

**The effect of cloud computing on accounting information quality: Empirical study in Saudia Arabia****Asaad Mubarak Hussien Musa<sup>a\*</sup>**<sup>a</sup>*Department of Accounting, College of Business Administration in Hawtat Bani Tamim, Prince Sattam Bin Abdulaziz University, Saudi Arabia***CHRONICLE***Article history:*

Received: January 3, 2024

Received in revised format: February 21, 2024

Accepted: April 12, 2024

Available online: April 12, 2024

*Keywords:**Cloud Computing**Accounting Information**TAM model**Company size***ABSTRACT**

This study aimed to investigate the effect of cloud computing (CC) and company size on accounting information quality. Data were collected using an online questionnaire which followed the Technology Acceptance Model (TAM). The research sample consisted of 178 respondents from accountants and audit offices in the Emirate of Riyadh. The study adopted a Smart PLS in hypothesis testing. The study's results indicated just a positive relationship between perceived benefit and quality of accounting Information. In addition, there was a clear influence of company size on the relationship between CC and accounting information quality.

© 2024 by the authors; licensee Growing Science, Canada.

**1. Introduction**

Companies today work in a setting with rapid technological growth that necessitates ongoing changes in how data systems function: gathering, analyzing, and exchanging information. (Đorđević et al., 2018). Many economic units in the contemporary corporate environment have the challenge of gathering and processing copious amounts of financial data. This dilemma necessitates more efficient systems supporting data gathering and processing activities to receive valuable and timely information (Mohamed & Najim, 2023). The Internet has gotten quicker, more reliable, and less expensive, and it has extended in all areas. Furthermore, the new generation of smart mobile devices has accelerated the adoption of cloud services (Dimitriu & Matei, 2015).

Cloud is a platform that allows access to data and apps online from anywhere at any time location, using any internet-connected device. Using a cloud application service provider, cloud computing (CC) users can access software remotely over the internet or another network. Data is sent to "the cloud" for processing before being sent back to the user. Instead of completing all program activities on the users' desktops, which saves the company from buying PC software (Khanom, 2017).

Accounting information systems have used accounting software to efficiently report on a firm's economic situation throughout the last three decades. In the 1990s, it referred to basic programs that were appropriate for every user and where the client strictly controlled data and reports. The 2000s saw the rise of types of software accounting apps that can be accessed by numerous users at the same time and rely on strong databases maintained securely. Since 2010, the most current trend in using information technology in accounting is cloud computing, which gave the origin to the phrase cloud accounting (Hamundu et al., 2020). The introduction of accounting software has improved accounting practice, making it a valuable tool for accountants to complete their tasks faster and more efficiently. The final decade of the twentieth century saw substantial advancements in data communication, and technology advanced swiftly (Dimitriu & Matei, 2015). In the age of globalization

\* Corresponding author.

E-mail address [am.musa@psau.edu.sa](mailto:am.musa@psau.edu.sa) (A.M.H. Musa)

and performance, international access to current financial information from anywhere globally and at any time becomes essential. The cloud-based processing of data on costs, revenues, and sales (Wyslocka & Jelonek, 2015).

In Saudi Arabia, two publicly listed, government-owned and run telecommunications businesses are launching cloud computing initiatives. Since 2010, these companies have been investigating how they may use cloud technology to provide services to the country's corporate and financial sectors. Still, advancements are being made, as recent statistics show that the contracting out segment climbed by 16.3% in 2014, compared to a 13.9% growth in the market for IT services. Additionally, IDC forecasted a rise in spending and investments in cloud computing services (Alghamdi et al., 2019).

Cloud computing offers various advantages, including cost savings, faster performance than most in-house IT activities, less effort, lower prices, and greater flexibility and adaptability. However, cloud computing services have significant drawbacks, including security and privacy concerns. There is a vast number of published research looking into the elements that influence CC. Nevertheless, the adoption of CC in technologically emerging nations is the subject of little research. Anyway, there is only a little research that has focused on the elements that influence the CC adoption in the KSA, and most of them dealt with the topic adopt CA by the Saudi government organization. So, the purpose of this study is to look at the impact of CC on the quality of accounting information.

The current study aims to respond to the following queries:

What is the impact of cloud computing on the accounting information quality(AIQ) for Saudi companies?  
Are there is a clear influence of company size on the relationship (CC) and (AIQ)?

## 2. Literature Review and Hypotheses Development

### 2.1. Cloud Accounting

A web-based accounting information system called “CA” allows transactions to be recorded anytime and from any location. The transaction entry procedure is made more effective. Since it can be accessible anywhere with an internet connection, it doesn't require any hardware or software. Self-service that can be accessed in response to user demands, information gathering, quick elasticity, scalable services, and a wide network are the primary features of CA (Musyaffi et al., 2022). Additionally, it is described as a practical paradigm that offers on-demand network access for sharing reconfigurable computing resources. This approach may be swiftly deployed and requires little management work or service provider engagement (Saha et al., 2020). With NetSuite, the concept of CA—where the software and data are stored on a different computer—was first introduced in the late 1990s. Later, in the early 2000s, the New Zealand-based company Xero created CA and grew to dominate both the Australian and New Zealand markets. With time, established desktop accounting firms in the US, like Intuit, saw the advantages of a CA and made the move to the cloud. Because of its versatility, CA can enhance the performance of both small and large businesses (Shaw, N, 2014). The original was used in 2008 to describe a way to store data from several devices that were spread out over numerous places. CC refers to the provision of hardware and software applications as a service over the Internet(Mihai & Duțescu, 2022).

The CC system gathers logs, stores, and transforms data into information that can help in decision-making. Which is conveniently accessible anywhere and anytime without requiring the use of a centralized server, therefore the process is tied to information technology to improve the business (Kartikasary et al., 2023). There are four categories of cloud in terms of spread. The Public cloud is owned by the supplier of services, and its Infrastructure is reachable by any user in general via the Internet through web applications and services. The private cloud which is overseen by organizations individually responsible for organizing and managing the systems used. Community cloud: It is used by a group of institutions with common goals or belonging to the same sector of activity. A hybrid cloud is the joining of two clouds together or a combination of a cloud server along physical devices(Mihai & Duțescu, 2022).

The benefits of using CC are reduced costs in economic units by not requiring many computers, software licenses, and program updates, thus reducing capital expenditures and maintenance costs (Shibuya et al., 2021). Enables access to the software from any device with an Internet connection, whether it is a computer, smartphone, or other, from anywhere and at any time (Mitran, 2020). Also, data is stored in the cloud instead of on a single desktop, and thus is a protection against infection with a virus, theft of a laptop, or a fire occurring on site (Khanom, 2017). In addition, all updates are done automatically, saved, and delivered by the service provider to the beneficiary in a quick and useful manner, and this is what contributes to the process of supporting beneficiaries. (Tarboush, 2017)

Companies will favor cloud accounting small firms, as the long-term expenses of investing in cloud accounting software are frequently lower than those of traditional accounting software, companies that utilize remote workers, and small businesses lack the resources to secure their data adequately from security breaches (Khanom, 2017). Even with cloud accounting's advantages, some companies could still favor using conventional accounting software like companies that desire strict control over accounting data and do not want it accessible through unsecured wireless networks or in situations where they are unable to keep an eye on usage. Businesses that store extremely sensitive financial data (banks, etc.), can fully manage the degree of protection by retaining it internally and don't want any outside parties to have access to it (Wali et al., 2022).

## 2.2. Technology Acceptance Model (TAM)

The TAM model was established by Davis in 1986. It was created to gauge consumer adoption of technology and information systems. This model aims to forecast users' desire to use technological advancements and explain their behavior toward information systems (Bolodeoku et al., 2022). TAM is thought that one of the largest obstacles to the success of technology systems is users' reluctance to interact with these systems. The TAM model is users' reactions towards technology adoption (Ogunsola, 2021). The model proposes perceived utility and usability as an external variable that influences users' attitudes towards using innovative technology. Suggesting that a user's behavioral intentions accept a technology depends on a person's belief in the capacity to utilize the technology (Malik & Annuar, 2021).

### 2.2.1 Perceived usefulness

The perceived utility is characterized as the perceived probability that the technology employed will increase the individual or team's organizational performance. The operators' assessment of whether using a specific technology would boost performance reflects perceived usefulness. The perceived utility of a technology is the degree to which the person thinks that the technology utilized will be the sole element in achieving their objectives (Bolodeoku et al., 2022).

### 2.2.2 Perceived Ease of Use

It has to do with how each person evaluates their level of effort expended while using the system or technological innovation. It can trust a person to use a technological system with him that will not require effort. The person also does not suffer due to the use of technological innovation (Shaw, 2014). Perceived ease of use can be clarified by considering the amount of effort required to operate a specific system. Consumer trust can be won by providing a user-friendly combination and an excellent guide, as well as demonstrating competency and goodwill on the part of service providers (Kartikasary et al., 2023). Perceived usability is also described as the belief that technology may be used with the fewest number of effort. (Malik & Annuar, 2021).

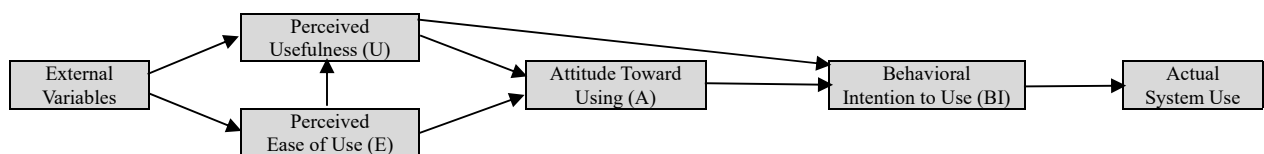


Fig. 1. TAM Model (Davis 1989)

The researcher believes that the TAM model is not sufficient to know the perceptions of accountants in Saudi companies towards cloud computing, as it relies on the perceived benefit and ease of use, while there is another especially crucial factor, which is trust in the cloud. This is based on previous studies, Albugmi et al., (2016) discovered that while implementing cloud computing apps has numerous advantages, there are also several drawbacks, including concerns with hosting, security, privacy, and trust. Alghamdi et al. (2019) believe that worries about security by permitting outside companies to manage a corporation's activities might be a key impediment to the adoption of CC. Also, Ali and Thakur (2017) discovered that most certified public accountants do not use CA due to the risk of data loss and the additional cost of migrating from traditional accounting to CA. Mitran, (2020) it is challenging for the client to verify the secure erasure of their data because they are blind to how their data is kept on the cloud. Shibuya et al. (2021) added cloud service provider's bankruptcy risk. Saad et al., (2022) discovered that security concerns positively and significantly influenced the CA of SMEs. Njonge, (2023) saw a lack of protection for financial data in the cloud, expert hackers can access classified information kept on cloud servers by companies.

### 2.2.3 Trust in the cloud

It means that the more trust potential users have in online accounting information systems, the more likely they are to adopt online systems. Aims to provide guarantees about security, online privacy, availability, and confidentiality in transactions (Younis et al., 2016). It is a certification by one of the accounting and auditing offices of the management's confirmation, which in turn confirms to clients that the business applications on the company's website are safe and can be dealt with. Before accessing any data or applications, the framework mandates that all users and entities attempting to access the network must be authorized and authenticated, and these procedure measures should continue while entering the network, so users must be routinely observed, and their identities verified routinely (Ahmed et al., 2017).

## 2.3 Hypotheses Development

Many studies have been conducted to focus on the topic of CA technologies. (Abdullah et al., 1997) aimed to determine if the same variables that affect the uptake of CA in technologically advanced nations also hold in less developed nations. The study showed that there are some similarities between technologically developed and technologically developing countries. For example, the enterprise size is a major factor influencing technical innovation and making it appealing to SMEs.

Alharbi (2012) sought to examine how Saudi Arabian consumers reacted to CA, considering five other variables that influence users' perceptions of modern technology gender, age, education level, work domain, and nationality. The study's findings suggest that consumers' attitudes toward adopting CC are significantly influenced by age, education level, work domain, and nationality. Nonetheless, there was no discernible difference in the perspectives of male and female employees about the use of CA. Tarmidi et al. (2014) focused on Malaysian accounting professionals' awareness of cloud computing. Most respondents, according to the results, believed that CA is an advanced technology that can shape business processes. However, they lack familiarity with and understanding of cloud-based technology, which prevents them from taking advantage of the advancements and advantages that the technology has to offer. Alhammadi et al. (2015) used the DOI and TOE framework to investigate the factors that influence the KSA adoption of CA. The findings showed that while technologically developed and technologically developing countries have several factors influencing cloud adoption, there are also some commonalities. Salem et al. (2021) emphasized the importance of CA and the extent to which accounting information systems are being developed in the Indonesian industry. The findings revealed that 90% of the respondents evolved into a more digital accounting system in the business. Future accountants will face more difficult accountancy tasks as accounting information systems become more digitalized. Ogunsola (2021) aimed to illustrate how CA affects the accounting procedures used in the preparation of financial reports for SME businesses in Nigeria. It is targeted to assist accountants in making quicker and more informed financial decisions. The study concluded that, because cloud CA improves the quality of SME business units' financial reports, SME economic units must employ it to improve the quality of their financial reports.

Sastararujji et al. (2022) investigated the elements that, in the wake of the pandemic, widely impacted CA acceptance among Thai SMEs. The findings implied that suppliers ought to concentrate on the unique requirements and traits of SMEs. Kartikasary et al. (2023) assessed CA software security system standards and policies in MSME, as well as the opportunities gained from implementing these systems and their future needs. They also considered the benefits of CA for MSMEs. The outcome demonstrated that CA effectiveness, dependability, usability, and security had a significant impact on how well businesses operate. It is believed that MSMEs can use CA to use fewer human resources, particularly when tracking sales and inventory of goods and production supplies. Abusaimh et al. (2023) studied the impact of CA on Jordanian business firms' advantages over their competitors, namely those that used CA. The study found a substantial association between competitive advantage and CC. Furthermore, CA affected the quality, cost, responsiveness, reliability, and innovation dimensions of competitive advantages for commercial businesses; quality was most affected by cloud computing services, followed by cost and responsiveness. CC, however, had no major impact on innovation or reliability.

### 3. Methodology

#### 3.1 Sampling and data collection

The present study is classified as a cause-and-effect study and a descriptive study. Its purpose is to test (to study the impact of cloud accounting on accounting information quality (AIQ) in the KSA). The approach starts with a literature review of the range of factors driving cloud accounting adoption. After that, information collected from three different groups was used: large Saudi companies, as well as small and medium companies, and finally accounting and auditing offices, and then the Smart PLS was used to code the data. After confirming normality, validity and reliability, descriptive analysis and variable correlation checks were performed.

**Table 1**

Response rate of questionnaire N (178)

	Large		Small and medium		office	
	The number	The ratio	The number	The ratio	The number	The ratio
Number of questionnaires	81	45	59	33	38	22

Source: prepared by researcher from data (2024)

#### 3.2 PLS-SEM implementation

We used partial least squares structural equation modelling (PLS-SEM) to assess our structural model. When higher-order components are included in the model, PLS-SEM is the recommended statistical method (Hair et al., 2022), which further supports PLS-SEM's suitability for the current investigation. In keeping with the previous ideas, PLS-SEM is especially helpful when the sample consists of small, closely held businesses since it can analyze correlations between several constructs at once (Binz-Astrachan et al., 2014).

### 4. Results

#### 4.1 Measurement model evaluation

The study uses the confirmatory composite analysis (CCA) method to evaluate the result. Using the repeated indicators approach, first evaluated the formative first-order constructs after determining the validity and reliability of the reflecting first-

order indicators. To evaluate discriminant validity, the factor loadings, composite reliability (CR), average variance extracted (AVE), and HTMT ratios were used. Verifying the nomological validity of the constructs is the last step before looking at the predictive validity of the model. Table 2 displays the outcomes of the measurement model assessment metrics. Measurement models surpassed the minimally advised thresholds for convergent validity and composite reliability (AVE).

**Table 2**  
Construct reliability and validity

	Outer loadings	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Average variance extracted (AVE)
accounting_information1 ← AccountingInformation	0.819				
accounting_information2 ← AccountingInformation	0.702				
accounting_information3 ← AccountingInformation	0.727	<b>0.808</b>	<b>0.814</b>	<b>0.867</b>	<b>0.657</b>
accounting_information4 ← AccountingInformation	0.804				
accounting_information6 ← AccountingInformation	0.704				
ease_of_use1 ← Ease of use	0.780				
ease_of_use2 ← Ease of use	0.849				
ease_of_use6 ← Ease of use	0.822	<b>0.842</b>	<b>0.849</b>	<b>0.894</b>	<b>0.674</b>
ease_of_use7 ← Ease of use	0.842				
perceived_benefit3 ← Perceived benefit	0.833				
perceived_benefit4 ← Perceived benefit	0.780				
perceived_benefit5 ← Perceived benefit	0.818	<b>0.867</b>	<b>0.869</b>	<b>0.904</b>	<b>0.654</b>
perceived_benefit6 ← Perceived benefit	0.820				
perceived_benefit7 ← Perceived benefit	0.789				
trust3 ← Trust	0.931				
trust5 ← Trust	0.862	<b>0.763</b>	<b>0.820</b>	<b>0.892</b>	<b>0.805</b>

Table 2 reveals that Composite reliability ranged from 0.763 to 0.867. The AVE values for the lower-order constructs that comprise ranged from 0.654 to 0.805 (Hair et al., 2022). Utilizing 50,000 subsamples, we ran the Smart PLS bootstrapping procedure to assess the indicators' statistical significance. Every indicator exhibited significance, with p-values surpassing 0.000. Consequently, we were able to validate each construct's importance, convergent validity, and reliability. We used the Heterotrait -Monotrait ratio of correlations (HTMT), to assess discriminant validity, measuring the distinctiveness of constructs, (Henseler et al., 2015). All the HTMT values – shown in Table 3 – were lower than the recommended standard of 0.90, with the highest value at 0.868 for the lower-order constructs. Perceived benefit on ease of use of the bootstrapping algorithm with 50,000 subsamples revealed none of the values in the confidence intervals were equal to one. After demonstrating discriminant validity, we used additional nomological net constructs to evaluate nomological validity. Nomological validity was confirmed by the fact that every one of the findings agreed with the theoretical direction, expected size, and significance of the relationships.

**Table 3**  
Heterotrait-Monotrait ratio of correlations (HTMT) for Discriminant validity

	Accounting Information	Ease of use	Perceived benefit	Trust
Accounting Information				
Ease of use	0.743			
Perceived benefit	0.823	0.868		
Trust	0.650	0.648	0.737	

Collinearity (VIF) between the indicators of the significance and relevance of the outer weights was utilized to evaluate the convergent validity of the formative first-order constructs (Sarstedt et al., 2019). All VIF values were below the recommended maximum level of 3.0 all indicators of the formative were significant in size.

**Table 4**  
Collinearity statistics (VIF)

	Accounting Information
Ease of use	2.318
Perceived benefit	2.631
Trust	1.593

#### 4.2 Assessing the Structural Model

The most crucial metrics to guarantee the appropriateness of the structural model in PLS-SEM are the effect size ( $F^2$ ) and coefficient of determination ( $R^2$ ). ( $R^2$ ) stands for the variance in the model (Hair et al., 2022), and denotes the variance in the dependent variable explained by the independent variable. The model is considered substantial if the  $R^2$  is more than 0.67, moderate if it is between 0.33 and 0.67, and weak if it is between 0.19 and 0.33, the model is deemed substantial. According to the model, if the  $R^2$  value is higher than 0.10, the model is deemed appropriate. The reasonable  $R^2$  values (0.33–0.67) in Table 4 and Fig. 2 support the applicability of the structural model.

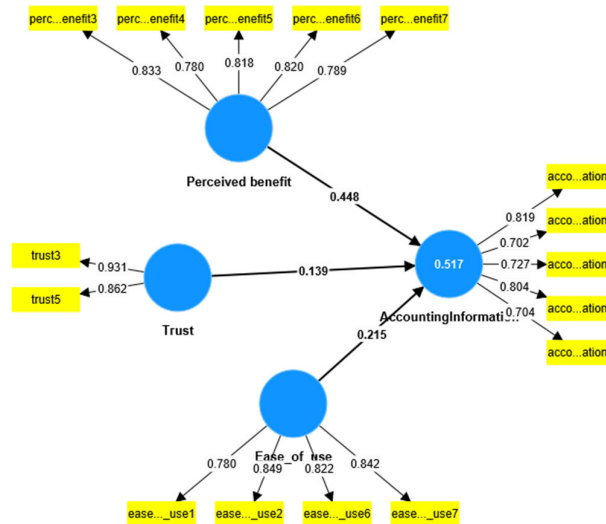


Fig. 2. The results of the composite reliability

Thus, the effect size of independent variables on dependent variables is determined by the ( $F^2$ ). In terms of impact, the model is deemed significant if the  $F^2$  is greater than 0.35, moderate if the  $F^2$  falls between 0.15 and 0.35, negligible if the  $F^2$  falls between 0.02 and 0.15, and not significant if the  $R^2$  is less than 0.02. The values of  $F^2$  are displayed in Table 4 and Figure 2, where we can observe that the accounting information is subject to a small effect from ease\_of\_use. And the medium effect of the Perceived benefit on accounting information, finally the effect of the values of  $F^2$  is a small effect on accounting information.

Table 5

Dependent variable (Accounting Information)

Effect	$F^2$	$R^2$	
Ease_of_use	0.041	0.517	Small effect
Perceived benefit	0.158		Medium effect
Trust	0.025		Small effect

4.3 Structural model evaluation

To test structural model results (the factors driving the adoption of cloud accounting in the Kingdom of Saudi Arabia), path coefficients were partially significant. The results summarized the path coefficients, their significance levels, and the outcomes of the hypothesis tests are shown in Table 6 and Fig. 3.

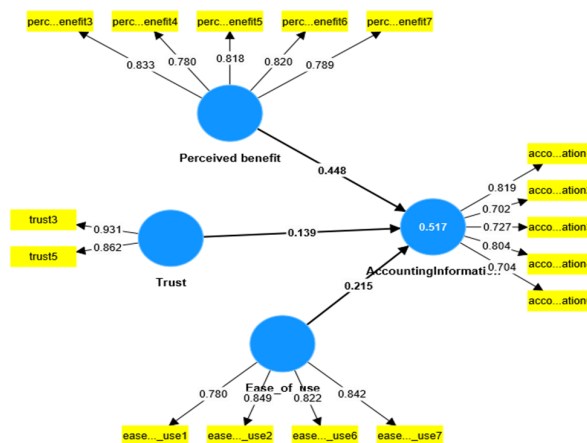


Fig. 3. The results of testing hypotheses of all Kingdom of Saudi Arabia compaies

Table 6

Hypotheses test results of all Kingdom of Saudi Arabia companies

	Path coefficient	T statistics	P values	Result
Ease_of_use → Accounting Information	0.215	1.877	0.061	Rejected
Perceived benefit → Accounting Information	0.448	4.420	0.000	Accepted
Trust → Accounting Information	0.139	1.891	0.059	Rejected

After checking the Measurement model evaluation and Structural model evaluation, the results were found to be statistically significant (95% confidence interval, 5,000 bootstrapping). So, As indicated by path coefficients and their significance levels:

**H1 Rejected** (There is no positive connection between Ease of use on AIQ) the Significance level 0.061.

**H2 Accepted** (There is a positive connection between Perceived benefit and AQI) the Significance level 0.000.

**H3 Rejected** (There is no positive connection between Trust on AIQ) the Significance level 0.059.

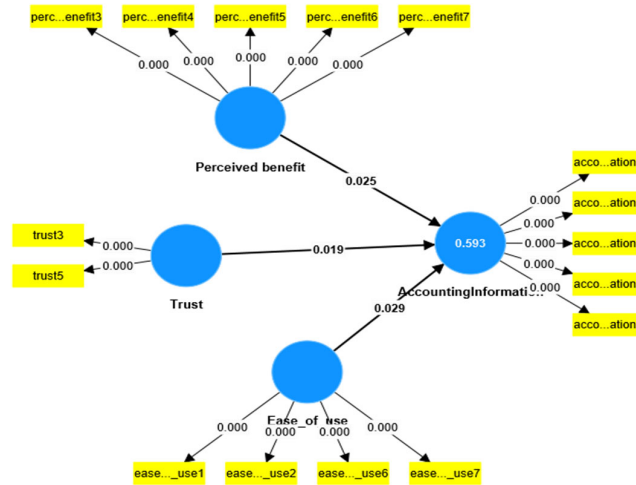


Fig. 4. Structural Equation Model for Large Companies

After checking the Measurement model evaluation and Structural model evaluation, the results were found to be statistically significant. So, As indicated by path coefficients and their significance levels:

**H1 Accepted** (There is a positive connection between Ease of use on AIQ) the Significance level 0.029.

**H2 Accepted** (There is a positive connection between Perceived benefit and AQI) the Significance level 0.025.

**H3 Accepted** (There is a positive connection between Trust on AIQ) the Significance level 0.019.

Table 7

Hypotheses test results large companies

	Path coefficient	T statistics	P values	Result
Ease_of_use → Accounting Information	0.305	2.183	0.029	Accepted
Perceived benefit → Accounting Information	0.325	2.249	0.025	Accepted
Trust → Accounting Information	0.240	2.346	0.019	Accepted

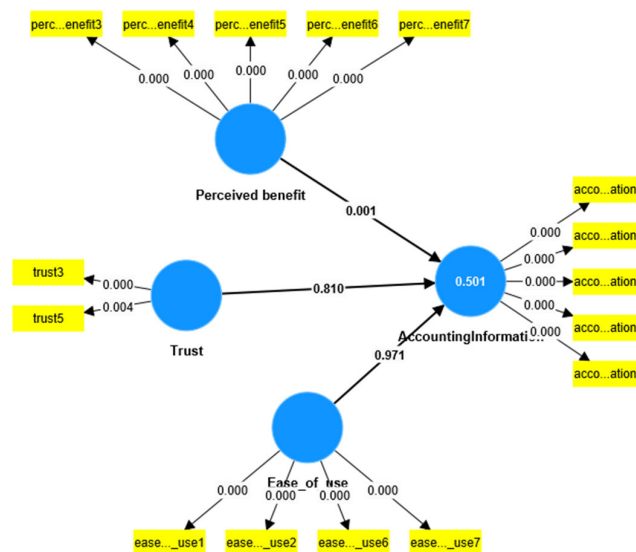


Fig. 5. Structural Equation Model for small and medium companies

After checking the Measurement model evaluation and Structural model evaluation, it was determined that the findings were statistically significant. So, As indicated by path coefficients and their significance levels:

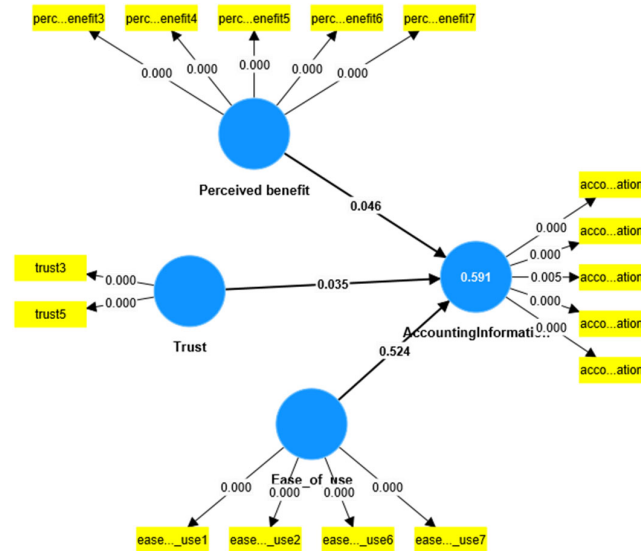
**H1 Rejected** (There is no positive connection between Ease of use on AIQ) the Significance level 0.971.

**H2 Accepted** (There is a positive connection between Perceived benefit and AQI) the Significance level 0.001.

**H3 Rejected** (There is no positive connection between Trust on AIQ) the Significance level 0.810.

**Table 8**  
Hypotheses test results small and medium companies

	Path coefficient	T statistics	P values	Result
Ease_of use → Accounting Information	0.009	0.037	0.971	Rejected
Perceived benefit → Accounting Information	0.717	3.355	0.001	Accepted
Trust → Accounting Information	-0.034	0.240	0.810	Rejected



**Fig. 6.** Structural Equation Model for accounting and audit office

After checking the Measurement model evaluation and Structural model evaluation. So, as indicated by path coefficients and their significance levels:

H1 Rejected (There is no positive connection between Ease of use on AIQ) the Significance level 0.524.

H2 Accepted (There is a positive connection between Perceived benefit and AQI) the Significance level 0.046.

H3 Accepted (There is no positive connection between Trust on AIQ) the Significance level 0.035.

**Table (9)** Hypotheses test results for accounting and audit office

	Path coefficient	T statistics	P values	Result
Ease_of use → Accounting Information	0.152	0.637	0.524	Rejected
Perceived benefit → Accounting Information	0.403	1.997	0.046	Accepted
Trust → Accounting Information	0.315	2.115	0.035	Accepted

**5. Discussion**

The study found that the impact of CC on the accounting information quality (AIQ) in the Kingdom of Saudi Arabia differs in terms of results which found a positive relationship between Perceived benefit and AIQ. On the other hand, there is a negative relationship between the ease of use and trust in the cloud and AIQ. The study results are also endorsed by the literature, according to Albugmi et al., (2016), Alghamdi et al., (2019) and Saad et al., (2022) concluded that utility is the main justification for adapting CA, but there are reservations about security in the CA adoption process. Also, Kartikasary et al., (2023) found that CA effectiveness, dependability, usability, and security had a significant impact on business operations. Njonge, (2023) found that CA systems have a positive impact on improving the efficiency and integrity of financial information. Based on the findings of the hypothesis testing, H2 was verified; The perception of Saudi accountants for adapting using CA differs according to company size. According to the findings, there is a positive impact of all factors at the level of large Saudi companies, while the impact differs at the level of SME companies and accounting and auditing offices. The findings of earlier research by Abdullah et al., (1997) show that company size is a major factor influencing technical



innovation and making it appealing to SMEs. Also, Alharbi, (2012) found that attitudes toward adopting CC are significantly influenced by work domain. Ali & Thakur, (2017) found that most certified public accountants do not use CA due to the risk of data loss and the additional cost of migrating from traditional accounting to CA.

## 6. Conclusion

This study examined the impact of CC on AIQ. Also, the extent of the influence of company size on relationship (CC) and accounting information quality. The results found that large companies believe that cloud computing has a positive impact on AIQ. However, SME companies and audit offices feel worried that data leaks due to permitting outside companies to manage a corporation's activities might be a key impediment to the adoption of CC.

The primary research constraint is reflected in the study sample, which included 177 respondents from accountants and audit firms serving Saudi businesses in Riyadh. Furthermore, the TAM model was the only one employed in the study. Subsequent research endeavors can examine the perceived contributions of diverse financial policymakers with larger sample sizes, particularly ones that are worldwide.

More testing is necessary to enhance the scale's generalizability and determine the extent to which CC services enhance Saudi corporates' financial performance. Several likely future developments merit further thought on their effects on the financial industry and accounting education. Accounting educators will have to keep up with the latest developments in technology and adapt their programs accordingly.

## Acknowledgements

This project was funded by the Deanship of Scientific Research at Prince Sattam bin Abdulaziz University award number 2023/02/25351.

## References

- Abdullah, A., Clare, S., & Alan, E. (1997). *The Determinants and Cloud Computing Adoption In Saudi Arabia*. 86(August), 124–138.
- Ahmed, H. A. S., Ali, M. H., Kadhum, L. M., Bin Zolkipli, M. F., & Alsariera, Y. A. (2017). A review of challenges and security risks of cloud computing. *Journal of Telecommunication, Electronic and Computer Engineering*, 9(1–2), 87–91.
- Albugmi, A., Alassafi, M. O., Walters, R., & Wills, G. (2016, August). Data security in cloud computing. *In 2016 Fifth International Conference on Future Generation Communication Technologies (FGCT) (pp. 55-59)*. IEEE.
- Alghamdi, F., Sharma, D., & Sathye, M. (2019). Investigating the factors affecting the adoption of cloud computing in SMEs: A case study of Saudi Arabia. *Lecture Notes in Business Information Processing*, 341(January), 158–176. [https://doi.org/10.1007/978-3-030-11395-7\\_15](https://doi.org/10.1007/978-3-030-11395-7_15)
- Alharbi, S. T. (2012). Users' acceptance of cloud computing in Saudi Arabia: an extension of technology acceptance model. *International Journal of Cloud Applications and Computing (IJCAC)*, 2(2), 1-11.
- Alhammadi, A., Stanier, C., & Eardley, A. (2015). The determinants of cloud computing adoption in Saudi Arabia. *Computer Science & Information Technology*, pp. 55–67, DOI:10.5121/csit.2015.51406.
- Ali, Y., & Thakur, U. (2017). Awareness and Adoption of Cloud Based Accounting By Qualified Chartered Accountants in Udaipur District of Rajasthan: an Empirical Study. *Indian Journal of Accounting (IJA) ISSN*, 49(2), 77–82.
- Binz-Astrachan, C.B., Patel, V.K., & Wanzenried, G. (2014). A comparative study of CB-SEM and PLS-SEM for theory development in family firm research. *Journal of Family Business Strategy*, 5(1), 116-128.
- Bolodeoku, P. B., Igbinoaba, E., Salau, P. O., Chukwudi, C. K., & Idia, S. E. (2022). Perceived usefulness of technology and multiple salient outcomes: the improbable case of oil and gas workers. *Heliyon*, 8(4), e09322. <https://doi.org/10.1016/j.heliyon.2022.e09322>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Dimitriu, O., & Matei, M. (2015). Cloud Accounting: A New Business Model in a Challenging Context. *Procedia Economics and Finance*, 32(15), 665–671. [https://doi.org/10.1016/s2212-5671\(15\)01447-1](https://doi.org/10.1016/s2212-5671(15)01447-1)
- Dorđević, M., Radović, O., & Bonić, L. (2018). Potentials for applying cloud technology in accounting. *Ekonomika*, 64(3), 23–30. <https://doi.org/10.5937/ekonomika1803023d>
- Hair, J.F., Hult, G.T.M., Ringle, C. and Sarstedt, M. (2022), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 3rd ed., SAGE Publications, Thousand Oaks, CA.
- Hamundu, F. M., Husin, M. H., Baharudin, A. S., & Khaleel, M. (2020). Intention to Adopt Cloud Accounting: A Conceptual Model from Indonesian MSMEs Perspectives. *Journal of Asian Finance, Economics and Business*, 7(12), 749–759. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO12.749>
- Henseler, J., Ringle, C.M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Kartikasary, M., Wicaksono, A., Laurens, & Juvenia. (2023). Cloud Accounting Application Program Analysis in Micro, Small, and Medium Business in Indonesia. *E3S Web of Conferences*, 388. <https://doi.org/10.1051/e3sconf/202338803022>
- Khanom, T. (2017). Cloud Accounting: A Theoretical Overview. *IOSR Journal of Business and Management*, 19(06), 31–38.

- <https://doi.org/10.9790/487x-1906053138>
- Malik, A. N. A., & Annuar, S. N. S. (2021). The Effect of Perceived Usefulness, Perceived Ease of Use, Reward, and Perceived Risk toward E-Wallet Usage Intention. *Eurasian Studies in Business and Economics*, 17, 115–130. [https://doi.org/10.1007/978-3-030-65147-3\\_8](https://doi.org/10.1007/978-3-030-65147-3_8)
- Mihai, M. S., & Dușescu, A. (2022). How cloud accounting and integrated services based on AI can impact accounting companies? *Proceedings of the International Conference on Business Excellence*, 16(1), 849–858. <https://doi.org/10.2478/picbe-2022-0079>
- Mitran, (2020). Risks and benefits of adopting cloud accounting. *Internal Auditing & Risk Management*, 60(4), 22-32. DOI: 10.5281/zenodo.4383046
- Mohamed Helio, M., & Najim Abdullah, D. B. (2023). The Effect of Cloud Computing in Facing the Challenges of Applying IFRSs in Iraqi Private Banks. *International Journal of Research in Social Sciences & Humanities*, 13(02), 184–195. <https://doi.org/10.37648/ijrssh.v13i02.015>
- Musyaffi, A. M., Septiawan, B., Arief, S., Usman, O., Sismi, A. A., & Zairin, G. M. (2022). What Drives Students to Feel the Impact of Online Learning in Using a Cloud Accounting Integrated System? *TEM Journal*, 11(4), 1577–1588. <https://doi.org/10.18421/TEM114-19>
- Njonge, T. (2023). *Influence of Psychological Well-Being and School Factors on Delinquency, During the Covid-19 Period Among Secondary School Students in Selected Schools in Nakuru County: Kenya*. VII(2454), 1175–1189. <https://doi.org/10.47772/IJRISS>
- Ogunsola, E. A. E. (2021). Effect of Cloud Accounting on the Financial Reporting Quality of SMEs in Nigeria. *Bingham University Journal of Accounting and Business (BUJAB)*, 2(2), 140–149. <http://35.188.205.12:8080/xmlui/handle/123456789/643%0Ahttp://35.188.205.12:8080/xmlui/bitstream/handle/123456789/643/9.pdf?sequence=1&isAllowed=y>
- Saad, M., Lutfi, A., Almaiah, M. A., Alshira'h, A. F., Alshirah, M. H., Alqudah, H., Alkhassawneh, A. L., Alsyouf, A., Alrawad, M., & Abdelmaksoud, O. (2022). Assessing the Intention to Adopt Cloud Accounting during COVID-19. *Electronics (Switzerland)*, 11(24), 1–19. <https://doi.org/10.3390/electronics11244092>
- Sastararujji, D., Hoonsopon, D., Pitchayadol, P., & Chiwamit, P. (2022). Cloud accounting adoption in Thai SMEs amid the COVID-19 pandemic: an explanatory case study. *Journal of Innovation and Entrepreneurship*, 11(1). <https://doi.org/10.1186/s13731-022-00234-3>
- Saha, T., DAS, S. K., Rahman, M. M., Siddique, F. K., & Uddin, M. G. (2020). Prospects and Challenges of Implementing Cloud Accounting in Bangladesh\*. *Journal of Asian Finance, Economics and Business*, 7(12), 275–282. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO12.275>
- Salem, S., Nurdayadi, N., & Alfiantri, A. (2021). Cloud Accounting : The Development of Accounting Information System in Industry 4.0 in Indonesia. *Conference Series*, 3(2), 282–294. <https://doi.org/10.34306/conferenceseries.v3i2.597>
- Sarstedt, M., Hair, J.F. Jr, Cheah, J.H., Becker, J.M., & Ringle, C.M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal (AMJ)*, 27(3), 197-211.
- Shaw, N. (2014). The mediating influence of trust in the adoption of the mobile wallet. *Journal of Retailing and Consumer Services*, 21(4), 449–459. <https://doi.org/10.1016/j.jretconser.2014.03.008>
- Sibuea, A. Y., Sinaga, M. B., & Muda, I. (2021). Cloud accounting adoption in SMEs: An overview. *International Journal of Multidisciplinary Research and Growth Evaluation*, 2(1), 26–30. [www.allmultidisciplinaryjournal.com](http://www.allmultidisciplinaryjournal.com)
- Tarboush, S. A. (2017). Cloud Accounting As a New Business Model and its influence on the accounting process. *Multi-Knowledge Electronic Comprehensive Journal For Education And Science Publications (MECSJ)*, 28(4), 723–731. <https://cibgp.com/https://cibgp.com/>
- Tarmidi, M., Rasid, S. Z. A., Alrazi, B., & Roni, R. A. (2014). Cloud Computing Awareness and Adoption among Accounting Practitioners in Malaysia. *Procedia - Social and Behavioral Sciences*, 164(August), 569–574. <https://doi.org/10.1016/j.sbspro.2014.11.147>
- Wali, K., Karim Darwish, B., & Jabbar Abdulfattah, S. (2022). Security and confidentiality of information under the application of cloud accounting compared to traditional accounting. *Journal of Economics and Administrative Sciences*, 28(134), 186–204. <https://doi.org/10.33095/jeas.v28i134.2430>
- Wyslocka, E., & Jelonek, D. (2015). Accounting in the Cloud Computing. *Turkish Online Journal of Science & Technology*, 5(4), 1. <http://lib.comu.edu.tr/kampusdisi.php>
- Younis, Y. A., Merabti, M., Kifayat, K., Survey, I. A., Younis, Y. A., Merabti, M., & Kifayat, K. (2016). Secure Cloud Computing for Critical. Secure Cloud Computing for Critical Infrastructure : A Survey. *Researchgate.Net*, June 2013. <https://www.researchgate.net/publication/262817790>

