

THE EFFECT OF TECHNOLOGICAL SOPHISTICATION, MANAGEMENT SUPPORT, AND PERSONAL TECHNICAL COMPETENCE ON THE EFFECTIVENESS OF ACCOUNTING INFORMATION SYSTEMS

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Abstract

An accounting information system is a system that collects, records, processes, and stores data to generate information used for decision making. The effectiveness of accounting information systems is essential to support the achievement of organizational objectives. This study aims to obtain empirical evidence regarding the effects of technological sophistication, management support, and personal technical competence on the effectiveness of accounting information systems at the Regional Financial and Asset Management Agency (BPKAD) of Denpasar City. This study employed a quantitative research approach. Data were collected using a survey method by directly distributing questionnaires to 75 employees of the Denpasar City BPKAD as research respondents. The data were analyzed using multiple linear regression analysis. The results indicate that technological sophistication, management support, and personal technical competence have positive effects on the effectiveness of accounting information systems. These findings support the Technology Acceptance Model (TAM) and the DeLone and McLean Information Systems Success Model. From a practical perspective, the findings emphasize the importance of utilizing adequate technology, ensuring continuous management support, and strengthening personal technical competence to improve the effectiveness of accounting information systems.

Keywords: Technological Sophistication, Management Support, Personal Technical Competence, Accounting Information System Effectiveness.

INTRODUCTION

In the current era of globalization, technological advancement is developing rapidly, particularly in technology based information systems. Rapid technological development represents a fundamental change driven by human needs, especially the need to perform work more easily and efficiently (Meiryani et al., 2020). Currently, the use of technology has become commonplace in everyday life, making information technology a basic necessity rather than merely an obligation for companies or organizations. These developments have brought various changes to organizational structures and business processes within society. Pasted markdown

An Accounting Information System (AIS) is an information system used to collect, store, manage, process, retrieve, and report financial information and data for accountants, investors, consultants, managers, and other stakeholders (Dagiliene, L., & Šutiene, 2019). According to Huy.P. Q & Puc (2020), an accounting information system is a combination of data input systems, data processing systems, data storage systems, and financial reporting systems designed to improve accounting performance and generate useful information for decision making. Pasted markdown

The objectives of developing an accounting information system include digitizing information to support development and competition (Yuhelson et al., 2020), facilitating the management of financial activities, and improving the quality of information produced by the system in terms of accuracy, timeliness, and information structure (Anggreni & Suardikha, 2020). Thus, an information system serves as an effective means of summarizing, recording, and validating both current and historical financial transaction data (Meiryani & Suzan, 2020). The use of computers in operating accounting information systems can assist organizations or institutions in processing financial transaction data into accounting information that is relevant, reliable, and easy to understand. The fundamental characteristics that accounting information must possess to achieve its intended objectives include relevance, credibility, accuracy, timeliness, understandability and absorption, usefulness, and completeness (Mustafa et al., 2019). Supported by the utilization of information technology, accounting information systems can assist organizations in achieving competitive advantages. Accounting information systems are now widely used not only in the business sector but also in government institutions for data processing activities. Pasted markdown

An effective accounting information system is one that can generate high quality and reliable information that is consistent with the organizational objectives underlying the use of the system. Effectiveness refers to the degree of success in achieving predetermined objectives. Information system effectiveness reflects an organization's efforts to utilize the capabilities and potential of information systems to achieve its objectives. It also describes the extent to which objectives can be achieved through the use of available resources, beginning with data collection, processing, and storage and continuing through the transformation of data into useful information and required reports (Adisanjaya et al., 2017). In general, an effective information system is defined as a system capable of providing added value to an organization and generating positive benefits for its users. Therefore, accounting information system effectiveness can be understood as a measure that describes the extent to which predetermined targets and organizational objectives can be achieved (Ayu et al., 2023). Accordingly, the effectiveness of accounting information systems can significantly influence management success in achieving organizational goals. Pasted markdown

Accounting information systems within organizations may face various problems, one of which is fraud. Fraud refers to actions that cause harm to an

organization or institution, whether committed by individuals inside or outside the organization. Fraud within an organization can become increasingly difficult to detect, particularly when it involves leaders or members of management. However, with the implementation of the Regional Government Information System (Sistem Informasi Pemerintahan Daerah, SIPD), fraud cases are expected to be prevented in the future. Every transaction conducted through SIPD can be directly monitored by the central government, specifically the Ministry of Home Affairs, because the system was developed by the ministry. This mechanism is intended to ensure a high level of transparency and accountability and to prevent the misuse of funds. Law Number 23 of 2014 concerning Regional Government, Article 1 paragraph 6, states that regional autonomy is the right, authority, and obligation of autonomous regions to regulate and manage government affairs and the interests of local communities within the framework of the Unitary State of the Republic of Indonesia. This provision grants regional governments the authority to carry out governmental functions independently in accordance with the principles of autonomy and assistance duties. Regional governments are therefore authorized to develop their respective regions through policies and regulations while carrying out their duties based on public interests and efforts to improve local prosperity. The establishment of Regional Government Organizations (Organisasi Perangkat Daerah, OPD) is one of the mechanisms through which regional governments regulate and administer governmental affairs while providing public services to local communities. Pasted markdown

This study was conducted at a Regional Government Organization in Denpasar City to obtain an overview of the effectiveness of the accounting information system within the institution. Regional Government Organizations serve as institutional units through which the Denpasar City Government manages governmental affairs. The research was specifically conducted at the Denpasar City Regional Financial and Asset Management Agency (Badan Pengelola Keuangan dan Aset Daerah, BPKAD). BPKAD plays an important role in managing regional finances and assets in Denpasar City. As an institution responsible for financial management, BPKAD is responsible for ensuring that the financial information produced is accurate, transparent, and accountable. This responsibility is consistent with public expectations for accountable and efficient governance. BPKAD was selected as the research location because of its crucial role in managing regional finances and assets. In addition to ensuring the accuracy and transparency of financial reports, BPKAD also performs an important control function in preventing fraud. Pasted markdown

Furthermore, following the transition toward the Regional Government Information System, BPKAD provides an appropriate setting for evaluating the effectiveness of the newly implemented accounting information system. This is particularly relevant because accounting information constitutes important information

required by management in the decision making process (Afiah et al., 2020). Pasted markdown

Regional Government Organizations in Denpasar City previously used the Regional Financial Management Information System (Sistem Informasi Pengelolaan Keuangan Daerah, SIPKD). However, they currently use a new information system developed by the central government known as the Regional Government Information System (Sistem Informasi Pemerintahan Daerah, SIPD). SIPD was introduced by the Ministry of Home Affairs and is regulated under Minister of Home Affairs Regulation Number 70 of 2019. SIPD is an integrated application used to support regional governments in financial and development governance. The application records expenditure transactions within the Regional Revenue and Expenditure Budget (APBD) and therefore requires regional governments to continuously update data and information regarding expenditure realization and the progress of expenditure outputs. The use of SIPD represents a strategic initiative aimed at establishing a common understanding of regional government information system management. The system is expected to improve regional government performance through technology based collaboration, support the development of regional databases, and provide an accurate representation of regional potential and resources to support the development of valid and reliable regional management information systems. The services provided through SIPD are described as follows. Pasted markdown

SIPD is an information system used for regional development planning, regional financial management, and other regional government functions, including regional government supervision and development. Three major components are included in the implementation of SIPD: regional development information, regional financial information, and other regional government information. This web based application is designed to accelerate and simplify the supervision and evaluation of government public services, particularly in Denpasar City. However, its implementation is not straightforward because it requires strong cooperation and commitment from all institutions involved.

The implementation of SIPD at the Denpasar City BPKAD has not always proceeded as expected. Based on observations of BPKAD employees, several challenges have been encountered in using SIPD, including technical problems that disrupt operations, insufficient staff training, inaccurate data, and difficulties in coordination among institutions. Resistance to change also represents a significant obstacle to optimizing the system. Addressing these issues is essential to achieving successful SIPD implementation and improving the efficiency of public services.

The mandatory implementation of SIPD is part of the mandate of Law Number 23 of 2014, which stipulates that regional financial and development information must be presented through a regional government information system (Meiryani & Suzan. K, 2020). Other legal foundations governing the use of SIPD include Presidential

Regulation Number 54 of 2018 concerning the National Strategy for Corruption Prevention, Minister of Home Affairs Regulation Number 70 of 2019 concerning the Regional Government Information System, Presidential Regulation Number 95 of 2018 concerning Electronic Based Government Systems, and Presidential Regulation Number 39 of 2019 concerning One Data Indonesia.

The SIPD currently in use is the 2023 SIPD Merah system. One of the major reasons for developing SIPD is to integrate data and standardize planning, financial management, and reporting processes throughout Indonesia, reduce regional government expenditure on developing separate Electronic Based Government Systems for regional planning, finance, and reporting, and ultimately establish SIPD as the primary integrated system. Another objective is to accelerate the electronic implementation of regional government transactions throughout Indonesia through Regional Development Banks (BPD) and state owned banks.

The implementation of an information system always involves the possibility of either success or failure. Therefore, measuring and evaluating information system implementation is important. One widely used model for examining the success or failure of information system implementation, particularly from the perspective of organizational users, is the model developed by DeLone & McLean (1992), known as the DeLone and McLean Information Systems Success Model. This model identifies six dimensions of information system success: system quality, information quality, user satisfaction, system use, individual impact, and organizational impact. Pasted markdown

Rapid developments in science and technology have led to various innovations, particularly in the field of technology. Today, a country's level of advancement can also be observed through its use of technology. Technological sophistication is one of the main factors influencing the effectiveness of accounting information systems. According to Raymond & Paré (1992), technological sophistication is a construct that refers to the nature of technology use, the interdependence between technologies, and the complexity of information technology and management within an organization.

Technological sophistication affects various aspects of everyday human life. Technology can facilitate human activities and provide new ways of performing particular tasks (Pradani, 2017). Within organizations, rapid developments in accounting technology can be observed in the transition from manual data processing to computerized systems and the emergence of various accounting software applications that assist users in preparing financial reports (Muda, 2017).

Technological sophistication is also supported by the Technology Acceptance Model (TAM). According to Davis (1989), TAM identifies two primary factors that can predict an individual's intention to use a particular technology: perceived usefulness and perceived ease of use. Users' reactions and perceptions influence their attitudes toward accepting the technology. According to Pinardi (2019), technology refers to the use of

software, hardware, and other technological solutions to collect, process, store, and present financial information more accurately, rapidly, and efficiently. When users perceive positive outcomes from a technology, they are more likely to accept it.

In the current era, organizations are expected to possess adequate technology to support and facilitate managerial tasks and improve management productivity. Regional Government Organizations in Denpasar City have implemented a new system known as the Regional Government Information System (SIPD), which is intended to provide integrated and interconnected electronic regional government information services and improve accountable, effective, and efficient governance. The implementation of SIPD also reflects the need for government accountability and transparency as part of Open Government Indonesia (OGI). Therefore, technological sophistication is considered to influence the effectiveness of accounting information systems. Pasted markdown

Management support also plays an important role in determining the effectiveness of Accounting Information Systems (AIS). Management support is one of the factors influencing the perceived usefulness of information system technology and is associated with improvements in individual performance. Individuals who believe in the implementation of new information system technology are more likely to use the technology to support their performance. Conversely, individuals who are skeptical of new information system technology may experience difficulties in demonstrating their performance when carrying out organizational activities. In this context, strong management support within Regional Government Organizations in Denpasar City is expected to support effective data processing. Therefore, management support is considered one of the factors affecting individual performance in the use of accounting information system technology. Pasted markdown

Personal technical competence also plays an important role in information system development because it supports the production of accurate information (Krisnawati & Suartana, 2017). Consistent with the TAM, personal technical competence is an important aspect of system use. The higher the technical competence of users, the greater their understanding of the system being used (Utama et al., 2019). Therefore, employees are expected to be capable of operating computerized systems so that they can process large numbers of transactions rapidly, store data, and produce reports in a timely manner.

Personal technical competence reflects an individual's ability to master the technical aspects of managing and operating accounting information systems (Adisanjaya et al., 2017). It therefore plays an important role in measuring the effectiveness of accounting information system use. The ability of users to operate an information system is essential to ensuring that the system can function optimally and effectively (Santa, D., & Damayanthi, 2018). With the implementation of the Regional Government Information System (SIPD) in Regional Government Organizations in

Denpasar City, personal technical competence is particularly important to ensure that the system can be operated effectively. Based on this explanation, personal technical competence is considered to influence the effectiveness of accounting information systems. Pasted markdown

Various studies have examined technological sophistication, management support, the technical competence of human resources, and information system effectiveness. However, the findings of previous studies remain inconsistent. Research conducted by Agustina et al. (2020), Putri & Srinadi (2020), Trisnawati et al. (2021), Widiasih et al. (2022), Ari & Juliarsa (2023), Susandya & Putra (2023), and Sitinjak et al. (2023) found that technological sophistication has a positive effect on the effectiveness of accounting information systems. In contrast, Bagus et al. (2022), Dewi et al. (2021), and Cahyani & Putra (2022) found that technological sophistication has no effect on the effectiveness of accounting information systems, while Cahya & Putra (2022) reported that technological sophistication has a negative effect on accounting information system effectiveness. Pasted markdown

Studies examining the effect of management support on information system effectiveness have also produced differing results. Budi et al. (2024) and Dewi et al. (2023) found that top management support has a positive effect on the effectiveness of accounting information systems. In contrast, Meiliani et al. (2024) and Princessa & Sari (2022) reported that management support has no effect on accounting information system effectiveness. Pasted markdown

Research on personal technical competence and information system effectiveness conducted by Putri & Srinadi (2020), Putri et al. (2021), Indrianto & Suputra (2020), Anjani et al. (2021), Trisnawati et al. (2021), Wahyuni et al. (2021), and Bella et al. (2024) found that higher levels of personal technical competence are associated with more optimal use of accounting information systems. However, Dewi et al. (2021) reported contradictory findings, concluding that personal technical competence has no effect on the effectiveness of accounting information systems. Pasted markdown

The effective use of accounting information systems is influenced by various factors, including technological sophistication, management support, and personal technical competence. Based on the background described above, BPKAD plays an important role in regional financial management and has implemented a new accounting information system. Therefore, the researcher is interested in conducting a study entitled “The Effect of Technological Sophistication, Management Support, and Personal Technical Competence on the Effectiveness of Accounting Information Systems.”

RESEARCH METHOD

This study employed a quantitative associative approach to examine the effects of technological sophistication, management support, and personal technical

competence on the effectiveness of accounting information systems. The study was conducted at the Regional Financial and Asset Management Agency (BPKAD) of Denpasar City, which has implemented the Regional Government Information System (SIPD), although its operation continues to face both internal and external constraints. The dependent variable in this study was accounting information system effectiveness (Y), while technological sophistication (X₁), management support (X₂), and personal technical competence (X₃) served as the independent variables. Accounting information system effectiveness was measured through system quality, information quality, user satisfaction, information usefulness, individual impact, and organizational impact. Technological sophistication was measured through hardware, software, networks and communication, databases, and information technology personnel. Management support was measured through authority, participation, and commitment, while personal technical competence was measured through knowledge, ability, and expertise (Sugiyono, 2022; Ismail, 2009; Suyanto, 2005; Putri et al., 2021; Robbins, 2008).

The study population consisted of 91 employees of the Denpasar City BPKAD, comprising 38 civil servants (PNS) and 53 government employees with employment agreements (PPPK). The sample was determined using nonprobability sampling with a purposive sampling technique based on the criteria that employees directly used SIPD in performing their duties and had a minimum of one year of work experience. Based on these criteria, 75 respondents were included in the study, while 16 employees were excluded because they did not use SIPD. The study used quantitative data obtained from primary and secondary sources. Primary data were collected through questionnaires distributed directly to respondents, while secondary data were obtained from the Denpasar City BPKAD. Responses were measured using a four-point Likert scale consisting of strongly agree (4), agree (3), disagree (2), and strongly disagree (1). The research instruments were evaluated using validity and reliability tests. An item was considered valid when its correlation coefficient was ≥ 0.30 , while reliability was determined based on a Cronbach's Alpha value > 0.70 (Sugiyono, 2022).

Data were analyzed using SPSS (Statistical Package for the Social Sciences) through descriptive statistics and multiple linear regression analysis. Prior to regression analysis, classical assumption tests were conducted, including normality, multicollinearity, and heteroskedasticity tests. The normality test employed the Kolmogorov-Smirnov test with a significance criterion of > 0.05 . Multicollinearity was assessed using a tolerance value > 0.10 and a Variance Inflation Factor (VIF) < 10 , while heteroskedasticity was examined using the Glejser test with a significance value > 0.05 . The regression model used in this study was $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$ to determine the effects of technological sophistication, management support, and personal technical competence on accounting information system effectiveness. Hypothesis testing was conducted using the F test to examine the simultaneous effects of the

independent variables, the coefficient of determination (R^2) to measure the model's ability to explain variations in the dependent variable, and the t test to examine the partial effect of each independent variable at a significance level of 5% (Ghozali, 2018; Sugiyono, 2019).

RESULT AND DISCUSSION

Research Data

Questionnaire Response Rate

Table 1. Questionnaire Response Rate

Description	Number of Questionnaires
Total questionnaires distributed	75
Questionnaires not returned	0
Questionnaires completed	75
Invalid questionnaires	20
Usable questionnaires	55
Response rate	100%
Usable response rate	73,33%

Source: Primary data processed, 2026

Based on Table 1, a total of 75 questionnaires were distributed to respondents who met the research criteria. All questionnaires were returned, resulting in a response rate of 100%. However, 20 questionnaires could not be used because they were incomplete and were therefore considered invalid. Consequently, 55 questionnaires were eligible for use in this study, resulting in a usable response rate of 73.33%.

Respondent Characteristics

Table 2. Respondent Characteristics

No.	Respondent Characteristics	Number of Respondents	Percentage
A	Gender		
1.	Male	27	49,09
2.	Female	28	50,91
	Total	55	100
B	Age		
1.	17-22 years	4	7,28
2.	23-28 Years	16	29,09
3.	29-34 Years	22	40
4.	> 35 Years	13	23,63
	Total	55	100
C	Highest Level of Education		

1.	Vocational/Senior High School	9	16,36
2.	Diploma	5	9,09
3.	Bachelor's Degree	31	56,36
4.	Master's Degree	10	18,18
5.	Doctoral Degree	0	0
	Total	55	100
D	Duration of SIPD Use (Years)		
1.	1-5 Years	32	58,18
2.	> 5 Years	23	41,82
	Total	55	100

Source: Primary data processed, 2026

Based on Table 2, the employees ranged in age from 17 years to over 35 years. The largest number of employees was in the 29–34 year age group, comprising 22 respondents or 40.00%, while only 4 respondents or 7.28% were in the 17–22 year age group.

The data in Table 2 also show that 9 respondents or 16.36% had completed vocational or senior high school education, 5 respondents or 9.09% held a diploma, 31 respondents or 56.36% held a bachelor's degree, and 10 respondents or 18.18% held a master's degree. None of the respondents in the sample held a doctoral degree.

Based on Table 2, the duration of accounting information system use among respondents ranged from less than 1 year to more than 5 years. A total of 23 respondents or 41.82% had used the accounting information system for more than 5 years, while 32 respondents or 58.12% had used the AIS for 1 to 5 years.

Variable Characteristics

Table 3. Criteria for Variable Description

Mean Score	Criteria			
	Accounting Information System Effectiveness	Technological Sophistication	Management Support	Personal Technical Competence
1,00 – 1,75	Very Poor	Very Poor	Very Poor	Very Poor
1,76 – 2,50	Poor	Poor	Poor	Poor
2,51 – 3,25	Good	Good	Good	Good
3,26 – 4,00	Very Good	Very Good	Very Good	Very Good

Source: Primary data processed, 2026

Based on the descriptive analysis, accounting information system effectiveness obtained a mean score of 3.43 and was categorized as very good. The highest score, 3.49, was found in the aspects of information utilization in work and the timeliness of

information presentation, while the lowest score, 3.40, was found in the ease of understanding the system interface. Meanwhile, technological sophistication obtained a mean score of 3.40 and was categorized as very good. The highest score, 3.50, was found in the suitability of the system to user needs, while the lowest score, 3.29, was found in the availability of computer facilities and supporting equipment.

Management support obtained the highest mean score among all variables, at 3.52, and was categorized as very good. The active involvement of top management in the operation of the Accounting Information System received the highest score of 3.63, while management attention to information system performance received the lowest score of 3.38. Personal technical competence obtained a mean score of 3.40 and was also categorized as very good, with the highest score of 3.43 found in the ability to complete tasks after participating in training or courses. Overall, these findings indicate that respondents had very positive perceptions of accounting information system effectiveness, technological sophistication, management support, and personal technical competence.

Research Instrument Test Results

Validity Test Results

Table 4. Validity Test Results

Variable	Indicator	Correlation Coefficient	Sig. (2-tailed)	Description
Technological Sophistication (X1)	X1.1	0,719	0,000	Valid
	X1.2	0,730	0,000	Valid
	X1.3	0,733	0,000	Valid
	X1.4	0,778	0,000	Valid
Management Support (X2)	X2.1	0,688	0,000	Valid
	X2.2	0,771	0,000	Valid
	X2.3	0,784	0,000	Valid
	X2.4	0,679	0,000	Valid
Personal Technical Competence (X3)	X3.1	0,813	0,000	Valid
	X3.2	0,869	0,000	Valid
	X3.3	0,704	0,000	Valid
Accounting Information System Effectiveness (Y)	Y.1	0,722	0,000	Valid
	Y.2	0,692	0,000	Valid
	Y.3	0,850	0,000	Valid
	Y.4	0,726	0,000	Valid
	Y.5	0,744	0,000	Valid
	Y.6	0,721	0,000	Valid

Source: Primary data processed, 2026

The validity test results presented in Table 4 show that all variables have correlation coefficients between each statement item and the total score exceeding 0.30. These results indicate that all statement items in the research instrument are valid.

Reliability Test Results

Table 5. Reliability Test Results

Variable	Koefisiensi Cronbach's Alpha	Description
Technological Sophistication (X1)	0,836	Reliabel
Management Support (X2)		
Personal Technical Competence (X3)		
Accounting Information System Effectiveness (Y)		

Source: Primary data processed, 2025

The reliability test results presented in Table 5 show that the Cronbach's Alpha coefficient is 0.836. This indicates that the research instrument is reliable because the Cronbach's Alpha coefficient is greater than 0.70.

Descriptive Statistical Analysis Results

Table 6. Descriptive Statistics of Research Variables

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Accounting Information System Effectiveness	55	11	16	13,64	1,470
Technological Sophistication	55	8	16	13,25	1,601
Management Support	55	9	12	10,22	1,182
Personal Technical Competence	55	17	24	20,65	2,303
Valid N (listwise)	55				

Source: Processed by the researcher

Based on the descriptive statistical analysis of 55 respondents, the Accounting Information System Effectiveness variable (Y) had a minimum value of 11 and a

maximum value of 16. Technological Sophistication (X1) had a minimum value of 8 and a maximum value of 16, while Management Support (X2) had a minimum value of 9 and a maximum value of 12. Personal Technical Competence (X3) had a minimum value of 12 and a maximum value of 16. For all variables, the standard deviation was lower than the mean, indicating a relatively low level of data variation. Therefore, respondents' answers regarding Accounting Information System Effectiveness, Technological Sophistication, Management Support, and Personal Technical Competence tended to be homogeneous or relatively similar.

Classical Assumption Tests

1) Normality Test

Table 7. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
Unstandardized		
		Residual
N		55
Normal Parameters ^{a,b}	Mean	0,000
	Std. Deviation	1,163
Most Extreme Differences	Absolute	0,112
	Positive	0,112
	Negative	-0,051
Test Statistic		0,112
Asymp. Sig. (2-tailed)		0,081 ^c

Source: Processed by the researcher

Based on the normality test results presented in Table 7 using the One-Sample Kolmogorov-Smirnov Test (K-S), the Asymp. Sig. (2-tailed) value was 0.081. Since this value is greater than the alpha level of 0.05, the data in this study are normally distributed.

2) Multicollinearity Test

Table 8. Multicollinearity Test Results

Coefficients ^a			
Collinearity Statistics			
Model		Tolerance	VIF
1.	Technological Sophistication (X1)	0,784	1,275
	Management Support (X2)	0,830	1,204
	Personal Technical Competence (X3)	0,873	1,145

Source: Processed by the researcher

Based on Table 8, the tolerance and VIF values for all variables show that each variable has a tolerance value greater than 0.10 and a VIF value below 10. Therefore, the regression model is free from multicollinearity.

3) Heteroskedasticity Test

Table 9. Heteroskedasticity Test Results
Coefficients^a

Model		Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,577	1,101		-1,432	0,158
	X1	-0,001	0,071	-0,002	-0,016	0,987
	X2	0,081	0,064	0,185	1,277	0,207
	X3	0,140	0,084	0,235	1,664	0,102

Source: Processed by the researcher

Based on Table 9, the heteroskedasticity test using the Glejser method shows that the significance value of each variable is greater than 0.05. Therefore, the regression model is free from heteroskedasticity.

Multiple Linear Regression Analysis

Table 10. Multiple Linear Regression Analysis Results
Coefficients^a

		Unstandardized		Standardized		
		Coefficients		Coefficients	(P-value).	
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-2,354	1,929		-1,220	0,228
	X1	0,516	0,125	0,329	4,124	0,000
	X2	0,726	0,112	0,505	6,499	0,000
	X3	0,622	0,148	0,319	4,211	0,000

Source: Processed by the researcher

Based on the results of the multiple linear regression analysis, the following regression equation was obtained: $Y = -2.354 + 0.516X_1 + 0.726X_2 + 0.622X_3 + e$. The constant value of -2.354 indicates that when Technological Sophistication (X_1), Management Support (X_2), and Personal Technical Competence (X_3) are equal to zero, Accounting Information System Effectiveness (Y) has a value of -2.354. The regression coefficients of X_1 , X_2 , and X_3 are 0.516, 0.726, and 0.622, respectively. These values indicate that a one unit increase in each independent variable will increase Accounting

Information System Effectiveness by the corresponding regression coefficient, assuming that the other variables remain constant.

Coefficient of Determination Test (R^2)

Table 11. Coefficient of Determination Test Results

Model Summary ^b			
R	R Square	Adjusted R Square	Std. Error of the Estimate
0,863 ^a	0,745	0,730	1,198

Source: Processed by the researcher

Based on Table 11, the magnitude of the effect of the independent variables on the dependent variable is indicated by the coefficient of determination (R Square). The R Square value of 0.745 indicates that 74.5% of the variation in Accounting Information System Effectiveness at the Denpasar City BPKAD can be explained by Technological Sophistication, Management Support, and Personal Technical Competence. The remaining variation is explained by other factors not included in the model.

Model Feasibility Test (F Test)

Table 12. Model Feasibility Test Results (F Test)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	213,296	3	71,099	49,576	0,000 ^b
	Residual	73,141	51	1,434		
	Total	286,436	54			

Source: Processed by the researcher

Based on Table 12, the calculated F value was 49.576 with a significance value of 0.000, which is lower than $\alpha = 0.05$. This indicates that the regression model used in this study is feasible and that Technological Sophistication, Management Support, and Personal Technical Competence simultaneously have a significant effect on Accounting Information System Effectiveness.

Hypothesis Test (t Test)

Based on the hypothesis testing results at a 5% significance level, all independent variables have positive and significant effects on Accounting Information System Effectiveness. Technological Sophistication (X_1) has a regression coefficient of 0.516, a t value of 4.124, and a significance value of $0.000 < 0.05$. Management Support (X_2) has a regression coefficient of 0.726, a t value of 6.499, and a significance value of $0.000 <$

0.05. Meanwhile, Personal Technical Competence (X₃) has a regression coefficient of 0.622, a t value of 4.211, and a significance value of $0.000 < 0.05$. Therefore, H₀ is rejected and H₁ is accepted for each variable, indicating that Technological Sophistication, Management Support, and Personal Technical Competence each have a positive and significant partial effect on Accounting Information System Effectiveness.

Discussion of Research Findings

The Effect of Technological Sophistication on Accounting Information System Effectiveness

The first hypothesis of this study, which states that technological sophistication has a positive effect on Accounting Information System Effectiveness, is accepted. The results of the analysis show that technological sophistication has a positive effect on Accounting Information System Effectiveness. This indicates that the more advanced and modern the technology used within an organization, the greater the effectiveness of its accounting information system. The use of adequate technology can assist employees in processing, storing, and presenting financial information more quickly, accurately, and efficiently. In addition, the implementation of sophisticated technology can facilitate employees in completing their work, thereby enabling more accurate decision making.

The findings of this study are consistent with the Technology Acceptance Model (TAM), which explains that perceived usefulness and perceived ease of use influence users' acceptance of information systems (Davis, 1989). The higher the level of technological sophistication implemented, the more likely users are to perceive the system as useful and easy to use in supporting their work. Consequently, the accounting information system can be used more effectively and contribute to improved organizational performance.

These findings are also consistent with the studies conducted by Agustina et al. (2020), Putri & Srinadi (2020), Trisnawati et al. (2021), Widiasih et al. (2022), Ari & Juliarsa (2023), Susandya & Putra (2023), and Sitinjak et al. (2023), which found that technological sophistication has a positive effect on Accounting Information System Effectiveness. This study also supports the findings of Hendrawan et al. (2022), Bukhori et al. (2022), and Meiliani et al. (2024), which indicate that the higher the level of technological sophistication used, the greater the effectiveness of the accounting information system.

The Effect of Management Support on Accounting Information System Effectiveness

The second hypothesis of this study, which states that management support has a positive effect on Accounting Information System Effectiveness, is accepted. The results of the analysis show that management support has a positive effect on Accounting Information System Effectiveness. This indicates that greater support from management leads to greater effectiveness of the accounting information system.

Management support can be demonstrated through the provision of adequate facilities, training, attention to system users' needs, and management involvement in the implementation of the accounting information system, thereby assisting employees in completing their work more effectively.

Strong management support can encourage users to become more confident and comfortable in using the accounting information system. In addition, management involvement in the development and implementation of the system can increase employee motivation to utilize the system optimally. As a result, the accounting information system can function effectively and generate accurate, relevant, and timely information for the organization.

The Effect of Personal Technical Competence on Accounting Information System Effectiveness

The third hypothesis of this study, which states that personal technical competence has a positive effect on Accounting Information System Effectiveness, is accepted. The results of the analysis show that personal technical competence has a positive effect on Accounting Information System Effectiveness. This indicates that the higher the level of personal technical competence possessed by users, the greater the effectiveness of the accounting information system. Adequate personal technical competence enables users to operate accounting information systems more quickly, accurately, and efficiently, allowing data processing and information presentation to be carried out optimally.

Personal technical competence plays an important role in supporting the successful use of accounting information systems. Users who possess sufficient knowledge, abilities, and skills in operating information systems are more likely to understand the available functions and features, thereby minimizing errors during data input and processing. Consequently, accounting information systems can be used effectively and generate accurate, relevant, and timely information to support the decision making process.

The findings of this study are consistent with the Technology Acceptance Model (TAM), which explains that the ease of using technology is influenced by an individual's ability to operate the system (Davis, 1989). The higher the level of personal technical competence possessed by users, the easier they are likely to find the accounting information system to use. This condition can increase user acceptance of the system and encourage optimal use of the accounting information system, thereby improving its effectiveness.

These findings are also consistent with the studies conducted by Putri & Srinadi (2020), Cahyani & Putra (2022), and Wahyuni et al. (2021), which found that personal technical competence has a positive effect on Accounting Information System Effectiveness. This study also supports the findings of Anggreni & Suardikha (2020), which indicate that the use of information systems supported by strong personal

competence can improve information system effectiveness and enhance organizational performance.

CONCLUSION

Based on the empirical testing and discussion, the following conclusions can be drawn:

- 1) Technological sophistication has a positive effect on Accounting Information System Effectiveness. This means that the more sophisticated the technology used, the greater the effectiveness of the accounting information system. Adequate technology can support faster, more accurate, and more efficient data processing.
- 2) Management support has a positive effect on Accounting Information System Effectiveness. This means that the greater the level of management support in the implementation of accounting information systems, the greater the effectiveness of the system. Such support may include the provision of facilities, training, and policies that encourage the effective use of information systems.
- 3) Personal technical competence has a positive effect on Accounting Information System Effectiveness. This means that the better the personal technical competence of employees, the greater the effectiveness of the accounting information system. Employees with adequate technical competence are better able to understand and operate accounting information systems, thereby enabling the system to generate accurate and appropriate information.

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