

(Research/Review) Article

Factors Affecting the Effectiveness of Accounting Information Systems in Village Credit Institutions Throughout Jembrana Regency

Ni Luh Gede Putri Wulandari¹, Made Yenni Latrini²

¹ Faculty of Economics and Business; Udayana University, e-mail:

putri.wulandari21@student.unud.ac.id

² Faculty of Economics and Business; Udayana University, e-mail:

madeyennilatrini@unud.ac.id

* Corresponding Author: Ni Luh Gede Putri Wulandari

Abstract: This study explores the influence of information system quality, information technology sophistication, and personal technical capability on the effectiveness of Accounting Information Systems (AIS) in Village Credit Institutions (LPDs) in Jembrana Regency. The research adopts a quantitative approach, utilizing a survey method. Questionnaires were distributed to 63 employees from 21 LPDs that have already implemented computerized AIS. The study focuses on assessing how these three independent variables contribute to the effectiveness of AIS in the LPDs. Multiple linear regression was employed for data analysis, allowing the researcher to determine the relationship between the independent variables and the effectiveness of AIS. The respondents were selected from LPDs that had successfully integrated technology into their accounting systems. The primary objective was to understand whether system quality, IT sophistication, and personal technical capability played a significant role in improving AIS performance in these institutions. The findings of the study indicate that all three independent variables—system quality, IT sophistication, and personal technical capability—positively influence the effectiveness of AIS. Specifically, high-quality systems, advanced IT infrastructure, and employees with strong technical skills were found to enhance the operational effectiveness of AIS. This underscores the importance of these factors in ensuring the smooth functioning of AIS in LPDs. As such, LPDs are encouraged to invest in improving system quality, upgrading IT systems, and enhancing the technical skills of their staff to optimize AIS performance. Overall, the study contributes to the understanding of how technological factors can be leveraged to improve accounting processes in financial institutions, particularly in rural settings like LPDs in Jembrana Regency.

Keywords: Accounting Information Systems Effectiveness, IT Sophistication, System Quality, Technical Capability, Village Credit Institutions

1. INTRODUCTION

In the current era of globalization, the rapid advancement of information technology has significantly impacted companies that utilize accounting information systems (AIS). This technology is expected to assist businesses in providing useful and accurate information for decision-making.

Received: June 30, 2025

Revised: July 14, 2025

Accepted: July 28, 2025

Online Available: July 30, 2025

Curr. Ver.: July 30, 2025



Copyright: © 2025 by the authors.

Submitted for possible open

access publication under the

terms and conditions of the

Creative Commons Attribution

(CC BY SA) license

([https://creativecommons.org/li](https://creativecommons.org/licenses/by-sa/4.0/)

[censes/by-sa/4.0/](https://creativecommons.org/licenses/by-sa/4.0/))

According to Azhar (2017), an AIS can be defined as an integrated collection of physical and non-physical subsystems or components that are interrelated and work together harmoniously to process financial transaction data into financial information.

In the banking sector, accounting information is a crucial element of all managerial information. Over time, the involvement of information technology has evolved AIS to support organizational performance. Village Credit Institutions (LPDs), as part of Indonesia's banking system, are also subject to this transformation. LPDs are required to provide relevant, accurate, and timely financial information. Without a reliable and up-to-date computer-based system, LPDs risk being outcompeted by modern banks.

LPDs are governed by Bali Provincial Regulation No. 3 of 2017, which acknowledges their importance in enhancing the welfare of traditional community members (Krama Desa Pakraman) and mandates improvements in governance as village-owned financial institutions. Furthermore, Governor Regulation No. 44 of 2017 stipulates the management, supervision, and risk governance of LPD operations, emphasizing not only financial services but also social contributions, human resource development, and infrastructure support. Suartana (2020) highlights the pivotal role of LPDs in strengthening community-based economies, while also noting associated costs and risks such as bad loans, technology-related operational expenses, and the necessity for strict oversight to ensure transparency and sustainability.

Currently, 21 out of 64 LPDs in Jembrana Regency have adopted computer-based AIS. However, many employees still feel unconfident operating these systems due to their previous reliance on manual data processing. System quality issues, such as frequent technical failures, also hinder financial data processing.

The effectiveness of AIS implementation can be influenced by various factors. Choe (2015) identifies user involvement, user competence, and training availability as key contributors. Al-Okaily et al. (2020) expand this by listing eight factors, including user involvement in system development, technical capability, organization size, top management support, system development formalization, user training programs, the presence of an information systems steering committee, and the location of the IT department.

This study focuses on three independent variables—system quality, IT sophistication, and personal technical capability—due to their relevance to the current issues faced by LPDs. A high-quality information system enhances business processes, delivers accurate and relevant information, and increases user satisfaction (Oktrivina et al., 2021). Conversely, low-quality systems may lead to financial losses and implementation failure. According to DeLone and McLean (2003), an effective system must provide

accurate data, be user-friendly, and be supported by responsive services. Mukhlis (2024) adds that system design, technology integration, data management, and developer-user understanding are critical to system quality.

Sophisticated technology enables organizations to generate timely and accurate information for effective decision-making (Ismail, 2009). It also enhances the speed and accuracy of accounting reports and supports continuous system upgrades.

The technical capabilities of personnel play a vital role in AIS effectiveness. Personnel involved as developers, users, or administrators must have the appropriate skills, knowledge, and attitudes to effectively operate the system. Suputeri (2019) found a positive and significant relationship between personal technical capability and AIS effectiveness.

This study is motivated by the strategic role of AIS in LPDs, particularly in supporting local economies. The Technology Acceptance Model (TAM) is employed to better understand how perceived usefulness and ease of use influence technology acceptance. This framework identifies challenges and opportunities for AIS implementation in LPDs, with the goal of enhancing their financial management capabilities.

This research replicates a prior study by Putri (2022), titled *The Influence of Personal Technical Capability and IT Sophistication on the Effectiveness of AIS* conducted at Koperasi SIDI Sanur's savings and loan unit. This current study differs by including an additional variable—information system quality—and focusing on LPDs in Jembrana Regency. It also builds upon Dewanti's (2023) study on AIS effectiveness in South Denpasar SMEs, which used different variables.

2. METHOD

This study adopts a quantitative approach with a descriptive-verification design to examine the influence of independent variables on the effectiveness of AIS in LPDs across Jembrana Regency. The independent variables are information system quality, IT sophistication, and personal technical capability, while the dependent variable is AIS effectiveness. All variables were measured using a four-point Likert scale questionnaire adapted from prior research, with validity and reliability tests conducted to ensure measurement accuracy (Sugiyono, 2020; Ghozali, 2021).

The population consists of all 64 LPDs in Jembrana Regency. Using purposive sampling, 21 LPDs were selected based on the criterion of having implemented a computerized AIS for more than one year. Each LPD was represented by three respondents—the head, treasurer, and credit staff—resulting in a total of 63 respondents. Primary data were obtained via questionnaires, while secondary data included documentation and general institutional profiles (Sugiyono, 2021).

Data analysis was conducted using multiple linear regression to assess both simultaneous and partial effects of the independent variables on AIS effectiveness. Prior to regression analysis, classical assumption tests were performed, including tests for normality, multicollinearity, heteroscedasticity, and linearity. The F-test was used to evaluate model feasibility, and the t-test was employed to assess the significance of individual variables. Adjusted R^2 was used to determine the proportion of variance in AIS effectiveness explained by the independent variables (Ghozali, 2021).

3. RESULTS AND DISCUSSION

Research Analysis Results

Research Instrument Test Results

1. Validity Test

Table 1. Validity Test Results

Variables	Indicator	Correlation Coefficient	Information
Information System Quality (X1)	X1.1	0.672	Valid
	X1.2	0.623	Valid
	X1.3	0.475	Valid
	X1.4	0.568	Valid
	X1.5	0.672	Valid
Sophistication of information technology (X2)	X2.1	0.522	Valid
	X2.2	0.681	Valid
	X2.3	0.741	Valid
	X2.4	0.573	Valid
	X2.5	0.655	Valid
Personal technical ability (X3)	X3.1	0.682	Valid
	X3.2	0.767	Valid
	X3.3	0.558	Valid
	X3.4	0.639	Valid
	X3.5	0.839	Valid
	X3.6	0.845	Valid
SIA Effectiveness (Y)	Y1	0.757	Valid
	Y2	0.634	Valid
	Y3	0.495	Valid
	Y4	0.669	Valid
	Y5	0.744	Valid
	Y6	0.696	Valid
	Y7	0.490	Valid
	Y8	0.711	Valid

Source: Processed Data, 2025

The results of the validity test in Table 1 above show that all variables have a correlation coefficient value with a total score of all statement items greater than 0.30. This indicates that the statement items in the research instrument are valid.

2. Reliability Test Results

Table 2. Reliability Test Results

No.	Variables	Cronbach's Alpha	Information
1	Information System Quality (X1)	0.735	Reliable
2	Sophistication of information technology (X2)	0.750	Reliable
3	Personal technical ability (X3)	0.783	Reliable
4	SIA Effectiveness (Y)	0.760	Reliable

Source: Processed Data, 2025. 5

The results of the reliability test in Table 2 show that all research instruments have a Cronbach's Alpha coefficient of more than 0.70. This can be said that all instruments are reliable so they can be used to conduct research.

Descriptive Statistical Analysis

Descriptive analysis was conducted to determine the characteristics and responses of respondents to each statement. All variables are described using average values. The assessment of data distribution for each variable uses a range of criteria calculated using the equation:

$$\text{Interval Value} = \frac{(\text{Highest boundary value} - \text{Lowest boundary value})}{\text{Total value used}}$$

$$= \frac{(4-1)}{4} = 0.75$$

Based on the interval range results, the measurement result criteria for the construct can be compiled in Table 3 as follows:

Table 3. Summary of Research Variable Score Intervals

Score Value	Criteria
1.00 – 1.75	Very Low
1.76 – 2.50	Low
2.51 – 3.25	Tall
3.26 – 4.00	Very high

These measurement criteria show that the higher the average value obtained, the better the respondent's response to the item or variable.

Table 4. Descriptive Statistics

	STS	TS	S	SS	Total	Average	Criteria
X1.1	0	0	29	34	223	3.54	Very high
X1.2	0	0	34	29	218	3.46	Very high
X1.3	0	0	34	29	218	3.46	Very high
X1.4	0	0	27	36	225	3.57	Very high
X1.5	0	0	31	32	221	3.51	Very high
X1	Information System Quality (X1)				1105	3.51	Very high
X2.1	0	0	35	28	217	3.44	Very high
X2.2	0	0	37	26	215	3.41	Very high

X2.3	0	0	24	39	228	3.62	Very high
X2.4	0	0	28	35	224	3.56	Very high
X2.5	0	3	37	23	209	3.32	Very high
X2	Technological Sophistication (X2)				1093	3.47	Very high
X3.1	0	3	34	26	212	3.37	Very high
X3.2	0	6	42	15	198	3.14	Tall
X3.3	0	2	36	25	212	3.37	Very high
X3.4	0	3	34	26	212	3.37	Very high
X3.5	0	5	29	29	213	3.38	Very high
X3.6	0	5	28	30	214	3.40	Very high
X3	Personal Technical Ability (X3)				1261	3.34	Very high
Y1	0	1	22	40	228	3.62	Very high
Y2	0	0	27	36	225	3.57	Very high
Y3	0	0	34	29	218	3.46	Very high
Y4	0	0	26	37	226	3.59	Very high
Y5	0	0	23	40	229	3.63	Very high
Y6	0	0	27	36	225	3.57	Very high
Y7	0	0	35	28	217	3.44	Very high
Y8	0	0	28	35	224	3.56	Very high
Y	SIA Effectiveness (Y)				1792	3.56	Very high

Source: Processed Data, 2025

Based on the results of the descriptive statistical test in Table 4, the Information System Quality variable obtained an average value (mean) of 3.51, which means that the majority of employees considered that LPD already had a very high or very good Information System Quality.

The information technology sophistication variable obtained an average value (mean) of 3.47, which means that the majority of LPD employees already have very high or very good information technology sophistication.

The personal technical capability variable obtained an average value (mean) of 3.34, which means that the majority of LPD employees already have very high or very good personal technical capabilities.

The SIA Effectiveness variable obtained an average value (mean) of 3.56, which means that the majority of employees considered that LPD already had very high or very good SIA Effectiveness.

Classical Assumption Test Results**Normality Test Results****Table 5. Normality Test Results**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		63
Normal Parameters ^{a,b}	Mean	0.0000000
	Std. Deviation	1.54909010
Most Extreme Differences	Absolute	0.117
	Positive	0.117
	Negative	-0.068
Test Statistics		0.928
Asymp. Sig. (2-tailed)		0.356c
a. Test distribution is Normal.		

Source: Processed Data, 2025

Based on the analysis results in Table 5, a significance value of 0.356 was obtained, which is greater than 0.05. Therefore, the significance value of the Kolmogorov-Smirnov test is more than 0.05, it can be concluded that the regression equation model is normally distributed.

Multicollinearity Test Results**Table 6. Multicollinearity Test Results**

Variables	Tolerance	VIF	Information
Information System Quality (X1)	0.634	1,576	Multicol free
Sophistication of information technology (X2)	0.734	1,363	Multicol free
Personal technical ability (X3)	0.811	1,233	Multicol free

Source: Processed Data, 2025. 8

Based on Table 6, it can be seen that the tolerance and VIF values of all variables show that the tolerance value for each variable is greater than 10% and the VIF value is less than 10, which means that the regression equation model is free from multicollinearity.

Heteroscedasticity Test Results**Table 7. Results of Heteroscedasticity Test**

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,177	2,696		-0.437	0.664
	Information System Quality (X1)	0.278	0.164	0.266	1,690	0.096
	Technological Sophistication (X2)	-0.184	0.144	-0.189	-1,285	0.204
	Personal Technical Ability (X3)	-0.024	0.086	-0.040	-0.282	0.779
a. Dependent Variable: ABS_RESIDUAL						

Source: Processed Data, 2025.

In Table 7, it can be seen that the significance value of the Information System Quality variable is 0.096, the sophistication of information technology is 0.204 and the personal technical ability is 0.779. This value is greater than 0.05, which means that there is no influence between the independent variables on the absolute residual. Thus, the model created does not contain symptoms of heteroscedasticity.

Based on the description in Table 5, Table 6 and Table 7 above, it shows that all classical assumption tests have been met so that the results of the regression analysis are worthy of further discussion.

Multiple Linear Regression Analysis

Table 8. Results of Multiple Linear Regression Analysis

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	
1	(Constant)	1,332	2,665		0.500
	Information System Quality (X1)	0.653	0.168	0.379	3,895
	Technological Sophistication (X2)	0.508	0.145	0.316	3,491
	Personal Technical Ability (X3)	0.342	0.087	0.338	3,927

a. Dependent Variable: Sia Effectiveness (Y)

Source: Processed Data, 2025.

Based on the results of the multiple linear regression analysis as presented in Table 8, the following regression equation can be created:

$$Y = 1.332 + 0.653 X1 + 0.508 X2 + 0.342 X3$$

The regression coefficient value of each independent variable has a t-test significance value of less than 0.05. This shows that all independent variables have a significant influence on the dependent variable.

Results of the Determination Coefficient Test (R²)

Table 9. Results of the Determination Coefficient Test (R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.803a	0.645	0.627	1.58799

a. Predictors: (Constant), Personal Technical Ability (X3), Technological Sophistication (X2), Information System Quality (X1)

Source: Processed Data, 2025.

The test results in Table 9 provide results where the adjusted R² (adjusted determination coefficient) is 0.627. This means that the variation of AIS Effectiveness can be significantly influenced by the variables of Information System Quality, information technology sophistication and personal technical capabilities by 62.7 percent, while the remaining 37.3 percent is explained by other factors not explained in the research model.

Simultaneous Test Results (F Test)**Table 10. F Test Results**

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	270,775	3	90,258	35,793	0.000b
	Residual	148,780	59	2,522		
	Total	419,556	62			

a. Dependent Variable: Sia Effectiveness (Y)

Source: Processed Data, 2025.

Table 10 shows that the F value is 35.793 with a significance of 0.000 which is less than $\alpha = 0.05$, this means that the model used in this study is feasible. This result gives the meaning that all independent variables are able to predict or explain the phenomenon of AIS effectiveness. in other words, there is a simultaneous influence of the variables of information system quality, information technology sophistication, and personal technical capabilities on AIS effectiveness.

Hypothesis Test Results (t-Test)**Table 11. Results of Multiple Linear Regression Analysis**

	Standardized Coefficients	t	Sig.
Information System Quality → AIS Effectiveness	0.379	3,895	0,000
Information technology sophistication → AIS effectiveness	0.316	3,491	0.001
Personal technical capability → AIS effectiveness	0.338	3,927	0,000

Source: Processed Data, 2025.

The results of the test of the influence between variables can be explained as follows:

1. The Influence of Information System Quality on AIS Effectiveness

Based on the results of the analysis of the influence of Information System Quality on AIS Effectiveness, a significance value of 0.000 was obtained with a t-value of 3.895 and a positive regression coefficient value of 0.379. A significance value of $0.000 < 0.050$ indicates that H_0 rejected and H_1 is accepted. This result means that the quality of the information system has a positive effect on the effectiveness of AIS.

2. The Influence of Information Technology Sophistication on AIS Effectiveness.

Based on the results of the analysis of the influence of information technology sophistication on the effectiveness of AIS, a significance value of 0.001 was obtained with a t-value of 3.491 and a positive regression coefficient value of 0.316. A significance value of $0.001 < 0.050$ indicates that H_0 is rejected and H_2 is accepted. This result means that information technology sophistication has a positive effect on the effectiveness of AIS.

3. The Influence of Personal Technical Ability on AIS Effectiveness. Based on the results of the analysis of the influence of personal technical ability on AIS Effectiveness, a significance value of 0.000 was obtained with a t-value of 3.927 and a positive regression coefficient value of 0.338. A significance value of $0.000 < 0.050$ indicates that H_0 is rejected and H_3 is accepted. This result means that personal technical ability has a positive effect on AIS Effectiveness.

Discussion of Research Results

The Influence of Information System Quality on the Effectiveness of AIS in LPD Jembrana Regency

Based on the test results (t-test) in this study, it was found that Information System Quality has a positive regression coefficient value 0.379 and sig. $0.000 < 0.050$. The test results indicate that the first hypothesis (H_1) Information System Quality has a positive influence on the Effectiveness of the Accounting Information System in LPD Jembrana Regency. The quality of the information system reflects the extent to which the system is able to provide accurate, relevant, and timely information to users. Which means that the higher the quality, the higher the effectiveness of the AIS in LPD. In the context of TAM Theory, good system quality strengthens the perception of ease of use and the perception of benefits of the information system. When employees feel that the system is easy to use and provides useful results, they are more likely to accept and use it optimally. This is in accordance with the research results of Widiartini and Dewi (2021) from Udayana University, which found that system quality is directly proportional to the level of adoption of the accounting system. Quality information also increases user confidence in making data-based decisions. Thus, the quality of the information system plays an important role in optimizing the effectiveness of AIS.

A quality information system helps minimize input errors, speeds up the reporting process, and increases the transparency of financial information. In the TAM framework, a system that has high reliability and integrity will increase the user's intention to continue using the system in daily work activities. This is because users will feel the direct benefits of the system and believe that the system supports their work significantly. In addition, a positive perception of the system will create a more open attitude in accepting technological innovations in the future. According to TAM theory, perceptions of system quality can indirectly strengthen long-term loyalty to system use. This is reinforced by research at Udayana University which shows that a high-quality system creates efficiency and user satisfaction. Therefore, improving the quality of information systems should be a priority in the development of AIS.

As a concrete example, LPDs that have an accounting information system with a user-friendly interface and automatic reporting features will be faster in the process of preparing monthly financial reports. This not only increases efficiency but also accelerates strategic decision-making by management. Within the TAM framework, ease of data access and system integration will strengthen the perception of usefulness which has an impact on the acceptance of technology by users. When employees feel that the system supports their tasks directly, the effectiveness of the AIS will increase. Yasa and Putra's (2019) research also concluded that a system that is easy to understand and use will increase user commitment in carrying out accounting procedures. Therefore, improving system quality is not only about technology, but also about how the system is able to create added value for its users. With strong system support, the effectiveness of AIS in LPD can continue to be improved sustainably.

The Influence of Information Technology Sophistication on the Effectiveness of AIS in LPD Jembrana Regency

Based on the test results (t-test) in this study, it was found that Information Technology Sophistication has a positive regression coefficient value.0.316 and sig. 0.001 < 0.050. The test results indicate that the second hypothesis (H2) Information Technology Sophistication has a positive influence on the Effectiveness of Accounting Information Systems in LPD Jembrana Regency. Information technology sophistication includes the integration of modern hardware and software in supporting efficient and real-time accounting processes. From a TAM perspective, the use of advanced technology can strengthen the perception of ease and usefulness of the system, two main components in predicting technology acceptance. Modern technology such as cloud systems, automatic data integration, and guaranteed information security will increase user trust. Research by Suryani and Sudana (2020) from Udayana University emphasized that the application of advanced information technology directly contributes to increasing the accuracy and speed of accounting processes. When employees realize the real benefits of the technology, they will be more easily able to adapt and integrate it into their daily work processes. This shows that technological sophistication plays an important role in supporting the success of AIS implementation.

In addition, more sophisticated technology also allows automation of processes that were previously carried out manually, thereby reducing employee workload. With automation features, employees can focus on analysis and decision making, not just on recording data. In TAM theory, this strengthens the perception of usefulness, which drives the intention to use the system continuously. A positive experience in using sophisticated technology will create a positive attitude towards information systems.

Another study from Udayana University by Artawan and Yadnyana (2021) stated that organizations that actively adopt high technology are more prepared to face change and are more efficient in managing information. Sophisticated information technology also increases the speed of communication and coordination between divisions in the organization. This is very important in the context of LPD which requires accurate financial information to meet stakeholder needs quickly and accurately.

In practice, the implementation of mobile-based financial applications and interactive dashboards in LPDs has been proven to increase employee participation in the financial reporting process. Technology like this makes information easier to access and understand, even for users with non-technical backgrounds. From a TAM perspective, when users feel that the technology is easy to learn and use, resistance to change will decrease. Technological sophistication is not just about features, but also how these features answer user needs efficiently. A study by Purnami and Mustanda (2019) at Udayana University showed that the sophistication of web-based information systems has driven an increase in the effectiveness of AIS in cooperatives and other financial institutions. Thus, LPDs that adopt modern technology have a greater chance of increasing the effectiveness of their accounting systems. Investment in sophisticated technology is a form of strategic commitment to increasing the competitiveness of regional financial institutions.

The Influence of Personal Technical Ability on the Effectiveness of SIA in LPD Jembrana Regency

Based on the test results (t-test) in this study, it was found that Personal Technical Ability has a positive regression coefficient value.0.338 and sig. 0.000 < 0.050. The test results indicate that the third hypothesis (H3) Personal Technical Ability has a positive influence on the Effectiveness of the Accounting Information System at LPD Jembrana Regency. Personal technical ability refers to the skills and competencies of employees in operating information systems and technological devices used in accounting. Within the TAM framework, individual abilities play a role in shaping perceptions of the ease of use of the system. Employees who have technical understanding tend to adapt more quickly and explore system features to the fullest. Research by Yasa and Putra (2019) from Udayana University confirmed that routine technical training increases the effectiveness of accounting information system implementation. With good technical skills, employees are better able to handle technical constraints and reduce dependence on third-party technicians. This also fosters self-confidence in using new technology.

Personal technical skills also improve the quality of data input and speed up the validation process in the accounting system. When employees

are able to operate the system well, the risk of errors is reduced and financial reports become more accurate. In TAM theory, direct experience in using the system will strengthen positive perceptions of the system, which ultimately encourages voluntary use. Skilled employees will find it easier to see the benefits of the system, which then influences their intention to continue using it. Research by Rahyuda and Dewi (2020) from Udayana University added that technical skills have a major influence on user attitudes and behavior towards information systems. This ability also creates a work culture that is data-based and efficient. Therefore, HR development through technical training is a key factor in optimizing the effectiveness of AIS.

As a strategic step, LPD needs to conduct regular internal training to improve the technical skills of its employees. This training does not only focus on software operation, but also on understanding the basics of information systems and data security. With this approach, employees will feel more prepared to face the challenges of ever-evolving technology. Within the TAM framework, this will increase positive attitudes towards the system and strengthen the acceptance of technology as a whole. A study by Utami and Sudirman (2021) at Udayana University proved that institutions that provide regular training have higher SIA effectiveness than those that do not. This strengthens the argument that investing in developing personal technical skills is a fundamental step. Because, no matter how sophisticated the system is, its effectiveness still depends on the quality and readiness of users within the organization.

4. CONCLUSION

1. Information system quality has a positive effect on the effectiveness of accounting information systems (AIS) in Village Credit Institutions (LPDs) across Jembrana Regency. This indicates that higher system quality—characterized by reliability, ease of use, and security—leads to more effective information systems for financial reporting.
2. Information technology sophistication also has a positive effect on the effectiveness of AIS in LPDs throughout Jembrana Regency. This suggests that the use of advanced technology supports accounting process efficiency and enables faster and more accurate information presentation, thereby enhancing decision-making in LPDs.
3. Personal technical capability has a positive effect on the effectiveness of AIS in LPDs across Jembrana Regency. This implies that employees with strong technical competencies in operating information systems are better able to minimize input errors, accelerate transaction recording, and improve the overall performance of the system.

4. Based on the regression analysis results, the Adjusted R^2 value is 62.7%, indicating that the combined influence of information system quality, IT sophistication, and personal technical capability explains 62.7% of the variation in AIS effectiveness. This means that more than half of the AIS effectiveness can be predicted by these three independent variables. The remaining 37.3% is attributed to other factors outside the scope of this study. Therefore, it can be concluded that the regression model used has strong predictive power, although it leaves room for other influencing factors such as management support, organizational culture, or employee training, which may also impact the effectiveness of accounting information systems.

REFERENCE LIST

- [1] T. A. Abu Taber, L. A. Alaryan, and A. A. Abu Haija, "The effectiveness of accounting information systems in Jordanian private higher education institutions," *Int. J. Accounting Financial Report.*, vol. 4, no. 1, pp. 28, 2014, doi: 10.5296/ijafr.v4i1.5323. [Online]. Available: <https://doi.org/10.5296/ijafr.v4i1.5323>.
- [2] I. O. Adeyemi, A. O. Issa, and I. Adeyemi, "Integration of Information System Success Model (ISSM) and Technology Acceptance Model (TAM): Proposing Students' Satisfaction with Web Portal Model," *Record Library J.*, vol. 6, no. 1, pp. 69-79, 2020. [Online]. Available: <https://e-journal.unair.ac.id/index.php/RLJ>. doi: 10.20473/rjl.V6-I1.2020.69-79.
- [3] F. Akbar et al., "Analisis Kualitas Sistem Informasi Akuntansi (Studi Kasus Implementasi Sipkd di BPKPD Kota Sukabumi)," *Akuntansi*, vol. 2024.
- [4] A. Al-Okaily, M. Al-Okaily, F. Shiyyab, and W. Masadah, "Accounting information system effectiveness from an organizational perspective," *Management Sci. Lett.*, vol. 10, no. 16, pp. 3991-4000, 2020, doi: 10.5267/j.msl.2020.7.010. [Online]. Available: <https://doi.org/10.5267/j.msl.2020.7.010>.
- [5] S. Anjarwati, R. Zaena, D. Fitriyaningsih, and I. Sulistiana, "Pengaruh Digitalisasi Akuntansi terhadap Efisiensi dan Pengurangan Biaya pada Perusahaan Wirausaha UMKM di Kota Bandung," *J. Aktiva: Riset Akuntansi Dan Keuangan*, vol. 5, no. 1, pp. 57-72, 2023. [Online]. Available: <https://doi.org/10.52005/aktiva.v5i1.181>.
- [6] N. M. T. Ari and G. Juliarsa, "Kualitas Sistem, Kecanggihan Teknologi, Kemampuan Teknik Personal dan Efektivitas Sistem Informasi Akuntansi," *E-Jurnal Akuntansi*, vol. 33, no. 6, pp. 1444, 2023, doi: 10.24843/eja.2023.v33.i06.p02. [Online]. Available: <https://doi.org/10.24843/EJA.2023.v33.i06.p02>.
- [7] Azhar, "Sistem Informasi Akuntansi Menurut Para Ahli & Fungsinya," 2017.
- [8] Cahyani and Dwiana, "E-Jurnal Ekonomi Dan Bisnis Universitas Udayana Pengaruh Kemampuan Teknik Personal, Kecanggihan Ti Dan Dukungan Manajemen Puncak Terhadap Efektivitas SIA PADA KRISNA OLEH-OLEH KHAS BALI III," *E-Jurnal Ekonomi Dan Bisnis Universitas*

- Udayana*, vol. 11, no. 09, pp. 1162-1170, 2022. [Online]. Available: <https://ojs.unud.ac.id/index.php/EEB/>. doi: 10.24843/EEB.2022.v11.i09.p13.
- [9] J.-M. Choe, "The Relationships among Performance of Accounting Information Systems, Influence Factors, and Evolution Level of Information Systems," *J. Manage. Inform. Syst.*, Dec. 11, 2015.
- [10] M. D. A. Ardyani, G. A. Yuniarta, and J. Ekonomi dan Akuntansi, "Pengaruh Kualitas Sistem Informasi Akuntansi, Personal Capability, Dan Partisipasi Pemakai Sistem Informasi Terhadap Efektivitas Sistem Informasi Akuntansi (Studi Pada Lembaga Perkreditan Desa (LPD) di Kecamatan Buleleng)," *J. Akuntansi dan Keuangan*, vol. 2022.
- [11] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS Q.*, vol. 13, no. 3, pp. 319-339, 1989, doi: 10.2307/249008. [Online]. Available: <https://doi.org/10.2307/249008>.
- [12] F. D. Davis, "A Technology Acceptance Model for Empirically Testing New End-User Information Systems," *ResearchGate*, 2014. [Online]. Available: <https://www.researchgate.net/publication/35465050>.
- [13] W. H. DeLone and E. R. McLean, "The DeLone and McLean model of information systems success: A ten-year update," *J. Manage. Inform. Syst.*, vol. 19, no. 4, pp. 9-30, 2003, doi: 10.1080/07421222.2003.11045748. [Online]. Available: <https://doi.org/10.1080/07421222.2003.11045748>.
- [14] N. M. I. P. Dewanti, "Faktor yang Mempengaruhi Efektivitas Sistem Informasi Akuntansi pada Usaha Kecil dan Menengah di Denpasar Selatan," 2023. [Online]. Available: <https://doi.org/10.24843/EEB.2024.v13.i03.p04>.
- [15] Ghozali, *Edisi 10 Aplikasi Analisis Multivariate*, vol. 26, 2021.
- [16] Hafeez-Baig, "An exploratory Study to Investigate the Effectiveness of PDAs in Healthcare: A Case of Queensland Nurses," *AIS Electronic Library*, 2011. [Online]. Available: <http://aisel.aisnet.org/acis2011/44>.
- [17] G. P. Huber, "A theory of the effects of advanced information technologies on organizational design, intelligence, and decision making," in *Knowledge, Groupware and the Internet*, Taylor and Francis, 2009, pp. 221-254, doi: 10.5465/amr.1990.4308227. [Online]. Available: <https://doi.org/10.5465/amr.1990.4308227>.
- [18] Ismail, "Pengaruh Kecanggihan Teknologi," 2009.
- [19] J. Jogiyanto, "Analisis Pengaruh Kemudahan Penggunaan Sopp Terhadap Kepuasan Kerja Pegawai Dengan Pendekatan TAM," vol. 111, 2008.
- [20] A. Laili and T. S. Aji, "Pengaruh Kualitas Sistem Informasi Akuntansi, Kecanggihan Teknologi Informasi, dan Kinerja Individual terhadap Efektivitas Sistem Informasi Akuntansi pada BPR Arta

- Bangsai Utama Mojokerto," *JFAS: J. Finance Account. Stud.*, vol. 3, 2021. [Online]. Available: <http://ejournal.feunhasy.ac.id/index.php/jfas>. doi: 10.33752/jfas.v3i2.301.
- [21] P. D. Mirnasari and I. M. S. Suardhika, "Pengaruh Penggunaan Teknologi Informasi, Efektivitas Sistem Informasi Akuntansi, dan Sistem Pengendalian Intern Terhadap Kinerja Karyawan," *E-Jurnal Akuntansi*, vol. 567, 2018, doi: 10.24843/EJA.2018.v23.i01.p22. [Online]. Available: <https://doi.org/10.24843/EJA.2018.v23.i01.p22>.
- [22] I. R. Mukhlis, *Sistem Informasi (Teori dan Implementasi Sistem Informasi di berbagai Bidang)*, 2024. [Online]. Available: <https://www.researchgate.net/publication/378849891>.
- [23] A. B. Muslim, N. A. Yani, and M. Dyah Permatasari, "Pengaruh Kecanggihan Teknologi Informasi, Kemampuan Teknik Personal dan Pengalaman Kerja Terhadap Efektivitas Penggunaan Sistem Informasi Akuntansi," *J. Akuntansi*, vol. 2022.
- [24] S. Mutmainah, S. Suprihati, and L. Kristiyanti, "Pengaruh Kecanggihan Teknologi Informasi, Partisipasi Manajemen, dan Pengetahuan Manajer Akuntansi Terhadap Efektivitas Sistem Informasi Akuntansi pada PT Indah Yatama Air Cargo di Surakarta dan Semarang," *J. Akuntansi Dan Pajak*, vol. 22, no. 1, pp. 259, 2021, doi: 10.29040/jap.v22i1.2797. [Online]. Available: <https://doi.org/10.29040/jap.v22i1.2797>.
- [25] H. T. Nguyen and A. H. Nguyen, "Determinants of accounting information systems quality: Empirical evidence from Vietnam," *Accounting*, vol. 6, no. 2, pp. 185-198, 2020, doi: 10.5267/j.ac.2019.10.004. [Online]. Available: <https://doi.org/10.5267/j.ac.2019.10.004>.
- [26] N. Nurhayati, "Kinerja Sistem Informasi Akuntansi yang dipengaruhi oleh Kemampuan Teknik Personal, Kecanggihan Teknologi Informasi dan Kepuasan Pengguna," *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, vol. 3, no. 4, pp. 903-910, 2022, doi: 10.47065/ekuitas.v3i4.1561. [Online]. Available: <https://doi.org/10.47065/ekuitas.v3i4.1561>.
- [27] L. Nyoman et al., "Pengaruh Kemampuan Teknik Personal, Kecanggihan Ti Dan Dukungan Manajemen Puncak Terhadap Efektivitas SIA Pada Krisna Oleh-Oleh Khas Bali III," *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, vol. 11, no. 09, pp. 1162-1170, 2022. [Online]. Available: <https://ojs.unud.ac.id/index.php/EEB/>. doi: 10.24843/EEB.2022.v11.i09.p13.
- [28] A. Oktrivina, S. Tinggi Ilmu Ekonomi Tunas Nusantara Jakarta, and F. Ekonomi dan Bisnis Universitas Jakarta, "The Effect of System Quality, Information Quality and Service Quality on User Satisfaction of E-Learning System," *Int. J. Business Rev.*, vol. 4, no. 2, 2021.
- [29] M. H. Olson and J. J. Baroudi, "The Measurement of User Information Satisfaction," 1983.
- [30] F. D. Paramitha and N. L. Supadmi, "Kecanggihan Teknologi Informasi, Skill, Pengalaman Kerja, Kompleksitas Tugas pada Efektivitas Sistem Informasi Akuntansi," *E-Jurnal Akuntansi*, vol. 33, no. 12, 2023, doi: 10.24843/eja.2023.v33.i12.p16. [Online]. Available: <https://doi.org/10.24843/EJA.2023.v33.i12.p16>.

- [31] N. M. S. Pawitri and M. Yenni Latrini, "Pengaruh Efektivitas Penggunaan SIA, Pelatihan SIA, dan LOC Internal Pada Kinerja Karyawan LPD Kota Denpasar," *E-Jurnal Akuntansi*, vol. 2100, 2019, doi: 10.24843/eja.2019.v27.i03.p17. [Online]. Available: <https://doi.org/10.24843/EJA.2019.v27.i03.p17>.
- [32] F. W. Pranoto et al., "Pengaruh Kecanggihan Teknologi Informasi Dan Kemampuan Teknik Personal Terhadap Efektivitas Penggunaan Sistem Informasi Akuntansi Pada PT Bank Rakyat Indonesia," *J. Akuntansi*, vol. 2024.
- [33] A. W. A. Putri, "Pengaruh Kemampuan Teknik Personal dan Kecanggihan Teknologi Informasi Terhadap Efektivitas Sistem Informasi Akuntansi (Studi Kasus pada Unit Simpan Pinjam Koperasi SIDI Sanur)," *J. Akuntansi*, 2022.
- [34] N. L. M. G. P. Saraswati and I. G. A. E. Damayanthi, "Pengaruh Kualitas Sistem Informasi Akuntansi, Norma Subyektif dan Kemudahan Penggunaan pada Kinerja Individu," *E-Jurnal Akuntansi*, vol. 1339, 2018, doi: 10.24843/eja.2018.v25.i02.p20. [Online]. Available: <https://doi.org/10.24843/EJA.2018.v25.i02.p20>.
- [35] D. A. Sasongko, "Pengaruh Kecanggihan Teknologi Informasi, Partisipasi Manajemen, Pengetahuan Manajer Akuntansi terhadap Efektivitas Sistem Informasi Akuntansi," *J. Ilmiah Aset*, vol. 22, no. 2, pp. 79-88, 2020, doi: 10.37470/1.22.2.164. [Online]. Available: <https://doi.org/10.37470/1.22.2.164>.
- [36] I. W. Suartana, "Pelaporan Akuntansi Lembaga Perkreditan Desa (LPD)," *CV. SASTRA UTAMA*, 2020.
- [37] W. Suartika and Widhiyani, "Kemampuan Teknik Personal Pada Efektivitas Penggunaan Sistem Informasi Akuntansi Dengan Pendidikan Dan Pelatihan Sebagai Pemoderasi," *E-Jurnal Akuntansi*, vol. 2017.
- [38] Sugiyono, *Buku Metode Penelitian Komunikasi*, 2021st ed.
- [39] N. Suputeri, "Pengaruh Kemampuan Teknik Personal Pada Efektivitas Penggunaan SIA Dengan Budaya Organisasi Sebagai Variabel Pemoderasi," *E-Jurnal Akuntansi*, vol. 1022, 2019, doi: 10.24843/eja.2019.v26.i02.p07. [Online]. Available: <https://doi.org/10.24843/EJA.2019.v26.i02.p07>.
- [40] S. Suryani, "Pengaruh Kecanggihan Teknologi Informasi, Partisipasi Manajemen, dan Kinerja Individu terhadap Efektivitas Sistem Informasi Akuntansi," *J. Akuntansi Dan Keuangan*, 2021. [Online]. Available: <https://doi.org/10.32520/jak.v10i1.1642>.
- [41] N. W. Wahyu Kusumaningsih and I. B. Dharmadiaksa, "Faktor-faktor yang Memengaruhi Efektivitas Sistem Informasi Akuntansi Lembaga Perkreditan Desa se-Kecamatan Tegallalang," *E-Jurnal Akuntansi*, vol. 29, no. 1, pp. 205, 2019, doi: 10.24843/eja.2019.v29.i01.p14. [Online]. Available: <https://doi.org/10.24843/EJA.2019.v29.i01.p14>.

- [42] I. G. N. W. Wira Satria and I. N. W. Asmara Putra, "Pengaruh Kemampuan Teknik Personal, Keterlibatan Pemakai, Pendidikan dan Pelatihan pada Efektivitas Penggunaan Sistem Informasi Akuntansi," *E-Jurnal Akuntansi*, vol. 763, 2019, doi: 10.24843/eja.2019.v26.i01.p28. [Online]. Available: <https://doi.org/10.24843/EJA.2019.v26.i01.p28>.