

## INFORMATION TECHNOLOGY AND UTILIZATION OF FINANCIAL INFORMATION SYSTEMS ON THE EFFECTIVENESS OF ACCOUNTING INFORMATION SYSTEM IN COOPERATIVES

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### Abstract

The purpose of this study was to determine information technology and the use of financial information systems on the effectiveness of accounting information systems in cooperatives, especially in Purwareja Klampok and Mandiraja districts. This type of research is quantitative research by distributing questionnaires directly to managers and the finance department of cooperatives in the two sub-districts. The population of this research is the manager and the finance department as many as 80 people. The sample in this study was taken 80 people. The data analysis technique used multiple linear regression. Quantitative analysis in this study will use validity and reliability tests with Cronbach's Alpha. Classical assumption test includes normality test, multicollinearity test and heteroscedasticity test. The results show that information technology and the use of financial information systems have a significant and significant effect on accounting information systems as evidenced by the results of the calculation of the SPSS application program, the R value of the two variables is 0.806 while the coefficient of determination is 0.650 (65%) meaning that the percentage of the influence of information technology variables and utilization of financial information systems by 65% and the remaining 35% is influenced by other variables that are not included in this study.

**Keywords:** *Information Technology, Utilization of Financial Information System*

## 1. Introduction

Technology is a useful tool to assist individuals in completing their work (Ratnaningsih, 2014). Information technology is not only important as a means of communication via electronics, but is an important tool that should be owned as a means to coordinate and archive important documents. Information technology is applied in order to manage information which is currently an important part due to the increasing complexity of management tasks, the influence of the international economy (globalization), the need for faster response times, pressure due to business competition.

Cooperatives also need to optimize the use of financial information systems to build a network of accounting information systems in order to accelerate the processing of transaction data and the presentation of financial reports. The application of a financial information system also affects cooperatives where the application of an accounting information system has a tremendous impact. In general, the purpose of using a financial information system in cooperatives places more emphasis on reducing errors in processing transactions that have been done manually and providing accurate financial statement information, and timely manner that management can use to make decisions.

The development of Information Technology (IT) is growing rapidly to provide a lot of convenience in various aspects of activities business. In a highly competitive business environment, Information technology (IT) is a fundamental resource in supporting competitive opportunities and become a strategic weapon in the organization. Computers supported by a wide range of easy-to-operate software allows for managers to be able to access information quickly and possibly more many reports are needed, because by using the information network related to the external environment (e.g. government, competitors) and internal data (from various departments) can be obtained easily and quickly.

If the information technology is running and well integrated, the financial information that will be generated will be valid. Likewise, information systems related to the purchase of raw materials or goods trading, cash receipts, cash disbursements, employee salaries and others. Accounting information system is a very important part for improve organizational efficiency and support competitiveness by provide financial and accounting information to management. The system can be said to be effective if the system is able to produce information that is acceptable and capable of meeting information expectations timely, accurate, and reliable. In addition, the effectiveness of using information systems in a company must also consider the human resource factor.

The accounting information system used in the company is organization depends on how well its users are able to implement the application well and know very well what is there in the system and can implement it properly. So success of technology and information systems at the company have a close relationship to human resources in the company or organization.

The importance of the use of accounting information systems that are supported by the use of information technology and good system users encourage an organization to create excellence. In the development of information systems, users become an important focus related to the effectiveness of accounting information systems.

The success of an organization is not only determined by the technology, but is determined by its suitability to the environment of the system users involved. Good technical ability of system users is expected in order to improve the performance of accounting information systems. Reliable users and aware of technological development is expected to improve its performance. Good organizational performance is created by users in carrying out their duties on time.

Bodnar and William (2000) in the journal Ratnaningsih and Suaryana (2014) define an accounting information system as a resource used to process data into information. Financial institutions are required to pay attention to the value of information presented in financial statements for planning, controlling and decision-making purposes. Accounting information contained in cooperatives must also be relevant, understandable, comparable and reliable. The low quality of financial reports can be caused by a financial accounting system that has not been implemented optimally and weak supervision. So there needs to be an increase in the application of Information Technology and financial information systems.

From the results of pre-research with the government (Disperindagkop) that cooperatives in Purwareja Klampok and Mandiraja sub-districts are familiar with information technology and financial information systems, but not optimally. So that the cooperatives in the sub-district become an attraction for researchers, where information technology and the use of financial information systems have not been implemented optimally, which may reduce the quality of financial reports.

### **Formulation of the problem**

Based on the description of the background above, the researchers formulated the problem as follows:

1. Is there any influence of information technology on the effectiveness of accounting information systems?
2. Is there any effect of using the financial information system on the effectiveness of the accounting information system?
3. Is there any influence of information technology and financial information systems on the effectiveness of accounting information systems?

### **Research purposes**

Based on the formulation of the problem that has been stated above, the purpose of this study is to find out:

1. To determine the magnitude of the influence of information technology on the effectiveness of accounting information systems.
2. To determine the magnitude of the effect of the use of financial information systems on the effectiveness of accounting information systems.
3. To determine the magnitude of the influence of information technology and the use of financial information systems on the effectiveness of accounting information systems.

### ***Technology Acceptance Model (TAM)***

*Technology Acceptance Model (TAM)* is one of the models built to analyze and understand the factors that influence the acceptance of the use of computer technology. TAM is the result of the development of Theory of Reasoned Action (TRA) which was previously developed by Fishbein and Ajzen in 1980. TAM aims to explain and estimate user acceptance of an information system. TAM provides a theoretical basis to determine the factors that influence the acceptance of a technology in an organization. TAM explains the causal relationship between beliefs (of the usefulness of an information system and its ease of use) and the behavior, goals/needs and actual use of users/users of an information system.

The TAM model is actually adopted from the TRA (Theory of Reasoned Action) model, which is a theory of reasoned action with the premise that a person's reaction and perception of something will determine that person's attitude and behavior. Reactions and perceptions of Information Technology (IT) users will affect their attitude towards acceptance of the technology. One of the factors that can influence it is the user's perception of the usefulness and ease of use of IT as a reasoned action in the context of technology users, so that the reason someone sees the benefits and ease of using IT makes the person's actions/behaviors a benchmark in the acceptance of a technology.

### ***Theory of Reasoned Action (TRA)***

The TAM model, which was developed from psychological theory, explains the behavior of computer users, namely based on beliefs, attitudes, intentions and user behavior relationships. The purpose of this model is to explain the main factors of user behavior towards technology user acceptance. In more detail explain the acceptance of IT with certain dimensions that can affect the acceptance of IT by users (users). This model places usage as the dependent variable, and perceived usefulness (U) and ease of use (EOU) as independent variables. These two independent variables are considered to be able to explain usage behavior.

The theoretical basis and concepts used in this study begin with TAM theory as a grand theory which states that the second variable of the TAM model namely usefulness (usefulness) and ease of use (ease of use) can be explain aspects of user behavior. TAM theory is based on by the TRA theory developed by Fishbein and Ajzen.

TRA is a theory dynamics of the formation of attitudes and behavior. Overall individual behavior explanation by considering the trust factor. Furthermore, the attitude towards use is the attitude of liking or disliking the use of a particular product. This attitude can predict a person's intention to use or not use a product.

Attitudes towards technology use are defined as an evaluation of their interest in using technology in which the individual believes that a particular subject will can improve their work performance. Perceived ease of use is the degree to which a person believes that the use of certain systems can reduce a person's effort in doing something

## **Effectiveness**

### 1) Definition of Effectiveness

Effectiveness is the relationship between output and goals. The greater the contribution of output to the achievement of goals, then the more effective the organization, program or activity. Effectiveness namely the ability to choose goals or objectives right and achieve it. Therefore, the effectiveness shows on the relationship between the output or what has been achieved or the results achieved actually achieved with the goal or what has been specified in the plan or expected results. Something

The organization is said to be effective if the output produced can be meet the expected goals. In the context of achieving goals, so effectiveness means do the right job. Effectiveness refers to successful achievement of organizational goals, so that effectiveness is also described as a measure of whether managers do the right job. Effectiveness is defined as the extent to which an organization realizes its goals.

### 2) Effectiveness Concept

Effectiveness is the relationship between output and goals. It means that effectiveness is a measure of how far the level of output the policies and procedures of the organization to achieve the objectives set. In the theoretical and practical sense, there is no universal agreement on what is meant by effectiveness. However, the definition of effectiveness relates to general approach. When traced, effectiveness comes from the basic word effective which means:

- a) Has an effect (influence, effect, effect)
- b) Using methods/methods, means/tools in implementing activities so that they are successful in order to achieve optimal results.

### 3) Effectiveness Measure

Measurement of effectiveness can be done by looking at the results work accomplished by an organization. Effectiveness can be measured through the success or failure of an organization to achieve its goals. If an organization succeeds in achieving its goals, then the organization can be said to have been running effectively the most important thing is effectiveness does not say about how much the costs incurred to achieve these goals have been achieve the goals that have been set. Measure of effectiveness as following:

#### a) Goal Achievement

Achievement is the overall effort to achieve the goal should be viewed as a process. Therefore, so that the achievement of the final goal is increasingly guaranteed, it is necessary phasing, both in the sense of phasing out the achievement of its parts and phasing in the sense of its periodization. The achievement of goals consists of several factors, namely: time and targets which are concrete targets.

#### b) Integration

Integration is a measurement of the level of competence of a organizations to conduct outreach, consensus development and communication with various organizations other. Integration involves the socialization process.

#### c) Adaptation

Adaptation is the ability of an organization to adapt themselves with their environment. For this purpose, a benchmark is used recruitment and recruitment process.

### **Accounting Information System Effectiveness**

Bodnar (2006: 3), states that an accounting information system is a collection of equipment and people (resources) created to converting financial data into a form that is useful for users and useful for the user. Sugiantara (2017), states that information systems accounting as a component and element of an organization that provides information for users by processing financial events. system that Effective is defined as a system that can have a positive influence to the user (Trabulsi, 2018). The effectiveness of an accounting information system i.e. measures that contribute to decision making through a collection of resources that are collected, processed and stored in electronic data, which is then converted into information that can be useful. The user's technical ability is the average education or experience level of a person. (Widyasari & Suardikha, 2015). Garrison et al., (2015) argues that the technical capabilities of the users of a system are key to realizing the success of an organization. Therefore, companies will be very selective when recruiting employees, to obtain employees with good personal technical skills.

A company can be said to have an effective information system if by using the information system, the company's goals can be achieved. The effectiveness of the information should be evaluated in relation to the objectives for decision making. Effectiveness then is the method made for making decisions, information that has been processed by technology by decision makers, and the capacity of decision makers to process information (Gelinias, 2010). The indicators of the effectiveness of the Accounting Information System according to William H. DeLone and Ephraim R. Mclean quoted from Didi Achjari (2004) are:

- a. Information Quality, related to the output of information systems
- b. System Quality, which evaluates the information processing system itself
- c. Service Quality, to access consumer expectations and perceptions of service quality in retail and service organizations
- d. System Use, related to the use of the output of the information system by the recipie
- e. User satisfaction, related to the recipient's response to the use of information system output
- f. Net Benefits, a series of entities from individual to national entities that can have an impact on information system activities

### **Information Technology**

Information technology is a combination of computerized and communication technology in the form of a system of software and hardware used to process, process, obtain, compile, store, manipulate data in various ways to produce quality information in order to produce strategic information for decision making. decision.

According to Warsita (2012), there are six functions of information technology, namely:

- 1) The function of information technology as a catcher (Capture)
- 2) The function of information technology as a processor (Processing)



- 3) The function of information technology as generating (Generating)
- 4) Function information technology as storage (Storage)
- 5) Function information technology as a retrieval (retrifal)
- 6) Function information technology as transmission (Transmission)

Technology has rapid developments rapidly and even capable of producing a variety of system technologies which is designed to assist human work in produce the best quality information. With this sophistication expected to have a positive impact on the continuity of performance company by producing timely financial reports, accurate, and reliable.

Technology can be said as the development of the world technology in various aspects. The technology referred to here is more emphasis on computerized technology in management accounting information system. Computerized technology can known or seen from the software and hardware. Because the more sophisticated the two devices, the more support the effectiveness and performance of accounting information systems, which still paying attention to the suitability of the need for technology it is for use.

Information technology will also develop better if the information technology environment is also good, the greater the technological environment in which a particular AIS application is developed and used. The IT environment includes a broad organizational vision for using IT, the way in which technology is currently used to record, process, store and communicate data, organization of people who are responsible for the acquisition and the development of information systems and processes by which applications developed, used, and maintained.

Accounting app is a software package used by organizations to record and store AIS data and generate reports. Application accounting can be made by the organization itself, by consultants or purchased by the company. This technology will provide a lot of convenience for the technology users in system implementation and decision making for users.

### **Utilization of Financial Information System**

Financial Information System is an information system that provides information to people or groups both within the company and outside the company regarding the company's financial problems. The information provided is presented in the form of special reports, periodic reports, results from simulations mathematics, expert system advice, and electronic communications. Peter (2008)

Financial information system is an information system that provides information to people or groups both within the company and outside the company that contains financial problems and also provides or contains information about the flow of money for users throughout the company.

Utilization of Financial Information Systems can be measured using the following indicators:

1. Data security
2. Speed and timeliness
3. Accuracy

4. Variations of reports or outputs and
5. System relevance.

Knowledge of information technology is not just knowledge technically, but more on its strength strategically. Technology the information applied must be acceptable, meaning that it is acceptable by everyone who will use it. If technological developments is not acceptable, then it can lead to unexpected behavior such as resistance to change. Resistance to change arises because not everyone is easy to accept change and assume that any change is an obstacle, can even be a threat. Resistance to change can also arise due to lack of knowledge or inability to operate new information technology. On the other hand, for dynamic people.

The development of information technology is an impetus for increasingly self development. Technology that is increasingly developing causes data processing using electronic devices such as computers is very profitable. System accounting information is defined as a computer-based system that process financial information and support task decisions in context of coordinating and controlling organizational activities.

Utilization of information technology is the use of optimization of computers (mainframe, mini, micro), software, databases, networks (internet, intranet), electronic commerce, and other types related to technology.

Utilization of information technology includes (a) data processing, information processing, management systems and work processes electronics, and (b) the use of advances in information technology so that public services can be accessed easily and cheaply by public.

### **Relevant Research Studies**

Several studies on information technology and the use of financial information systems on the effectiveness of accounting information systems have been carried out by several researchers. Kadek Indah Ratnaningsih, I Gusti Ngurah Agung Suaryana (2014) found that the variable of information technology sophistication has a positive and significant influence on the effectiveness of the accounting information system for star hotels in Bandung Regency. Natalia Paranoan, Christina Jeane Tandirerung, and Anthon Paranoan (2019). According to Putri (2017) that the use of financial information systems affects the effectiveness of accounting information systems. This study is in line with the research of Prasisca, Kharlina and Yunita (2012) that the use of financial information systems affects the effectiveness of accounting information systems.

## **2. Method**

### **Research sites**

This research was conducted in cooperatives in Purwareja Klampok and Mandiraja districts. The object of this research is the effectiveness of the accounting information system in the cooperatives of Purwareja Klampok and Mandiraja subdistricts. The population in this study are users of accounting information systems in the cooperatives of Purwareja Klampok and Mandiraja districts, totaling 80 users. The sampling method used was non-probability sampling, namely the saturated sampling technique.



The sample in this study amounted to 80 users. Multiple linear regression analysis was used to determine the effect between the independent variable and the dependent variable, whether each independent variable was positively or negatively related.

### **Types of research**

The research to be conducted is quantitative. According to Sugiyono (2015) quantitative research methods are research methods based on the philosophy of positivism, used to examine certain populations or samples, collect data using research instruments, and analyze quantitative/statistical data, with the aim of testing hypotheses that have been applied.

### **Research variable**

1. The independent variable (Independent) is a variable that affects or is the cause of changes or the emergence of the dependent variable (dependent). In this study, the independent variables are information technology (X1) and the use of accounting information systems (X2).
2. The dependent variable is the variable that is influenced or that becomes the result of the existence of the independent variable. In this study, the dependent variable is the effectiveness of the accounting information system (Y). 11pt, 1,15 lines spacing, Times New Roman)

### **Concept Definition and Variable Operational Definition**

#### **a. Information Technology**

Information technology includes computers (both hardware and software), various electronic office equipment, factory equipment and telecommunications (Mulyadi, 2014).

Indicator: *Hardware, Software, F* Communication Network facility

#### **b. Utilization of Financial Information System**

Financial information system is an information system that provides information to people or groups both within the company and outside the company that contains financial problems and also provides or contains information about the flow of money for users throughout the company. Indicators: Data security, Speed and timeliness, Accuracy, Variation of reports or outputs and Relevance of the system.

#### **c. Effectiveness of accounting information systems**

Financial accounting information systems are used for making economic, social, political decisions as well as accountability reports themselves. In addition to these goals, a more important goal in this report is the satisfaction of using Ramadhani's information (2014).

## **3. Result and Discussion**

### **1. Instrument Test**

#### **a. Validity test**

This study uses a significance of 0.05. Test result validity can be seen in the following table:

**Table 1**  
**Questionnaire Validity Level**

Variable	No. Items	rcount	Significant	Interpretation
Effectiveness of Accounting Information Systems	1	0.513	0.000<0.05	Valid
	2	0.526	0.000<0.05	Valid
	3	0.625	0.000<0.05	Valid
	4	0.566	0.000<0.05	Valid
	5	0.632	0.000<0.05	Valid
	6	0.424	0.000<0.05	Valid
	7	0.399	0.000<0.05	Valid
	8	0.425	0.000<0.05	Valid
	9	0.305	0.000<0.05	Valid
	10	0.265	0.000<0.05	Valid
Information Technology	1	0.744	0.000<0.05	Valid
	2	0.708	0.000<0.05	Valid
	3	0.785	0.000<0.05	Valid
	4	0.784	0.000<0.05	Valid
	5	0.510	0.001<0.05	Valid
Utilization of Financial Information System	1	0.394	0.000<0.05	Valid
	2	0.434	0.000<0.05	Valid
	3	0.474	0.000<0.05	Valid
	4	0.470	0.000<0.05	Valid
	5	0.436	0.000<0.05	Valid
	6	0.543	0.000<0.05	Valid
	7	0.407	0.000<0.05	Valid

Source: Processed primary data, 2021.

Based on the table above shows that all indicators to measure the variables in this study have a significant value <0.05. It is said to be valid if the variable is significantly <0.05 so that all indicators are said to be valid.

#### b. Reliability Test

The results of reliability testing can be seen in the following table:

**Table 2**  
**Reliability Test Results**

Variable	Cronbach Alpha	Criteria
Accounting Information System Effectiveness (Y)	0.641	Reliable
Information Technology (X1)	0.751	Reliable
Utilization of Financial Information System(X2)	0.742	Reliable

Source: Processed primary data, 2021.

From the table above, it can be seen that the entire Cronbach alpha value of each variable is greater than 0.06 (> 0.06). It is said to be reliable if Cronbach's alpha > 0.06.

Thus, all statement items from each variable can be declared to meet the reliability requirements.

## 2. Classic assumption test

Before analyzing the data regarding information technology and the use of financial information systems on the effectiveness of accounting information systems, a classical assumption test was conducted to test the prerequisites for multiple linear regression analysis. The prerequisite tests carried out include:

### a. Normality test

The normality test aims to test whether in a regression model, an independent variable and a dependent variable or both have a normal or abnormal distribution. In this study using the Kolmogorov-Smirnov test, the data is said to be normally distributed if the significance is greater than 0.005. Results normality testing can be seen in the following table:

**Table 3**  
**Normality Test Results**

One-Sample Kolmogorov-Smirnov Test

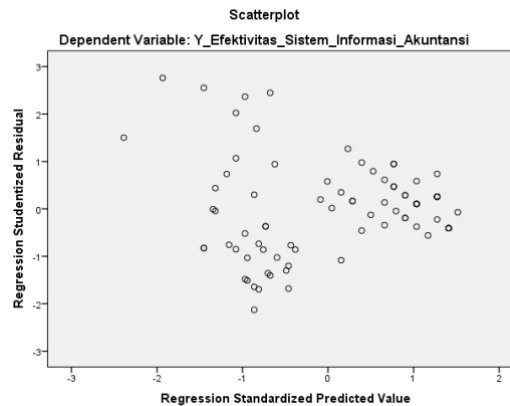
		Standardized Residual
N		80
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	,98870020
Most Extreme Differences	Absolute	,095
	Positive	,095
	Negative	-,049
Test Statistic		,095
Asymp. Sig. (2-tailed)		,142 <sup>c</sup>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: Processed Primary Data, 2021

Normality test results with Kolmogorov-Smirnov. testit is known that the significance value of Asymp.Sig (2-tailed) is 0.142 > from 0.05, so according to the basis for decision making in the Kolmogorov-Smirnov normality test above, it can be concluded that the data is normally distributed. This the assumptions or requirements for normality in the regression have been met.

### b. Heteroscedasticity Test

Heteroscedasticity test was carried out to determine whether in the regression model there was an inequality of variance from the residuals of one observation to another observation. A good regression model is one with homoscedasticity or no heteroscedasticity.



Source: Processed Primary Data, 2021

It can be seen that the points generated from the heteroscedasticity test spread in an orderly fashion or do not collect and form a reflection with the center point at zero, so it can be said that the variable variance in this model has the same value (constant) or there is no heteroscedasticity problem.

c. Multicollinearity Test

Multicollinearity test was conducted to determine whether the regression model found the existence of independent variables influencing each other. The presence or absence of multicollinearity problems can be seen in the Tolerance and Variance Inflation Factor (VIF) values. With the criteria if the tolerance number is above 0.05 and  $VIF < 10$ , it is said that there are no symptoms of multicollinearity. If the tolerance number is below 0.05 and  $VIF > 10$ , it means that there are symptoms of multicollinearity.

**Table 4**  
**Table of Multicollinearity Test Results**

Coefficients		
Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
X1_Technology_Information	.706	1.416
X2_Utilization_System_Information_financial	.706	1.416

a. Dependent Variable: Y\_Effectivity\_System\_Accounting\_Information

Source: Processed Primary Data, 2021

**3. Multiple Linear Regression Analysis Test**

Multiple linear regression examines the effect of two or more independent variables on one dependent variable. The regression coefficient is seen from the value of the unstandardized coefficient. To test information technology and the use of financial information systems on the effectiveness of accounting information systems, the data obtained were using multiple linear regression. The results of multiple linear regression are as follows:

**Table 5**  
**Multiple Linear Regression Test Results**

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	.893	2.187
X1_Technology_Information	.380	.107
X2_Utilization_System_Information_financial	.684	.089

Source: Processed Primary Data, 2021

#### 4. Hypothesis testing

##### a. t test

The t-statistical test basically aims to partially test the effect of each independent variable on the dependent variable. This test is carried out by comparing if the significance value is  $< 0.05$  or 5%, then the proposed hypothesis is accepted or said to be significant. Meanwhile, if the significance value is  $> 0.05$  or 5% then the proposed hypothesis is rejected or said to be insignificant.

**Table 6**  
**Test Result**

Model	Coefficients	
	T	Sig.
(Constant)	.408	.684
X1_Technology_Information	3.551	.001
X2_Utilization_System_Information_financial	7,661	.000

a. Dependent Variable: Y\_Effectivity\_System\_Accounting\_Information

sOProcessed primary data, 2021

From the calculation results obtained the value of t arithmetic variables as in the table above. From the table it can be seen that the t value for each variable is as follows:

##### a. The Effect of Information Technology on the Effectiveness of Accounting Information Systems in cooperatives

Based on the t-test in the table above, it is known that the information technology variable has a value of  $t_{count} > t_{table}$ , which is  $3.551 > 1.991$  and a significant value of  $0.001 < 0.05$ . Based on this,  $H_a$  is accepted and  $H_o$  is rejected.

Advances in information technology so rapidly affect the accounting information system. Technology changes impact on the accounting information system applied to a organization or company. Technology includes innovation new technology that provides users with a golden opportunity in help improve the effectiveness of accounting information systems. Many companies use accounting information systems in their the company's operations but the performance of the accounting information system unsatisfactory, such as the user does not understand how to operate the system so that the performance of the information system is not optimal.

The existing information system is not in accordance with the operating system in the company. The costs incurred for the manufacture of information systems greater than the benefits. The system made is not suitable with the size of the company seen from the company's operations, such as the existing information system is too sophisticated for a small company so that the company can incur losses due to the costs incurred issued is very large where in fact with an information system that simple can also meet the needs of enterprise information systems or on the other hand, large companies use information systems that simple so that it cannot meet the needs of information systems company.

**b. The Effect of Utilization of Financial Information Systems on the Effectiveness of Accounting Information Systems in cooperatives**

Based on the t-test in the table above, it is known that the variable utilization of financial information systems has a value of  $t_{count} > t_{table}$ , namely  $7.661 > 1.991$  and a significant value of  $0.000 < 0.05$ . Based on this,  $H_a$  is accepted and  $H_o$  is rejected.

Utilization of information technology can assist in increasing the effectiveness of accounting information systems. If the user is able mastering the available information technology, the effectiveness of the resulting system will be maximized. Utilizing information technology (computers and networks) will provide many advantages both in terms of accuracy/accuracy of operating results as well as a multipurpose machine as well as reducing errors that may occur when recording financial transactions.

The better the utilization of information technology based on the intensity of use, the frequency of use, and the number of applications or software used, the effectiveness of the resulting accounting information system will increase.

**c. Information Technology and Utilization of Financial Information Systems on the Effectiveness of Accounting Information Systems**

Based on the t-test in the table above, it is known that the information technology variable has a value of  $t_{count} > t_{table}$  which is  $3.551 > 1.991$  and a significant value of  $0.001 < 0.05$ , and the use of financial information systems has a value of  $t_{count} > t_{table}$  that is  $7.661 > 1.991$  and a significant value of  $0.000 < 0.05$ . Based on this,  $H_a$  is accepted and  $H_o$  is rejected.

Technology utilization effective information in cooperatives can provide value added for users in the form of providing information finance for planning, controlling, and decision-making activities, which ultimately have an impact on improve the performance of the cooperative. The presence of technology is a source of strength that makes a cooperative have a competitive advantage, and are identified as factors that contribute to success cooperative, plus more or less users mastering information technology will further improve effectiveness of accounting information systems.

**b.F Uji test**

The F statistical test basically aims to test the effect of the independent variable on the dependent variable. This test is carried out by looking at the significance column for each tcount. If the significance value is  $< 0.05$  or 5%, then the proposed hypothesis is accepted or said to be significant. Meanwhile, if the significance value is  $> 0.05$  or 5% then the proposed hypothesis is rejected or said to be insignificant.



**Table 7**  
**F Uji test**

ANOVAa					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	638,533	2	319,267	71.390	.000b
Residual	344,354	77	4.472		
Total	982.887	79			

a. Dependent Variable: Y\_Effectivity\_System\_Accounting\_Information  
b. Predictors: (Constant), X2\_Pehasilan\_Sistem\_Informasi\_financial, X1\_Technology\_Information

Source: Processed Primary Data, 2021

Based on the f test table above with a value of (n1) 2, df (n2)77, and a significance level of 5% or 0.05, the f table value is 3.12 or F count 71.390 > F table. Thus, it can be concluded that Ha is accepted, Ho is not accepted, thus information technology and the use of financial information systems have a positive effect on the effectiveness of accounting information systems.

## 5. Coefficient of Determination

The Coefficient of Determination Test measures how far the model's ability to explain the variation of the independent variables. If the coefficient of determination is close to 1, it can be stated that it is stronger in explaining the variation of the independent variable to the dependent variable.

**Table 8**  
**Coefficient of Determination Results**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.806a	.650	.641	2.11474

a. Predictors: (Constant), X2\_Pehasilan\_Sistem\_Informasi\_financial, X1\_Technology\_Information

Source: Processed Primary Data, 2021

Based on table 4.12, it is known that the combined R correlation of the two variables is 0.806 while the coefficient of determination is 0.650 (65%) meaning that the percentage influence of information technology variables and the use of financial information systems is 65% while the remaining 35% is influenced by other variables not included in this study.

The results showed that the information technology variable had a significant partial effect on the effectiveness of the accounting information system. The results of this study are consistent with research (Sujana and Purnamawati, 2017), that information technology partially positive and significant effect on the effectiveness of accounting information systems. Thus, the higher the sophistication of information technology, the higher the level of effectiveness of the accounting information system. Therefore, the results of this study support the results of research conducted by (Dwitrayani, 2012).

The results showed that the variable of the use of the financial information system had a significant partial effect on the effectiveness of the accounting information system.

The results of this study are consistent with research (Putri, 2017) said that the use of financial information systems has a positive and significant effect on the effectiveness of accounting information systems.k.

#### 4. Conclusion

After testing the hypothesis, it can be concluded that:

1. Information technology affects the effectiveness of the accounting information system in cooperatives.
2. The use of financial information systems affects the effectiveness of the accounting information system in cooperatives.
3. Information Technology and Utilization of Financial Information Systems have a positive and significant effect on the effectiveness of the accounting information system in cooperatives.

#### 5. References

- Achjari, Didi. (2004). Partial Least Square: Another Structural Method Equation Modeling Analysis. *Indonesian Journal of Economics and Business*. 19(3), 238-248.
- Bodnar, George H. and Hopwood, William S. 2010. *Accounting Information Systems*. Boston: Pearson Education.
- Department of Industry, Trade and Cooperatives (Indagkop). 2006. *Work Plan Regional Apparatus Work Unit (SKPD Plan)*. Banjarnegara: Indagkop.
- Dwitrayani, MC, Widanaputra, AAGP, & Putri, IGAMAD (2017). The Influence of Information Technology Sophistication, Management Participation, Organizational Culture and User Satisfaction on the Effectiveness of the Accounting Information System of Rural Banks in Badung Regency. *E-Journal of Economics and Business*, Udayana University, 6(1), 197–222.
- Gelinas, U.J. and Dull, R.B. (2010) “Accounting Information System” (8th ed). Ohio: South Western Cengage Learning.
- Garrison, G., Wakefield, R. L., & Kim, S. (2015). The effects of IT capabilities and delivery model on cloud computing success and firm performance for cloud supported processes and operations. *International Journal of Information Management*, 35(4), 377–393. <https://doi.org/10.1016/j.ijinfomgt.2015.03.001>
- Mulyadi. 2014. *Accounting System*. Yogyakarta: Salemba Empat.
- Meydiani Ni Putu Chintia Dewi dll, 2020. Efektivitas Sistem Informasi Akuntansi dan Kemampuan Teknis Pengguna pada Kinerja Individual Lembaga Perkreditan Desa. *E-JA e-Jurnal Akuntansi e-ISSN 2302-8556 Vol. 30 No. 7 Denpasar, Juli 2020 Hal. 1633-1644*
- Paranoan, Natalia, Chistina Jeane Tandirerung, and Anthon Paranoan. 2019. The Effect of Information Technology Utilization and Human Resource Competence on the Effectiveness of Accounting Information Systems. *Nabilo Account Journal*. Vol No. 2.
- Prasica, Julia, Rka Kharlina, and Chistina Yunita. 2012. The Influence of the Application of Financial Accounting Information Systems on the Quality of Financial Reports at the Lister Cooperative PT. PLN (Persero) Palembang City.

- Peter, 2008, Sistem Informasi Keuangan Terintegrasi Dengan Dukungan Sistem Pengambilan Keputusan (Dss) Dalam Organisasi, *Jurnal Manajemen*, Vol.8, No.1, November 2008
- Ratnaningsih, Kadek Indah and I Gusti Ngurah Agung Suaryana. 2014. The Effect of Information Technology Sophistication, Management Participation, and Knowledge of Accounting Managers on the Effectiveness of Accounting Information Systems. *Udayana University Accounting E-Journal*.
- Sugiyono. 2017. *Quantitative Research Methods*. Bandung: Alfabeta
- Sujana, Edy & Gusti Ayu Purnamawati. 2017. The Effect of Information Technology Sophistication, Information System Protection, Management Participation and Knowledge of Accounting Managers on the Effectiveness of Accounting Information Systems at Star Hotels in Karangasem Regency. *Journal of S1 Accounting Department*. Vol 7 No 1.
- Sugiantara, P. P. O. (2017). Pengaruh Penerapan Sistem Informasi Akuntansi,
- Trabulsi, R. U. (2018). The Impact of Accounting Information Systems on Organizational Performance: The Context of Saudiâs SMEs. *International Review of Management and Marketing*, 8(2), 69–73.
- Warsita, Bambang. 2012. The theoretical basis and information technology in the development of learning technology. *Technodic Journal*. Vol 15 No 1.
- Widyasari, H., & Suardikha, I. M. S. (2015). Pengaruh Kemampuan Teknik Pemakai, Efektivitas Sia, Dukungan Manajemen Puncak, Lingkungan Kerja Fisik Pada Kinerja Individual. *E-Jurnal Akuntansi Universitas Udayana*, 678–697.

