The Effect of System User Support on Accounting Information Systems

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ABSTRACT

Abstract: Accounting information systems can improve decision making by providing timely information. Accounting information systems within the company contribute such as providing accurate and timely information so that the company can carry out operational activities effectively and efficiently and improve quality and reduce the cost of products and services produced. This study aims to determine the influence of system user support in Development Information System on Accounting Information System performance. This research uses quantitative methods using primary data in the form of questionnaires. The analytical method used in this study is multiple linear regression with Rstudio software. The results showed that System user support in the Development of Information Systems affecting the Performance of Information Systems.

INTRODUCTION

A well-designed accounting information system can improve the efficiency and effectiveness of business processes in a company. The rapid development that occurred in technology is a fundamental change. This fundamental change is due to the human need to do a job more easily and quickly. The demands of ease and speed in completing a job encourage human transformation from manual to systematic work. The existence of human demands for technology to support their work to make technology experts continue to develop the existing technology. The development is carried out to provide the benefits of convenience to the user in completing a job. Every company implements technology in its business processes to be able to compete in this technological era. One of the most important technologies used to sustain a company's success is accounting information system technology. By applying accounting information system technology, a company has added value in meeting the needs of its stakeholders. That is because accounting information system technology is a system that collects, records, stores, and also processes data into information that is useful in helping the decision-making process (Romney and Steinbart, 2015: 10).

In processing data into information, companies need accounting information systems to collect and integrate data from each business activity which is highly complex. The existence of an accounting information system that is able to process data quickly and accurately makes the company can improve the performance of the company itself. To improve company performance, the accounting information system data processing must be able to capture, create and manage information from various sources varying to user needs. Applying accounting information systems to business processes makes it easy for users to obtain information quickly, relevantly, on time and in full, especially financial and accounting information that is used as consideration in decision making related to company policies and strategies that can support the company's survival going forward.

However, in reality there are still problems that arise in companies that have implemented accounting information systems. Problems that arise are influenced by human resources who feel confused and lack of confidence in operating accounting information systems to support the work delegated to them (Prabowo, Mahmud, and Murtini, 2014). In 2019, PT. Asuransi Jiwasraya (Persero) asserted that it was unable to pay the JS Saving Plan policy of a customer valued at Rp 12.4 trillion, which matures from October-December 2019. From the statement, the BPK conducted an audit of its financial statements and found that Jiwasraya accounting could not be relied upon to support policy-related human negotiations. Presentation of backup information cannot be trusted. The company’s problems are due to an unreliable information system and a weak company control system.

In 2014, various cases in BUMN companies were rife in several regions including Padang City. One example of the case that occurred was the loss of 23 thousand liters of oil in the Pertamina branch of the Padang branch, which cost SOEs up to Rp 1.5 billion, as evidenced by the discrepancy between reported stock and actual conditions. Another case that occurred was the case of a delay in the supply of cement from Semen Padang and coal from Omblin for the construction of the Sirth Bay Steam Power Plant (PLTU) project in the Bungus Bay District of Padang Kabung Padang. After tracing it was found that the case occurred due to the lack of expertise of employees in operating accounting information systems that often-caused errors in inputting data so that it gave a loss to the company. These cases indicate that the performance of state-owned information systems at that time had not been able to contribute to the best performance, which in turn caused the company’s overall performance to be low. Based on the above case, it can be concluded that errors in inputting data are influenced by the poor system used, or because of the poor operation of the system by the user (user), causing a lack of quality information produced by the accounting information system. Several cases that occur, it can be traced that the companies that implement accounting information systems must conduct an accounting information system performance evaluation. Accounting information system performance appraisal is done to help measure the successful implementation of the accounting information system itself. The assessment is carried out so that the factors that affect the performance of accounting information systems can be disclosed appropriately in a company. The successful application of accounting information systems depends on the users of the accounting information system itself. One factor that influences the performance of accounting information systems is system user support. According to research by Utami, Dewi and Muhammad (2016), the more frequent system user support will increase the performance...
of accounting information systems due to the positive relationship between system user support in the process of developing accounting information systems in the performance of accounting information systems. Based on the background of the problem presented, the authors are interested in conducting research on accounting information systems by taking the title "The effect of system user support in the development of information systems on the performance of accounting information systems"

**LITERATURE REVIEW**

**A. Accounting Information System**

Romney and Steinbart (2015: 10), an accounting information system is a system that collects, records, stores, and processes data into information that is useful in helping the decision making process. Azhar Susanto (2017: 72), information systems are a collection (integration) of sub-systems/components both physical and non-physical that are interconnected and work together in harmony to process transaction data related to financial problems into information finance. Of the three definitions of accounting information systems presented by experts, it can be said that the accounting information system is an integrated system component in an organization with the activity of collecting, processing financial transaction data into financial information so that it can be used for decision making related to company business activities.

**Accounting Information System Components**

Romney and Steinbart (2015: 11) accounting information systems consist of six (6) components, namely:

1. **People**
   The person in charge of operating the system and carrying out various functions.

2. **Procedures and Instructions**
   Procedures and instructions are used to collect, process, and store data regarding company activities.

3. **Data**
   Data contains information about the company and the company's business processes.

4. **Software**
   Software used to process company data.

5. **Information Technology Infrastructure**
   Information technology infrastructure is supporting equipment and communication network devices used in accounting information systems.

6. **Internal Controls and Security Measures**
   Internal controls and security measures are taken to maintain data security in the accounting information system.

While the accounting information system components according to Azhar Susanto (2015: 72) are as follows:

1. **Hardware**
   Hardware is physical equipment that can be used to collect, enter, store and output data in the form of information.

2. **Software**
   Software is a collection of programs used to run certain applications on a computer.

3. **Brainware**
   Brainware is a resource that is involved in making information systems, data collection and processing, distribution and utilization of information generated by the information system.

4. **Procedure**
   Procedure is a series of activities or activities carried out repeatedly in the same way so that everything can be done uniformly. If the procedure has been accepted by the user of the information system, the procedure will be a guideline for how the information system functions must be operated.

5. **Database**
   The database is part of the management of information resources that helps the company so that its information resources accurately reflect the physical system it represents. Collection of data is called a database.

6. **Telecommunications Network Technology**
   Telecommunications or data communication is defined as the use of electronic media to move data or information from one location to one or several other different locations. Communication that occurs between several communicating parties is facilitated by infrastructure in the form of telecommunications networks whose configuration can be in the form of stars, ring and hierarchy so as to speed up production and decision making.

From the opinion of the experts above, it can be said that the accounting information system component consists of hardware, software and human resources needed to process data into information to be used in running a company's business processes.

**The Purpose of Accounting Information Systems**

Mardi (2015: 5) there are three (3) objectives of the accounting information system, which are as follows:

1. Fulfill each obligation in accordance with the authority given to someone (to fulfill obligations relating to stewardship).

   Management of the company always refers to the responsibility of management in order to clearly arrange everything related to the resources owned by the company. The existence of an information system helps the availability of information needed by external parties through traditional financial reports and other requested reports, as well as the availability of internal reports needed by all levels in the form of corporate management accountability reports.

2. Any information generated is valuable material for management decisions (to support decision making by internal decision makers). The information system provides information to support every decision taken by the leadership in accordance with established responsibilities.

3. Information systems are needed to support the smooth running of the company's daily operations (to support the day-to-day operations). Information systems provide information for each task force at various levels of management, so that they can be productive.

From the description above it can be said that the purpose of the accounting information system helps management in managing financial and non-financial transaction data into information that is used to support decisions taken.

**Accounting Information System Performance**

Performance (work performance) according to Mangkunegara (2014) is the result of quality and quantity of work achieved by an employee in carrying out his duties in accordance with the responsibilities given to him. Simanjuntak (2014), performance is the level of achievement of the results of the implementation of a particular task in an agency or organization. Cushway (2014), performance is to assess how someone who has worked compared to a predetermined target. From the three expert opinions, it can be said that performance is a condition that describes the level of achievement of a person both in quality and quantity associated with the results of the implementation of the task in accordance with the responsibilities and targets that have been determined.

While the performance of accounting information systems according to Ronaldi (2012) is the result of the work of a series of accounting data that can be achieved by a person or group of people in an organization and company, in accordance with their respective authorities and
responsibilities, legally, does not violate the law, and according to moral ethics which in the end result becomes an accounting information that includes transaction processes and information technology. Based on the expert description above, it can be stated that the definition of accounting information system performance is the assessment and evaluation of the achievement of the results of the implementation of accounting information systems used by companies to produce accounting information that is effective, efficient, and accurate according to the company's objectives.

B. System user support in the Development of Information Systems

System user support is the involvement of users of information systems in the development of information systems. Bruwer and Hierschheim (2005) argue that system user support influences key criteria such as system quality, user satisfaction and system usage. Hajha and Azizi, (2011), stated that system user support in the development of information systems is an effective factor that influences the performance of information systems. Participation in the development of accounting information systems is shown by users through real personal intervention (Dalimunthe, 2014). The participation includes about the role of the user in the information system design process. In addition, participation is also demonstrated through steps in the form of user contributions to support system development (Imana, 2014). From the opinions of experts, it can be stated that the participation of users of information systems to participate in developing accounting information systems will improve the performance of accounting information systems. The opportunity to actively participate in giving opinions or proposals in the development of the system raises the user's sense of responsibility. With these responsibilities, users of information systems will be more active in developing efficient and effective accounting information systems to complete the company's work.

THEORETICAL FRAMEWORK

Based on the phenomenon, research background, literature review, and previous research, the researchers make the conceptual framework of the study as follows:

![Figure 1 Theoretical Framework](image)

Data analysis method
1. Test Validity
   - An instrument is declared valid if it is able to measure what is desired and can express data from the variables studied appropriately. Validity testing is testing that is shown to find out which data can be trusted to be true in accordance with reality. Sugiyono (2016: 121) states, "a valid instrument means the measuring instrument used to obtain data (measuring) is valid". Valid means that the instrument can be used to measure what should be measured. Determining whether a data is valid or not is done by comparing the Pearson product moment correlation number (r-count) with r table at the 0.05 significance level of its critical value. Therefore, if the correlation rate is above the critical value or the probability number is below or equal to (p < 0.05; p = 0.05), the research instrument is valid. Test the validity of the questionnaire in this study using the help of RStudio software to obtain targeted results.

2. Reliability Test
   - To test the reliability in this research that is using reliability testing with internal consistency. The reliability test is

RESEARCH METHODOLOGY

Sekaran and Bougie (2016: 236) population refers to the whole group of people, events, or interesting things that researchers want to investigate and then draw a conclusion based on sample statistics. The population in this study were 41 finance department employees of PT. Unilever Indonesia, Tbk. Sekaran and Bougie (2016: 236) the sample is part of the population. The sample consists of several members selected from the population. In this study, the sample selection technique used was purposive sampling. Sekaran and Bougie (2016: 248) Purposive sampling is a nonprobability sampling technique in which the required information is collected from specific or specific targets or groups of people based on certain criteria.

Sample Collection Method
   - Data and information collection methods used by researchers in this study are as follows: (1) library research, through a literature study the authors obtain various information to be used as a basis for theory and reference in processing data. This literature study is carried out by reading and studying the literature in the form of journals, books, and previous research that is closely related to the problem under study; (2) Questionnaire; The questionnaire is a data collection technique that is done by giving a set of questions or written statements to be answered by respondents (Sugiyono, 2017). The researcher makes several questions related to system user support in the development of accounting information systems, education & training programs for users of accounting information systems, and formalization of the development of accounting information systems. These questions are spread directly to the subject under study. Furthermore, after the questionnaire is answered by the subject, the researcher will process and analyze the data.
carried out to find out how far the measurement results remain consistent if two or more measurements are taken of the same symptoms with the same measuring device. The method used the reliability coefficient method is most often used because this coefficient uses variations of items for either true or false format or not, such as the format on a Likert scale. Cronbach’s alpha coefficient is the most commonly used coefficient to evaluate internal consistency. The minimum requirement that is considered eligible is if Cronbach’s alpha coefficient is obtained 0.6. If the coefficient obtained is less than 0.6 then the research instrument is declared unreliable. If in testing this instrument is valid and reliable, it can be used for measurements in the context of data collection. The reliability test of the questionaire in this study used the help of RStudio software to obtain targeted results.

Descriptive statistics
Priyatno (2014), descriptive statistical analysis is used to describe statistical data such as minimum value, maximum value, mean (average), standard deviation. The purpose of descriptive statistical analysis is to find a picture of the research data and the relationship between variables that will be used in research.

Classic assumption test
Before testing hypotheses using regression analysis, it is necessary to test the classical assumptions which include:

1. Normality Test
Ghozali (2016: 154), a normality test is conducted to test whether in the regression model the independent variable and the dependent variable or both have normal distribution or not. If the variables are not normally distributed then the statistical test results will decrease. Good data that is suitable for use in research is data that has a normal distribution.

In the normality test, researchers used the Shapiro-Wilk technique. Decision making with Shapiro-Wilk:

a. If sig > 0.05 then the data is normally distributed
b. If sig < 0.05, the data is not normally distributed.

Multicollinearity Test
Sujarwani (2016) stated that multicollinearity test is needed to determine whether there are independent variables that have similarities between the independent variables in a model. In addition, multicollinearity test is also to avoid habits in the decision-making process regarding the influence of the partial test of each independent variable on the dependent variable. The effect of multicollinearity is that it causes a high variable in the sample. This means that the standard error is large, consequently when the coefficient is tested, the t-count will be small from the t-table. This shows that there is no linear relationship between the independent variables that are affected by the dependent variable. To find the presence or absence of multicollinearity in the regression model can be known from the tolerance value and the value of the variance inflation factor (VIF).

Tolerance measures the variability of selected independent variables that cannot be explained by other independent variables. So a low tolerance value equals a high VIF value (because VIF = 1/tolerance) and shows a high colinearity. The cut off value that is commonly used is a tolerance value of 0.10 or equal to VIF values above 10.

Heteroscedasticity Test
Heteroskedastitas test aims to test whether in a regression model there is an insecurity of the variance from the residuals of one observation to another. If the variants of the residuals are the same, then it is called homoscedasticity. Conversely, if in one study to another observation variants of different residuals, it is called heteroscedasticity. Heteroscedasticity testing on RStudio software uses the Breusch-Pagan test. Criteria data is said to be not heteroscedasticity when the p-value is more than 0.05.

Autocorrelation Test
Ghozali (2016: 107) autocorrelation test aims to determine whether in the linear regression model there is a correlation between the error of the intruder in the period t with the error of the intruder in the period t-1 (previous) where the data is time series. A good regression model is a regression that is free from autocorrelation. In this study to detect autocorrelation using the Durbin Watson method. Autocorrelation test can be done by comparing the Durbin-Watson values through a ratio of du < d < 4 - du. However, in this study the autocorrelation test was not carried out because the data was cross section, namely the collection of data through a questionnaire where measurements of all variables were taken at the same time.

Hypothesis testing
Multiple Linear Regression
Multiple linear regression analysis is a regression analysis with two or more independent variables. The researcher uses multiple linear regression analysis to test 3 hypotheses, namely:

H1: System user support in the process of developing information systems affects the performance of accounting information systems.
Nazaruddin and Basuki (2015), multiple linear regression is stated:

\[ Y = \alpha + \beta_1 X_1 + \varepsilon \]

Information:

Y: dependent variable (accounting information system performance)
\( \alpha \): constant
\( \beta_1 \): regression coefficient
X1: system user support in the process of developing information systems
\( \varepsilon \): error

Coefficient of Determination (R2)
The coefficient of determination R2 measures how far the model’s ability to explain the dependent variables (Ghozali, 2016: 95). The coefficient of determination is zero and one. A small R2 value means that the ability of the independent variables in explaining the variation of the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable (Ghozali, 2016: 95).

RESULT AND DISCUSSION
Descriptive statistics
Descriptive analysis is used to find the big picture of the data to be examined. This analysis interprets the minimum value, maximum value, mean value, and standard deviation values of the data to be examined. Descriptive analysis is performed on each variable tested, namely Accounting Information System Performance (Y), system user support in Information Systems Development (X1).

Table 1 presents the results of descriptive statistics for each variable can be seen as follows:

| Table 1 Descriptive Statistics Results |
The Effect of System User Support on Accounting Information Systems

Based on the above descriptive statistical tests, it can be stated:
The system user support variable in the development of accounting information systems (X1) has a minimum value of 3, a maximum value of 10, and an average of 6.76. This states that based on the results of descriptive statistics the level of system user support in the development of information systems at PT. Unilever Indonesia, Tbk on average is quite high. The standard deviation is 1.85 and the mean is 6.76 which means that the data is less variable because the standard deviation is smaller than the mean.

Classic assumption test
Normality test
According to (Sujarweni, 2016), the data normality test aims to determine the distribution of data in variables by assuming that the residual value follows the normal distribution. In this case, researchers conducted a normality test with the Shapiro-Wilk technique using RStudio software. How to determine the normality of data distribution by comparing the significance value with the following criteria: 1. If the significant value (p) > α = 0.05, the data is normally distributed
2. If the significant value (p) < α = 0.05, the data are not normally distributed

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>33</td>
<td>3</td>
<td>10</td>
<td>6.76</td>
<td>1.85</td>
</tr>
<tr>
<td>X2</td>
<td>33</td>
<td>8</td>
<td>20</td>
<td>14.88</td>
<td>3.51</td>
</tr>
<tr>
<td>X3</td>
<td>33</td>
<td>12</td>
<td>25</td>
<td>18.15</td>
<td>3.52</td>
</tr>
<tr>
<td>Y</td>
<td>33</td>
<td>32</td>
<td>70</td>
<td>54.76</td>
<td>9.07</td>
</tr>
</tbody>
</table>

Source: RStudio Output, 2020

Table 2 Normality Test Results

The calculation results state that the probability (p-value) is 0.2345. Probability is greater than the test level used in research (p-value > α or 0.2345 > 0.05). Thus it can be concluded that the distribution of research data used is normally distributed.

![Normal Q-Q curve](image)

Figure 2 Normal Q-Q curve

From the analysis of the normal Q-Q curve it can be seen that the data spreads around the diagram and follows the regression model so that it can be concluded that the data processed is normally distributed data. Therefore, the normality test of research data is fulfilled.

Multicollinearity Test
Sujarweni (2016) stated that multicollinearity test is needed to determine whether there are independent variables that have similarities between the independent variables in a model. In addition, multicollinity test is also to avoid habits in the decision-making process regarding the influence of the partial test of each independent variable on the dependent variable. Multicollinearity test is done by looking at the value of VIF (Variant Inflation Factor) in the regression model. If the tested variable VIF value <10 then the regression model is not affected by multicollinearity. Based on the multicollinearity test results obtained as follows:

![Multicollinearity Test Results](image)

Table 3 Multicollinearity Test Results

Heteroscedasticity Test
Heteroscedasticity testing of the regression model was performed using the Breusch-Pagan test and a plot in R software. In the Breusch-Pagan test, the data was said not to occur heteroscedasticity if the p-value > 0.05.

![Heteroscedasticity Test Results](image)

Table 4 Heteroscedasticity Test Results

Based on the heteroscedasticity test results, it can be seen that the points do not form clear patterns, and the points spread above and below the number 0 on the Y axis. It can be concluded that there is no heteroscedasticity in the regression model used.

![Residuals vs Fitted](image)

Figure 3 Output Plot Residuals vs Fitted

Hypothesis testing
Linear regression analysis is performed to analyze the effect of system user support in the development of information systems (X1) on the performance of accounting information systems (Y). The results of multiple linear regression analysis can be seen as follows:

![Results of Multiple Linear Regression Analysis](image)

Table 5 Results of Multiple Linear Regression Analysis

Based on the table above can be obtained linear regression equation as follows:

\[ Y = 27.04252 + 2.13656X1 + \varepsilon \]
The interpretation of the linear regression equation above is as follows:

Constants, if all independent variables have a value of zero (0), then the value of the dependent variable (accounting information system performance) is 27.04252.

Regression coefficient on system user support in information system development (X1) has a value of 2.13656 positive relationship to the performance of accounting information systems (Y). This means that if the value of X1 increases, the performance of the accounting information system (Y) will increase by 2.13656 assuming the other independent variables are constant.

Coefficient of Determination (R2)
The coefficient of determination test is performed to determine the percentage of the effect of the independent variable on the dependent variable as a whole.

<table>
<thead>
<tr>
<th>Adjusted R Square (R²)</th>
<th>0.3679</th>
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<td>Source: RStudio Output, 2020</td>
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</table>

Based on the results of multiple linear regression analysis, it can be seen the Adjusted R Square (R²) value of 0.3679. This shows that 36.7% of the accounting information system performance variable can be explained by the independent variable, namely system user support in the development of information systems (X1). While 63.3% is influenced by other variables not examined.

Statistic test
Partial Test (t-test)
T tests were carried out on three independent variables that were used in research to see the effect of each independent variable (X) on the dependent variable (Y) can be seen in the following table.

| Model | t-value | Pr(>|t|) |
|-------|---------|---------|
| Y     | 4.011   | 0.000389 |
| X1    | 2.255   | 0.031866 |

Source: RStudio Output, 2020

Based on the results of the multiple linear regression analysis in Table 7 with the t test (in this case to test the effect partially) the results can be stated as follows:
The variable system user support in the development of information systems (X1) has a significance level (sig.) of 0.031866. Significance level value is less than α = 0.05, then H0 is rejected where partially system user support variables in the development of information systems affect the performance of accounting information systems. Based on the results of the t test, the coefficients of multiple linear regression equations can be interpreted as follows:
The variable system user support in the development of information systems (X1) influential, meaning that any increase or decrease in the variable of system user support in the development of information systems affect the performance of accounting information systems.

DISCUSSION
After a statistical test of the data, several analyzes and discussions can be presented. The Influence of System user support in the Development of Information Systems on the Performance of Accounting Information Systems

The results of data analysis show that system user support in the development of accounting information systems has a significant level (sig.) of 0.031866 less than α = 0.05. It states that H1 is accepted where partially system user support variables in the development of information systems affect the performance of accounting information systems. System user support in the development of information systems affects the performance of accounting information systems. That is because every employee who uses the accounting information system in completing work is given the opportunity to provide feedback related to the lack of existing accounting information systems so that the development of accounting information systems can be done. The development of information systems makes the employees of each division work effectively. In practice, most employees have the awareness to participate and provide influence in the development of accounting information systems. This is triggered by the rapid turnaround of transactions in companies so that the performance of accounting information systems must adjust to the speed of financial transactions that become a data to then be processed into information. The large amount of financial related information needs, making accounting information systems owned must have high performance in order to support the needs of employees of each division who is a user of accounting information systems. The results of this study support the results of research conducted by Almilia and Briliatnian (2006) and research conducted by Dewi, Ni Luh (2017) which states that the participation of users of information systems affects the performance of accounting information systems. In a study conducted by Fatmawati, Indra (2019) also stated that the participation of users of information systems had a significant positive effect on the performance of accounting information systems.

CONCLUSION
This study aims to analyze the influence of users in the development of information systems on the performance of accounting information systems. The questionnaire was distributed by researchers to obtain data, then the data was processed using RStudio software. Based on the results of testing and analysis that have been done, the researcher can draw a conclusion that system user support in the development of information systems affects the performance of accounting information systems.

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