EFFECTIVENESS OF LOCAL GOVERNMENT ACCOUNTING INFORMATION SYSTEMS: A STUDY OF TRAINING, USER PARTICIPATION, TASK COMPLEXITY, AND TOP MANAGEMENT SUPPORT

Fransiscus Nicodemus Naiola[1]
Politeknik Negeri Kupang, Indonesia
franznaiola06@gmail.com

Viany Cecilia Pah[2]
Politeknik Negeri Kupang, Indonesia
vianycecilia1201@gmail.com

Abstract

This study, entitled *"The Influence of Internal Control Systems and Information Technology…"*, highlights how the advancement of information technology in the public sector has encouraged local governments to implement Accounting Information Systems (AIS) to improve the efficiency, effectiveness, and accountability of financial management. AIS plays a crucial role in producing accurate, relevant, and timely financial information as the basis for strategic decision-making. However, the effectiveness of AIS is strongly influenced by several factors, including technical aspects, organizational behavior, and structural support. Effective training can enhance users' ability to operate the Accounting Information System, thereby improving system effectiveness. Conversely, task complexity can hinder users in utilizing the system, which may reduce its effectiveness. Active user participation can help improve system quality and enhance its effectiveness. Top management support can strengthen the influence of training on system effectiveness by providing adequate resources and support. It can also reinforce the effect of user participation by facilitating communication and collaboration between users and system developers. In addition, top management support may mitigate the negative impact of task complexity on system effectiveness by ensuring sufficient resources and assistance to address task-related challenges. Thus, top management support plays a pivotal role in enhancing the effectiveness of the Accounting Information System.

Keywords: Training, Task Complexity, User Participation, Accounting Information Systems, Top Management Support

INTRODUCTION

The development of information technology in the public sector has encouraged local governments to implement accounting information systems in order to improve the efficiency, effectiveness, and accountability of financial management. Accounting information systems play an important role in producing accurate, relevant, and timely financial information as the basis for strategic decision-making. However, the effectiveness of accounting information systems is strongly influenced by several factors, including technical aspects, organizational behavior, and structural support.

An accounting information system collects and processes financial data to produce high-quality accounting information. An integrated system makes financial information easier to access and supports transparency in financial management. Accounting information systems are designed to collect, input, process, and store reports and information. An accounting information system is a collection of sub-systems or components, both physical and non-physical, that are interconnected harmoniously to process financial data into financial information needed by various parties as a basis for decision-making and control within an organization (Lilis Pupitawati, 2021). The system then performs its role by processing data and converting it into value-added accounting information that can be used by various users.

One of the regions that has adopted rapid technological development in its accounting information system is East Nusa Tenggara Province. All treasurers in each Regional Work Unit (SKPD) are fully responsible for preparing and carrying out technical support tasks in the financial sector in order to achieve quality, transparent, responsive, and accountable regional financial management. To support better financial administration, a system called the “Regional Government Information System” began to be used and implemented.

The Regional Government Information System (SIPD), introduced by the Ministry of Home Affairs (Kemendagri) and regulated under Permendagri No. 70/2019, was developed to fulfill the mandates of Law No. 23/2014 and Government Regulation No. 12/2019 on regional financial management. Mandatory since APBD 2021, SIPD supports budgeting, financial administration, accounting, reporting, as well as LPPD and EKPD processes. The system was later upgraded and renamed the Regional Government Information System of the Republic of Indonesia.

Technical problems remain common, including difficulties in financial data entry and staff rotation that affects understanding of SIPD workflows. According to budgeting officer Jumsar, S.Pi., M.Si., many treasurers still misunderstand the required process flow, leading to errors such as improper spending sequences and missing vendor input. Issues like exceeding the 100 MB upload limit for receipts also cause delays. These obstacles hinder timely financial reporting and ultimately disrupt decision-making and budget management.

One of the key factors is training. Employees who receive adequate system training tend to have better abilities in operating accounting information systems. Research by Princessa, Suwendra, and Wedana (2022) shows that training has a positive effect on the effectiveness of accounting information systems in Village Credit Institutions in Denpasar. Training not only improves technical competence but also reduces the risk of errors in financial recording and reporting. Training or guidance is carried out as an essential action for users, aiming to provide background understanding of computer usage mechanisms or

specific system processes, not only to enhance understanding but also to improve accuracy and information awareness so users become more skilled in making better decisions. Training is closely related to performance because performance will be higher when the training program is properly introduced to users.

The next factor is task complexity. In the dynamic public sector work environment, employees are required to complete various administrative and financial tasks simultaneously. Putri and Karyada (2020) found that task complexity negatively affects the effectiveness of accounting information systems in savings and loan cooperatives because the more complex the tasks, the greater the potential for errors in system use. The ability to integrate problems, limitations in capability, and memory capacity contribute to task complexity. Complex tasks create differences in perception that can affect performance. Task fit is related to the extent to which users' abilities align with the use of information technology in performing tasks to improve individual performance.

In addition, user participation is also an important element in the successful implementation of the system. User involvement in the design and use of information systems has been proven to increase understanding and sense of ownership of the system. Research by Muliana, Suprasto, and Ratnadi (2017) states that user participation in accounting information systems positively affects system effectiveness in cooperatives in Gianyar Regency. User participation refers to the involvement of system users in the key stages of information system development, including planning, design, testing, and implementation. This involvement enhances the system's alignment with organizational needs (Afrizon & A. Pakpahan, 2020). By participating, users can contribute information and improve their understanding of the system, allowing the developed information system to be effectively used by users (Rusmiati, 2012). This indicates that system effectiveness increases when users are given opportunities to participate in system development as a form of responsibility, which also allows them to evaluate their own satisfaction, since the success of a system lies in the users' hands.

Top management support is another critical factor. Organizational leaders have a strategic role in providing resources, directing policies, and creating a system-based work culture. Pratiwi (2019) states that top management support is a determining factor in the effectiveness of accounting information systems in microfinance institutions in Semarang. Top management support significantly affects accounting information system procedures. A system is considered well integrated when supported by leaders who pay attention to their subordinates' performance and provide adequate understanding in utilizing information technology, as top management support is vital in system implementation. According to Fitrios et al. (2024), top management support refers to the active involvement of top organizational leaders in providing strategic direction, resources, and moral encouragement for the implementation of information systems and technological innovation.

REVIEW OF LITERATURE

Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) is a psychological theory proposed by Ajzen in 1991 to explain the relationship between attitudes and behavior. A person's behavior, whether to perform or not perform an action, is strongly influenced by intention. TPB asserts

that intention is a more accurate predictor of actual behavior and can function as an intermediary linking attitudes to actual behavior (Ajzen, 1991).

Training

Training is a method used to develop skills and provide feedback in an optimal way to achieve the company's expected goals. The development of an institution cannot be separated from the development of its human resources or workforce, which focuses on the quality and skills of the institution and improves employee performance. Employees must have a commitment to developing training programs (Hartono & Siagian, 2020).

Task Complexity

Task complexity refers to tasks that are confusing and difficult to measure objectively because individuals' perceptions of the difficulty of an audit task vary, depending on their responses to the task (Rossy et al., 2021). Task complexity reflects the level of difficulty of a job based on the amount of information that must be processed, the interdependence between activities, and the degree of variation and changes in the work environment (Rustiarini, 2023).

User Participation

User participation has been recognized as an important factor influencing the success or failure of information system development. User participation in information systems, including user feedback, greatly affects the successful use of the system. User participation represents the extent of users' contributions and involvement in providing input, experience, and system testing to ensure quality user experience (Ariwanta et al., 2024).

Accounting Information Systems

An accounting information system is a system designed to collect, record, classify, and present financial information in a relevant and timely manner to support managerial and operational decision-making (Pontoh, 2023). An accounting information system is an information technology–based system that facilitates a company's accounting activities in an integrated manner, emphasizing the reliability, speed, and security of information (Fitrios et al., 2023).

Theory of Top Management Support

Top management support can be provided in various ways, such as allocating resources, involving employees, and offering feedback. According to Fitrios et al. (2024), top management support is the active involvement of the organization's highest leaders in providing strategic direction, resources, and moral encouragement for the implementation of information systems and technological innovation.

RESEARCH METHOD

Research Location

This study was conducted at the Regional Financial Agency of East Nusa Tenggara Province, located at Jalan Eltari No. 52, Kupang City. This location was chosen because it operates an accounting information system, specifically the regional government information system.

Research Object

The object of this research is the regional government information system, with a focus on how factors such as training, task complexity, and user participation influence the

system, as well as how top management support strengthens or weakens the relationships among these variables.

Population

A population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by the researcher to be studied and from which conclusions are drawn. Thus, a population is not only people but also objects or other natural entities. Population also does not merely refer to the number or the attributes possessed by the subjects or objects (Sugiyono, 2019). The population in this study consists of all employees serving as expenditure treasurers in Regional Apparatus Organizations (OPD) within the Provincial Government of East Nusa Tenggara who use the Regional Government Information System (SIPD) in carrying out their duties. According to data obtained from the Regional Financial Agency of East Nusa Tenggara Province, the total number of expenditure treasurers actively using SIPD is 132 individuals.

Sample

A sample is a portion of the number and characteristics possessed by the population (Sugiyono, 2022). According to Sugiyono (2019), saturated sampling is a technique in which all members of the population are used as the sample. The inclusion criteria for sample selection are: employees who serve as active expenditure treasurers in OPDs within the Provincial Government of East Nusa Tenggara, have at least six months of experience operating the Regional Government Information System (SIPD), and are directly involved in data entry, budget management, and financial reporting through the SIPD system. This study uses saturated sampling; therefore, the sample size consists of all 132 expenditure treasurers who directly use the Regional Government Information System.

Data Collection Technique

The data collection technique in this study focuses on obtaining the necessary data. According to Sugiyono (2022), a questionnaire is a data collection method conducted by providing a set of written questions to respondents to be answered. Questionnaires are an efficient technique when the researcher clearly understands the variables to be measured and knows what can be expected from the respondents. The questions were answered directly by the respondents through a distributed Google Form.

RESULTS AND DISCUSSION

Data Quality Test

Validity Test

The validity of the instrument can be seen in the Pearson Correlation column. If the calculated r is greater than the r_{table} ($|r_{count}| > r_{table}$), then the instrument is declared valid. In this study, the r table value was 0.1720 (df=n-2=132-2=130), with a significance level of 5% using a two-tailed test. The results of the instrument validity test for Training (X1), Task Complexity (X2), User Participation (X3), Accounting Information System Effectiveness (Y), and Top Management Support (M) are described in the tables below:

Table 1.
Results of the Training Instrument Validity Test (X1)

Item	Rcount	Rtable	Description
X1.1	0,525	0,172	Valid
X1.2	0,549	0,172	Valid
X1.3	0,480	0,172	Valid
X1.4	0,432	0,172	Valid
X1.5	0,548	0,172	Valid
X1.6	0,501	0,172	Valid
X1.7	0,404	0,172	Valid
X1.8	0,562	0,172	Valid
X1.9	0,526	0,172	Valid
X1.10	0,538	0,172	Valid
X1.11	0,545	0,172	Valid
X1.12	0,424	0,172	Valid
X1.13	0,537	0,172	Valid
X1.14	0,610	0,172	Valid
X1.15	0,512	0,172	Valid
X1.16	0,498	0,172	Valid
$X_{2.1}$	0,531	0,172	Valid
$X_{2.2}$	0,674	0,172	Valid
$X_{2.3}$	0,678	0,172	Valid
$X_{2.4}$	0,651	0,172	Valid
$X_{2.5}$	0,683	0,172	Valid
$X_{2.6}$	0,614	0,172	Valid
$X_{2.7}$	0,600	0,172	Valid
$X_{2.8}$	0,588	0,172	Valid
$X_{2.9}$	0,586	0,172	Valid
$X_{2.10}$	0,679	0,172	Valid
$X_{2.11}$	0,654	0,172	Valid
$X_{2.12}$	0,614	0,172	Valid
$X_{2.13}$	0,619	0,172	Valid
$X_{2.14}$	0,582	0,172	Valid
$X_{2.15}$	0,626	0,172	Valid
$X_{2.16}$	0,573	0,172	Valid
$X_{3.1}$	0,586	0,172	Valid
$X_{3.2}$	0,536	0,172	Valid
$X_{3.3}$	0,546	0,172	Valid
$X_{3.4}$	0,481	0,172	Valid
$X_{3.5}$	0,504	0,172	Valid
$X_{3.6}$	0,533	0,172	Valid
$X_{3.7}$	0,568	0,172	Valid

$X_{3.8}$	0,466	0,172	Valid
$X_{3.9}$	0,488	0,172	Valid
$X_{3.10}$	0,564	0,172	Valid
$X_{3.11}$	0,634	0,172	Valid
$X_{3.12}$	0,549	0,172	Valid
$X_{3.13}$	0,508	0,172	Valid
$X_{3.14}$	0,550	0,172	Valid
$X_{3.15}$	0,477	0,172	Valid
$X_{3.16}$	0,633	0,172	Valid
Y.1	0,586	0,172	Valid
Y.2	0,493	0,172	Valid
Y.3	0,622	0,172	Valid
Y.4	0,554	0,172	Valid
Y.5	0,627	0,172	Valid
Y.6	0,616	0,172	Valid
Y.7	0,643	0,172	Valid
Y.8	0,421	0,172	Valid
Y.9	0,490	0,172	Valid
Y.10	0,483	0,172	Valid
Y.11	0,571	0,172	Valid
Y.12	0,620	0,172	Valid
M.1	0,534	0,172	Valid
M.2	0,525	0,172	Valid
M.3	0,534	0,172	Valid
M.4	0,523	0,172	Valid
M.5	0,456	0,172	Valid
M.6	0,579	0,172	Valid
M.7	0,449	0,172	Valid
M.8	0,604	0,172	Valid
M.9	0,440	0,172	Valid
M.10	0,433	0,172	Valid
M.11	0,531	0,172	Valid
M.12	0,540	0,172	Valid
M.13	0,560	0,172	Valid
M.14	0,510	0,172	Valid
M.15	0,588	0,172	Valid
M.16	0,666	0,172	Valid

Source: Processed Research Data, 2025

The validity test results show that all instruments used in the study are valid. The Training (X1), Task Complexity (X2), User Participation (X3), and Top Management Support (M) instruments each consist of 16 statements, while the Accounting Information

System Effectiveness (Y) instrument consists of 12 statements. All items across these variables are declared valid, as each has an absolute *r*-value greater than the critical value ($|r_{count}| > r_{table}$).

Reability Test

Reliability is an index that indicates the extent to which a measuring instrument is trustworthy or reliable. The measuring instrument in this study was a questionnaire, and this questionnaire must pass a reliability test before it can be used in research. A measuring instrument is considered usable if it is accurate and consistent, as seen from its reliability coefficient. This coefficient value ranges from 0 to 1, with the closer it is to 1, the more reliable it is. The results of the reliability test for each variable using Cronbach's Alpha are shown in the following table:

Table 2.
Reliability Test Results

Variable	Cronbach's Alpha	N of Items	Description
Training (X1)	0,829	16	Reliable
Task Complexity (X2)	0,895	16	Reliable
User Participation (X3)	0,836	16	Reliable
Effectiveness of Accounting Information Systems (Y)	0,802	12	Reliable
Top Management Support (M)	0,829	16	Reliable

Source: Processed Research Data, 2025

Based on Table 2 above, it can be explained that:

a. The Cronbach's Alpha value for the Training instrument (X1) is 0.829. This value is greater than 0.6, so the Training instrument (X1) is considered reliable.
b. The Cronbach's Alpha value for the Task Complexity instrument (X2) is 0.895. This value is greater than 0.6, so the Task Complexity instrument (X2) is considered reliable.
c. The Cronbach's Alpha value for the User Participation instrument (X3) is 0.836. This value is greater than 0.6, so the Task Complexity instrument (X3) is considered reliable.
d. The Cronbach's Alpha value for the Accounting Information System Effectiveness instrument (Y) is 0.802. This value is greater than 0.6, so the Accounting Information System Effectiveness instrument (Y) is considered reliable.
e. The Cronbach's Alpha value for the Top Management Support (M) instrument is 0.829. This value is greater than 0.6, thus the Top Management Support (M) instrument is considered reliable.

Classical Assumption Test

Normality Test

The data normality test is used to determine whether the residual variables in the regression model have a normal distribution. This test determines whether the data distribution is normally distributed. In this case, the normality test was conducted using the Normal P-P Plot of Regression Standardized Residuals and the One-Sample Kalmogorov-Smirnov test. The test results using the Normal P-P Plot of Regression Standardized Residuals are shown in the following figure.

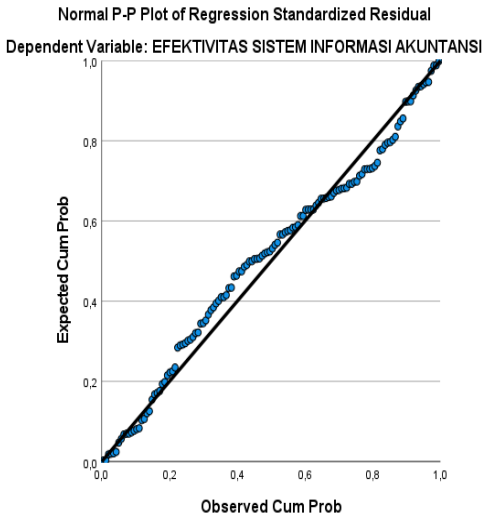

Figure 1.
Results of the Normal P-P Plot of Regression Standardized Residuals Test
Source: Processed Research Data, 2025

The results of the test using the graph plot analysis above indicate that the regression model is normally distributed, as the points are spread around the diagonal and follow the diagonal direction. The results of the One-Sample Kalmogorov-Smirnov test can be seen in the following table:

Table 3.
Results of the One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			132
Normal Parameters[a,b]	Mean		,0000000
	Std. Deviation		2,69094312
Most Extreme Differences	Absolute		,075
	Positive		,071
	Negative		-,075
Test Statistic			,075
Asymp. Sig. (2-tailed)[c]			,065
Monte Carlo Sig. (2-tailed)[d]	Sig.		,060
	99% Confidence Interval	Lower Bound	,054
		Upper Bound	,066

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Source: Processed Research Data, 2025

From the test results above, the Asymp. Sig. value was obtained as 0.065. The significance value must be greater than 0.05 (0.065 > 0.05). This indicates that the data is normally distributed and can be used for further testing.

Multicollinearity Test

The multicollinearity test is used to determine whether there is a correlation or relationship between variables. A good regression model should have no correlation or relationship between independent variables, as determined by the tolerance value and variance inflation factor (VIF). If the tolerance value is > 0.10 and the VIF is <10, it can be concluded that there is no multicollinearity. The results of the multicollinearity test can be seen in the following table:

Table 3.
Multicollinearity Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	7,145	3,457		2,067	,041		
	PELATIHAN	,206	,076	,238	2,718	,007	,581	1,722
	KOMPLEKSITAS TUGAS	,045	,048	,071	,927	,356	,762	1,312
	PARTISIPASI PEMAKAI	,362	,072	,443	5,037	<,001	,574	1,743

a. Dependent Variable: EFEKTIVITAS SISTEM INFORMASI AKUNTANSI

Source: Processed Research Data, 2025

Based on the test results in Table 4.3 above, the following results are obtained:

a. The tolerance value for the Training variable (X1) is 0.581, and the VIF value for the Training variable (X1) is 1.722. These data indicate that there are no symptoms of multicollinearity in the Healthy Lifestyle variable, as the tolerance value is greater than 0.10 (0.581>0.10) and the VIF value is less than 10 (1.722<10).
b. The tolerance value for the Task Complexity variable (X2) is 0.762, and the VIF value for the Task Complexity variable (X2) is 1.312. These data indicate that there are no symptoms of multicollinearity in the Task Complexity variable (X2) because its tolerance value is greater than 0.10 (0.762>0.10) and its VIF value is less than 10 (1.312<10).
c. The tolerance value for the User Participation variable (X3) is 0.574, and the VIF value for the User Participation variable (X3) is 1.743. These data indicate that there are no symptoms of multicollinearity in the User Participation variable (X3) because its tolerance value is greater than 0.10 (0.574>0.10) and its VIF value is less than 10 (1.743<10).

Based on the results of the multicollinearity test above, it can be concluded that there are no symptoms of multicollinearity among the independent variables because all variable tolerance values are greater than 0.10 and all variable VIF values are less than 10. Therefore, the research data can be used in subsequent tests.

Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there is unequal variance in the residuals from one observation to another in the regression model. Heteroscedasticity can be detected using a scatterplot. If there is no regular pattern, the regression model is free from heteroscedasticity. The results of the heteroscedasticity test using the scatterplot method are as follows:

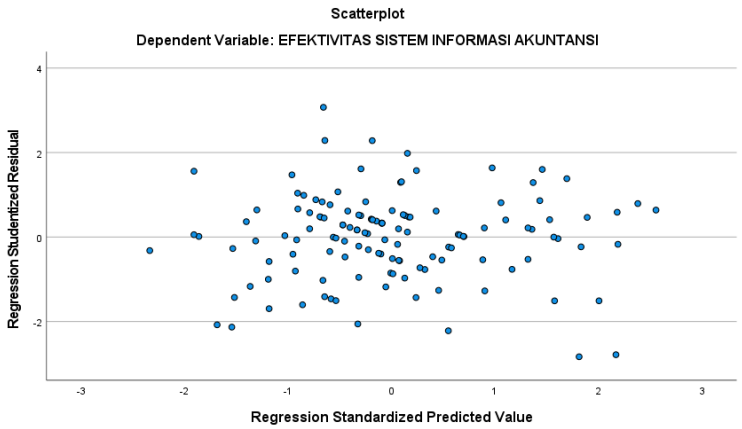

Figure 2.
Heteroscedasticity Test Results
Source: Processed Research Data, 2025

The heteroscedasticity test results in Figure 2 above show that the scatterplot between SRESID and ZPRED exhibits a dispersion pattern, where the points are randomly distributed and spread both above and below the 0 mark on the Y-axis. This concludes that there is no heteroscedasticity in the regression model, making it suitable for predicting Accounting Information System Effectiveness based on Training, Task Complexity, and User Participation, moderated by Top Management Support.

Hypothesis Testing

Coefficient of Determination (R2) Test

The coefficient of determination (R2) test is needed to measure the influence of the independent variables on the dependent variable. Since there are five independent variables in this study, the coefficient of determination value will be taken from the Adjusted R Square value. The results of the coefficient of determination (R2) test can be seen in the following table:

Table 4.
Results of the Coefficient of Determination (R2) Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,657[a]	,432	,418	2,722

a. Predictors: (Constant), PARTISIPASI PEMAKAI, KOMPLEKSITAS TUGAS , PELATIHAN

Source: Processed Research Data, 2025

Based on Table 4 above, the coefficient of determination (R2) is 0.418 or 41.8%. This means that the Effectiveness of the Accounting Information System (Y) is influenced by the Training variable (X1), Task Complexity variable (X2), and User Participation variable (X3) by 41.8%. The remaining 58.2% is influenced by other variables outside the variables in this study.

t-test

The t-test is conducted to determine whether the independent variables individually influence the dependent variable. The criteria for this partial test (t-test) are as follows:

a. If the |tcount| value is ≥ ttable or t-significance is <0.05, it can be concluded that the independent variable influences the dependent variable.
b. If the |tcount| value is ≥ ttable or t-significance is <0.05, it can be concluded that the independent variable influences the dependent variable. ≤ ttable or t significance > 0.05, it can be concluded that the independent variable has no effect on the dependent variable.

The partial test results (t-test) can be seen in the table below:

Table 5.
t-Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	7,145	3,457		2,067	,041
	Pelatihan	,206	,076	,238	2,718	,007
	Kompleksitas Tugas	,045	,048	,071	,927	,356
	Partisipasi Pemakai	,362	,072	,443	5,037	<,001

a. Dependent Variable: Efektivitas Sistem Informasi Akuntansi

Based on Table 5 above, the results show that the Training variable (X1) has a t-count of 2.718 with a significance of 0.001 and a t-table (α = 0.05; df = 128) of 1.97867. Because t-count > t-table, namely 2.718 > 1.97867, or the sig t value (0.001) < α (0.05), then H1 is accepted. This indicates that Training (X1) has a partial effect on the Effectiveness of Accounting Information Systems (Y).

Based on Table 5 above, the same results are obtained, namely that the Task Complexity variable (X2) has a t-count of 0.927 with a significance of 0.001 and a t-table (α = 0.05; df = 128) of 1.97867. Because t-test > t-test, i.e., 0.927 > 1.97867, or a significant t-test value (0.001) < α (0.05), H1 is accepted. This indicates that Task Complexity (X2) has a partial effect on Accounting Information System Effectiveness (Y).

Based on Table 5 above, the results show that the User Participation variable (X3) has a calculated t-test of 5.037 with a significance level of 0.001, and a t-test (α = 0.05; df = 128) of 1.97867. Because t-test > t-test, i.e., 5.037 > 1.97867, or a significant t-test value (0.001) < α (0.05), H1 is accepted. This indicates that User Participation (X3) has a partial effect on Accounting Information System Effectiveness (Y).

Multiple Linear Regression Test

Table 6.
Multiple Linear Regression Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	7,145	3,457		2,067	,041
	Pelatihan	,206	,076	,238	2,718	,007
	Kompleksitas Tugas	,045	,048	,071	,927	,356
	Partisipasi Pemakai	,362	,072	,443	5,037	<,001

a. Dependent Variable: Efektivitas Sistem Informasi Akuntansi

Source: Processed Research Data, 2025

Based on the table above, the formula for forming a multiple linear regression equation can be seen in the Unstandardized Coefficients table for the β (Betha) column, which is 7.145 for the constant value, 0.206 for the training value, 0.045 for the task complexity value, and 0.362 for the user participation value.

Discussion

This study was conducted to examine the influence of Training, Task Complexity, and User Participation on the Effectiveness of Accounting Information Systems, with Top Management Support as a moderating variable. The questionnaire respondents targeted in this study were treasurers from all Regional Apparatus Organizations (OPD) in East Nusa Tenggara Province. After the required data were collected, the results were tested using validity and reliability tests. Subsequently, further analyses were performed, including normality testing, multicollinearity testing, heteroscedasticity testing, Moderated Regression Analysis (MRA), and hypothesis testing.

Based on the data analysis described previously, the results show that Training has a significant influence on the Effectiveness of Accounting Information Systems. Thus, H1 is accepted. This indicates that, partially, Training significantly affects the effectiveness of Accounting Information Systems. The multiple linear regression analysis shows that the Training variable has a positive value, meaning that the higher the level of training received by a treasurer, the higher the effectiveness of the Accounting Information System they use. This suggests that the more comprehensive the training, particularly regarding the operation of the regional government information system, the more effective the system becomes. These findings align with Mutmainna (2020), who stated that continuous and structured training can significantly improve users' ability to operate accounting information systems. Additionally, Saputra (2019) found that effective training allows employees to master new system features, which enhances work efficiency and effectiveness. Dewi L. E. (2019) also reported similar results in her study at BPR Bali, showing that training has a positive and significant effect on the effectiveness of accounting information systems, explaining that training activities aim to develop users' abilities. Proper training programs minimize user errors and reduce anxiety or resistance toward system upgrades.

The results also show that Task Complexity has a significant influence on the Effectiveness of Accounting Information Systems. Thus, H2 is accepted. This indicates that, partially, Task Complexity significantly affects system effectiveness. The multiple linear regression analysis shows that the Task Complexity variable has a positive value, meaning that the higher the complexity of tasks handled by a treasurer, the broader their knowledge becomes. Although the tasks may be demanding, they are still completed responsibly. Financial management personnel with high competence—including technical accounting skills, regulatory understanding, and the ability to use financial management systems—significantly contribute to improving system effectiveness. The positive regression coefficient indicates that as task complexity increases, the effectiveness of the accounting information system also increases.

These findings are consistent with Suputra (2021), who stated that task complexity positively affects the effectiveness of accounting information systems. This means that the higher the task complexity, the higher the system's effectiveness. Complex tasks make work more efficient, especially in utilizing information systems. Similarly, Arizona et al. (2021) found a significant positive relationship between task complexity and accounting information

system effectiveness in Village Credit Institutions (LPD) in North Bali. Measuring task complexity in using a system is crucial. Frequently assigning complex tasks makes employees more accustomed to dealing with demanding workloads, thus improving system utilization and enhancing the effectiveness of accounting information systems. Therefore, task complexity positively affects system effectiveness.

The results further show that User Participation significantly influences the Effectiveness of Accounting Information Systems. Thus, H3 is accepted. This indicates that, partially, User Participation significantly affects system effectiveness. The multiple linear regression analysis shows a positive value for the User Participation variable, meaning that the higher the level of user involvement—whether in planning, developing, implementing, or evaluating the system—the more effective the accounting information system becomes. This positive regression coefficient indicates that active user participation helps the system become more relevant, accurate, user-friendly, and capable of supporting appropriate decision-making.

These findings are consistent with studies by Dewi and Arizona et al., which show that user participation positively affects the effectiveness of accounting information systems in LPDs in Sukawati District. The higher the level of user participation in system implementation, the higher the system's effectiveness. User participation has long been considered a key factor influencing the success or failure of information system development. Participation in system development provides positive organizational impacts and economic benefits. Similar results were also found by Anggarini et al. (2021), showing that user participation significantly influences the effectiveness of accounting information systems in LPDs in Denpasar City.

The analysis also shows that Top Management Support does not moderate the influence of Training on the Effectiveness of Accounting Information Systems. Thus, H4 is rejected. This means that even with top management support, the effect of training on system effectiveness does not significantly increase. This may occur because training success depends more on the quality of the materials, delivery methods, and participants' commitment than on leadership support. Employees who receive high-quality training can still enhance their competence in operating the accounting system even without direct intervention from upper management. Conversely, strong management support will not have much impact if the training provided is irrelevant to user needs. Thus, system effectiveness is more strongly influenced by targeted training than by top management support as a moderating factor.

Similarly, the results show that Top Management Support does not moderate the influence of Task Complexity on the Effectiveness of Accounting Information Systems. Thus, H5 is rejected. High task complexity that exceeds employee capacity continues to hinder system effectiveness, even with top management support. However, when task complexity aligns with employee capabilities, the system can be utilized optimally without significant leadership involvement. Support in the form of policies, facilities, or motivation becomes less meaningful if the workload is too high and beyond user capacity. Nonetheless, competent and experienced employees still attempt to complete tasks efficiently despite complex demands. Therefore, system effectiveness is more influenced by the alignment between task complexity and user capacity than by top management support as a moderating factor.

Finally, the results indicate that Top Management Support does not moderate the influence of User Participation on the Effectiveness of Accounting Information Systems. Thus, H6 is rejected. High user participation in planning, developing, and using the system continues to positively influence system effectiveness, even without strong top management support. Conversely, when user participation is low, managerial support does not automatically increase system effectiveness. Leadership support in the form of policies, facilities, or motivation becomes less impactful when users are not actively engaged in contributing feedback, operating the system, or optimizing its use. However, employees with strong commitment and responsibility still strive to maximize system usage despite limited management support. Therefore, the effectiveness of accounting information systems is determined more by the extent of user participation itself rather than by top management support as a moderating factor.

CONCLUSION

Based on the analysis and discussion in the previous chapter, several conclusions can be drawn regarding the influence of training, task complexity, and user participation on the effectiveness of accounting information systems, with top management support as a moderating variable. The conclusions drawn are as follows:

1. Training has a significant positive effect on the Effectiveness of Accounting Information Systems. The t-test shows t = 7.405, sig = 0.001 < 0.05, so H1 is accepted.
2. Task Complexity significantly influences the Effectiveness of Accounting Information Systems. The t-test shows t = 4.552, sig = 0.001 < 0.05, so H2 is accepted.
3. User Participation significantly affects the Effectiveness of Accounting Information Systems. The t-test shows t = 9.075, sig = 0.000 < 0.05, so H3 is accepted.
4. Top Management Support does not moderate the effect of Training on system effectiveness. In the MRA test, b2 is significant but b3 is not, so the variable acts only as a predictor. H4 is rejected.
5. Top Management Support does not moderate the effect of Task Complexity on system effectiveness. The MRA test shows b2 significant, b3 not significant, placing it as a predictor. H5 is rejected.
6. Top Management Support does not moderate the effect of User Participation on system effectiveness. The MRA results again show b2 significant, b3 not significant, indicating it functions only as a predictor. H6 is rejected.

REFERENCES

Ablelo, J. E., Anakotta, F. M., & Loupatty, L. G. (2021, March). Pengaruh Partisipasi Pengguna, Dukungan Manajemen Puncak, Dan Kemampuan Teknik

Anjani, P. W., & Wirawati, N. G. P. (2018). Pengaruh usia, pengalaman kerja, tingkat pendidikan, dan kompleksitas tugas terhadap efektivitas pengguna sistem informasi akuntansi. *E-Jurnal Akuntansi Universitas Udayana*, *22*(3), 2430-2457.

Chandrika R. Vegathree, Rafika Sari, Mutiara K. Ratu. (2025). *Pengaruh Dukungan Manajemen Puncak, Kemampuan Teknik Personal, Serta Program Pelatihan Dan Pendidikan Terhadap Kinerja Sistem Informasi Akuntansi*. **Jurnal Revenue.** (Vol 5)

Chotimah, C., & Kartika, A. (2017). *Pengaruh gender, tekanan ketaatan, kompleksitas tugas, dan pengalaman auditor terhadap audit judgment. Dinamika Akuntansi Keuangan Dan Perbankan, 6*(1).

Darlis, E., Sari, R. N., & Febrianti, I. (2014). *Pengaruh Pengetahuan terhadap Audit Judgement dengan Kompleksitas Tugas dan Independensi sebagai Variabel Moderating* (Studi pada Akuntan Publik di KAP Wilayah Sumatera) (Doctoral dissertation, Riau University).

Devita Savitri. (2024). *Sistem Informasi Pemerintahan Daerah Republik Indonesia.* **DetikEdu**.

Dewi, D. P. Y. P. (2020). *Pengaruh Dukungan Manajemen Puncak, Transfer Teknologi Dan Program Pendidikan Dan Pelatihan Pengguna Terhadap Efektivitas Sistem Informasi Akuntansi Pada Bumdes Di kabupaten Buleleng* (Doctoral dissertation, Universitas Pendidikan Ganesha).

Fariyana Kusumawati. (2006). *Pengaruh Partisipasi Pemakai dan Dukungan Manjemen Puncak Terhadap Kepuasan Pemakai Dalam Pengembangan Sistem Informasi Akuntansi.* **E-jurnal Sekolah Tinggi Ilmu Ekonomi Indonesia STIESIA, Surabaya.**

Farokh, M. S., & Setyorini, M. (2020). Pengaruh Keterlibatan Pengguna. *Program Pendidikan dan Pelatihan, Dukungan Manajemen Puncak Terhadap Kinerja Sistem*.

Fatimah, S. (2021). Pengaruh Keterlibatan Pemakai, Kemampuan Teknik Personal, Ukuran Organisasi, Dukungan Manajemen Puncak Dan Budaya Kerja Selama Pandemi Covid-19 Terhadap Kinerja Sistem Informasi Akuntansi (Studi Pada PDAM Tirta Merapi Kabupaten Klaten). Bachelor (S1) thesis, Universitas Widya Dharma Klaten.

Febriyanti, N. W. A. N. (2024). *Pengaruh Kemampuan Teknik Personal, Keterlibatan Pemakai, Kompleksitas Tugas, Pengalaman Kerja, dan Dukungan Manajemen Puncak Terhadap Efektivitas Sistem Informasi Akuntansi Pada LPD Se-Kecamatan Sukawati* (Doctoral dissertation, Universitas Mahasaraswati Denpasar).

Gede B. D. Pradana, Ni Gusti P. Wirawati (2018). *Pengaruh Pelatihan dan Kompleksitas Tugas Pada Efektivitas Penggunaan Sistem Informasi Akuntansi Rumah Sakit Swasta di Kota Denpasar.* **E-jurnal Akuntansi Universitas Udayana** (Vol. 25,3).

Hartono, Tommy, dan Mauli Siagian (2020). *Pengaruh Displin Kerja Dan Pelatihan Terhadap Kinerja Karyawan di PT. BPR Sejahtera Batam.* Jurnal Ilmiah Manajemen Bisnis dan Inovasi Universitas Sam Ratulangi (Jambi Insrat) 7(1):220-37.

Helmy, M. R., Fitrios, R., & Supriono, S. (2023). Pengaruh Pelatihan Pengguna Dan Kepemimpinan Kewirausahaan Terhadap Kinerja Organisasi Dengan Implementasi Sistem Informasi Akuntansi Sebagai Pemediasi: The Influence Of User Training And Entrepreneurial Leadership On Organizational Performance With The Implementation Of Accounting Information Systems As A Mediator. *Current: Jurnal Kajian Akuntansi dan Bisnis Terkini*, *5*(1), 52-71.

I Kadek Muliana, Herkulanus Bambang Suprasto, Ni Made Dwi Ratnadi. (2017). I Putu Deddy S. Putra, Sang Ayu Putu A. Indraswarawati. (2020). *Pengaruh Partisipasi Pemakai Sistem Informasi Akuntansi Terhadap Efektivitas Sistem Informasi Akuntansi Dengan Kemampuan Teknik Personal Sebagai Variabel Pemoderasi Pada Lembaga Perkreditan Desa Di Kecamatan Sukawati.* **Widya Akuntansi Keuangan** (Vol. 2, No. 2).

Irma Paramita Sofia. (2018). **Sistem Informasi Akuntansi**. Universitas Pembangunan Jaya, Tangerang Selatan.

Isbahi, M. B., Zuana, M. M. M., & Toha, M. (2024). The Multi-Social Relation of the Cattle Industry in the Plaosan Subdistrict Animal Market of Magetan Regency. *Malacca: Journal of Management and Business Development* , *1*(1), 31–46. https://doi.org/10.69965/malacca.v1i1.51

Jackson, S. E., Sculer, R. S., & Werner, S. (2018). Managing Human Resources (12 (ed.)). Oxford University Press

Jensen, M. C., dan W. H. Meckling. 2019. *Theory of the firm: Managerial behavior, agency costs and ownership structure. In Corporate Governance (pp. 77-132). Gower.*

Kustina, K. T., Medianasuari, I. A. P. D., Permana, G. P. L., & Utari, I. A. D. (2023). *Efektivitas Sistem Informasi di Bank Perkrditan Rakyat: Eksplorasi Pengaruh Kemajuan Teknologi Informasi, Kompetensi Pengguna dan Kepuasan Pengguna Sistem Informasi Akuntansi.* WACANA EKONOMI (Jurnal Ekonomi, Bisnis dan Akuntansi), 22(2), 186-198.

Lie Liana. (2009). *Pengguna MRA dengan SPSS Untuk Menguji Pengaruh Variabel Moderatting terhadap Hubungan Antara Variabel Independen dan Variabel Dependen*. **Jurnal Teknologi Informasi Dinamika**. (Vol. XIV, No. 2).

Meidita, A. (2019). *Pengaruh Pelatihan dan Kompetensi Terhadap Kepuasan Kerja Melalui Motivasi Kerja.* Maneggio: **Jurnal Ilmiah Magister Manajemen**, 2(2), 226-237.

Meiryani (2020) Kualitas Sistem Informasi Akuntansi dan Faktor-Faktor yang Memengaruhi. 1st edn. Edited by W. & E. Widianto. Jakarta: Kencana.

Mon, M. D., & Mulyadi, S. (2021, April). Pengaruh Kompensasi, Pelatihan dan Pengembangan, Pemberdayaan Karyawan Terhadap Turnover Intention dan Kepuasan kerja Sebagai Mediasi di Hotel Berbintang Kota Batam. In *CoMBInES-Conference on Management, Business, Innovation, Education and Social Sciences* (Vol. 1, No. 1, pp. 2165-2177).

Muliana, I, K., Suprasto, H. B., & Ratnadi, N. M. D (2017). *Pengaruh Partisipasi Pemakai Sistem Informasi Akuntansi Dukungan Manajemen Puncak Dan Pendidikan Dan Pelatihan Pada Kinerja Sistem Informasi Akuntansi Dengan Kompleksitas Tugas Sebagai Variabel Pemoderasi.* E-Jurnal Ekonomi dan Bisnis Universitas Udayana, 6(2017), 24132440.

Nasrizal Nasrizal, Vince Ratnawati, Dwi Rossatifa. (2009). *Pengaruh Partisipasi Terhadap Kepuasan Pemakai Dalam Pengembangan Sistem Informasi Akuntansi Yang Dimoderasi Oleh Dukungan Manajemen Puncak, Kompleksitas Tugas, Pengaruh Pemakai, Dan Pendidikan & Pelatihan Pemakai.* **Jurnal Kajian Akuntansi Dan Auditing** (Vol. 4, No. 2).

Noe, R. A. (2020). Employee Training & Development (8th ed.). Mc Graw Hill Education

Nuswan Sudariana, M.M, Yoedani. (2021). *Analisis Statistik Regresi Linier*. **Nusa Putra University, Seniman Nusa Putra.**

Pakpahan, D. S., & Afrizon, A. (2020). Efektivitas sistem informasi akuntansi pada perusahaan jasa keuangan di Jakarta. *Jurnal Kajian Akuntansi Dan Bisnis Terkini*, *1*(1), 116-130.

Personal Terhadap Kinerja Sistem Informasi Akuntansi (Pada OPD Kabupaten Maluku Barat Daya). In *Conference on Economic and Business Innovation (CEBI)* (pp. 868-893).

Pontoh, G. T., Purisamya, A. J., & Sarifudin, E. F. (2023). PENGARUH COMPUTER KNOWLEDGE, TRAINING, DAN COMPUTER SELFEFFICACY TERHADAP EFEKTIFITAS SISTEM KEUANGAN DESA. *Jurnal BPPK: Badan Pendidikan dan Pelatihan Keuangan*, *16*(1), 14-24.

Praditya M. S, Entot S, Ngurah P. M. A. Durya, Natalistyo T. A. H. (2024). *Analisis Kinerja Sistem Informasi Pengelolaan Keuangan Daerah Dengan Moderasi Pendidikan dan Pelatihan Pengguna.* **Jurnal STIE Semarang** (Vol. 16, No. 2).

Princessa, I G. A. A. M., Sunarwijaya, I. K., & Adiyadnya, M. S. P. (2022). Efektivitas Sistem Informasi Akuntansi dan Faktor-faktor yang Mempengaruhi. *Kumpulan Hasil Riset Mahasiswa Akuntansi (KHARISMA), 4*(3), 1-11.

Puspitawati, L. (2021). *Sistem Informasi Akuntansi: Kualitas dan Faktor Lingkungan Yang Mempengaruhi.* Bandung:Rekayasa Sains.

Putri, S. D., Kuntadi, C., & Pramukty, R. (2023). Faktor-faktor Mempengaruhi Kinerja Sistem Informasi Akuntansi: Partisipasi Pemakai Sistem Informasi Akuntansi, Kemampuan Pemakai Sistem Informasi Akuntansi, Ukuran Organisasi, dan Program Pelatihan Pendidikan. Madani: *Jurnal Ilmiah Multidisiplin, 1*(5).

Putri, N. K. D. L., & Karyada, I. P. F. (2020). Pengaruh Keterlibatan Pemakai, Kompleksitas Tugas Dan Dukungan Manajer Terhadap Efektivitas Penerapan Sistem Informasi Akuntansi Pada Koperasi Simpan Pinjam Di Kecamatan Denpasar Selatan. *Hita Akuntansi dan Keuangan*, *1*(2), 851-883.

Riska Gustiana, Taufik Hidayat, Achmad Fauzi. (2022). *Pelatihan dan Pengembangan Sumber Daya Manusia (Suatu Kajian Literatur Review Ilmu Manajemen Sumber Daya Manusia).* **Jurnal Ekonomi Manajemen Sistem Informasi**. (Vol.3, *Issue* 6).

Rusmiati, R. (2012). *Pengaruh Keterlibatan Pengguna, Kapabilias Personal Sistem Informasi, Ukuran Organisasi, dan Formalisasi Pengembangan Sistem Terhadap Kepuasan Pengguna Sistem Informasi Akuntansi.* Skripsi, Fakultas Ekonomi Universitas Pasunda.

Rustiarini, N. W. (2013). Pengaruh kompleksitas tugas, tekanan waktu, dan sifat kepribadian pada kinerja. *Makara Seri Sosial Humaniora*, *17*(2), 126138.

Salsabilla A. P. Deadewi, Gede Juliarsa. (2023). *Pengaruh Efektivitas Sistem Informasi Akuntansi Pada Kinerja Karyawan Dengan Budaya Organisasi Dan Dukungan Manajemen Puncak Sebagai Pemoderasi.* **Jurnal Ilmiah Dan Karya Mahasiswa** (Vol. 1, No. 5). OPEN ACCESS.

Sanusi, ZM, Iskandar, TM dan June M. L. Poon. 2007. Effect of Goal Orientation and Task Complexity on Audit Judgment Performance. *Malaysian Accounting Review.* pp. 123-139.

Sugiyono, Prof. Dr. (2018). **Metode Penelitian Kuantitatif, Kualitatif dan R&D**. Bandung: Alfabeta.

Sugiyono. (2019). *Metodelogi Penelitian Kuantitatif dan Kualitatif Dan R&D.* Bandung: ALFABETA.

Supriyono, R. A. (2018). Pengertian Teori Agensi. *Journal of Chemical Information and Modeling*, *110*(9).

Susanto, A. (2013). Sistem Informasi Akuntansi: Struktur Pengendalian Risiko Pengembangan. *Edisi Perdana. Cetakan Pertama. Bandung: Lingga Jaya*.

Syafitri, L., Fitrios, R., & Indrawati, N. (2024*). Cloud Computing Sebagai Mediasi Pengaruh Dukungan Manajemen Puncak Terhadap Kinerja Organisasi Cloud Computing As A Mediation Of The Influence Of Top Management Support On Organizational Performance.*

Wicaksono, Imam Wahyu and Murdianingrum, Sri Luna (2017) *Pengaruh Keterlibatan Pengguna, Dukungan Manajemen Puncak, Kemampuan Teknik Personal, Program Pendidikan Dan Pelatihan Terhadap Kinerja Sistem Informasi Akuntansi (Studi Empiris pada SKPD Dinas Pemerintah Kota Yogyakarta).* Kajian Akuntansi, 12 (2). pp. 137-146. ISSN 1907-1442.

Y. Yulia. (2019). *Kompleksitas Tugas.* Repository STEI.

Yoga Saputra, Nora Pitri Nainggolan. (2022). *Pengaruh Pelatihan dan Penempatan Terhadap Kinerja Karyawan di PT. Vasan Mandiri Indonesia.* **Universitas Putera Batam**.

Zalukhu, Z. S., & Huatauruk, R. P. S. (2022). Analisis Faktor-Faktor Yang Mempengaruhi Efektivitas Sistem Informasi Akuntansi. *Accounting Progress*, *1*(1), 18-26.