Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-0504 Volume 07 Issue 01 January 2024 Article DOI: 10.47191/jefms/v7-i1-49, Impact Factor: 7.144

Page No: 463-475

The Influence of Information Technology Sophistication, User Participation and Personal Technical Capabilities on the Performance of Accounting Information Systems



Nataline Putri Petricelia¹, Hermaya Ompusunggu²

^{1,2}Program Studi Akuntansi Fakultas Ilmu Sosial dan Humaniora Universitas Putera Batam Jalan R. Soeprapto, Muka Kuning, Batam. Kode Pos 29452

ABSTRACT: This study aims to test and evaluate the effect of Information Technology Sophistication, User Participation and Personal Technical Ability on Accounting Information System Performance at the Office of Cooperatives, Micro Enterprises, Industry and Trade of Bintan Regency. Quantitative method data analysis is the data analysis method used in this study. A total of 62 active employees of the Office of Cooperatives, Micro Enterprises, Industry and Trade of Bintan Regency were the population. Because the population is less than 100 people, sampling is carried out using one of the non-probability sampling techniques, namely oneation sampling or saturated sample. Based on the saturated sample technique, the sample in this study was 62 respondents. Data collection techniques are carried out by direct observation to the Office of Cooperatives, Micro Enterprises, Industry and Trade of Bintan Regency, interviews with the Head of the Finance Subdivision of the Office of Cooperatives, Micro Enterprises, Industry and Trade of Bintan Regency and distributing questionnaires via google form which are measured using a Likert scale. The tests carried out in this study include descriptive analysis, validity test, reliability test, multiple linear regression test, normality test, multicollinearity test, heteroscedasticity test, t test, F test, and coefficient of determination. The SPSS version 26 program was used to process data in this study. The results of data processing show that partially the sophistication of information technology has a positive and significant effect on the performance of accounting information systems, partially user participation has a positive and significant effect on the performance of accounting information systems and partially personal technical skills have a positive and significant effect on the performance of accounting information systems at the Office of Cooperatives, Micro Enterprises, Industry and Trade of Bintan Regency.

KEYWORDS: Information Technology Sophistication, User Participation, Personal Technical Ability, Accounting Information System Performance

I. INTRODUCTION

The performance of accounting information systems is influenced by various factors such as information technology sophistication, user participation, and personal technical capabilities. Several studies have investigated the impact of these factors on the effectiveness of accounting information systems. (Jayanti et al., 2022) aimed to determine the effect of information technology sophistication, personal technical ability, and user participation on the effectiveness of accounting information systems. Their findings contribute to understanding the relationship between these factors and the performance of accounting information systems. Similarly, (Dharmawan & Ardianto, 2017) found that technology sophistication and user training programs significantly influence the performance of accounting information systems. This supports the notion that the level of technological advancement and user training can impact the effectiveness of accounting information systems. Moreover, (Kusumawati & Ayu, 2019) demonstrated that individual performance and personal technical abilities positively affect the effectiveness of accounting information systems. This suggests that the capabilities of individual users play a crucial role in the performance of these systems. Additionally, (Fitria & Sari, 2023) found that personal technical skills and work experience significantly impact the effectiveness of accounting information systems. This emphasizes the importance of considering the technical capabilities and experience of users when evaluating the performance of accounting information systems. Furthermore, top management support has been identified as a significant factor influencing the performance of

accounting information systems. Reference (Dharmawan & Ardianto, 2017) and the analysis of accounting information system performance both highlight the positive influence of top management support on the performance of accounting information systems. This suggests that organizational support and leadership are essential for ensuring the effectiveness of these systems. In addition to user participation and technological factors, the quality of accounting information systems has been linked to user satisfaction. (Ritchi et al., 2021) examined the quality of information systems and its influence on user satisfaction with accounting information systems. Their findings contribute to understanding the relationship between system quality and user satisfaction. Overall, the synthesis of these references highlights the multifaceted nature of factors influencing the performance of accounting information systems, encompassing technological sophistication, user participation, personal technical capabilities, and top management support.

II. GRAND THEORY

Theory Technology Acceptance Model

The Theory of Technology Acceptance Model (TAM) is one of the most prominent scientific models due to the many empirical tests that show the success of the TAM model (Ammenwerth, 2019). The technology acceptance model was developed by Fred D. Davis in the late 1980s. This model is widely used as a tool to examine various factors that influence user acceptance activities whose research is related to adopting information technology and various other unlimited subjects (Nadlifatin et al., 2020). Technology acceptance model (TAM) believes that the use of information systems will improve the performance or effectiveness of individuals or organizations, besides that the use of information systems is relatively easy and does not require hard effort from users when using the system (Ammenwerth, 2019). Technology acceptance model (TAM) is one of the most widely used research models in technology research, because this research model is simpler and easier to apply (Leng et al., 2011).

Accounting Information System Performance (Y)

In general, accounting information systems are defined as a network scale consisting of procedures, forms and tools as well as human resources as a goal to provide information to an organization that is used for supervisory, operation and for purposes when making business decisions against interested parties (Agnesia et al., 2021). Effective information system performance can meet the needs of information system users, so this is able to help system users when preparing their work (Sutariani et al., 2022). The success rate of accounting information system performance must be able to determine the performance of an accounting information system is good or bad (Diansari et al., 2020). The measure of the effectiveness of accounting information systems can be seen using two approaches, namely the satisfaction of information users and users of accounting information systems by employees in the finance department to assist when completing their work in processing financial data into accounting information (Nabila Putri Maharani & Yenni Khristiana, 2022). Accounting information systems can fail, one of the causes is the lack of ability of the information system itself to meet the expectations of the system and end users (Agnesia et al., 2021). Sometimes the existence of information systems has the potential to change the cultural structure, business processes and organizational strategies. So there are often rejections that must be considered when the system is introduced (Maryani, 2020). If organizational resistance to the system is very strong, then many information technology investments fail and cannot increase productivity (Sugihartini et al., 2020). Meanwhile, if users of the information system are satisfied with the implementation of the information system, then the rejection can be avoided so that it can further be stated that the system works well (Nabila Putri Maharani & Yenni Khristiana, 2022).

Advanced Information Technology (X1)

Information technology is a tool that helps everyone to be able to work with information and perform tasks related to information processing (Agnesia et al., 2021). With technological advances, it will create the sophistication of information technology that is growing and will certainly help a company to compete in the current era (Nabila Putri Maharani & Yenni Khristiana, 2022). The sophistication of existing information technology will certainly help users prepare accurate and competitive information with their business competitors, besides that the use of increasingly sophisticated information technology will increase capacity in improving the quality of financial statements (Agnesia et al., 2021). Proper utilization of information technology sophistication will also help in improving the performance of information systems. In addition, the sophistication of information technology is also one of the developments of information with the aim of increasing the reception, processing and storage of information, so that it can be used by related parties for decision making in achieving goals. The presentation of accounting information must be timely, complete, relevant, reliable and comparable (Nabila Putri Maharani

& Yenni Khristiana, 2022). So with the sophistication of this technology is very helpful and very influential on the performance of information systems.

User Participation (X2)

User participation is the participation of the user information system when implementing the system from the planning concept which includes selecting and training users, installing new computer equipment, writing and testing system testing programs, developing standards, documentation and changing files (Agnesia et al., 2021). The influence of high participation of information system users is expected to make accounting information systems more often applied and can be easily socialized, so that it will make the performance of accounting information systems good (Fridayanthie et al., 2021). Adequate training and education can improve the ability and knowledge of users in operating the system. Training and education is a program held to provide or improve users' ability and understanding of the system (Maryani, 2020). The success of accounting information system performance is supported by the role of humans where users of accounting information systems are employees who will determine the process of implementing the system whether it runs well or not (Diponegoro & Ilham, 2023). In theory, TAM, which was developed from psychological theory, explains one of the behaviors of technology users, namely attitudes towards user activities that take part as users in the development of information systems (Sutariani et al., 2022). The more frequent and high the involvement of accounting information system users in activities in the company, the more the performance of the accounting information system. Employees involved during the system development process are able to improve the performance of accounting information systems through the delivery of information or through the development of systems that meet user needs. By involving users at the stage of developing accounting information systems, both manual and computerized, they can improve the performance of accounting information systems through the delivery of information or system development that suits user needs (Samarenjana et al., 2022).

Personal Technical Skills (X3)

Personal technical ability is a person's way of showing a potential to carry out a task or job (Haryanto and Dewi, 2021). These abilities can be in the form of physical abilities such as computer skills or mental abilities such as making decisions, where a person can choose whether or not to use these abilities (Nabila Putri Maharani & Yenni Khristiana, 2022). Personal technical abilities greatly determine the success of a system seen from its reliable users, therefore users who know the development of accounting information systems and technological developments are needed which are expected to improve the quality of work done by users (Samarenjana et al., 2022). Personal technical skills in information system users are very useful and play an important role in the development of information systems in order to get results from information in creating accurate planning reports (Putu Ardiwinata & Sujana, 2019). In addition, an information system will be more useful and able to help users who use the information system. So every employee must be able to master the use of computer-based systems in order to make it easier when processing a number of transactions, storing data and retrieving large amounts of data, then can reduce mathematical errors, produce timely reports in various forms and can be a tool when making decisions (Samarenjana et al., 2022).

III. METHOD

Research Design

Research is defined as an effort to observe, examine, discuss and study systematically based on a phenomenon through scientific data, with the aim of being able to get answers and images to solve problems from the phenomenon (Wulandari & Sudarma, 2022). Research design visualizes concepts that will later be applied to the research process carried out. In this study, the approach applied is a quantitative approach with primary data (Istan & Fahlevi, 2020). The method of data collection by distributing questionnaires using google form to employees from the Office of Cooperatives, Micro Enterprises, Industry and Trade (DKUPP) of Bintan Regency who are directly involved in the use of accounting information systems at the Office of the Office of Cooperatives, Micro Enterprises, Industry and Trade (DKUPP) Bintan Regency. This study uses a Likert scale that has 5 alternative answers, namely strongly disagree, disagree, neutral, agree and strongly agree. The measurement of these variables is used to measure a person's views and opinions in response to a statement about a particular phenomenon (Theotama et al., 2023). The results of the questionnaire are then used to examine the influence, relationship or impact of the independent variable.

Independent Variable

Independent variables describe the variables that explain and determine the variations contained in the dependent variable. The independent variable can also be said to have an effect on the dependent variable (Kismono et al., 2023). So in this study researchers used 3 independent variables to test their effect on the dependent variable, namely, as follows:

1. Advanced Information Technology

The sophistication of information technology is a construction that refers to the use, complexity and interdependence between information technology and management that is able to produce a variety of system technologies, information technology is designed to assist human work in producing accurate information quality (Nabila Putri Maharani & Yenni Khristiana, 2022). Some indicators used on the variable of information technology sophistication in the development of accounting information systems are as follows: Technological sophistication; Sophistication of information; Functional sophistication

2. User Participation

User participation is the behavior of assignments and activities carried out or represented during the development of information systems (Diponegoro & Ilham, 2023). In the development of accounting information systems that are developed, involving users will provide satisfaction for these users in using the accounting information systems that have been implemented (Wulandari & Sudarma, 2022). Increasingly frequent user participation will improve the performance of accounting information systems, due to the positive relationship between user involvement in the development of accounting information systems and the performance of accounting information systems (Nadlifatin et al., 2020). There are several indicators used in the variable of user participation in the development of accounting information system development; Opinions/proposals in system development; Influence in system development; User involvement in information system processes.

3. Personal Technical Skills

Personal technical ability is a capacity of an individual in performing various tasks in doing a job (Setyawati et al., 2023). Personal technical ability can also be interpreted as an advantage that someone has in doing the task of the given job. Personal technical ability in this study can be measured based on the 3 indicators below, as follows: Knowledge; Abilities; Skills.

Dependent Variable

The depedent variable or often referred to as the dependent variable is the main variable that can be influenced by the effect and attractiveness of research and is also useful for knowing the alleged factors in research (Sugihartini et al., 2020). The dependent variable in this study is the performance of the accounting information system, which according to (Diponegoro & Ilham, 2023) the performance of the accounting information system (Y) is one of the abilities in achieving certain goals that can be seen through the satisfaction of the users of the accounting information system itself. In this variable, there are 4 indicators in collecting data, which are as follows: Performance success; Increase satisfaction; Makes it easier to get work done.

IV. RESULT AND DISCUSSION

Statistik Deskriptif

Descriptive Statistics provides an overview of the subject matter used when testing through samples without the need for analysis to draw valid conclusions. Descriptive statistics are able to describe data through average, maximum, minimum and standard devition. Here is the result of SPSS which is a descriptive statistical output:

Table 1. Descriptive Statistics

Descriptive Statistics					
	Ν	Minimum	Maximum	Mean	Std. Deviation
Advanced Information Technology	62	22	55	43,40	8,910
User Participation	62	15	45	35,50	7,645
Personal Technical Skills	62	12	40	31,44	7,176
Accounting Information System Performance	e62	19	45	36,42	7,142
Valid N (listwise)	62				

Based on the results of the Descriptive Statistical Test above, it can explain and illustrate that the value of the data distribution obtained is valid. Column N is the number of research respondents, which is as many as 62 respondents. The minimum column is

the column that shows the lowest value of the respondent's responses, namely for X1 is 22, X2 is 15, X3 is 12 and Y is 19. The maximum column is the column that shows the highest value of the respondent's responses, namely for X1 is 55, X2 is 45, X3 is 40 and Y is 45. The mean column is a column that shows the average value, namely for X1 is valued (43.40), X2 is valued (35.50), X3 is valued (31.44) and Y is valued (36.42). The Std. deviation column is a column that shows the standard deviation value, namely for X1 is valued (8.910), X2 is valued (7.645), X3 is valued (7.176) and Y is valued (7.142).

Test Data Validity

The purpose of the validity test is as an assessment of a question or statement that in the questionnaire is accurate. This can be seen from the score of each question item with a total score. Here's what the results of the validity test look like:

Variable	Item	r-calculate	r-table	Description
Advanced Information Technology (X1)	X1A	0,728	0,210	
	X1B	0,748	0,210	
	X1C	0,464	0,210	
	X1D	0,442	0,210	
	X1E	0,743	0,210	
	X1F	0,768	0,210	Valid
	X1G	0,794	0,210	
	X1H	0,751	0,210	1
	X1I	0,743	0,210	1
	X1J	0,766	0,210	1
	X1K	0,780	0,210	1
User Participation (X2)	X2A	0,831	0,210	
	X2B	0,850	0,210	1
	X2C	0,777	0,210	-
	X2D	0,833	0,210	1
	X2E	0,814	0,210	Valid
	X2F	0,873	0,210	
	X2G	0,832	0,210	1
	X2H	0,778	0,210	
	X2I	0,782	0,210	
Personal Technical Skills (X3)	X3A	0,913	0,210	
	X3B	0,902	0,210	
	X3C	0,897	0,210	
	X3D	0,867	0,210	Valid
	X3E	0,931	0,210]
	X3F	0,887	0,210]
	X3G	0,927	0,210]
	X3H	0,904	0,210	
Accounting Information System Performance (Y)	Y1A	0,747	0,210	
	Y1B	0,710	0,210	
	Y1C	0,704	0,210	
	Y1D	0,575	0,210	
	Y1E	0,644	0,210	Valid
	Y1F	0,624	0,210	
	Y1G	0,685	0,210	
	Y1H	0,756	0,210	
	Y1I	0,812	0,210	

Table 2. Data Validity Test Results

The table above shows that all statement indicators in the questionnaire are valid, where the value is all > 0.210 which can be interpreted as all valid statements. It is determined from r-count > r-table, then the value of r-table is 0.210 (Df = n-2 = 62-2 = 60).

Data Reliability Test

This data reliability test is performed at the time when all statements are proven valid. Cornbach's Alpha will be used in this test to see if responses from respondents are reliable or not. The following is a display of the results of the data reliability test:

Table	3.	Hasil	Uii	Reliabilitas Data	
TUDIC	٠.	nasn	UJ.	incliabilitas Data	

Variable			Cornbach's Alpha	Kesimpulan
Advanced Inform	nation Technology		0,896	Reliabel
User Participatio	n		0,967	Reliabel
Personal Technic	cal Skills		0,967	Reliabel
Accounting Performance	Information	System	0,866	Reliabel

Cornbach's Alpha score is used to see if the answers given by respondents are trustworthy or reliable. If the value of Cornbach's Alpha > 0.60 then the data can be said to be reliable and if vice versa if the value of Cornbach's Alpha < 0.60 then the data can be said to be unreliable. From the data generated in the table above, all values > 0.60 which means that all variables can be declared reliable.

Normality Test

Normality testing on this data is to find out whether this research data can be said to be normal or not. In this study researchers used the Regression Standardized Residual histogram curve, the P-Plot of Regression Standardized Residual graph and the Klomogrov-Smirnov Test One-Sample table. Here's what the graphs and tables mentioned:



Figure 1. Histogram Chart

The graph above illustrates that the results have formed a bell shaped curve not leaning to the right or left, so it can be interpreted that the research data is normally distributed. The normality test is not only data seen from the histogram graph but can also be seen from the Normal P-Plot of Regression Standardized Residual, the following attach:

Normal P-P Plot of Regression Standardized Residual



Figure 2. Normal P-Plot of Regression Standardized Residual

In the P-Plot graph above, you can see the points that spread out following the diagonal line around the path, so it can be interpreted that the data obtained is normally distributed. To ensure the results of graphs and curves above normal or not, you can use numerical testing, namely with the Kolmogorov-Smirnov Test which if the significant value is > 0.05 it can be declared normal or pass the normality test.

Table 3.	Results of	One Ko	Imogorov	-Smirnov	Test
Table J.	Results of	One no	mogorov	-311111100	1 C J L

One-Sample Kolmogorov-Smirnov Test					
		Unstandardized Residual			
N		62			
Normal Parameters ^{a,b}	Mean	,0000000			
	Std. Deviation	2,78572227			
Most Extreme Differences	Absolute	,087			
	Positive	,068			
	Negative	-,087			
Test Statistic		,087			
Asymp. Sig. (2-tailed)		,200 ^{c,d}			
a. Test distribution is Normal.					
b. Calculated from data.					
c. Lilliefors Significance Correction	n.				
d. This is a lower bound of the tru	ie significance.				

It can be seen from the Kolmogorov-Smirnov Test results table above, the Asymp value. The resulting Sig (2-tailed) is 0.200 > 0.05 (alpha), meaning that the data calculations in this study are normally distributed.

Multicollinearity Test

Multicollinearity test is used to analyze whether there are symptoms of multicollinearity or not. This test is measured using tolerance and VIF results obtained via SPSS. The following is a display of the multicollinearity test:

Table 4	. Multico	llinearitv	Test	Results

Coefficients ^a		
	Collinearity Stat	istics
Model	Tolerance	VIF
1 Advanced Information Technology	,414	2,414
User Participation	,387	2,581

Personal Technical Skills	,453	2,205				
a. Dependent Variable: Accounting Information System Performance						

It can be seen in the multicollinearity test table above, the tolerance value on the independent variable, namely the sophistication of information technology is valuable (0.414), user participation is valuable (0.387) and personal technical ability is valuable (0.453) where the standard tolerance value must be > 0.10 then the three independent variables pass multicollinearity. For the VIF value of the information technology sophistication variable value (2.414), user participation is value (2.581) and personal technical ability is value (2.205) where if the VIF value < 10.00 then it can be interpreted that the three variables are declared passed and the regression model used is free from symptoms of multicollinearity.

Heteroscedasticity Test

The heteroscedasticity test is used to determine whether a regression model is well validated or not by looking at whether there is heteroscedasticity in the test. Here's what a scatterplot looks like using SPSS:



Figure 3. Heteroscedasticity Test Results

It can be interpreted that the pattern of dots in the figure above is scattered and does not form a regular pattern, it can be concluded that the data does not show symptoms of heteroscedasticity. When using the heterskedasticity test, it is also common to use the Glejser test to support the results of scatterplots in looking at the reliability of heteroscedasticity. Here are the results of the Glejser test using SPSS:

Table 5. Heteroscedasticity Test Results – Glacier Test

Сс	pefficients ^a					
		Unstandardized Coefficients Standardized Coefficient				
Μ	odel	В	Std. Error	Beta	t	Sig.
1(Constant)	,864	,998		,866	,394
4	Advanced Information Technology	-,024	,030	-,213	-,804	,429
ι	Jser Participation	,013	,029	,122	,449	,657
F	Personal Technical Skills	,017	,020	,224	,879	,387
a.	a. Dependent Variable: Accounting Information System Performance					

Based on the table above, it can be interpreted that the significance value of the information technology sophistication variable in the Glejser test is valued (0.429), user participation is valuable (0.657) and personal technical ability is valued (0.387) where the significance value of the three variables is > 0.05 which means that all variables do not experience heteroscedasticity.

Multiple Linear Regression Test

Multiple linear regression tests are performed to construct regression equations to see if there is an influence on the three independent variables on one dependent variable. Here are the results of multiple linear regression tests using SPSS:

Table 6. Multiple Linear Regression Test Results

Coefficients ^a					
Unstandardized Coefficients Standardized Coefficients					
Model B Std. Error Beta					
1 (Constant)	7,521	3,107		2,421	,019
Advanced Information Technology	,285	,103	,321	2,754	,008
User Participation	,273	,109	,302	2,501	,015

Personal Technical Skills	,199	,076	,293	2,630,011	
a. Dependent Variable: Accounting Information System Performance					

The following calculation uses the formula of the multiple linear regression test:

Y = a + b1x1 + b2x2 + b3x3 + e Y = 7,521 + 0,285x1 +0,273x2 + 0,199x3 + 3,107

The explanation of the linear regression equation above is as follows:

- 1. The constant 7.521 as the performance level of the accounting information system indicates if the value of the coefficient X1 is valued (0.285), X2 is valued (0.273) and X3 is valued (0.199).
- The regression coefficient X1 is positive value of 0.285, it can be concluded that there is a positive relationship between the sophistication of information technology (X1) and the performance of accounting information systems (Y), where when the sophistication of information technology increases by 1 point by 0.285, the performance of accounting information systems also increases.
- 3. The regression coefficient X2 is positive which is 0.273, it can be concluded that there is a positive relationship between user participation (X2) and accounting information system performance (Y), where when user participation increases by 1 point by 0.273, the performance of the accounting information system also increases.
- 4. The regression coefficient X3 is positive which is 0.199, it can be concluded that there is a positive relationship between personal technical ability (X3) and accounting information system performance (Y), where when personal technical ability increases by 1 point by 0.199, the performance of accounting information systems also increases.

Based on the table above, it can be seen, concluded and compared that of the three variables, the sophistication of information technology has a strong and greater influence on the performance of accounting information systems.

Hypoplant TestPartial Test (t Test)

The t-test in this study was used to examine whether the regression model of the independent variable had a significant effect on the dependent variable. The following are the results of the t test processed using SPSS:

	Coefficients ^a										
Unstandardized Coefficients Standardized Coefficients											
Model		В	Std. Error	Beta	t	Sig.					
1	(Constant)	7,521	3,107		2,421	,019					
7	Advanced Information Technology	,285	,103	,321	2,754	,008					
	User Participation	,273	,109	,302	2,501	,015					
	Personal Technical Skills	,199	,076	,293	2,630	,011					
	a. Dependent Variable: Accounting Information System Performance										

Table 7. Test Results t

Known formula t table = ($\alpha/2$; N-K-1 or DF residual) then (0.05/2; 62-3-1 or df) yields a table t that is 0.2002. From the table above it can be explained that:

- The significant value X1 is 0.008 < 0.05 then the hypothesis is accepted. The results of t-count and t-table are valued at 2.754 > 2.002 which means that the sophistication of information technology has a positive and significant influence on the performance of accounting information systems.
- The significant value of X2 is 0.015 < 0.05 then the hypothesis is accepted. The results of t-count and t-table are valued at 2.501 > 2.002 which means that user participation has a positive and significant influence on the performance of accounting information systems.
- The significant value of X3 is 0.011 < 0.05 then the hypothesis is accepted. The results of t-count and t-table are valued at 2,630 > 2,002 which means that personal technical skills have a positive and significant influence on the performance of accounting information systems.

Simultaneous Test (F Test)

The f test is carried out to find out whether the independent variable (free variable) has a simultaneous effect on the dependent variable (dependent variable). The following are the results of the t test processed using SPSS:

ANOVAª					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	973,996	3	324,665	39,779	,000 ^b
Residual	473,375	58	8,162		
Total	1447,371	61			

Table 8. F Test Results

b. Predictors: (Constant), Kemampuan Teknik Personal, Kecanggihan Teknologi Informasi, Partisipasi Pengguna

It can be concluded from the table above that the calculated F value is 39.799 and the significant value is 0.000. This value is greater than F table ie (39.779 > 2.76) and a significant value smaller than 0.05 ie (0.000 < 0.05), it can be interpreted and concluded that from the three independent variables namely information technology sophistication, user participation and personal technical ability have a significant influence on the dependent variable, namely the performance of accounting information systems.

F table is generated using the following calculation:

df1 = (k-1) = 4-1 = 3 dan df2 = (n-k) = 62-4 = 58 df1;df2 = 3;58 = 2,76 (F tabel)

Coefficient of Determination (R2)

This test is conducted to analyze the percentage of the influence of independent variables, namely the sophistication of information technology, user participation and the ability of personal techniques on the dependent variable, namely the performance of accounting information systems simultaneously. The following are the results of the analysis of the coefficient of determination processed using SPSS:

Table 9. Results of Determination Coefficient Analysis (R2)

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate					
1	,820ª	,673	,656	2,857					
Advanced Information Technology, User Participation, Personal Technical Skills									
b. Dependent Variable: Accounting Information System Performance									

From the table above, it can be seen that the results of the coefficient of determination analysis in the form of Adjusted R Square values are 0, 656 or 65.6%, which means that as much as 65.6% of accounting information system performance is influenced by variables such as information technology sophistication, user participation and personal technical abilities, while the remaining value of 34.45% is found in other variables that affect it.

DISCUSSION OF RESEARCH RESULTS

This research was conducted as an effort to test and assess whether there is an influence between independent variables, namely information technology sophistication, user participation and personal technical ability on the dependent variable, namely the performance of accounting information systems. The objects used in this study are active employees of the Cooperative Office, Micro Unit, Industry and Trade of Bintan Regency in the form of primary data obtained by researchers directly without intermediaries by observing the location directly, conducting interviews with the Head of the Finance Sub-Division and distributing questionnaires to employees of the Cooperative Office, Micro Units, Industry and Trade of Bintan Regency.

The Effect of Information Technology Sophistication on the Performance of Accounting Information Systems

Based on the final results of the analysis, the variable of information technology sophistication is proven to have a partial influence on the significance value through data analysis using the SPSS application, which is 0.008 < 0.05 and the calculated t value is 2.754 > 2.002 t table, it can be interpreted that the sophistication of information technology has a positive and partially significant effect on the performance of accounting information systems. This shows that the performance of accounting information technology itself and also understands the purpose and function of applicable information technology and so on. The sophistication of information technology has a significant

effect on the performance of accounting information systems because the sophistication of information technology continues to grow from time to time very rapidly and helps and facilitates users in doing something computer-based, so with the development of the sophistication of information technology, users can easily use technology and process computer-based information.

The Effect of User Participation on the Performance of Accounting Information Systems

Based on the final results of the analysis, it is proven that the user participation variable has a partial influence, namely with a significance value through data analysis using the SPSS application, which is 0.015 < 0.05 and a calculated t value of 2.501 > 2.002 t table, it can be interpreted that user participation has a positive and partially significant effect on the performance of accounting information systems. This shows that the performance of the accounting information system is also influenced by the participation of the users themselves and also understand the objectives and functions of the applicable system performance and so on. User participation can have a significant effect on the performance of accounting information systems because the role of users greatly determines the process of implementing the system whether it can run well or not. The role of user participation is expected to make accounting information systems more often used so that the performance of accounting information systems.

The Effect of Personal Engineering Capabilities on the Performance of Accounting Information Systems

Based on the final results of the analysis, it is proven that the variable of personal technical ability has a partial influence, namely with a significance value through data analysis using the SPSS application, which is 0.011 < 0.05 and a calculated t value of 2.630 > 2.002 t table, it can be interpreted that personal technical ability has a positive and partially significant effect on the performance of accounting information systems. Personal technical skills can have a significant effect on the performance of accounting information systems because in determining the success of a system requires users who have reliable abilities, experience and know the development of technology and systems in order to reduce mathematical errors, facilitate retrieval and storage of large amounts of data, produce timely work reports in various forms and can be a tool when taking a decision.

The Effect of Technological Sophistication, User Participation and Personal Technical Capabilities on System Performance Accounting Information

Based on the final results of the F test, the results of the analysis have a significant effect simultaneously between technological sophistication, user participation and personal technical capabilities on the performance of accounting information systems. The results of the research hypothesis test are proven by the anova table, namely F count is 39.779 where F table is 2.79 then it can be interpreted F count > F table (39.779 > 2.79) and the level of significance obtained is worth 0.000 which is 0.000 < 0.05, it can be concluded that technological sophistication, user participation and personal technical capabilities on the performance of accounting information systems.

CONCLUSIONS

- The results of the study proved by the t test, where the value of t count is 2.754 where t table is 2.002 then it can be concluded t calculate > t table (2.754 > 2.002) with a significance value of 0.008 > 0.05 then it can be interpreted that the sophistication of information technology has a positive and significant effect on the performance of accounting information systems.
- 2. The results of the study as evidenced by the t test, where the value of t count is 2.501 where t table is 2.002 then it can be concluded t calculate > t table (2.501 > 2.002) with a significance value of 0.015 > 0.05 then it can be interpreted that user participation has a positive and significant effect on the performance of accounting information systems.
- 3. The results of the study as evidenced by the t test, where the value of t count is 2.630 where t table is 2.002 then it can be concluded t calculate > t table (2.630 > 2.002) with a significance value of 0.011 > 0.05 then it can be interpreted that personal technical ability has a positive and significant effect on the performance of accounting information systems.

REFERENCES

- 1) Agnesia, F., Dewanti, R., & Darmahusni, D. (2021). Praksis Literasi Digital dalam Pembelajaran Bahasa Inggris Abad 21. *Jurnal Kajian Bahasa, Sastra Dan Pengajaran (KIBASP), 5*(1), 16–29. https://doi.org/10.31539/kibasp.v5i1.2713
- 2) Ammenwerth, E. (2019). Technology Acceptance Models in Health Informatics: TAM and UTAUT. *Studies in Health Technology and Informatics*, *263*, 64–71. https://doi.org/https://doi.org/10.3233/shti190111
- 3) Dharmawan, J., & Ardianto, J. (2017). Pengaruh Kemutakhiran Teknologi, Kemampuan Teknik Personal Sistem

Informasi, Program Pelatihan Pengguna dan Dukungan Manajemen Puncak Terhadap Kinerja Sistem Informasi Akuntansi. *Ultimaccounting : Jurnal Ilmu Akuntansi, 9*(1), 60–78. https://doi.org/10.31937/akuntansi.v9i1.588

- 4) Diansari, L. M., Sujana, I. K., Budiasih, I. G. A. N., & Sari, M. M. R. (2020). User Involvement, Training and Education of the User, Formalization of The Development of Information System and Support of Top Management To The Performance of Udayana University Accounting Information Systems. *International Research Journal of Management*, 7(4), 65–79. https://doi.org/https://doi.org/10.21744/irjmis.v7n4.951
- 5) Diponegoro, R. A. D. N. S., & Ilham, R. (2023). Pengaruh Formalisasi Pengembangan, Keterlibatan Pemakai SIA, Kemampuan Personal Dan Dukungan Manajemen Puncak Terhadap Kinerja SIA. Jurnal Akuntansi AKUNESA, 11(2), 138– 147. https://doi.org/https://doi.org/10.26740/akunesa.v11n2.p138-147
- 6) Fitria, A., & Sari, I. (2023). The Influence of Personal Technical Ability and Work Experience on the Effectiveness of Using Accounting Information Systems With an Educational Background as a Moderation. *Research of Accounting and Governance*, 1(1), 23–32. https://doi.org/10.58777/rag.v1i1.12
- 7) Fridayanthie, E. W., Haryanto, H., & Tsabitah, T. (2021). Penerapan Metode Prototype Pada Perancangan Sistem Informasi Penggajian Karyawan (Persis Gawan) Berbasis Web. Paradigma - Jurnal Komputer Dan Informatika, 23(2). https://doi.org/10.31294/p.v23i2.10998
- 8) Istan, M., & Fahlevi, M. (2020). The Effect of External and Internal Factors on Financial Performance of Islamic Banking. *Jurnal Ekonomi & Studi Pembangunan*, 21(1). https://doi.org/10.18196/jesp.21.1.5036
- 9) Jayanti, S. E., Damayanti, N. L. K. D., Trisnawati, A. E., & Sanjaya, I. K. P. W. (2022). The Effect of Information Technology Advancement, Personal Engineering Capabilities, and Accounting Information System User Participation on Accounting Information System Effectiveness. *Journal of Governance, Taxation and Auditing*, 1(1), 48–54. https://doi.org/10.38142/jogta.v1i1.396
- Kismono, G., Paramita, W., & Lintang, G. B. (2023). Can Acceptance Promote Life Satisfaction during a Work from Home Regime? The Mediating Role of Work-Life Balance and Job Stress. *Cogent Business & Management*, 10(2). https://doi.org/10.1080/23311975.2023.2234130
- Kusumawati, N. P. A., & Ayu, P. C. (2019). Pengaruh Kinerja Individual dan Kemampuan Teknik Personal Pada Efektivitas Sistem Informasi Akuntansi dengan Pendidikan dan Pelatihan Sebagai Pemoderasi. Widya Akuntansi Dan Keuangan, 1(2), 77–95. https://doi.org/10.32795/widyaakuntansi.v1i2.384
- 12) Leng, G. S., Lada, S., Muhammad, M. Z., Ibrahim, A. A. H. A., & Amboala, T. (2011). An Exploration of Social Networking Sites (SNS) Adoption in Malaysia Using Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB) And Intrinsic Motivation. *Journal of Internet Banking and Commerce*. https://www.researchgate.net/publication/286678651_An_Exploration_of_Social_Networking_Sites_SNS_Adoption_in _Malaysia_Using_Technology_Acceptance_Model_TAM_Theory_of_Planned_Behavior_TPB_And_Intrinsic_Motivation
- 13) Maryani, T. (2020). Pengaruh Partisipasi Pemakai Sistem Informasi, Kemampuan Pemakai Sistem Informasi, Ukuran Organisasi, Program Pelatihan dan Pendidikan Terhadap Kinerja Sistem Informasi Akuntansi. Prisma (Platform Riset Mahasiswa Akuntansi), 1(1). https://ojs.stiesa.ac.id/index.php/prisma/article/view/365
- 14) Nabila Putri Maharani, & Yenni Khristiana. (2022). Determinan Integritas Laporan Keuangan Perusahaan Manufaktur. Jurnal Buana Akuntansi, 7(1), 83–96. https://doi.org/10.36805/akuntansi.v7i1.2176
- 15) Nadlifatin, R., Miraja, B. A., Persada, S. F., Belgiawan, P. F., Redi, A. A. P., & Lin, S.-C. (2020). The Measurement of University Students' Intention to Use Blended Learning System through Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) at Developed and Developing Regions: Lessons Learned from Taiwan and Indonesia. *International Journal of Emerging Technologies in Learning (IJET)*, 15(09), 219. https://doi.org/10.3991/ijet.v15i09.11517
- 16) Putu Ardiwinata, I. G. N., & Sujana, I. K. (2019). Pengaruh Kemampuan Teknik Personal, Keterlibatan Pemakai, Pelatihan dan Pendidikan Pada Kinerja Sistem Informasi Akuntansi. *E-Jurnal Akuntansi*, 1867. https://doi.org/10.24843/EJA.2019.v27.i03.p09
- 17) Ritchi, H., Fitri Evayanti, N., & Yusi Sari, P. (2021). A Study on Information Systems Success: Examining User Satisfaction of Accounting Information System. *Bina Ekonomi*, *24*(2), 1–14. https://doi.org/10.26593/be.v24i2.5084.1-14
- 18) Setyawati, A., Mayanto, I. M., Sugangga, A., Widyanto, W. R., & Rahma, A. (2023). Analysis of Factors Affecting Employee Morale in the Technical Implementation Unit Office of the Singosari Revenue Agency, Malang Regency. *International Scientific Journals Of Social, Education and Humaniora*, 2(1).
- 19) Sugihartini, N., Sindu, G. P., Dewi, K. S., Zakariah, M., & Sudira, P. (2020). Improving Teaching Ability with Eight Teaching

Skills. Proceedings of the 3rd International Conference on Innovative Research Across Disciplines (ICIRAD 2019). https://doi.org/10.2991/assehr.k.200115.050

- 20) Sutariani, M., Arizona, P., & Ernawatiningsih, P. (2022). Pengaruh Penggunaan Teknologi, Keterlibatan Pemakaian Dalam Pengembangan Sistem, Pelatihan Pemakai Sistem Dan Formalisasi Pengembangan Sistem Terhadap Kinerja Sistem Informasi Akuntansi Pada Lembaga Perkreditan Desa di Denpasar Timur. *Jurnal Kharisma*, 4(3), 111–122.
- 21) Theotama, G., Waskita, Y. D., & Hapsari, A. N. S. (2023). Fraud Hexagon in the Motives to Commit Academic Fraud. *Jurnal Ekonomi Dan Bisnis*, 26(1), 195–220. https://doi.org/10.24914/jeb.v26i1.7395
- 22) Wulandari, P., & Sudarma, M. (2022). *The Influence of Ownership Structure, Leverage, Profitability, Company Size, and Audit Quality on Tax Avoidance in Indonesia*. https://doi.org/10.2991/aebmr.k.220128.030



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0 (https://creativecommons.or/licenses/by-nc/4.0/), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.