

Effect of the Application of Accounting Information Systems Artificial Intelligence Based on Quality Financial Statements with Control System Internal as a variable moderation in Bank 9 Jambi

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Abstract

This study aims to determine the effect of implementing an artificial intelligence-based Accounting Information System on the Quality of Financial Statements moderated by the Internal Control System. The population used in this study were Bank 9 Jambi employees. Determination of the research sample using the Purposive Sampling method. The data used in this study is primary data. Respondents in this study were 30 respondents by distributing questionnaires using a Likert Scale. The analysis technique used is Partial Least Square (PLS). The result showed that The Artificial Intelligence-Based Accounting Information System has a positive effect on the Quality of Financial Statements and the Internal Control System can moderate the effect of the Artificial Intelligence-Based Accounting Information System on the Quality of Financial Statements.

Keywords: Accounting Information System; Internal Control System; Financial Statements; Artificial Intelligence

INTRODUCTION

Technological sophistication at this time is growing rapidly and will continue to grow because human nature is always hungry for knowledge. The greatness of technology that is growing can certainly be a double-edged knife for human life. Accounting Information System (SIA) is one of the systems that are always used by the company, because it is useful to provide more consistent information appropriate and appropriate for its use in making decisions. AICPA (1966) states that the Accounting Information System is one way of obtaining information for the management of the company which will be used as a decision making this is an information system that is more accurate than accounting is the practice of theories in the field of economic activity and information is presented with quantitative data (Abdelraheem et al., 2021). Financial statements are a report prepared systematically by the company that describes how the financial condition.

The problem that often occurs in the Financial Field is none other than fraud. Starting from fraud forgery and data manipulation carried out by the financial parties themselves. Not spared the help of auditors, lawyers, and other fields who took part in helping smooth this fraud with a scandal that quite shocked the world, making internal information users more stringent in strengthening the security and accuracy of the data to be presented and external information users also increased their suspicion and vigilance against the company (Roszkowska, 2021). Artificial Intelligence has remained a relatively obscure technology scientifically and of limited practical interest for half a century. However, with the advent of Big Data Technology, Artificial Intelligence can be increased in computing power so that AI is now entering the business environment and public conversation (Haenlein & Kaplan, 2019).

Quoted from Forbes.com, AI is already rampant in the lives around us. According to the data explained that the use of AI in the business sector has grown by 270% in the last four years. Another worrying thing is that most accountants are not good at using this artificial intelligence technology and some companies avoid this change, because companies have to make additional investments because of this advanced technology (Gass, 2018).

Quoted on the official website, Bank Jambi is a Bank owned by The Local Government of Jambi province and the entire region. Bank Jambi also cooperates with third parties, such as fintech, amazon and others. With that, Bank Jambi has adopted artificial intelligence (AI) in their company. Bank Jambi utilizing existing technology, the development of the times this company also has a website that is easily accessible to the general public and also has an official application for related customer needs such as this application account commonly referred to as Mobile Banking. McKinsey (2020) states that, 60% of banks have implemented AI technology in their companies, as Virtual assistants are useful as fraud detection tools and monitor risk in real-time. The existence of AI technology can help Bank Jambi in improving the quality of its financial statements both in terms of efficiency, accuracy, relevance, timeliness, and others (Utoyo et al., 2021).

This study will help determine the effect of Accounting Information Systems based on Artificial Intelligence (AI) on the quality of financial statements at Bank 9 Jambi and determine whether the Internal Control System moderates the relationship between Accounting Information Systems based on Artificial Intelligence (AI) with the quality of financial statements at Bank 9 Jambi. Thus, researchers are interested in conducting research on “the effect of the application of Artificial Intelligence-Based Accounting Information System on the quality of financial statements 9 with Internal control system as a moderation variable in Bank Jambi”

RESEARCH METHODS

This study uses quantitative methods with survey methods. In the calculation of data analysis can be assisted by computer programs or manual calculation. In this study the object and population of the study will be conducted on all employees of the financial sector in Bank 9 Jambi. The sample of this study is the employees who work in finance/accounting at Bank 9 Jambi, with sampling using Purposive Sampling method. Data analysis conducted in this study in the form of analyzing quantitative data obtained from the distribution of questionnaires using SmartPLS 4.0.

RESULTS AND DISCUSSION

Based on the distribution of questionnaires to 33 respondents who are employees of Bank Jambi. The total number of people who filled out the questionnaire was only 30 respondents with the data obtained sufficient to meet the safe limit for conducting research. Questionnaires that have been distributed through the online system, namely with google gform and the answers of

the respondents have been loaded in tabulated form in Microsoft Excel and processed using SmartPLS 4.0.

Outer Model Analysis

Convergent Validity Test

Based on the outer model, each indicator used to measure the latent variable has an outer loading value of > 0.7, from the picture it can be said that it meets the requirements or criteria for validity, because the outer loading value of each indicator is > 0.5.

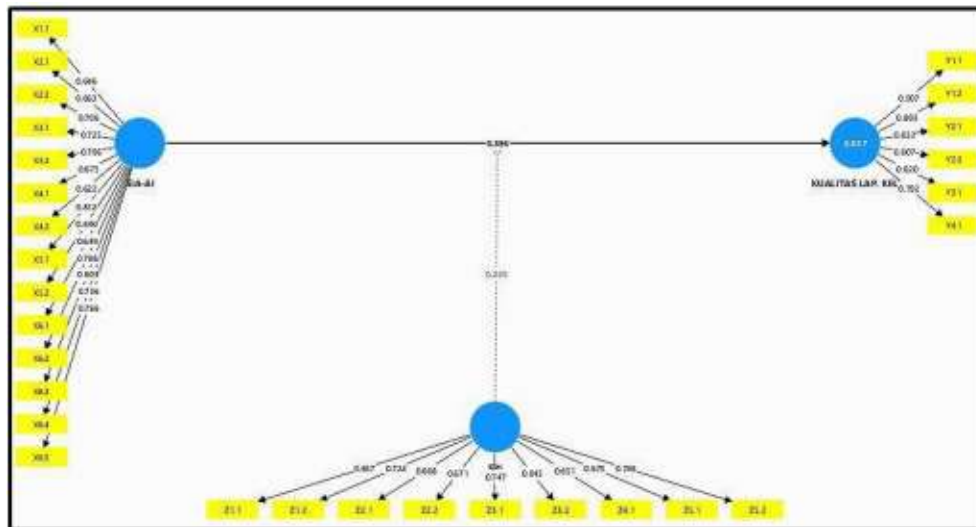


Figure 1. Outer Model

Discriminant Validity Test

Discriminant Validity measurement with HTMT method can be said to meet the criteria if the correlation value between constructs < 0.9. In addition to observing the value of HTMT, Discriminant Validity also looks at the value of the average Variant Extracted (AVE). Can be seen from the table, all variables have met the criteria for a good Ave value, which is > 0.5.

Table 1. HTMT Method

	SIA-AI (X)	KLK (Y)	SPI (Z)
SIA-AI (X)			
KLK (Y)	0.668		
SPI (Z)	0.507	0.656	
SPIxSIA-AI	0.279	0.456	0.203

Table 2. AVE Method

Variabel	AVE
SIA-AI (X)	0,504
KLK (Y)	0,716
SPI (Z)	0,507

Reliability Test

Table 3. Reliability Method

	<i>Cronbach's Alpha</i>	<i>Composite Reability (rho_a)</i>	<i>Composite Reability (rho_c)</i>	Keterangan
SIA-AI (X)	0.924	0.938	0.934	Reliabel
KLK (Y)	0.920	0.927	0.938	Reliabel
SPI (Z)	0.881	0.901	0.902	Reliabel

Based on the table, it can be concluded that all constructs have met the required reliability test criteria. It is said to be reliable because each construct has reached a value > 0.7.

Inner Model Test

R – square test

Table 4. R-square

	<i>R-Square</i>	<i>Adjusted R-Square</i>
KLK (Y)	0.637	0.595

The value of the Adjusted R-Square can be concluded that with the addition of the moderation variable allows a decrease in the influence of the dependent variable, because it is not so contribute more to the dependent variable so as to reduce its influence.

Path Coefficient

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard deviation (STDEV)</i>	T Statistics	P Values
SIA-AI → KLK	0.395	0.427	0.114	3.455	0.001
SPIxSIA-AI → KLK	0.240	0.257	0.099	2.418	0.016

Table 5. Path Coefficient with Bootstrapping

Table 6. Moderated Regression Analysis Test

	<i>Path Coefficients</i>	T Statistics	P Values	Pengaruh
Moderasi → KLK	0.240	2.418	0.016	Positif dan Signifikan

Effect of Artificial Intelligence-Based Accounting Information System (X) on the quality of financial statements (Y)

The results of statistical testing on hypothesis 1 (H1) showed the effect of Artificial Intelligence-Based Accounting Information System on the quality of financial statements with a

coefficient value of 0.395 and T Statistics value of 3.455 and significance value of 0.001. A statistical value indicating the numbers $3.455 > 1.96$ can be stated that hypothesis 1 is accepted.

It can be understood that an Accounting Information System based on Artificial Intelligence that is getting better can certainly improve the quality of the company's financial statements, if the opposite happens, it will certainly reduce the quality of the company's financial statements. The results of this study are in line with previous research conducted by Josephina Akwila (2023) and Ciko Arfismanda (2021).

Internal Control System (Z) the relationship between Artificial Intelligence-Based Accounting Information System (X) with the quality of financial statements (Y)

Hypothesis 2 has a coefficient value of 0.240 where the value is > 0 . Then, the value of T Statistics is 2.418, which means that the value is > 1.96 and the significance value is $0.016 < 0.05$. This can be interpreted that the Internal control system as a variable of moderation can moderate (or strengthen) the relationship between the variables of Accounting Information Systems based on Artificial Intelligence with the dependent variable, namely the quality of financial statements.

The results of this study are in line with previous research, conducted by Mardiah Hasanah Nasution (2023) and Hendri (2019), that with a good internal control system in the company, it will certainly improve the relationship between accounting information systems and the quality of the company's financial statements.

CONCLUSION

A good artificial intelligence-based accounting information system can improve the accuracy, reliability, and quality of the company's financial statements. Good internal control is important in supporting a technology applied to the company in order to achieve optimal results. The results of this study are quite consistent with the results of previous studies. However, there are also some previous research results that are not in line with this study. Suggestions can be given in the form of companies developing existing technology (software) in order to improve employee performance further. Strengthening the company's internal control system with the help of AI technology that has proven useful, internal control will be needed to ensure adjustments to the use of these technologies to the maximum and optimal

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