

The Influencing Factors Quality of the Accounting Information System at Medan State University with an Internal Control System as a Moderating Variable

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ABSTRACT

This study aims to examine and analyze the influence of information technology, management support, and user competence on the quality of accounting information systems, with the internal control system as a moderating factor at Medan State University. This study employed a quantitative descriptive approach and utilized primary data obtained from 67 respondents' responses to a questionnaire. The obtained data were then analyzed using SmartPLS software.

The results indicate that information technology have no effect on the quality of accounting information systems, but management support and user competence have positive effect on the quality of accounting information systems. Overall, there is no moderating effect of the internal control system variable on these interactions. However, the internal control system partially exerts a direct influence on the quality of accounting information systems.

Keywords: Information Technology, Management Support, User Competence, Accounting Information Systems, Internal Control Systems

INTRODUCTION

An Accounting Information System (AIS) plays a fundamental role in an institution as it stores and processes accounting data to produce quality accounting information and supports internal company activities carried out by managers and employees, as well as company activities with external parties such as consumers, suppliers, government, and others (Ariana, Mulya & Suparta, 2023). An institution can increase its competitive advantage with a quality information system. To produce quality information, a quality information system is required that is timely, flexible, efficient, and easy to access. If an institution does not have a good AIS, it will not be able to present accurate information that will later be used for decision-making within the institution (Saputri, Kusnaedi & Amanah, 2023). One factor influencing AIS quality is information technology (Sudir, Arizona, Ernawatiningsih & Lisa, 2022), (Putri, Yuesti & Mariati, 2025), and (Anggraini, Kuntadi & Pramukti, 2023). Information technology is any form of technology used to collect, store, process, and disseminate information. This is in line with previous research conducted by Abedin & Hajek (2023), which stated that information technology has a significant positive effect

on AIS quality because it can help companies obtain more real-time information.

Furthermore, AIS quality is determined not only by the technology used, but also by non-technical factors such as management support (Dewi, Sibarani & Saputra, 2025), (Sasongko, 2020), and (Dewi, Apriada & Kepramareni, 2025). Management support in the implementation of AIS is the active involvement and provision of resources by the top management of the institution to support the planning, implementation, supervision, and use of the accounting information system so that the system runs effectively and achieves its objectives.

Based on interviews conducted by researchers, several gaps and existing practical phenomena indicate that the quality of accounting information is still suboptimal, due to a lack of information technology integration. Implementing information technology can certainly boost the effectiveness, efficiency, and quality of information produced in an AIS. Research findings reported by Firdhaus & Akbar (2022), Qur'aini et al. (2024), and Anggraini et al. (2023) state that information technology used in business correctly, effectively, and efficiently will significantly improve the performance of an institution or company. Another phenomenon concerns management support, which is a crucial element because accounting information systems are part of an institution's strategy and require commitment, direction, and adequate resources. Company management plays a crucial role in the success of information systems. Management also plays a role in ensuring that information systems align with the company's business objectives and provide added value to the institution (Monteiro, Vale, Leite, Lis, & Pysz, 2022). The lack of quality of AIS can be caused by minimal management support for its development and use, resulting in negative impacts during implementation (Nuraeni et al., 2023).

This is due to the lack of competence of users or operators of the system, as well as the lack of system quality. Before developing this research proposal, the researcher conducted a simple survey and interviews with several information system users at Medan State University. The researcher found low motivation due to weak management support, manual reporting, not based on information technology, resulting in delays in preparing financial reports. There was also the issue of the AIS application's inability to meet real-time information needs at Medan State University, and the ineffectiveness of information technology implementation. These factors certainly motivated the researcher to observe and analyze in depth the role of information technology and internal factors (management support and user competence) in AIS quality and its application at Medan State University, supported by theoretical foundations and previous research.

LITERATURE REVIEW

The Technology Acceptance Model (TAM)

Developed by Davis (1989), is a widely used theory to explain and predict user acceptance of information technology. In the implementation of AIS in a university environment, TAM can be used to explain how users are able to accept and utilize existing information systems. TAM serves as a relevant foundation for understanding how technology, management, and user competency factors influence the quality of AIS used in university environments (Huang, Li, Lee, Browning & Yu, 2023). Based on this description, researchers linked TAM to the variables used in this study.

Contingency Theory

Contingency Theory is a concept formulated by Drazin and Van De Ven (1985). This theory proposes three important approaches in contingency research: selection, interaction, and systems. Contingency theory, broadly defined, states that

institutional effectiveness is a function of the fit between the system and the environment in which an institution operates (Lattu et al., 2022). Contingency theory is the first and most well-known tool for explaining variations in institutional structures (Karagianni, Lainidi & Montgomery, 2023). Contingency theory posits a relationship between institutional structure and the situation, with institutional effectiveness resulting from this relationship. Good managerial activities are carried out by the entire institutional structure as a whole, and cannot be carried out by individuals.

Accounting Information Systems

Accounting information systems is considered high-quality if it is accompanied by ease of use (Lutfi, 2022). If the AIS is flexible, efficient, easily accessible, and can present information in a timely manner, it is considered high-quality. A high-quality information system is one that is easy to use, provides the correct functionality for end users, is fast in retrieving data and moving between different data displays, is reliable, secure, and well-structured, and integrates with other systems (Okaily, 2024). From the observation process carried out by the researcher, the researcher found several previous research results stating that the quality of information systems is influenced by the continuity of information technology implementation and also support from internal factors (management support and user competence), as well as the internal control system available in the company. For example, in research conducted by Thuan et al., (2022), Lutfi (2022) and Okaily, Alkhwalidi, Abdulmuhsin, Alqudah, & Al-Okaily (2023), which stated that the quality of information systems is positively influenced by the continuity of quality technology implementation, internal supervision carried out by top management, and the success of top management in providing support for the development of the competence of the system users themselves.

Information Technology

Sutrisno, Ausat, Permana & Harahap (2023) state that information technology is any form of technology used to create, store, exchange, and use information. Information technology describes any technology that has the ability to assist in producing, manipulating, storing, communicating, and disseminating information (Musa'ad, Nurlaela & Soemadi, 2022). In this study, information technology is assumed to have a relevant influence on the quality and success of an AIS. The use of information technology in an AIS can help companies obtain more real-time information (Abedin & Hajek, 2023). Furthermore, the quality of the information produced is also more accurate, with an accountable and transparent reporting system (Jarrah et al., 2023). In the university context, proper implementation of information technology enables integration between divisions, automating financial processes, and providing faster and more accurate financial reports (Ahmad, 2024), (Thottoli & Ahmed, 2022), and (Thuan et al., 2022). Conversely, if information technology is not utilized optimally, it can have negative impacts, including the risk of inaccurate data, non-real-time data, and reduced information quality for decision-making (Almaiah et al., 2022).

User Competency

Competence describes characteristics related to good performance or adequate capabilities (Rahman et al., 2024). Meanwhile, in the case of technology and information systems, user competence relates to the technical and non-technical abilities and knowledge possessed by system users to interact effectively and efficiently with information systems. These competencies include technical skills in using software and hardware, an understanding of the business processes supported by the system, and the ability to solve problems that may arise when using the information system (Riskynanta et al., 2024). Without adequate competence, users

tend to experience difficulties in accepting and adopting new technology (Davis, 1989; O'Brien & Marakas, 2011). User competence is a key contingency factor that determines whether an accounting information system will function optimally. Even if a university has adequate information technology or optimal management support, the implementation of an accounting information system cannot be fully successful without optimal user competence.

Management Support

Laudon & Laudon (2014) state that management support and control are mechanisms used to address a certain level of risk in any information system. Management plays a crucial role in improving the quality of information systems by ensuring that they are designed, implemented, and managed effectively to support institutional goals (Wiyoga & Putra, 2022). This involves various aspects, from strategic planning to ongoing monitoring and evaluation (Akhtar, Wang & Huo, 2023). Researchers believe that management support can have a crucial influence on the quality of the resulting accounting information system. The success or failure of a company in producing a quality information system is supported by the role of company management (Novianti & Khamimah, 2023), (Wiyoga & Putra, 2022), and (Akhtar et al., 2023). In higher education practice, researchers assume that management must be able to provide involvement, commitment, and contribution in the context of planning, development, implementation, and maintenance of information systems. This form of support can be in the form of providing resources (funds, infrastructure, human resources as users), and providing motivation to system users.

Internal Control System

The internal control system in AIS implementation aims to maintain the integrity of financial data through general

controls and application controls. General controls cover aspects such as system security, access authorization, and segregation of duties, while application controls focus on the accuracy and completeness of data input, processing, and output (Sagala & Siregar, 2023). An internal control system is crucial for ensuring the quality of an accounting information system, encompassing characteristics such as reliability, relevance, timeliness, and integrity of financial data. An internal control system can also increase management and user confidence in AIS output, reduce the risk of recording errors, and support effective financial decision-making. In universities, strong internal controls will support the transparency of educational funding management, research grants, and campus financial reporting (Setiawan & Rahmawati, 2022). General controls cover aspects such as system security, access authorization, and segregation of duties, while application controls focus on the accuracy and completeness of data input, processing, and output (Sagala & Siregar, 2023). An internal control system is crucial for ensuring the quality of an accounting information system, encompassing characteristics such as reliability, relevance, timeliness, and integrity of financial data. An internal control system can also increase management and user confidence in AIS output, reduce the risk of recording errors, and support effective financial decision-making. In educational settings such as universities, strong internal controls will support the transparency of educational funding management, research grants, and campus financial reporting (Setiawan & Rahmawati, 2022). Researchers have found several research findings that demonstrate the influence of internal control systems on the effectiveness and quality of information systems. One example is Christensen's (2022) study, which found that internal controls in companies implementing information systems have a significant

positive impact on the quality of the resulting accounting information system.

CONCEPTUAL FRAMEWORK AND HYPOTHESIS

Conceptual Framework

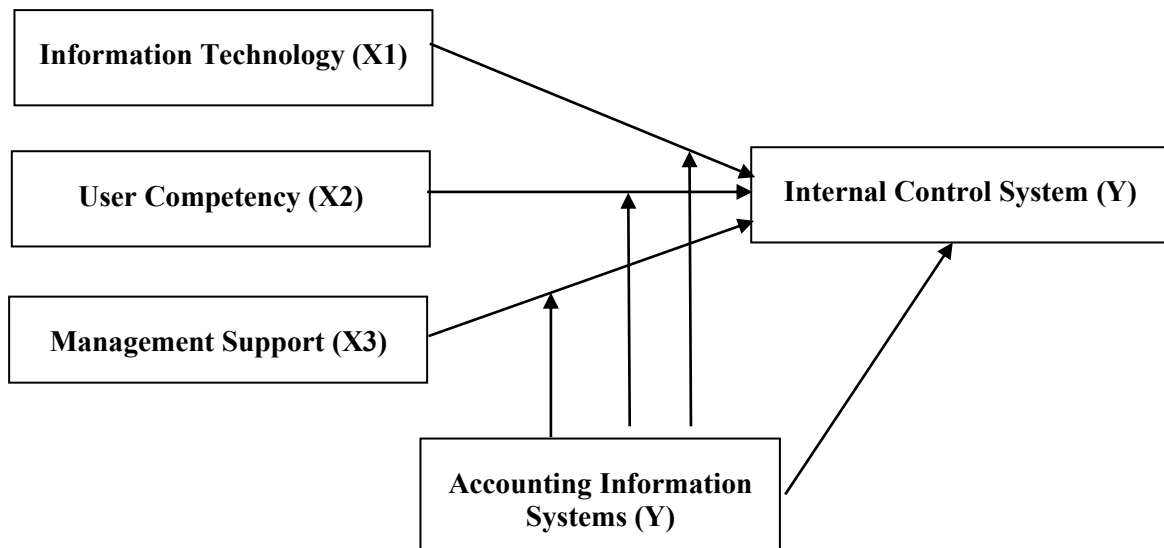


Figure 1. Conceptual Framework

Hypothesis

- H1: Information technology has a positive effect on AIS quality
- H2: Management support has a positive effect on AIS quality
- H3: User competence has a positive effect on AIS quality
- H4: Internal control systems have a partial positive effect on accounting information system quality
- H5: Internal control systems can moderate the effect of information technology on AIS quality
- H6: Internal control systems can moderate the effect of management support on AIS quality
- H7: Internal control systems can moderate the effect of user competence on AIS quality

MATERIALS & METHODS

This study uses a quantitative descriptive research design. The quantitative descriptive research method is a conscious and systematic effort to find solutions to problems and/or obtain more complete and

A conceptual framework is a structured visualization or description that connects variables, theories, and key concepts in research to explain the flow of thought and relationships between variables.

in-depth information related to the phenomena that occur by following research stages with a quantitative approach. This study uses primary data collected from financial management education staff at Medan State University. Because the population in this study was less than 100, all members of the population were included as research samples using a saturated sampling technique. The research instrument used in this study was a questionnaire. The instrument items were compiled based on the established variable indicators. The instrument items were compiled using clear language so that respondents understood what was meant by the questionnaire statements. The scale used in measuring the data from this study was the Likert scale. The Likert scale is used to measure a person's attitude/perception about an attitude object (Sugiono, 2015).

Data Analysis Techniques

1. Descriptive Analysis

Before conducting the regression testing, this study first presented a descriptive

statistical analysis using SmartPLS. This analysis included calculating the mean, standard deviation, minimum, and maximum values for each construct indicator.

2. Moderated Regression Analysis (MRA)

The moderation test in SmartPLS is run to determine whether the moderator variable (M) strengthens or weakens the relationship between the independent (X) and dependent (Y) variables by creating an interaction variable. This test will also yield the partial hypothesis results determined in the

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4Z + \beta_5ZX_1 + \beta_6ZX_2 + \beta_7ZX_3 + e$$

3. Path Diagram

A path diagram visualizes the conceptual framework of a study, making it easier to understand and study. The creation of a path diagram must consider the constructs of exogenous and endogenous variables, along with the manifest variables of each latent variable.

4. Measurement Model (Outer Model)

A research model cannot be tested in a relational and causal relationship prediction model if it has not gone through the purification stage in the measurement model. The measurement model is used to test the construct validity and reliability of the instrument using the outer model and outer relations, or the measurement model defines each indicator block in relation to its latent variables.

5. Structural Model (Inner Model)

Inner model or structural model testing is conducted to examine the relationships between latent constructs. The inner model, which includes inner relations, structural models, and substantive theory, describes the relationships between latent variables based on substantive theory. The inner model is tested by examining the R-square, F-square, and path coefficient values to determine how much the dependent latent

variable is influenced by the independent latent variable. A significance test is used to test the significance of the relationship or influence between variables (Ghazali, 2011).

previous chapter. The MRA test will be run using the measurement model (outer model) and the structural model (inner model). The decision rules for this research's moderation test are as follows:

- If the p-value is <0.05 , a significant moderating effect is found.
- If the interaction path coefficient indicates a positive direction (strengthening).
- If the interaction path coefficient indicates a negative direction (weakening).

This study has the following moderation equation:

variable is influenced by the independent latent variable. A significance test is used to test the significance of the relationship or influence between variables (Ghazali, 2011).

RESULT

1. Descriptive Test Results

Based on data processing using SmartPLS, 67 respondents were observed, with a measurement scale ranging from 1 to 5. In general, the average score for all indicators ranged from 4.00 and above, indicating that respondents' perceptions of the research variables were high. The median score for most indicators was around 4.00, indicating that respondents' responses tended to fall into the "agree" category. The following is an analysis of the descriptive test results in this research:

- The IT indicator had a mean score between 4.090 and 4.313, with a standard deviation ranging from 0.446 to 0.751. The highest mean scores were found for indicators TI.2 and TI.4 (mean 4.313), indicating that these aspects received the highest ratings from respondents.
- The management support indicators DM.1 and DM.2 had mean scores of 4.194 and 4.015, with standard deviations of 0.496 and 0.532,

respectively. This indicates that respondents rated management support as high, with a relatively low level of data distribution.

c. The KP indicators showed varying mean values. KP.1 had a mean of 2.821 with a standard deviation of 0.845, indicating respondents' perceptions were relatively lower than the other indicators. Meanwhile, KP.2 and KP.3 had means of 4.045 and 4.209, with standard deviations of 0.584 and 0.505, respectively, indicating a high assessment.

d. Indicators SIA.1 through SIA.5 had mean values ranging from 4.075 to 4.239, with standard deviations between 0.455 and 0.577. These values indicate that respondents rated the quality of the accounting information system as high, with relatively little variation in responses.

e. The SPI indicator showed mean values between 4.045 and 4.224, with standard deviations ranging from 0.442 to 0.613. This shows that respondents' perceptions tend to be high and consistent regarding this variable

Table 1. Results of Descriptive Research Tests

Indicator	Mean	Median	Observed min	Observed max	Number of observations used	Standard deviation
TI.1	4.134	4	1	5	67	0.751
TI.2	4.313	4	2	5	67	0.552
TI.3	4.239	4	1	5	67	0.693
TI.4	4.313	4	3	5	67	0.552
TI.5	4.134	4	1	5	67	0.620
TI.6	4.090	4	3	5	67	0.448
TI.7	4.119	4	3	5	67	0.504
TI.8	4.134	4	3	5	67	0.570
TI.9	4.119	4	1	5	67	0.681
DM.1	4.194	4	3	5	67	0.496
DM.2	4.015	4	3	5	67	0.532
KP.1	2.821	3	1	5	67	0.845
KP.2	4.045	4	2	5	67	0.584
KP.3	4.209	4	3	5	67	0.505
SIA.1	4.104	4	3	5	67	0.461
SIA.2	4.104	4	1	5	67	0.577
SIA.3	4.075	4	1	5	67	0.555
SIA.4	4.239	4	3	5	67	0.491
SIA.5	4.179	4	3	5	67	0.455
SPI.1	4.104	4	3	5	67	0.461
SPI.2	4.164	4	2	5	67	0.613
SPI.3	4.149	4	3	5	67	0.465
SPI.4	4.134	4	3	5	67	0.454
SPI.5	4.224	4	2	5	67	0.594
SPI.6	4.060	4	3	5	67	0.485
SPI.7	4.149	4	3	5	67	0.496
SPI.8	4.045	4	2	5	67	0.558
SPI.9	4.209	4	3	5	67	0.442
SPI.10	4.179	4	3	5	67	0.516

Source: SmartPLS data processing

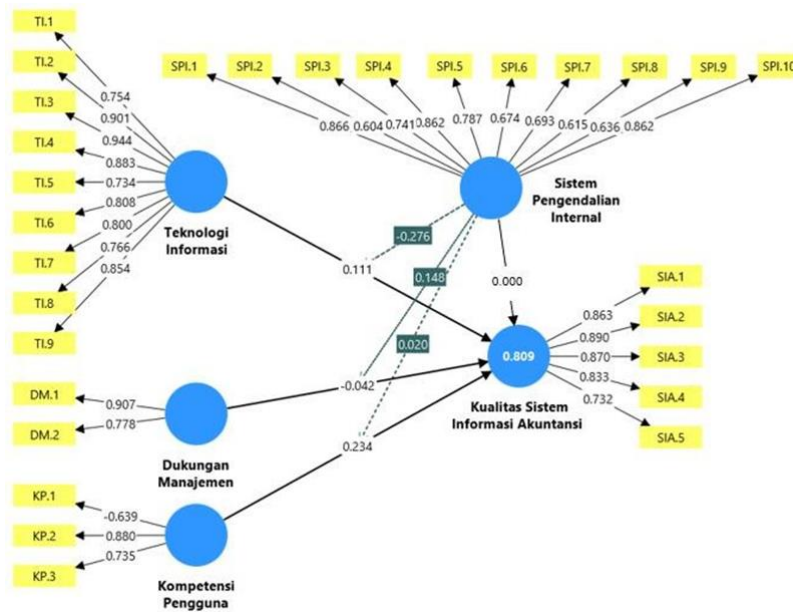
2. Path Diagram Analysis Results

Path diagram is a graphical visual representation used in path analysis to illustrate causal relationships between

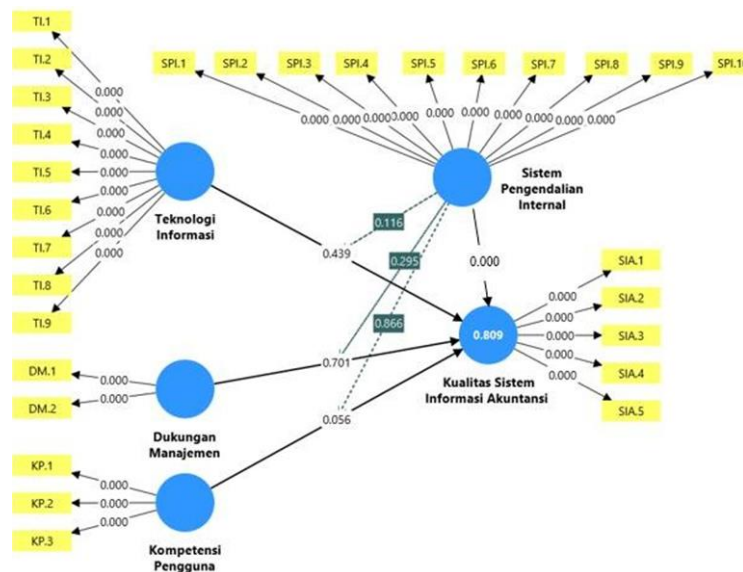
variables. This diagram uses boxes/circles for variables and arrows to show the direction of influence, helping to visualize direct, indirect, and total influences. The

following is a diagram showing the results of the path diagram analysis using the measurement model (outer model) and

structural model (inner model) obtained in this study:



Source: SmartPLS data processing
Figure 2. Path Diagram with Measurement Model (Outer Model)



Source: SmartPLS data processing
Figure 3. Path Diagram with Structural Model (Inner Model)

3. Measurement Model Test Results (Outer Model)

The measurement model is used to test the construct validity and reliability of the instrument using the outer model and outer relations. The measurement model defines each indicator block in relation to its latent variable. This model specifies the relationship between the latent variable and

its indicators. The outer model defines the relationship between each indicator and its latent variable.

1) Validity Test Results

Validity testing is a statistical procedure for measuring the precision, validity, and accuracy of an instrument (such as a questionnaire) in measuring what it is supposed to measure. The results of the

outer model validity test obtained in this study are as follows:

Table 2. Validity Test Results

Indicator	User Competency	Management Support	Accounting Information System	Quality Internal System	Information Technology
TI.1					0.754
TI.2					0.901
TI.3					0.944
TI.4					0.883
TI.5					0.734
TI.6					0.808
TI.7					0.800
TI.8					0.766
TI.9					0.854
DM.1	0.907				
DM.2	0.778				
KP.1		0.639			
KP.2		0.880			
KP.3		0.735			
SIA.1			0.863		
SIA.2			0.890		
SIA.3			0.870		
SIA.4			0.833		
SIA.5			0.732		
SPI.1				0.866	
SPI.2				0.604	
SPI.3				0.741	
SPI.4				0.862	
SPI.5				0.787	
SPI.6				0.674	
SPI.7				0.693	
SPI.8				0.615	
SPI.9				0.636	
SPI.10				0.862	

Source: SmartPLS data processing

Based on the table above, the following validity analysis was obtained:

- All indicators from TI.1 to TI.9 have outer loading values between 0.734 and 0.944, so all indicators are declared valid.
- Indicator DM.1 has an outer loading value of 0.907 and DM.2 of 0.778, so all indicators are declared valid.
- Indicator KP.1 has an outer loading value of 0.639, KP.2 and KP.3 of 0.880 and 0.735, respectively, so all indicators are declared valid.
- All indicators SIA.1 to SIA.5 have outer loading values of 0.863, 0.890, 0.870, 0.833, and 0.732, respectively, so all indicators are declared valid.

- The SPI indicator shows outer loading values of SPI.1 (0.866), SPI.2 (0.604), SPI.3 (0.741), SPI.4 (0.862), SPI.5 (0.787), SPI.6 (0.674), SPI.7 (0.693), SPI.8 (0.615), SPI.9 (0.636), and SPI.10 (0.862), thus all indicators are declared valid.

2) Reliability Test Results

This test ensures that the data collected is accurate and the questions in the questionnaire are consistently understood by respondents, so that the research results can be trusted. An instrument is considered reliable if it gives the same or consistent results, even if measurements are taken many times on different samples or at

different times. The results of the outer model reliability test obtained in this study are as follows:

Table 3. Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability (Rho_A)	Composite Reliability (Rho_C)	Average Variance Extracted (AVE)
Information Technology	0.942	0.948	0.952	0.689
Management Support	0.612	0.677	0.832	0.714
User Competency	-0.136	0.682	0.428	0.575
Quality Internal Sysytem	0.894	0.900	0.922	0.705
Quality Internal Sysytem	0.907	0.936	0.923	0.549

Source: SmartPLS data processing

Based on the reliability test results above, the following analysis was obtained:

- a. Information technology has a Cronbach's alpha value of 0.942, a composite reliability (rho_a) of 0.948, a composite reliability (rho_c) of 0.952, and an AVE of 0.689, indicating that the information technology construct is highly reliable and valid.
- b. Management support has a Cronbach's alpha value of 0.612, a composite reliability (rho_a) of 0.677, and a composite reliability (rho_c) of 0.832, with an AVE of 0.714. The AVE value meets the convergent validity criteria because it is greater than 0.50. The composite reliability (rho_c) also meets the criteria of ≥ 0.70 , indicating that the construct is reliable.
- c. User competence has a Cronbach's alpha value of -0.136, a composite reliability (rho_a) of 0.682, and a composite reliability (rho_c) of 0.428, with an AVE of 0.575, indicating that this construct does not meet internal reliability criteria.
- d. Accounting information system quality has a Cronbach's alpha value of 0.894, a composite reliability (rho_a) of 0.900, a composite reliability (rho_c) of 0.922, and an AVE of 0.705. All values meet the criteria for reliability and convergent validity. Therefore, this construct is considered reliable and valid in measuring the quality of accounting information systems.

- e. The internal control system has a Cronbach's alpha value of 0.907, composite reliability (rho_a) of 0.936, composite reliability (rho_c) of 0.923, and AVE of 0.549. All reliability values are above 0.70 and AVE > 0.50 . This indicates that the internal control system construct is reliable and valid.

4. Structural Model Results (Inner Model)

The inner model was tested using the R-square, F-square, and Path Coefficient values to determine how much the dependent latent variable is influenced by the independent latent variable, as well as a significance test to examine the significance of the relationship or influence between variables (Ghazali, 2011). The results of the inner model testing in this study are as follows:

1) R-Square Test Results.

The R-square value is used to measure the level of variability of independent changes in the dependent variable. This parameter is also used to measure the suitability of the prediction model, with a range of 0-1. The higher the R-square value, the greater the influence of the exogenous latent variable on the endogenous latent variable. Based on the R-square test, this study achieved an R-square value of 0.809, indicating that all independent variables used in this study were able to influence the AIS quality variable by 81%, a fairly strong influence.

Meanwhile, the other 19% is influenced by study. other variables that are not included in this

Table 4. R-Square Test Result

R-square	R-square adjusted
Accounting Information System Quality (Y)	
0.809	0.787

Source: SmartPLS data processing

2) F-Square test results

F-Square (f^2) is a measure of effect size used in PLS-SEM analysis to determine the extent of influence of each exogenous variable on the endogenous variable in a

structural model. The f^2 test not only examines significance but also assesses the extent of the independent variable's contribution to explaining the dependent variable.

Table 5. F-Square Test Result

Interaction of Variable	f-square
Information Technology -> Accounting Information System Quality	0.019
Management Support -> Accounting Information System Quality	0.004
User Competence -> Accounting Information System Quality	0.148

Source: SmartPLS data processing

Based on Table 5.5, it can be stated that:

- The influence of information technology on the quality of accounting information systems has an f^2 value of 0.019, equivalent to 1.9%. This indicates that information technology's contribution to the quality of accounting information systems is relatively weak.
- The influence of management support on the quality of accounting information systems has an f^2 value of 0.004, equivalent to 0.4%, and is categorized as very small. This indicates that the contribution of management support to the quality of accounting information systems is relatively weak.
- The influence of user competence on the quality of accounting information systems has an f^2 value of 0.148, equivalent to 14.8%, which can be considered medium. This means that user competence has a significant contribution to the quality of accounting information systems.

3) Path Coefficient Results

The path coefficient indicates the extent of the relationship or influence of the latent constructs using the bootstrapping

procedure. The following are the results of the path coefficient test, which simultaneously answers the partial hypothesis (t) and the moderation hypothesis presented in the previous chapter.

Based on the results of the path coefficient test above, the analysis results are as follows:

a. Information Technology → Accounting Information System Quality.

The coefficient (O) value is 0.111 with a t-statistic of 0.773 and a p-value of 0.439 > 0.05, indicating that Hypothesis 1 is rejected. This indicates that information technology does not significantly influence the quality of accounting information systems.

b. Management Support -> Accounting Information System Quality.

The path coefficient (O) value is -0.042, with a t-statistic of 0.384 and a p-value of 0.701 > 0.05, indicating that Hypothesis 2 is rejected. This indicates that management support does not significantly influence the quality of the accounting information system.

c. User Competence → Accounting Information System Quality.

The coefficient (α) is 0.234 with a t-statistic of 1.912 and a p-value of 0.056 < 0.05, thus confirming that Hypothesis 3 is accepted. This indicates that user competence has a significant positive effect on the quality of the accounting information system.

d. Internal Control System → Accounting Information System Quality.

The coefficient (α) is 0.663 with a t-statistic of 3.801 and a p-value of 0.000 < 0.05, thus confirming that Hypothesis 4 is accepted. This indicates that the internal control system has a positive and significant effect on the quality of the accounting information system.

e. Internal Control System × Information Technology → Accounting Information System Quality.

The coefficient (O) value of -0.276 with a t-statistic of 1.574 and a p-value of 0.116 > 0.05 indicates that Hypothesis 5 is rejected. This indicates that the internal

control system does not moderate the effect of information technology on the quality of the accounting information system.

f. Internal Control System × Management Support → Accounting Information System Quality.

The coefficient (O) value of 0.148 with a t-statistic of 1.048 and a p-value of 0.295 > 0.05 indicates that Hypothesis 6 is rejected. This means that the internal control system does not moderate the effect of management support on the quality of the accounting information system.

g. Internal Control System × User Competence → Accounting Information System Quality.

The coefficient value (O) of 0.020 with a t-statistic of 0.169 and a p-value of 0.866 > 0.05 indicates that hypothesis 7 is rejected. This indicates that the internal control system has not been proven to moderate the influence of user competence on the quality of the accounting information system.

Table 6. Path Coefficient Results

Interaction of Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values
Information Technology -> Accounting Information System Quality	0.111	0.080	0.143	0.773	0.439
Management Support -> Accounting Information System Quality	-0.042	0.003	0.109	0.384	0.701
User Competence -> Accounting Information System Quality	0.234	0.186	0.122	1.912	0.056
Internal Control System -> Accounting Information System Quality	0.663	0.670	0.174	3.801	0.000
Internal Control System x Technology Information -> Accounting Information System Quality	-0.276	-0.200	0.175	1.574	0.116
Internal Control System x Support Management -> Accounting Information System Quality	0.148	0.071	0.141	1.048	0.295
Internal Control System x User Competence -> Accounting Information System Quality	0.020	0.059	0.119	0.169	0.866

Source: SmartPLS data processing

DISCUSSION

The Effect of Information Technology on the Quality of Accounting Information Systems

Based on the results of the tests conducted, it was found that information technology does not affect the quality of accounting information systems. These results align

with previous research conducted by Sisilia & Firdaus, 2024, which stated that information technology does not affect the quality of AIS. Theoretically, referring to the technology acceptance model (TAM), system effectiveness and quality are not solely determined by the presence or sophistication of technology, but rather by how the technology is perceived and utilized by users. Advanced technology does not automatically improve information quality if it is not accompanied by optimal utilization, adherence to procedures, and integration with the organization's business processes. Furthermore, from a contingency theory perspective, information system effectiveness depends on the fit between technology, organizational structure, and control mechanisms (Hammouch & Manta, 2024). If the system is operating in a standardized and relatively stable environment, variations in technological aspects are not a major differentiating factor in determining the quality of system output.

The Effect of Management Support on Accounting Information System Quality

Based on the results of the testing conducted, it was found that management support had no effect on the quality of the accounting information system. In practice, an institution's management plays a crucial role in improving the quality of its information system by ensuring that it is designed, implemented, and managed effectively to support the institution's goals. This involves various aspects, starting with strategic planning. Theoretically, within the framework of the Technology Acceptance Model (TAM), system quality and success are determined more by perceived ease of use and perceived usefulness directly experienced by users and not solely by structural support from management. Meanwhile, from a contingency theory perspective, information system effectiveness also depends on the alignment between organizational structure, technology, and operational processes. If the system is standardized with clear procedures

and strong internal controls, variations in management support are no longer the primary determinant of AIS quality.

The Influence of User Competence on the Quality of Accounting Information Systems

Based on the results of the testing conducted, it was found that user competence has a positive effect on the quality of accounting information systems. When a user possesses good competence, they tend to find the system easier to use and experience greater benefits from its use. Optimal use will also have a positive impact on the quality of the accounting information system implemented by the company. The quality of an accounting information system is highly dependent on the internal quality of the company implementing it (Donaldson, 2001). This competence includes technical skills in using software and hardware, an understanding of the business processes supported by the system, and the ability to solve problems that may arise during the use of the information system (Riskynanta et al., 2024). Without adequate competence, users tend to experience difficulties in accepting and adopting new technologies (Davis, 1989; O'Brien & Marakas, 2011).

The Influence of Internal Control Systems on the Quality of Accounting Information Systems

Based on the results of the tests conducted, it was found that internal control systems influence the quality of accounting information systems. In the context of an AIS, internal control functions to ensure that the data generated by the system is accurate, reliable, and secure from manipulation or error. The internal control system in AIS implementation aims to maintain the integrity of financial data through general controls and application controls. General controls cover aspects such as system security, access authorization, and segregation of duties, while application controls focus on the accuracy and

completeness of data input, processing, and output (Sagala & Siregar, 2023). Internal control systems can also increase management and user confidence in AIS output, reduce the risk of recording errors, and support effective financial decision-making.

The Moderating Role of Internal Control Systems in the Impact of Information Technology on the Quality of Accounting Information Systems

Based on the results of the tests conducted, it was found that internal control systems were not proven to be able to moderate the impact of information technology on the quality of accounting information systems. Internal control is an integral and inseparable part of company management activities, where the company's operational processes occur. Good control is believed to assure management that existing decisions, policies, and directives are implemented properly (Ali, 2023). Theoretically, information technology is an infrastructure factor related to the quality of hardware, software, system integration, and data processing capacity, which directly determine the speed, accuracy, and reliability of system output. Meanwhile, internal control systems function as a monitoring and security mechanism through procedures, authorization, segregation of duties, and monitoring. Because information technology operates on the technical and architectural aspects of the system, while internal control operates on compliance and operational control, the two exist on different dimensions. Therefore, internal control systems do not alter the strength of the relationship between information technology and the quality of accounting information systems (Siregar et al., 2025).

The Moderating Role of Internal Control Systems in the Effect of Management Support on Accounting Information System Quality.

Based on the test results, it was found that the internal control system was not proven

to moderate the influence of management support on accounting information system quality. Theoretically, this result can be explained because management support is a strategic factor characterized by commitment and policy at the top management level, while the internal control system is a structural and operational mechanism that operates based on established procedures and standards within the organization. This difference in levels means that the internal control system does not function as a variable that strengthens or weakens the relationship between management support and accounting information system quality, but rather acts as an independent factor that directly influences system quality. Research conducted by Alqaraleh et al. (2022) also stated that the internal control system implemented by a company can make a partial and significant contribution to the quality of its accounting information system. The research findings of Aziz et al. (2023) also conveyed the same conclusion: the quality of the accounting information system is significantly and positively influenced by the company's ability to implement its internal control processes.

The Moderating Role of Internal Control Systems in the Influence of User Competence on Accounting Information System Quality

Based on the results of the tests conducted, it was found that the internal control system was not proven to moderate the influence of user competence on the quality of the accounting information system. Theoretically, user competence is an individual factor related to knowledge, skills, and technical abilities in operating the system. Therefore, its impact on system quality is direct through the accuracy of information input, processing, and utilization (Kamandita, 2025). Meanwhile, the internal control system is a structural mechanism that functions to maintain compliance with procedures, record keeping accuracy, and risk control. Because user

competence already partially determines the quality of system use, the existence of an internal control system does not change or strengthen this relationship but rather acts as a partial control tool. In company practice, competent users are still able to produce quality information even if the control system is not particularly stringent, and conversely, good internal control cannot always compensate for low user competence. This indicates that the internal control system does not act as a contingency variable influencing the strength of the relationship between user competence and the quality of the accounting information system, but rather functions as a stand-alone monitoring mechanism to maintain system reliability (Yulianti et al., 2024).

CONCLUSION

Based on the discussion of the research results described in the previous chapter, the researcher outlines several research conclusions as follows:

- a. Information technology does not affect the quality of the accounting information system at Medan State University.
- b. Management support does not affect the quality of the accounting information system at Medan State University.
- c. User competence has positive affect the quality of the accounting information system at Medan State University.
- d. The internal control system has a positive and significant effect on the quality of the accounting information system at Medan State University.
- e. The control system is unable to moderate the effect of information technology on the quality of the accounting information system at Medan State University.
- f. The internal control system is unable to moderate the effect of management support on the quality of the accounting information system at Medan State University.
- g. The internal control system does not moderate the effect of user competence on the quality of the accounting

information system at Medan State University.

Limitation And Recommendation

The limitations and suggested references for these limitations are: this study is limited to the universities observed, where the researcher only focused on one state university in Medan. Therefore, the researcher hopes that further research can expand the object by adding several state universities in Medan, in order to obtain a broader discussion in terms of the quality of accounting information systems.

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