect financial data quality for Amman Stock Market service companies and found that the nature of accounting information systems and security improve financial data quality statistically. However, accounting information system inputs kept the quality of financial data the same.

Events that have never happened before, like the COVID-19 pandemic, have made the business situation even more challenging for companies. At the same time, innovative IT-based systems like AIS have opened up new business opportunities (Saad, 2023). The study of Alibraheem et al. (2024) says that Jordan's internal control system affects how satisfied clients are with accounting information systems (AIS) services and how well those services work. The results show the importance of the internal control system at AIS for improving the link between quality of service and customer happiness (Alibraheem et al., 2024). According to Alnasrallah and Saleem (2022), service, information, and system quality are DAS's success criteria and, ultimately, the organization's performance.

The literature we have presented underscores the critical role of accounting information systems in firms' success. These systems, when designed to be helpful, easy to use, efficient, trustworthy, accurate, and reliable, can significantly enhance a firm's performance. As technology advances and companies increasingly rely on sophisticated financial information systems, our research in this area will continue to evolve, offering practical insights for firms.

Building on the extensive body of literature, we have formulated a set of hypotheses that are crucial for testing in this study, thereby contributing significantly to the field of accounting information systems and firm performance.

Based on the above studies, the following hypotheses were proposed to test in this study.

H₁: The perceived usefulness of AIS positively influences the performance of the firm.

H₂: The perceived ease of use of AIS positively influences the performance of the firm.

H₃: The efficiency of AIS positively influences the performance of the firm.

H₄: The trust and accuracy of AIS positively influence the performance of the firm.

H₅: The reliability of AIS positively influences the performance of the firm.

3. The Research Model

The research model in Figure 1 illustrates the factors that have been hypothesized in the present study:

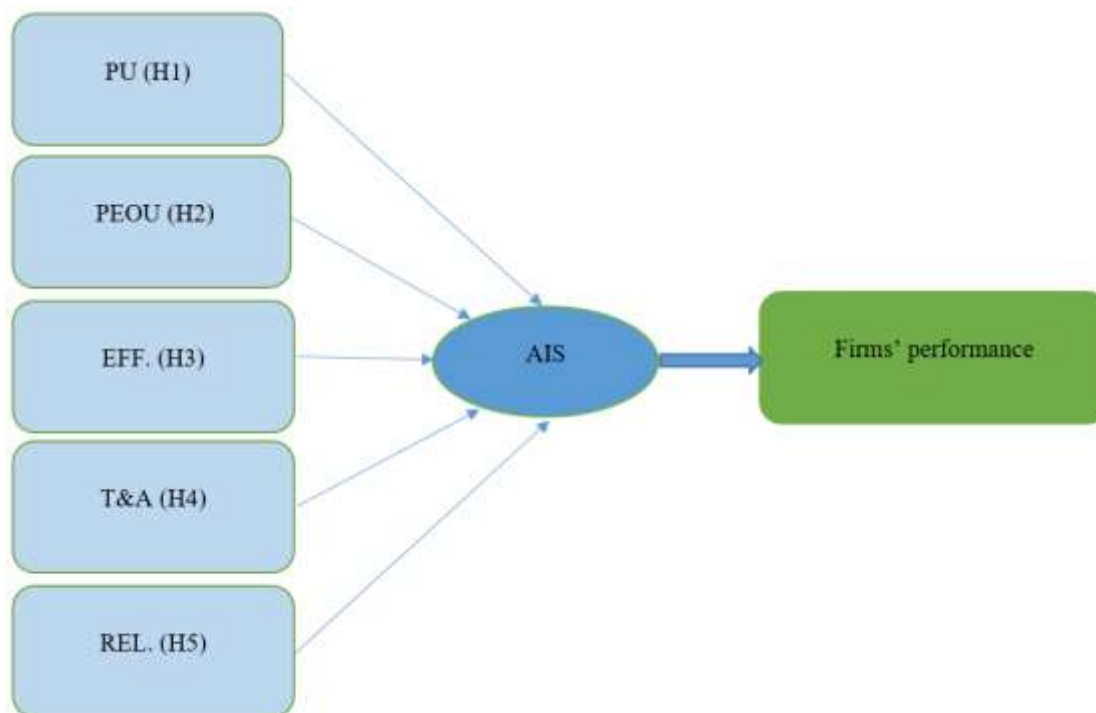


Figure 1.
Research model.

4. Research Methodology

The study used mixed-method research and incorporated quantitative and qualitative methodologies to comprehensively explore the dynamics of AIS attributes and their impact on various aspects of organizational performance. A structured questionnaire was a primary source, whereas research publications, journals, business periodicals, and literature were secondary data sources. The questionnaire contained 30 statement-based questions about AIS's usefulness, ease of use, efficiency, trust correctness, and reliability on business performance. A detailed literature review shaped the survey questions. The questionnaire was pre-tested with 50 respondents and forwarded for data collection following successful testing. Data was collected via convenience random sampling. A five-point Likert scale was used to measure responses, with 5 = strongly agree and 1 = strongly disagree. Four hundred and eight participants completed and submitted the online questionnaire. Informed consent was obtained from all the respondents, and confidentiality was ensured.

Appropriate statistical tools were used to analyze the data using SPSS. Descriptive statistics were used to describe respondents' demographic frequencies and percentages. The relationships between the variables were evaluated using correlation analysis. The hypotheses were investigated using ANOVA and multiple regression models. Regression analysis and analysis of variance (ANOVA) are commonly employed statistical approaches in scientific publications to examine the relationships between variables and draw inferences about populations based on sample data. This strategy is suitable for simple models that use only one outcome variable. Multiple regression allows us to analyze the impact of several independent variables on a single dependent variable. This method is frequently used in business and social science research to forecast results by considering numerous (Hair et al., 2009).

5. Research Results

Table 1 shows independent variable descriptive statistics. Table 1's mean, standard deviation, minimum, and maximum values show that all five variables affect a firm's performance. According to the

mean values, efficiency has a more significant impact, followed by reliability, perceived ease of use, perceived use, and trust and accuracy.

Table 1.
Descriptive statistics of the variables.

| | N | Minimum | Maximum | Mean | Std. deviation |
|-----|-----|---------|---------|-------|----------------|
| PU | 408 | 3 | 5 | 3.688 | 0.461 |
| PEU | 408 | 3 | 5 | 3.792 | 0.567 |
| EFF | 408 | 3 | 5 | 3.871 | 0.469 |
| T&A | 408 | 3 | 5 | 3.682 | 0.478 |
| REL | 408 | 3 | 5 | 3.795 | 0.571 |

Cronbach's alpha was employed to assess the construct's internal consistency. Each construct's reliability was assessed using SPSS. When using Likert-type scales in research, Cronbach's alpha coefficient must be reported to measure internal consistency reliability (Giem & Gliem, 2003). Table 2 summarizes construction reliability and interpretations. Internal consistency was excellent and dependable, with Cronbach's alpha ranging from .790 to .887. This shows that the data collection scale was reliable and sufficient for the online survey.

Table 2.
Reliability of measurements.

| Constructs | N | Number of items | Cronbach's alpha | Internal consistency |
|------------|-----|-----------------|------------------|----------------------|
| FP | 408 | 6 | 0.849 | Excellent |
| PU | 408 | 5 | 0.858 | Excellent |
| PEU | 408 | 5 | 0.790 | Excellent |
| EFF | 408 | 5 | 0.810 | Excellent |
| T&A | 408 | 5 | 0.808 | Excellent |
| REL | 408 | 4 | 0.887 | Excellent |

Table 3 compares dependent and independent factors. Test results are usually compared using Pearson's correlation coefficient (Beanland et al., 1999). According to Litwin (1995), good correlation coefficients are less than 0.7. The independent and dependent variables were significantly correlated.

Table 3.
Correlation analysis of the variables.

| | PU | PEU | EFF | T&A | REL | FP | p-value |
|-----|-------------|-------------|-------------|-------------|------------|----|---------|
| PU | 1 | | | | | | 0.01 |
| PEU | 0.536959161 | 1 | | | | | 0.01 |
| EFF | 0.33097187 | 0.397601009 | 1 | | | | 0.01 |
| T&A | 0.645581364 | 0.405613029 | 0.240158674 | 1 | | | 0.01 |
| REL | 0.299259067 | 0.542317922 | 0.179727329 | 0.278388613 | 1 | | 0.01 |
| FP | 0.266853255 | 0.319975605 | 0.835152044 | 0.211979717 | 0.15607105 | 1 | 0.01 |

Multiple regression analysis was used to test the study's proposed hypothesis. Regression analysis facilitates the investigation and quantification of the relationships between variables. It enables us to comprehend the relationship between one or more independent variables and a dependent variable, which is beneficial when investigating causal or correlative relationships. Table 4 shows the five multiple regression predictor models ANOVA. Table 5 summarizes regression analysis results, while Table 6 shows regression model coefficients. All five variables significantly affect the increase in the firm's performance at the 0.05 level.

Regression results showed a robust collective influence between the independent and dependent variables ($R^2 = 0.698$, $F(5, 402) = 139.875$, $p = .000$). Individual predictors were analyzed to determine the dependent-independent relationship. The regression model showed that the "first variable" ($R^2 = .071$, $F(1, 407) = 23.461$, $p = .000$) was a significant predictor, supporting hypothesis 1. Hypothesis 2 was accepted because "second variable" ($R^2 = .102$, $F(1, 407) = 34.903$, $p = .000$) was a significant predictor, hypothesis 3 was accepted because "third variable" ($R^2 = .697$, $F(1, 407) = 75.499$, $p = .000$) was a significant predictor, hypothesis 4 was accepted because "fourth variable" ($R^2 = .044$, $F(1, 407) = 14.397$, $p = .000$) was a significant predictor, and hypothesis 5 was also accepted because "fifth variable" ($R^2 = .024$, $F(1, 407) = 7.639$, $p = .006$) was a significant predictor.

Table 6 shows that the third predictor, 'efficiency' significantly affects the increase in the firm's performance ($\beta = 1.002$, $t = 26.56$, $p < .05$). The influence of the first predictor ($\beta = .325$, $t = 4.843$, $p < .05$) follows the second predictor ($\beta = .317$, $t = 5.907$, $p < .05$), fourth predictor ($\beta = .249$, $t = 3.794$, $p < .05$), and fifth predictor ($\beta = .153$, $t = 2.763$, $p < .05$).

Table 4.
Variation analysis of the variables – ANOVA^a

| Model | | Sum of squares | Df | Mean square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|--------------------|
| 1 | Regression | 6.933 | 1 | 6.933 | 23.461 | 0.000 ^b |
| | Residual | 90.434 | 406 | 0.295 | | |
| | Total | 97.367 | 407 | | | |
| 2 | Regression | 9.968 | 1 | 9.968 | 34.903 | 0.000 ^c |
| | Residual | 87.399 | 406 | 0.285 | | |
| | Total | 97.367 | 407 | | | |
| 3 | Regression | 67.912 | 1 | 67.912 | 75.499 | 0.000 ^d |
| | Residual | 29.455 | 406 | 0.096 | | |
| | Total | 97.367 | 407 | | | |
| 4 | Regression | 4.375 | 1 | 4.375 | 14.397 | 0.000 ^e |
| | Residual | 92.992 | 406 | 0.303 | | |
| | Total | 97.367 | 407 | | | |
| 5 | Regression | 2.371 | 1 | 2.371 | 7.639 | 0.006 ^f |
| | Residual | 94.996 | 406 | 0.310 | | |
| | Total | 97.367 | 407 | | | |

Note: a. Dependent variable: Increase in firm's performance
b. Predictors: (Constant), perceived use;
c. Predictors: (Constant), perceived ease of use;
d. Predictors: (Constant), efficiency;
e. Predictors: (Constant), trust and accuracy;
f. Predictors: (Constant), reliability.

Table 5.
Regression model summary^b.

| Model | R | R square | Adjusted R square | Std. error of the estimate | F change | Significance F |
|-------|--------------------|----------|-------------------|----------------------------|----------|----------------|
| 1 | 0.266 ^a | 0.071 | 0.068 | 0.543 | 23.461 | 0.000 |
| 2 | 0.319 | 0.102 | 0.099 | 0.534 | 34.903 | 0.000 |
| 3 | 0.835 | 0.697 | 0.696 | 0.310 | 75.499 | 0.000 |
| 4 | 0.211 | 0.044 | 0.041 | 0.551 | 14.397 | 0.000 |
| 5 | 0.156 | 0.024 | 0.021 | 0.557 | 7.639 | 0.006 |

Note: a. Predictors: (Constant), perceived use, perceived ease of use, efficiency, trust and accuracy, reliability.
b. Dependent Variable: Increase in firm's performance.

Table 6.
Coefficients^a Regression Models 1, 2, 3, 4 and 5.

| Model | Unstandardized coefficients | | Standardized coefficients | t | Sig. |
|-----------------------|-----------------------------|------------|---------------------------|--------|-------|
| | B | Std. error | Beta | | |
| (Constant) | -0.116 | 0.197 | | -0.591 | 0.554 |
| Perceived Use | -0.028 | 0.055 | 0.325 | 4.843 | 0.000 |
| Perceived ease of use | -0.022 | 0.043 | 0.317 | 5.907 | 0.000 |
| Efficiency | 1.010 | 0.041 | 1.002 | 26.56 | 0.000 |
| Trust and accuracy | 0.035 | 0.049 | 0.249 | 3.794 | 0.000 |
| Reliability | 0.015 | 0.037 | 0.153 | 2.763 | 0.000 |

Note: a. Dependent variable: Increase in firm's performance.

6. Discussions

The results of the empirical analysis carried out in the present study, which focused on the role of perceived usefulness, perceived ease of use, efficiency, trust, accuracy, and reliability of accounting information systems, have a significant impact on increasing a firm's performance. This topic is of utmost importance in the field of accounting and business management, and our findings contribute to the existing body of knowledge in a meaningful way.

The investigation results, which confirmed the acceptance of hypothesis 1, not only provide valuable insights into the positive influence of the perceived usefulness of AIS on a firm's performance but also offer practical implications. According to the DeLone and McLean Information Systems Success Model, Accounting Information Systems can benefit individuals and organizations (Iqbal and Rafiq, 2023). This knowledge and trust in accounting information can lead to a statistically significant increase in utilization (Kyando et al., 2022). The primary purpose of an Accounting Information System (AIS) is to assign numerical values to business events that have occurred in the past, are currently happening, or are expected to occur in the future (Rehab, 2018). A high amount of perceived usefulness means that the AIS is seen as an essential tool that motivates employees to use it. Managerial tasks, such as planning and control, rely heavily on the data provided by accounting information systems (Samer, 2016). The findings also align with the study to determine how the accounting information system (AIS) affects small and medium firms in Lugazi Municipality. The study found that accounting information systems perceived usefulness (PU), perceived ease of use (PEOU), and attitude towards usage (ATU) positively and significantly affect financial performance (Musana, 2022).

The investigation results confirmed the acceptance of hypothesis 2, indicating that the perceived ease of use of AIS positively influences the firm's performance. A favourable relationship exists between reported ease of use, perceived usefulness, and adoption of computerized accounting systems (CAS) (Lanlan et al., 2019). Usage of Convenience shows that how easy it is for staff to use and navigate the AIS is a crucial factor that affects how well it works. Additionally, the study's results support the notion that AIS performance contributes to the organisation's overall success and that there is a correlation between AIS usage and its effectiveness (Thuan et al., 2022).

This study's findings align with the study conducted by Ironkwe and Nwaiwu (2018), who examined the effect of accounting information systems on financial and non-financial measures of Nigerian companies and found a significant positive effect. Alnasrallah and Saleem (2022) suggest that the success criteria for DAS encompass service quality, information quality, and system quality, which eventually contribute to the organisation's overall performance. Further, our findings are supported by the study conducted by Kashif (2018), who examined how accounting information systems affected Indian FMCG companies' financial performance and found that accounting information systems affect the financial performance of selected Indian FMCG companies. Employees who think the method is easy to use are likelier to adopt it. This increases productivity and efficiency.

The investigation results confirmed the acceptance of hypothesis 3, indicating that AIS's efficiency positively influences the firm's performance. Perceived utility positively affects accounting information system user satisfaction, confirming a favorable association between AIS use and efficacy (Apsari et al., 2023). Efficiency is anticipated to automate and streamline several financial procedures, reducing the time and effort required to perform repetitive duties. Teru, Idoku, and Ndeyati (2017) examine how accounting information systems for internal control affect business performance and found that efficient and effective controls improve performance, accounting information dependability, and decision-making for internal and external users. The impact of perceived ease of use on the quality of accounting information systems is substantial, whereas perceived efficacy has no significant effect (Meiryani et al., 2021). The technology acceptability model (TAM) was employed in the study to elucidate the utilization of accounting information systems. Increased productivity enables employees to focus on more crucial tasks, which could improve the organisation's overall performance.

The investigation results, which confirmed the acceptance of hypothesis 4, provide a strong foundation for the positive influence of trust and accuracy of AIS on the firm's performance. People are more inclined to utilize accounting information when they trust it (Kim, 2014). Implementing an Accounting Information System (AIS) has been found to enhance the accuracy and reliability of information, hence facilitating effective decision-making by management within the organizational context (Abdallah, 2013). Trusting the AIS to provide reliable financial information is crucial. Making sound financial decisions relies on accurate data, and doubts about the system's reliability could undermine confidence in its findings.

The investigation results confirmed the acceptance of hypothesis 5, indicating that the reliability of AIS positively influences the firm's performance. Accounting information systems enhance the efficiency and cost management of organizations. Nwinee et al. (2016) emphasize that many dimensions may be employed to elucidate the quality of accounting information. Gunawan and Nengzih (2023) concluded that accounting information system quality and quality affect S4/HANA System Application Product (SAP) end-user satisfaction, but security does not. The AIS is accountable for delivering timely and reliable data. For purposes including strategic planning, reporting, and compliance, it is crucial to have accurate financial data. AIS internal control system improves service quality and customer satisfaction (Alibraheem et al., 2024). Information technology's main impact on accounting is the organisation's ability to design and use computerized systems to track and record financial transactions to improve managerial decision-making, internal controls, and financial report quality (Hla & Teru, 2015).

7. Limitations and Future Scope

The present study provides valuable insights into the various essential dimensions of AIS but also has a few limitations. The study was conducted with a few selected variables that reveal the significance of using AIS and its impact on the firm's performance. Apart from this, we did not limit this study to any firm; instead, we collected samples from people from all types of firms. Future research could explore the other qualitative dimensions of AIS on firms' overall valuation, examining the role of AIS on different firms with a comparative study showing the impact on performance. In addition, future research can consider a few more variables related to AIS adoption and use in determining such impacts on a firm's performance.

8. Conclusions

The analysis and results of the study, conducted using a quantitative research methodology, may lead to some critical conclusions. The findings, based on a survey of 500 firms, demonstrated that AIS's perceived usefulness, perceived ease of use, efficiency, trust and accuracy, and reliability significantly increase a firm's performance. The results of the descriptive statistics show that among all the other factors, the efficiency of AIS has the highest impact on increasing the firm's performance. Cronbach's alpha indicated that the internal consistency of the data was high and reliable. Examining the relationship between an accounting information system and a firm's performance scale revealed a

positive relationship between the variables. The results of all five regression models significantly predicted the impact of independent variables on dependent variables.

The quantitative results obtained from the study concluded that a complex and interconnected relationship exists between these characteristics and the performance of a corporation. A business can benefit significantly from a well-functioning AIS characterized by high perceived effectiveness, usability, efficiency, trustworthiness, and reliability. These results encompass enhanced financial reporting, stringent cost management, informed financial decision-making, and enhanced financial performance. It is crucial to understand that the influence of these factors on a business's performance may differ depending on the organization's environment, size, and sector. The objective of this study is to examine these associations and elucidate the interactions that exist between AIS and company performance. The research's findings will furnish academics and practitioners with valuable insights that will empower firms to make well-informed decisions on implementing and enhancing accounting information systems.

Copyright:

© 2024 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

References

- [1] Abdallah, A. A. J. (2013). The impact of using accounting information systems on the quality of financial statements submitted to the income and sales tax department in Jordan. *European Scientific Journal*, 1(4), 41-48.
- [2] Abduljalil, K. M., & Zainuddin, Y. (2015). Integrating Technology Acceptance Model and Motivational Model towards Intention to Adopt Accounting Information System. *International Journal of Management, Accounting & Economics*, 2(5).
- [3] Al-Dalabih, F. A. (2018). The impact of the use of accounting information systems on the quality of financial data. *International Business Research*, 11(5), 143-158.
- [4] Al-Dalaieen, B. O. A., & Khan, N. A. (2018). Effect of accounting information system on financial performance: A study of selected real estate companies in Jordan. *International journal of current engineering and scientific research (IJCESR)*, 4(8), 132-143.
- [5] Alibraheem, M., Siam, I., Al-Daoud, K., Alkhazaali, A., Freihat, B., Ahmad, A., ... & Zoubi, M. (2024). The moderating role of internal control system on the relationship between service quality of accounting information system and customer satisfaction: a study of some selected customers from commercial banks in Jordan. *Uncertain Supply Chain Management*, 12(1), 567-572.
- [6] AlNasrallah, W., & Saleem, F. (2022). Determinants of the Digitalization of Accounting in an Emerging Market: The Roles of Organizational Support and Job Relevance. *Sustainability*, 14(11), 6483.
- [7] Apsari, R. D., Widhiyani, N. L. S., & Rasmini, N. K. (2023). The Influence of Accounting Information System Quality and Perceived Usefulness on Accounting Information System (AIS) User Satisfaction (Case Study at the Head Office of the Bali Regional Development Bank). *European Journal of Business and Management Research*, 8(4), 59-63.
- [8] Beanland, C., Schneider, Z., LoBiondo-Wood, G., & Haber, J. (1999). Nursing research: Methods, critical appraisal and utilization.
- [9] Beg, K. (2018). Impact of accounting information system on the financial performance of selected FMCG companies. *Asian Journal of Applied Science and Technology*, 2(3), 08-17.
- [10] Bodnar, G. H., & Hopwood, W. S. (2010). Accounting Information System. tenth edition. Pearson Education Inc
- [11] Buana, I. B. G. M. M., & Wirawati, N. G. P. (2018). Influence Quality of Information System, Quality of Information, And Perceived Usefulness On User Accounting Information System Satisfaction. *E-Jurnal Akuntansi*, 22, 683.
- [12] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- [13] Fuhong, Y. (2012). Research on the Impact of Accounting Information on Accounting Theory and Practice. *Lecture Notes in Information Technology*, 19, 25.
- [14] Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.
- [15] Gunawan, S., & Nengzih, N. (2023). The Influence of Accounting Information System Quality, Accounting Information Quality and Accounting Information System Security on End User Satisfaction of S4/Hana System Application Product (SAP) with Perceived Usefulness as a Moderating Variable at PT Hakaaston. *Saudi Journal of Economics and Finance*, 7, 22-32.
- [16] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). Multivariate data analysis: Pearson new international edition. Essex: Pearson Education Limited, 1(2).

- [17] 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.
- [18] Iqbal, M., & Rafiq, M. (2023). DeLone and McLean's reformulated information systems success model: a systematic review of available literature in public sector (2011-2022). *Global Knowledge, Memory and Communication*.
- [19] Ironkwe, U., & Nwaiwu, J. (2018). Accounting information system on financial and non-financial measures of companies in Nigeria. *International Journal of Advanced Academic Research | Business Development & Management*, 4(2), 39-55.
- [20] Kim, D. (2014). The perceived information quality in accounting information system: Effects on trust and risk. *Journal of the Korea Industrial Information Systems Research*, 19(4), 119-131.
- [21] Kusumathias, I. P., Rahayu, S., & Wiralestari, W. (2023). THE INFLUENCE OF ACCOUNTING INFORMATION SYSTEM IMPLEMENTATION ON PERFORMANCE WITH TECHNOLOGY ACCEPTANCE MODEL (TAM) APPROACH IN PUBLIC SERVICE AGENCIES OF JAMBI PROVINCE. *JOURNAL OF MANAGEMENT, ACCOUNTING, GENERAL FINANCE AND INTERNATIONAL ECONOMIC ISSUES*, 3(1), 211-230.
- [22] Kyando, A., Abayo, A., & Raphael, G. (2022). Determinants of the extent of usage of accounting information by Public Accounts Committee in Tanzania public corporations: Moderating role of effective communication. *International Journal of Research in Business and Social Science (2147-4478)*, 11(9), 205-221.
- [23] Lanlan, Z., Ahmi, A., & Popoola, O. M. J. (2019). Perceived ease of use, perceived usefulness and the usage of computerized accounting systems: A performance of micro and small enterprises (mses) in china. *International Journal of Recent Technology and Engineering*, 8(2), 324-331.
- [24] Lutfi, A. (2022). Factors influencing the continuance intention to use accounting information system in Jordanian SMEs from the perspectives of UTAUT: Top management support and self-efficacy as predictor factors. *Economies*, 10(4), 75.
- [25] Lutfi, A. (2023). Factors affecting the success of accounting information system from the lens of DeLone and McLean IS model. *International Journal of Information Management Data Insights*, 3(2), 100202.
- [26] Lutfi, A., Alshira'h, A. F., Alshirah, M. H., Al-Okaily, M., Alqudah, H., Saad, M., ... & Abdelmaksoud, O. (2022). Antecedents and impacts of enterprise resource planning system Adoption among Jordanian SMEs. *Sustainability*, 14(6), 3508.
- [27] Lutfi, A., Alsyouf, A., Almaiah, M. A., Alrawad, M., Abdo, A. A. K., Al-Khasawneh, A. L., ... & Saad, M. (2022). Factors influencing the adoption of big data analytics in the digital transformation era: Case study of Jordanian SMEs. *Sustainability*, 14(3), 1802.
- [28] Meiryani, M., Chang, A., Alfred Lorenzo, B., & Daud, Z. M. (2021, July). Analysis of Technology Acceptance Model (TAM) Approach to the Quality of Accounting Information Systems. In *Proceedings of the 9th International Conference on Computer and Communications Management* (pp. 37-45).
- [29] Ming-Hsien, Y., Wen-Shiu, L., & Tian-Lih, K. (2011). The impact of computerized internal controls adaptation on operating performance. *African Journal of Business Management*, 5(20), 8204-8214.
- [30] Musana, J. (2022). *The impact of accounting information systems on financial performance of small and medium enterprises* (Doctoral dissertation, Busitema University.).
- [31] Naem, M., Jawaid, S. T., & Mustafa, S. (2023). Evolution of modified TAM associated with e-banking services adoption: a systematic PRISMA review from 1975 to 2021. *Journal of Modelling in Management*, 18(3), 942-972.
- [32] Nwinee, K., Akpos, Y., Vincent, N., & Ibinabo, T. (2016). Impact of accounting information system on organizational effectiveness: A study of selected small and medium scale enterprises in Woji, Portharcourt. *International journal of research*, 3(1), 974-982.
- [33] Okour, S. M. (2016). The impact of the effectiveness of accounting information systems on operational performance in public listed industrial companies in Jordan. *Journal of Social Sciences (COES&RJ-JSS)*, 5(3), 263-276.
- [34] Patel, F. (2015). Effects of accounting information system on organizational profitability. *International Journal of Research and Analytical Reviews*, 2(1), 168-174.
- [35] Rogers, A. D. (2016). *Examining small business adoption of computerized accounting systems using the technology acceptance model* (Doctoral dissertation, Walden University).
- [36] Romney, M. B., & Steinbart, P., J. (2012). *Accounting Information Systems*. Pearson Education Limited.
- [37] Saad, M. (2023). The influence of accounting information system adoption on business performance amid COVID-19. *Computers in Human Behavior Reports*, 10, 100286.
- [38] Saad, M., Lutfi, A., Almaiah, M. A., Alshira'h, A. F., Alshirah, M. H., Alqudah, H., ... & Abdelmaksoud, O. (2022). Assessing the intention to adopt cloud accounting during COVID-19. *Electronics*, 11(24), 4092.
- [39] Salehi, M., Rostami, V., & Mogadam, A. (2010). Usefulness of accounting information system in emerging economy: Empirical evidence of Iran. *International Journal of Economics and Finance*, 2(2), 186-195.
- [40] Souza, L. A., Da Silva, M. J. P. B. M., & Ferreira, T. A. M. V. (2017). The acceptance of information technology by the accounting area. *Sist. Gest.*, 12, 516-524.
- [41] Susanto, A. (2017). How the quality of accounting information system impact on accounting information quality (Research on Higher Education in Bandung). *Journal of Engineering and Applied Sciences*, 12(14), 3672-3677.

- [42] Teru, S. P., Idoku, I., & Ndeyati, J. T. (2017). A review of the impact of accounting information system for effective internal control on firm performance. *Indian Journal of Finance and Banking*, 1(2), 52-59.
- [43] Thuan, P. Q., Khuong, N. V., Anh, N. D. C., Hanh, N. T. X., Thi, V. H. A., Tram, T. N. B., & Han, C. G. (2022). The determinants of the usage of accounting information systems toward operational efficiency in industrial revolution 4.0: Evidence from an emerging economy. *Economies*, 10(4), 83.
- [44] Trabulsi, R. U. (2018). The Impact of Accounting Information Systems on Organizational Performance: The Context of Saudiâ€™s SMEs. *International Review of Management and Marketing*, 8(2), 69-73.