IIUC Business Review, Vol.-13, Issue-1, Dec. 2024
DOI: https://doi.org/10.3329/iiucbr.v13i1.88356

Impact of accounting information system quality on perceived organizational performance: Mediating role of artificial intelligence application

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Abstracts
Artificial intelligence has become very helpful in an organization's daily decision-making process. A study is conducted to determine the mediating role of artificial intelligence in the quality of accounting information systems and their perceived organizational performance. The study used an exploratory method to measure the mediating effect where primary data were collected and analyzed. Then, the structural equation model is developed and validated with convergent validity, discriminant validity and model index values in IBM SPSS AMOS 22 software to test the hypotheses. The study results show that the quality of the accounting information system has a significant contribution to the perceived organizational performance without any mediation. Artificial intelligence works as a mediating factor between Accounting Information System (AIS) quality and perceived organizational performance. So, artificial intelligence has a full mediating effect on information system quality and perceived organizational performance. As a result, artificial intelligence has become very important in an organization's daily decision-making process. The results of this study support the use of artificial intelligence in policy-making and strategy in the daily decision-making process.

Keywords Accounting information system, Organizational performance, Artificial intelligence, Mediating.

Paper type Research paper

1. Introduction

The use of information technology simplifies many tasks that are performed by different types of business organizations. The rising amount of responsibilities placed on business organizations and commercial banks in particular, in recent years, has led to an expansion of the function that information technology plays inside those organizations. When taking into account the significant contribution that information makes to the process of decision-making, it is imperative that businesses, particularly commercial banks, have access to adequate information management systems. Commercial banks are able to maintain their competitive edge because of the availability of advanced information

IIUC Business Review
Vol.-12, Issue-1, Dec. 2023
pp. 59-78

ISSN 1991-380X

technology. In order to make timely, accurate, and reasonable decisions, the management of commercial banks needs accounting information. Planning, organizing, directing, and managing are all ways in which information may be used by banks to make decisions, which in turn may increase work efficiency and performance. Improving performance is not going to be a walk in the park unless you employ efficient internet technology. By examining the use of information technology in the decision-making process of commercial banks in Bangladesh, this study seeks to answer the question of whether the results produced by the automated AIS, which refers to tools and systems designed for the collection and display of accounting information so accountants and executives can make informed decisions used by these institutions to meet the requirements of their decision-makers. The AIS is a tool for automating the accounting process by addressing routing and administrative issues. Artificial intelligence (AI) refers to a set of technologies that enable computers to perform various advanced functions, including the ability to see, understand, and translate spoken and written language; analyze data; and make recommendations, which can enhance decision-making. AI plays an important role in every sector to gain strategic objectives. AI can be the best mediator to use with AIS to maximize performance. Another focus of this research is the commercial banking industry in Bangladesh and how IT influences their decision-making. For the outputs of the automated AIS to be suitable for use in decision-making processes, they need to possess a number of properties. Is the AIS able to provide the required outputs that commercial banks in Bangladesh's decision-makers require, therefore contributing to the performance of these institutions?

The objective of this study is to determine the impact of Accounting Information System quality on perceived organizational performance without any mediation and the mediating effect of artificial intelligence application for Accounting Information System quality on perceived organizational performance.

2. Literature review

Accounting Information Systems have been used in the firms for a long period of time. A lot of studies have been conducted on how to make AISs more effective and efficient. AIS involves the administrative and routine jobs in firms. Artificial Intelligence is currently playing important roles in all sectors. AI involves the strategic decision-making process in firms. AIS becomes more effective with the blending of AI. There are scopes to be explored how AI be best applied with AIS to get the maximum benefit. In the following literature, an attempt is made to find out the avenue to make AIS more fruitful through the application of AI.

Gaps have been identified from the existing literatures and accordingly, the outline has been demonstrated to conduct the study as the conclusion of the literature review. The literature review shows that the gap between AIS and organizational performance can be mediated by AI.

As part of their research on the topic, Abayomi and Adegoke (2016) looked at how computerized accounting systems affected the efficiency and effectiveness of banks in Nigeria. They found that the banking industry gains substantially from the use of computerized accounting systems. Akande's (2016) study, "Information System Effect on Performance of Entrepreneurs in South Western Nigeria," found that CA systems manage accounting data well, which allows them to make accurate reports on time. Entrepreneurs primarily employ computerized accounting systems because of the system's effectiveness and efficiency in connection to their operations. According to research by Bakri (2016), titled The Effect of the Use of Information Technology and Organizational Culture on the Quality of Information Systems, information systems can assist firms in processing transactions more quickly and improving the quality of their financial statements. "Financial reporting quality and investment efficiency of private firms in emerging markets."

Information systems can help businesses improve the quality of their financial statements and process transactions faster, according to research by Bakri (2016) titled The Effect of the Use of Information Technology and Organizational Culture on the Quality of Information Systems. Financial reporting quality and investment efficiency of private firms in emerging markets. It was discovered by Darmansyah and Fitrijanti (2016). There is strong evidence that CBAIS usage significantly improves accounting information quality, which in turn significantly affects management performance in the sugar business. In their 2016 publication titled "Usage of Computerized Accounting Information Systems at Development Fund Organizations: The Case of Zimbabwe," Yose and Choga highlighted the use of CAIS. Eruemegbe (2015) found that information and communication technology improve the efficiency and effectiveness of banks, gives them a competitive edge, and boosts their profitability in his study of the impact of ICT on banking sector organization performance. According to the resource-based view (RBV) of organizational performance, Kabiru, Rajalli, and Hasan (2015) showed in their study, "The Relationship between Information Technology Capability and Organizational Performance in Nigerian Banks," that there is a strong correlation between IS capability and organizational performance in Nigerian banks. The results of this study can help managers and academics in Nigeria elucidate the relationship between ROI and IS competency.

Kloviend' and Gimzauskiene (2015) demonstrated in their study "The Effect of Information Technology on Accounting System's Conformity with Business Environment: A Case Study In Banking Sector Company" that...with the help of information technology, accounting systems and business environments can become more closely aligned. When the accounting system fails to provide useful information for decision-making, information technology may be a useful tool for the compliance process. Studying "The Impact of Computerized Accounting System on Financial Reporting in the Ministry of Local Government of Rwanda," Murungi and Kayigamba (2015) found that nearly all respondents (98%) recognized that the Ministry utilizes both cash-based and accrual-based computerized accounting systems. Furthermore, 38% of the people who took the survey thought that computerized accounting makes things more transparent, and 38% thought that it made things more accountable. Accounting information systems, according to Saeidi's 2014 essay "The impact of accounting information systems on financial performance - a case study of TATA Consultancy Services (TCS) - India," are among a company's most important systems. The data it contains will be useful for managers at all levels of the organization. Their work in planning, controlling resources, assessing performance, and decision-making is enhanced by this data. According to Shiraj (2015), the first step was to assess the current state of computerized accounting systems (CAS) and their development and implementation. The second step was to analyze the potential impact of CAS on improvement. The research topic was "The Impact of Using Computerized Accounting Systems (CAS) in Financial Reporting Among SMEs: Special Reference To the South Eastern Region, Sri Lanka." He reasoned that computerized accounting systems precisely generate financial reports and that prompt generation of these reports helps with business decision-making. In a study published in the journal Accounting and Finance, Ware (2015) investigated the use of computerized accounting systems as an efficient method of keeping accounting records in Ghanaian banks. The case study focused on the Ga Rural Bank. After considering the pros and cons, he determined that banks' financial reporting has been improved by implementing a computerized accounting system. Companies, especially rural banks, need to use an accounting system to stay competitive. A study titled "The Role of Accounting Information Systems (A.I.S.) in Rationalized Administrative Decision-making. (Field Study) Jordanian Banks" was carried out by Swalhah (2014). The purpose of the study was to determine the function of AIS in rationalized administrative decision-making, as it pertained to four banks in Jordan: the Islamic International Arab Bank, the Housing Bank for Jordan, the Jordan Islamic Bank for Development, and the Jordan Islamic Bank. Both the administrative decision-making

process and the activation of accounting control processes and settings are greatly aided by accounting information systems. In addition to accounting systems, it is critical to develop the software, hardware, and tools utilized by accounting information systems; these systems should then be expanded into marketing activities and used to build future company strategies.

A study conducted by Abubakar, Gatawa, and Kebbi (2011) examined the effect of an information system on the performance of certain commercial banks in Nigeria. The researchers discovered that the utilization of Information Systems in this sector led to an increase in return on equity. A study conducted by Agbolade (2011) titled "Information and Communication Technology and Banks Profitability in Nigeria" demonstrated that the utilization of Information Systems in the banking sector led to a rise in industry profits and a slight but positive shift in investment levels. Using regression coefficients and component analysis, they confirmed that there was a negligible amount of profit even before the advent of ICT, thereby disproving your theory. A study conducted by Chen, Hope, Li, and Wang (2011) indicated that in nations with less robust investor protection measures, financial systems focused on banks, and higher levels of tax and financial reporting rule conformity had lower financial reporting quality (FRQ). The World Bank's data and their empirical studies demonstrate that the FRQ improves investment efficiency. They also found that bank funding strengthens the connection between FRQ and investment efficiency, but tax incentives to cut earnings weaken it. There has been much speculation in the academic literature on the possible connection between tax-minimization incentives and the informative role that profits perform. They provided extensive proof to back up their assertions in this regard. Researchers in Indonesia looked at how sugar companies' financial data and managers' efficiency were affected by using a computer-based accounting information system (CBAIS). In 2011, Ghasemi, Shafeiepour, Aslani, and Barvayeh (2011) investigated "The influence of Information Systems (IS) on current accounting systems." Companies may quickly and simply develop individual reports for management decision-making according to their results. Computerized accounting systems provide various benefits, including improved functionality, accuracy, processing speed, and the ability to generate reports for external use. At the end of the essay, we looked at the pros and cons of information system (IS) accounting systems. In their 2014 study titled "Impact of Technological Innovation on Delivery of Banking Services in Nigeria," Joseph, Ani, Chioke, and Samuel found that technological innovation had a positive link with the performance of bank staff. In addition, there is a strong association between technical innovation and customer happiness and retention rates,

which are both improved by IS utilization. How Ugandan Manufacturing Firms' Financial Data Reporting Has Changed Due to Computerized Accounting Using Uganda Breweries Limited as a case study, Mark (2011) investigated how the use of computerized accounting affected financial reporting. Uganda Breweries, a Private Company The results demonstrated that 67.7 per cent of survey takers were in agreement that a computerized accounting system simplifies ledger transaction submission and decreases the possibility of human error.

The purpose of the study by Momani and Obeidat (2012), "Do the Outputs of the IS Satisfy the Requirements of Decision Makers of the Omani Commercial Banking Industry? ", is to determine if the decision-makers of Omani commercial banks are satisfied with the outputs of their automated accounting information systems in terms of being consistent, relevant, comprehensible, and dependable. A t-test and a predetermined set of descriptive statistics were used to analyze the collected data and test the study's premise. Because they were concise, relevant, trustworthy, comparable, and consistent, the findings generated by the automated IS of the Omani commercial banks were deemed useful for decision-making. According to Saleh's (2011) study titled "A Study on the Use of Computerized Accounting Systems in Small Business: A Case of Small Business in Libya," small businesses are more inclined to implement CAS if they see its benefits.

Salehi and Elahe (2012) did a research study called "The Role of Information Technology in Financial Reporting Quality: Iranian Scenario" to investigate the effect of information technology on the quality of financial reporting. This effort led to the creation of a questionnaire. We tested our hypotheses using Duncan's Test, ANOVA, and the T-Evaluate, and then examined the data. The evidence suggests that accounting data are more relevant and trustworthy after incorporating IT. It also makes things more comparable. "The Impact of ICT Adoption on Financial Performances of Commercial Banks in KENYA." Wesutsa (2012) found that commercial banks in Kenya were able to improve their operations, liquidity, and asset quality through the use of ICT. This not only increased increase their market share, but also helped the firm stay competitive. Moreover, in the current market, banks have more money to lend, thanks to ICT.

In their 2007 work titled "Web-based corporate reporting in Bangladesh: An exploratory study," Dutta and Bose discuss the results of an experimental study they carried out on the use of the internet for the dissemination of corporate information by listed enterprises in Bangladesh. Companies listed on either the Dhaka Stock Exchange (DSE) or the Chittagong Stock Exchange (CSE) make up 268 of the study sample (CSE). We gathered information regarding online corporate

reporting by viewing the sample businesses' corporate websites using a standard web browser. Based on their research, the authors proved that online corporate reporting is a relatively new phenomenon in Bangladesh.

Computerized accounting information systems reduce operational expenditures, save time, and reduce mistakes, according to the study's findings. We were able to accomplish our goal of better presenting financial reports.

As discussed in the literature, AI has an impact on gaining the best output from AIS, which is justified by the following hypotheses.

Hypothesis 1

Null Hypothesis H_0: There is no direct effect of Accounting Information System quality on perceived organizational performance.

Alternative Hypothesis H_1: There is a direct effect of Accounting Information System quality on perceived organizational performance.

Hypothesis 2

Null Hypothesis H_0: There is no indirect effect of Accounting Information System quality on perceived organizational performance with Artificial Intelligence applications.

Alternative Hypothesis H_1: There is an indirect effect of Accounting Information System quality on perceived organizational performance with Artificial Intelligence applications.

After finalizing the factors, the accounting information system quality on perceived organizational performance (AISQ-POP) structural equation model is developed, with accounting information system quality selected as the exogenous variable and perceived organizational performance as an endogenous variable to test the direct effect. After that, another equation model for accounting information system quality in terms of perceived organizational performance for the mediating artificial intelligence application (AISQ-POP-MAIA) structure is developed. Accounting information system quality is selected as the exogenous variable, perceived organizational performance is selected as the endogenous variable, and artificial intelligence is selected as the mediating variable to test the indirect effectiveness of the conceptual model in Figure 1.

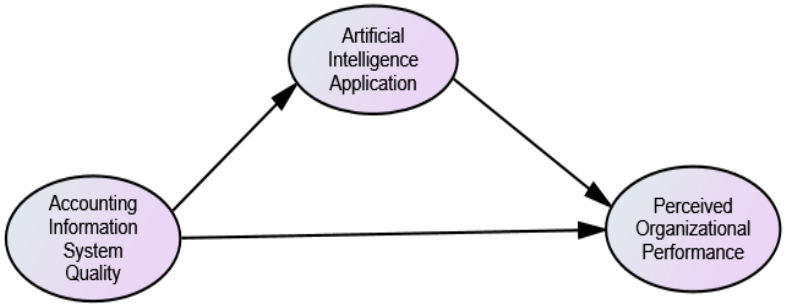

Figure 1
Conceptual AISQ-POP-MAIA model

The structural equation model (SEM) is finalized with a model validity test, and the hypotheses are tested in the study.

3. Data and method

The quality of accounting information systems, perceptions of organizational performance, and the use of artificial intelligence are the main foci of the study's survey. Based on their research and prior work, the authors (1) Measure stick for accounting information system quality as follows: 1(a) the ability of the system to aid in bank investment and growth decisions; 1(b) the ability of the system to aid in industry development decisions; 1(c) the ability of the system to aid in competitive position decisions; 1(d) the ability of the system to aid in accounting, finance, and administration decisions; and 1(e) the system's ability to satisfy decision-making requirements. (2) The following is a list of metrics that may be used to assess how well an organization is perceived: 2(a) how well it plans, 2(b) how well it makes decisions, 2(c) how well it accounts, 2(d) how well it handles finances, and 2(e) how well it runs operations. (3) The use of AI is defined as 3(a) the ability to automate the recording of financial transactions through the use of AI, and 3(b) another way to enhance fraud detection is to build models using powerful machine learning auditors. 3(c) Emails, social media broadcasts, and audio files from conferences are examples of unstructured data that AI may analyze. 3(d) With the aid of AI, auditors will be able to maximize their time and apply human judgment to a more comprehensive and in-depth set of documents and data. Thirdly, AI will make it easier and more efficient for auditors to determine whether financial statements are accurate. Fourthly, AI will allow you to conduct audits continuously. A five-point Likert scale, with one representing strongly disagree and five representing strongly agree, is used to quantify the variables in a closed-ended survey questionnaire. In order to ensure that the questionnaire was error-free, it

was pilot-tested with ten seasoned responders. Next, 200 people who agreed to fill out the survey were chosen at random using a combination of electronic mail, WhatsApp, and an intentional sampling technique due to the fact that some respondents from Chattogram City, Bangladesh, answered the same number of questions or not at all, a total of 160 replies were ultimately chosen from the collected survey data. The data from the responses were entered into IBM SPSS Statistics 26, MS Excel 2016, and IBM SPSS AMOS 22 for further analysis. The data that have been chosen will be used to compute descriptive statistics. Next, the Kolmogorov-Smirnov and Shapiro-Wilk tests are used to determine if the data were normally distributed. Following the completion of the normality test, the data are divided into three categories using factor analysis. Each category is evaluated using Cronbach's Alpha, and the Kaiser-Meyer-Olkin score for sample adequacy is employed.

4. Result

Descriptive statistics

The descriptive statistics and normality test results of accounting information system quality, perceived organizational performance and artificial intelligence application of the respondent data are given in Table I.

Table I

Results of descriptive statistics and tests for normalcy

Sl. No.	Questionnaire	Variable name	N	Min	Max	Kolmogorov–Smirnov Test (Sig)	Shapiro–Wilk Test (Sig)	Median
1.	**Accounting Information System Quality**							
1(a)	Bank investment and development decisions are aided by accounting information systems (AIS).	AIS Quality1	160	2	5	0.268 (0.000)	0.757 (0.000)	4
1(b)	AIS can aid in making decisions about industrial growth.	AIS Quality2	160	2	5	0.282 (0.000)	0.718 (0.000)	4
1(c)	AIS is useful for determining one's competitive standing.	AIS Quality3	160	2	5	0.251 (0.000)	0.781 (0.000)	4
1(d)	Accounting, finance, and administrative decision-making are all enabled by AIS.	AIS Quality4	160	2	5	0.260 (0.000)	0.786 (0.000)	4

Sl. No.	Questionnaire	Variable name	N	Min	Max	Kolmogorov–Smirnov Test (Sig)	Shapiro–Wilk Test (Sig)	Median
1(e)	For decision-making, AIS is sufficient.	AIS Quality5	160	2	5	0.269 (0.000)	0.749 (0.000)	4
2.	**Perceived Organizational Performance**							
2(a)	Use of efficient AIS during conceptualization	Performance1	160	2	5	0.246 (0.000)	0.872 (0.000)	3
2(b)	Achieving AIS effectiveness in decision-making	Performance2	160	2	5	0.258 (0.000)	0.868 (0.000)	3
2(c)	Accounting performance-enhancing AIS	Performance3	160	2	5	0.226 (0.000)	0.877 (0.000)	3
2(d)	Achieving financial success with efficient AIS	Performance4	160	1	5	0.270 (0.000)	0.872 (0.000)	3
2(e)	Effective AIS for operational performance	Performance5	160	2	5	0.251 (0.000)	0.868 (0.000)	3
3.	**Artificial Intelligence Application**							
3(a)	Artificial Intelligence(AI) can be used to automatically record accounting transactions	AIApplication1	160	3	5	0.364 (0.000)	0.657 (0.000)	5
3(b)	One way to enhance fraud detection is to build models using powerful machine-learning auditors.	AIApplication2	160	3	5	0.386 (0.000)	0.670 (0.000)	5
3(c)	Unstructured data, including emails, social media broadcasts, and audio conference files, may be analyzed by AI.	AIApplication3	160	3	5	0.371 (0.000)	0.686 (0.000)	5
3(d)	AI will aid auditors in making the most efficient use of their time, which will allow them to apply their human Judgement to a	AIApplication4	160	4	5	0.363 (0.000)	0.634 (0.000)	5

Sl. No.	Questionnaire	Variable name	N	Min	Max	Kolmogorov–Smirnov Test (Sig)	Shapiro–Wilk Test (Sig)	Median
	more comprehensive and detailed set of papers and data.							
3(e)	Through the use of AI, auditors are able to more efficiently and accurately determine the reliability of financial accounts.	AIApplication	5160	3	5	0.367 (0.000)	0.668 (0.000)	4
3(g)	With the help of AI, you may conduct audits continuously.	AIApplication	6160	2	5	0.310 (0.000)	0.780 (0.000)	4

The minimum and maximum values of accounting information system quality are 2 and 5, perceived organizational performance is 1 to 2 and 5, and artificial intelligence applications are 2 to 4 and 5, respectively. The Kolmogorov-Smirnov and Shapiro-Wilk test statistics for each item accounting information system quality are (0.251 to 0.282 for the former and 0.718 to 0.786 for the latter), perceived organizational performance is (0.226 to 0.270 for the former and 0.868 to 0.877 for the latter) and artificial intelligence application (0.310 to 0.386 for the former and 0.634 to 0.780 for the latter) at the significance level of 0.000. So, the survey questionnaire response values on a five-point Likert scale are not normally distributed. Therefore, the median values are taken into account for mean rank comparison in the non-parametric test. The median value of accounting information system quality is 4, perceived organizational performance is 3, and artificial intelligence application is 4 to 5.

Factor analysis

Varimax rotation with Kaiser normalization rotation and principal component analysis extraction are now used to categorize respondent responses into distinct variables in factor analysis. A result of 0.836 ($p = 0.000$) was recorded for the Kaiser-Meyer-Olkin Measure of Sampling Adequacy in the analysis. Using the AISQ-POP-MAIA model, which is given in Table II, we may divide the survey questions into three categories based on the impact of AI on organizational performance perceptions.

Table II

Factor analysis, Cronbach's Alpha and Convergent Validity test of the AISQ-POP-MAIA model

Rotated Component Matrix						Convergent	Square
	Component			Variable	Cronbach's	Validity	Root of
	1	2	3	Name	Alpha	(AVE)	AVE
Performance2	0.972			Perceived	0.964	0.852	0.923
Performance1	0.966			Organizational			
Performance5	0.908			Performance			
Performance3	0.906						
Performance4	0.857						
AIApplication4		0.875		Artificial	0.910	0.637	0.798
AIApplication3		0.852		Intelligence			
AIApplication1		0.830		Application			
AIApplication2		0.825					
AIApplication6		0.806					
AIApplication5		0.692					
AISQuality5			0.946	Accounting	0.932	0.738	0.859
AISQuality2			0.910	Information			
AISQuality3			0.910	System			
AISQuality1			0.825	Quality			
AISQuality4			0.782				

Now, from the above factor analysis table, the survey questionnaire is classified based on the response values as (i) accounting information system quality (factor loading 0.782 to 0.946), (ii) perceived organizational performance (factor loading 0.857 to 0.972) and (iii) artificial intelligence application (factor loading 0.692 to 0.875). Here, all the factor loading values are quite reliable, as the factor loadings are greater than 0.400.

The factor variables are validated with Cronbach's Alpha values, which are 0.932 for accounting information system quality, 0.964 for perceived organizational performance and 0.910 for artificial intelligence application. Here all the Cronbach's Alpha values are greater than 0.7, so the survey questionnaire are most trustworthy, accurate, and uniform.

Based on the results of the analysis, the AISQ-POP-MAIA model survey questionnaire can be categorized as follows: (1) accounting information system quality is measured as 1(a) accounting information system (AIS) helps in investment and growth of bank decisions; 1(b) AIS helps in the development in industry decisions; 1(c) the AIS helps in competitive position decisions; 1(d) the AIS helps in accounting, finance, and administration decisions; and 1(e) the AIS satisfies the requirements of decision making. (2) The following metrics are used to assess the perceived success of an organization: 2(a) the effectiveness of the accounting information system (AIS) in the planning and decision-making processes, 2(b) the effectiveness of the AIS in the financial and operational processes, and 2(c) the effectiveness of the AIS in the accounting operations themselves. Automated recording of accounting

transactions is one possible use of artificial intelligence (AI), which is defined as 3(a) AI application, 3(b) Thirdly, auditors can enhance fraud detection by building models using powerful machine learning. 3(c) Emails, social media broadcasts, and audio files from conferences are examples of unstructured data that AI can read and understand. 3(d) With the application of AI, auditors will be able to maximize their time and apply human judgment to a more comprehensive and in-depth analysis of data and documents. Three things are true about AI: First, it helps auditors evaluate the accuracy of financial statements in a more efficient and effective way. Second, it enables audits be conducted continuously.

The average variance expected (AVE) value for accounting information system quality is 0.738, perceived organizational performance is 0.852, and artificial intelligence application is 0.637 to test convergent validity, which is greater than 0.500. So, the AISQ-POP-MAIA model achieves convergent validity. The square root of AVE value for accounting information system quality is 0.859, perceived organizational performance is 0.923, and artificial intelligence application is 0.798 to test discriminant validity. Also, the maximum shared variance (MSV) between each unobserved variable of the AISQ-POP-MAIA model is shown in Table III.

Table III
Maximum shared variance (MSV) of the AISQ-POP-MAIA model

Correlation			Estimate MSV
AIS Quality	<-->	performance	0.163
AIS Quality	<-->	application	0.346
PO Performance	<-->	AI Application	0.298

The maximum shared variance (MSV) of accounting information system quality and perceived organizational performance is 0.163, which is lower than the square root of AVE for accounting information system quality (0.859) and perceived organizational performance (0.923) (from Table II). Again, the maximum shared variance (MSV) of the accounting information system quality and artificial intelligence application is 0.346, which is lower than the square root of the AVE for accounting information system quality (0.859) and artificial intelligence application (0.798) (from Table II). Also, the maximum shared variance (MSV) of perceived organizational performance and artificial intelligence application is 0.298, which is lower than the square root of the AVE for perceived organizational performance (0.923) and artificial intelligence application (0.798) (from Table II). So, the AISQ-POP-MAIA model achieves discriminant validity.

Structural equation model

Based on the factor analysis, a structural equation model for the accounting information system quality on perceived organizational performance (AISQ-POP) model is developed (in the figure 2).

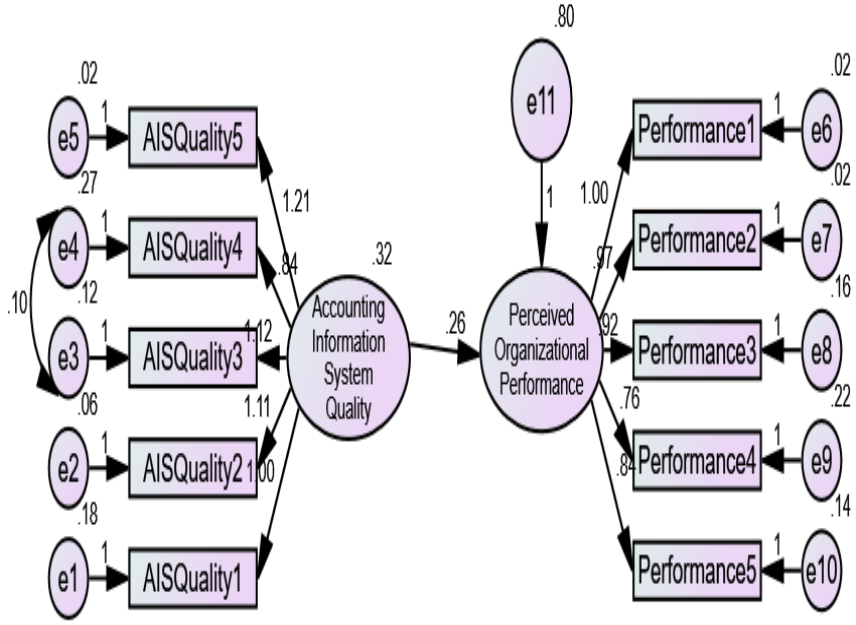

Figure 2
AISQ-POP structure equation model

In the AISQ-POP structural equation model, the model index values are as follows: $\chi 2/df$ is 2.684 (< 3), CFI is 0.973 (> 0.9), IFI is 0.973 (> 0.9), TLI is 0.963 (> 0.9), and NFI is 0.958 (> 0.9). In this case, the chosen AISQ-POP model fits well since the model index values meet all of the survey's standard requirements. In the AISQ-POP model, the regression weight (path coefficient) of accounting information system quality on perceived organizational performance is 0.26 (p = 0.043).

The artificial intelligence application is added as a mediating variable, and the Information System Quality on Perceived Organizational Performance for mediating Artificial Intelligence Application (AISQ-POP-MAIA) structural equation model is developed in Figure 3.

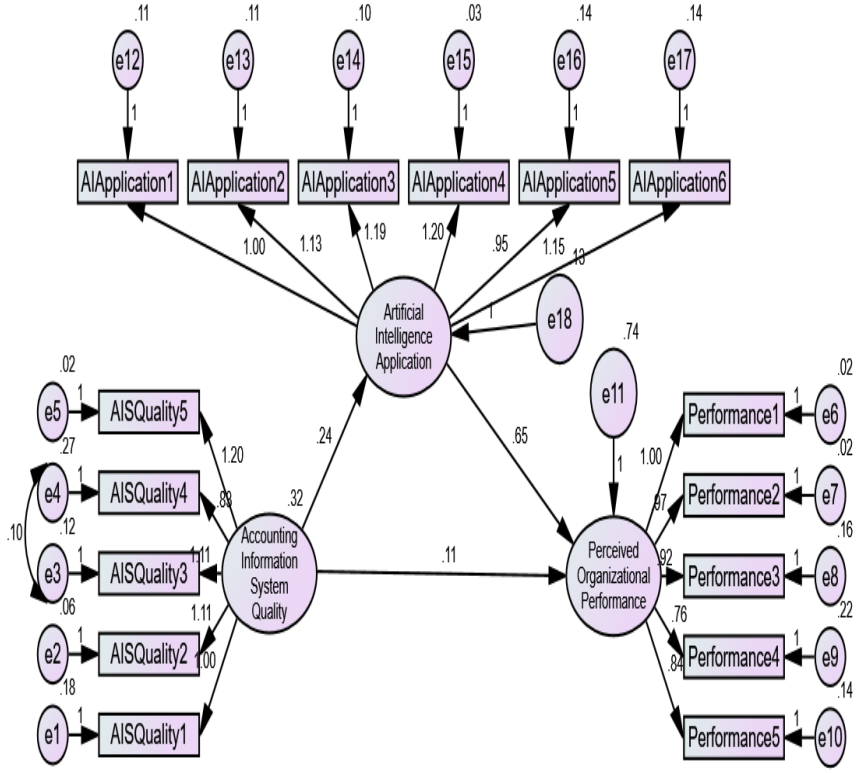

Figure 3
AISQ-POP-MAIA structure equation model

In the AISQ-POP-MAIA structural equation model, the model index values are as follows: $\chi 2/df$ is 2.217 (< 3), CFI is 0.935 (> 0.9), IFI is 0.936 (> 0.9), TLI is 0.922 (> 0.9), and NFI is 0.904 (> 0.9). In this case, the chosen AISQ-POP-MAIA model is well-fit since the model index values meet the standard requirements, and the regression weights (path coefficients) of the model are shown in Table IV.

Table IV
Regression weights of the AISQ-POP-MAIA model

Endogenous variable		Exogenous variable	Direct effect		Indirect effect of e-banking product	
			Estimate	p-value	Estimate	p-value
AIS Quality	--->	PO Performance	0.11	0.412	0.152	0.002
AIS Quality	--->	AI Application	0.24	***		
AI Application	--->	PO Performance	0.65	0.002		

In the AISQ-POP-MAIA model, when artificial intelligence is applied, then the direct effect of accounting information system quality on perceived organizational performance is 0.11 ($p = 0.412$). The regression weights (path coefficients) for a direct effect of accounting information system quality on artificial intelligence applications and artificial intelligence applications on perceived organizational performance are 0.24 ($p < 0.000$) and 0.65 ($p = 0.002$), respectively. Also, the regression weight (path coefficient) for the indirect effect of accounting information system quality on perceived organizational performance with artificial intelligence application mediation is 0.152 (0.002).

5. Discussion

In the AISQ-POP model, the regression weight (path coefficient) of accounting information system quality on perceived organizational performance is 0.26 ($p = 0.043$). Null hypothesis 1 is rejected (as the p-value is less than 0.05). So, the accounting information system quality has a significant contribution to the perceived organizational performance.

The AISQ-POP-MAIA model has regression weights (path coefficients) of 0.24 ($p < 0.000$) for the direct effect of accounting information system quality on artificial intelligence application and 0.65 ($p = 0.002$) for the direct effect of AI on perceived organizational performance. Furthermore, with the mediation of artificial intelligence, the regression weight (path coefficient) for the indirect influence of accounting information system quality on perceived organizational performance is 0.152 (0.002). With a p-value lower than 0.05, we may reject null hypothesis 2. Perceived organizational performance is directly impacted by accounting information system quality to the threshold of 0.11 ($p = 0.412$), which is statistically insignificant (since the p-value is greater than 0.05), even when AI is used as a mediator between the two. when AI is used as a mediator, the perceived performance of a company is unaffected by the quality of its accounting information system. Therefore, AI fully mediates the relationship between information system quality and perceived organizational performance. The literature review shows that the gap between AIS and organizational performance can be mediated by AI. From the above SEM equation and factor analysis, it is evident that AI has an important mediating effect on achieving the best outcome of AIS to confirm a firm's performance.

6. Conclusion

The use of AI has become increasingly useful in the organizations' day-to-day decision-making process. Therefore, the purpose of this research is to identify the function that artificial intelligence plays as a mediator between the perceived performance of a company and the quality of its accounting

information system. According to the study's results, there was no mediation between perceived organizational performance and the quality of the accounting information system. The quality of an organization's accounting information system does not have an immediate impact on how its stakeholders see its performance when AI mediates the relationship between the two. Therefore, AI fully mediates the relationship between information system quality and perceived organizational performance. Consequently, AI is becoming increasingly important for organizations' day-to-day decision-making. The findings of this study will inform the development of policies and strategies for incorporating AI into routine decision-making.

7. Recommendations

As AIS may play a strategic role in the mediation of AI, firms are more benefited now-a-days. As a result, various stakeholders like the directors of the board make policies and comply with regulatory bodies employees to generate quick and quality information about the organization may take a strategy to utilize AIS by mediating with AI to increase the organization's performance. Here, are some recommendations for further exploration-

1. Emphasize the practical significance of our findings. Since accounting information system (AIS) quality significantly contributes to perceived organizational performance (with a path coefficient of 0.26), organizations should focus on improving their AIS to enhance overall performance.
2. This highlights the mediating role of AI. Given that the significant path coefficient of 0.65 indicates its direct effect on organizational performance, how businesses can strategically implement AI to maximize the benefits derived from AIS quality should be considered.
3. Address the finding that the direct relationship between AIS quality and perceived performance (0.11, $p = 0.412$) was statistically insignificant. Encourage further investigation into why this relationship may not hold when AI is included as a mediator.
4. Consider discussing how different stakeholders (e.g., management, and IT departments) view the importance of AIS quality and AI applications in enhancing organizational performance. This could lead to a richer understanding of stakeholder dynamics in this context.

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Questionnaire

1.	**Accounting Information System Quality**	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1(a)	An Accounting Information System (AIS) helps in the investment and growth of bank decisions.					
1(b)	AIS helps in decisions of development in the industry					
1(c)	AIS helps in the decision of competitive position					
1(d)	AIS helps in accounting, finance and administration decision					
1(e)	AIS satisfy the requirement of decision-making					
2.	**Perceived Organizational Performance**					
2(a)	Effective AIS in the planning process					
2(b)	Effective AIS in the decision-making process					
2(c)	Effective AIS for accounting performance					
2(d)	Effective AIS for financial performance					
2(e)	Effective AIS for operational performance					
3.	**Artificial Intelligence Application**					
3(a)	Artificial Intelligence (AI) can be used to automatically record accounting transactions.					
3(b)	Creating models based on advanced machine learning auditors can also improve fraud detection.					
3(c)	AI can analyze unstructured data such as emails, social media broadcasts and audio conference files.					
3(d)	AI will help auditors optimize their time, enabling them to use their human judgment to analyze a broader and deeper set of data and documents.					
3(e)	AI allows auditors to gauge the veracity of financial statements more effectively and efficiently.					
3(f)	Artificial intelligence will allow you to perform an audit on an ongoing basis.					