

The Effect of Information Technology, User Technical Skills, Education and Training on Accounting Information System Performance

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ABSTRACT: This study aims to determine the effect of information technology, user technical skills, education and training on the performance of the accounting information system of the Village Credit Institution (LPD in Indonesia). This research was conducted at LPD Tegallalang District. Determination of the sample using nonprobability sampling method with purposive sampling technique and obtained a sample of 45 samples. The data collection method is to use a survey method by distributing questionnaires. The analysis technique used is multiple regression analysis techniques. The results of the analysis obtained indicate that information technology, user technical skills, education and training have a positive and significant effect on accounting information system performance.

KEYWORDS: *accounting information system performance, information technology, user technical skills, education and training*

I. INTRODUCTION

The development of accounting information systems in financial institutions is very rapid. Village Credit Institutions (LPD in Indonesia), which are village-owned financial enterprises, have also begun to develop from manual systems to computer-based systems. The LPD is guided to present relevant, accurate, and timely financial information so that it is expected that it can be used by interested parties. LPD aims to improve the standard of living of village karma, both in the economic and social fields. LPDs in Bali are certainly facing tough competition, due to the many other banking institutions. The LPD in Tegallalang District also face similar things, there are financial institutions other than LPDs that are developing in Tegallalang District, including banks (public and private), Rural Bank (BPR in Indonesia), savings and loan cooperatives, and others. The LPD in Tegallalang District that are still active are 45 LPDs. Judging from the amount of assets owned by LPD in Tegallalang District, it shows that LPDs in this area are increasingly developing.

Increasing the number of assets owned by the LPD will require more practical data processing in order to improve the LPD's performance in Tegallalang District. It takes the application of a good accounting information system with an application program that is able to process data to be more practical. However, the problems faced by LPDs in Tegallalang District are human resources whose knowledge is still limited in the field of information technology, especially accounting information systems, and employees with minimal accounting education backgrounds. When viewed from the effectiveness of the accounting information system in producing this information, it is acceptable and meets expectations accurately and reliably. However, in timely terms from the LPDs, there were still several LPDs that were late in reporting their monthly financial reports to Village Credit Institution Empowerment Institution (LPLPD in Indonesia), Gianyar District. Based on Governor Regulation No. 44 of 2017, the requirements for reporting LPD monthly financial reports to LPLPD are no later than the 5th of the following month.

The purpose of holding performance appraisals is to motivate employees to achieve the organization's mission and to comply with predetermined standards of behavior so as to produce the desired actions and results. AIS performance means an assessment of the implementation of the AIS, whether it is in accordance with the stated objectives or not (Soegiharto, 2001). There are various factors that can affect AIS including information technology such as computerized systems, user capabilities, as well as education and training, because previous findings show inconsistent results, so further research is needed. There are several factors that influence the performance of AIS, but in this study the factors of information technology, user technical skills, and education and training are used.

Previous research, Nugroho et al., (2018) stated that information technology has a positive effect on the performance of accounting information systems. Sudjarwo and Sulistiyo's research (2016) states that the user's technical ability has a significant positive effect on the performance of the accounting information system. However, in the research of Prabowo et al., (2014) states that there is no positive and significant effect between personal engineering skills on the performance of accounting information systems. Research by Ardiwinata and Sujana (2019) states that education and training have a positive and significant effect on the performance of accounting information systems. However, Komara's research (2006) states that there is no significant difference between companies that have training and education programs for system users and companies that do not have training and education programs.

II. LITERATURE REVIEW AND RESEARCH HYPOTHESIS

This research is based on Victor Vroom's Expectancy Theory and the Technology Acceptance Model (TAM) theory. According to Vroom, Expectancy Theory is the strong tendency of a person to act in a certain way depending on the strength of an expectation that the action will be followed by a certain output and on the attractiveness of the output to that individual (Komara, 2006). This theory is classified into three, namely, Expectancy, Equity, and (Reinforcement). The Technology Acceptance Model (TAM) theory explains the causal relationship between belief (in the benefits of an information system and its ease of use) and the behavior, goals / needs, and actual use of users of an information system (Kharisma and Juliarsa, 2017). There are two factors described in TAM that influence user behavior to accept and use technology (Widyantari and Suardikha, 2016). These two factors are usefulness ease of use.

Technology is an important component in information systems. Utilization of technology as a benefit by users of information systems in carrying out their duties where the measurement is based on the intensity of utilization, frequency of use and number of applications used (Thompson et al, 1991). Whereas in Bakri's (2014) research, information technology has a negative effect on individual performance through the functioning of interdependence between personnel, departments and management functions. Utilization of information technology is expected to be able to make decisions that are beneficial to the company. Companies that have sophisticated technology have a good level of accounting information system alignment (Ismail and King, 2007). Researchers refer to research conducted by Putra (2014) and Pardani and Damayanthi (2017) who found an influence between the use of information technology on accounting information systems. Research by Nugroho et al., (2018) states that information technology has a positive effect on the performance of accounting information systems. This shows that the higher the utilization of the information system, the higher the accounting information system. Based on this description, the researchers took the hypothesis:

H₁: Information technology has a positive effect on the accounting information system performance.

Ability is the capacity of an individual to perform various tasks in a job (Robbins and Mery, 2008: 45). The abilities possessed by employees will increase self-confidence that affects users of information systems. Information system users are important things related to the effectiveness of information systems, because users of information systems know more about problems that occur in the field. Information system performance can run well if the user is able to understand, use, and apply technology to become information that can be useful in making decisions so as to achieve the goals of the company. In the development of accounting information systems the participation of system users can have a positive impact on the organization and provide economic benefits (Kusumastuti and Irwandi, 2012). Kharisma and Juliarsa's research (2017) states that user ability has a positive and significant effect on the performance of the accounting information system. In addition, Perbarini and Juliarsa (2014), in their research, found that it has a significant effect on AIS performance. However, in the research of Prabowo et al., (2014) states that there is no positive and significant effect between personal engineering skills on the performance of accounting information systems. Based on the description above, the hypothesis is used:

H₂: User technical skills have a positive effect on accounting information system performance.

Sumarsono (2009: 92-93) states that education and training are important factors in human resource development. The education and training program for AIS users can improve the quality of the users of the system so that it affects the AIS performance. By holding education and training programs, it can improve and develop abilities and skills in order to create quality human resources. The performance of accounting information systems will be better if a company provides training and education programs for users of accounting information systems (Choe, 1996 and Tjhai, 2002). In research Abhimantra and Suryanawa (2016) state that training and education have a positive effect on the performance of accounting information systems. Research by Ardiwinata and Sujana (2019) states that education and training have a positive and significant effect on the performance of accounting information systems. However, Komara's research (2006) states that there is no significant difference between companies that have training and education programs for system users and companies that do not have training and education programs. Meanwhile, research by Kharisma and Juliarsa (2017) and Hidayati (2014) also shows that user training and education do not have a significant effect on the accounting information system.

H₃: Education and training have a positive effect on accounting information system performance.

III. METHODS

This research was conducted at Village Credit Institution (LPD in Indonesia) of Tegallalang District. This location was chosen because people are more likely to be engaged in tourism. In this study, researchers went directly to the research location by giving questionnaires to respondents to be filled out. The measurement scale used by researchers to express responses from respondents to each question given is to use a Likert scale.

The population in this study were all employees of 15 LPDs in Tegallalang District who were involved in the accounting information system with a total of 120 employees. Sampling in this study was carried out by purposive sampling method and got 45 employees as the sample. The technical analysis carried out is using multiple linear regression analysis with the following formulas: $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$.

IV. RESULT AND DISCUSSION

Descriptive statistics aim to analyze data by describing or describing the data that has been collected as is without intending to make general conclusions or generalizations (Sugiyono, 2017: 232). The results of the descriptive statistics can be seen in Table 1 below.

Table 1. Descriptive Statistics Test Results

| No. | Variable | N | Min. | Max | Mean | Std. Deviation |
|-----|--|----|------|-----|-------|----------------|
| 1. | AIS Performance (Y) | 45 | 18 | 30 | 26.27 | 2.453 |
| 2. | Information Technology (X ₁) | 45 | 15 | 25 | 21.16 | 2.296 |
| 3. | User Technical Skills(X ₂) | 45 | 9 | 15 | 11.87 | 1.949 |
| 4. | Education and Training (X ₃) | 45 | 12 | 20 | 17.04 | 1.942 |

Source: Research Data, 2021

Table 1 shows that the accounting information system performance variable has a minimum value of 18 and a maximum value of 30 with an average value of 26.27. The minimum value of the information technology variable is 15 and the maximum value is 25, and the average value is 21.26. The technical ability variable of the user has a minimum value of 9, a maximum value of 15, and an average value of 11.87. The education and training variable has a minimum value of 12, a maximum value of 20, and an average value of 17.13.

Table 2. Normality Test Results

| Kolmogorov-Smirnov | Unstandardized Residual |
|------------------------|-------------------------|
| N | 45 |
| Asymp. Sig. (2-tailed) | 0.200 |

Source: Research Data, 2021

Table 2 shows that the value of Asymp. Sig. (2-tailed) is 0.200. This value is greater than 0.05, so it can be concluded that the data in this study is normally distributed.

Table 3. Multicollinearity Test Results

| No | Variable | Tolerance | VIF |
|----|--|-----------|-------|
| 1. | Information Technology (X ₁) | 0.881 | 1.136 |
| 2. | User Technical Skills(X ₂) | 0.882 | 1.133 |
| 3. | Education and Training(X ₃) | 0.948 | 1.054 |

Source: Research Data, 2021

Table 3 shows that the tolerance value of each independent variable has a value greater than 0.10 and a VIF value less than 10, so it can be concluded that there are no symptoms of multicollinearity between the independent variables.

Table 4. Heteroscedasticity Test Results

| No | Model | Sig. | Information |
|----|--|-------|--------------------------------|
| 1 | (Constant) | 0.193 | |
| | Information Technology (X ₁) | 0.246 | No heteroscedasticity symptoms |
| | User Technical Skills(X ₂) | 0.476 | No heteroscedasticity symptoms |
| | Education and Training(X ₃) | 0.836 | No heteroscedasticity symptoms |

Source: Research Data, 2021

Table 4 shows that all of the independent variable has a significance value greater than 0.05, so it can be concluded that there is no heteroscedasticity in the regression model.

Table 5. Multiple Linear Regression Analysis

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--|-----------------------------|------------|---------------------------|-------|--------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 3.568 | 2.869 | | 1.244 | 0.221 |
| Information Technology (X ₁) | 0.521 | 0.111 | 0.487 | 4.678 | 0.000 |
| User Technical Skills(X ₂) | 0.274 | 0.131 | 0.218 | 2.095 | 0.042 |
| Education and Training(X ₃) | 0.495 | 0.127 | 0.392 | 3.901 | 0.000 |
| R ² | | | | | 0.608 |
| Adjusted R ² | | | | | 0.580 |
| Fcount | | | | | 21.231 |
| Sig. F | | | | | 0.000 |

Source: Research Data, 2021

Based on the results of the analysis above, the regression equation results as follows: $Y = 3.568 + 0.521X_1 + 0.274X_2 + 0.495X_3 + \epsilon$.

The constant value is 3.568 indicating that if the value of information technology (X₁), the user technical skills (X₂), and education and training (X₃) is equal to zero, then the accounting information system performance is 3.568. The coefficient value $\beta_1 = 0.521$ means that information technology has a positive influence on the accounting information system performance. The use of technology increases by one unit if the performance of the information system also tends to increase with the assumption that other variables are equal to zero. The value of the coefficient $\beta_2 = 0.274$ indicates that the user technical skills have a positive effect on accounting information system performance. The technical ability of the user will increase by one unit if the accounting information system performance also tends to increase, then the assumption of other variables is equal to zero. The coefficient value $\beta_3 = 0.495$ indicates that education and training have a positive influence on the accounting information system. Education and training increase by one unit if the accounting information system performance also tends to increase with the assumption that other variables are equal to zero.

The coefficient of determination (R²) is carried out to measure how much the ability of the independent variable to explain the variation in the dependent variable. Table 5 shows that the Adjusted R² value is 0.580, which means that 58% of the variation in accounting information system performance (Y) can be explained by information technology, user technical skills, and education and training, while the rest 42% is explained by other variables that are not explained in this research model.

The F test shows whether all the independent variables have a joint influence on the dependent variable. Table 5 shows that the significance value of F is 0.000, which it's less than $\alpha = 0.05$. This result means that the information technology, the user technical skills, and education and training are simultaneously influence the accounting information system performance.

The t test is used to determine the effect of each independent variable individually on the dependent variable. From Table 5, it can be seen that the influence of information technology on the accounting information system performance obtained t value of 4.678 with a significance level of 0.000 less than 0.05. It indicates that H₁ is accepted, which means that information technology has a positive and significant effect on the accounting information system performance. The influence of the user technical skills on the accounting information system performance has a t value of 2.095 with a significant level of 0.042 which less than 0.05. It indicates that H₂ is accepted, which means that the user technical skills have a positive and significant effect on the accounting information system performance. The effect of education and training on the accounting information system performance obtained t value of 3.901 with a significant level of 0.000 which less than 0.05. It indicates that H₃ is accepted, which means that education and training have a positive and significant effect on the accounting information system performance.

V. CONCLUSION

Based on the research results, information technology has a positive and significant effect on the accounting information system performance of the Tegallalang Village Credit Institution (LPD in Indonesia). The user technical skills have a positive and significant effect on the performance of the accounting information system performance at LPD in Tegallalang District, and education and training have a positive and significant effect on the performance of the accounting information system performance at LPD in Tegallalang District.

The suggest that can be given as follows, for Village Credit Institution that have already used accounting information system performance in order to become an example for Village Credit Institution that have not used accounting information system performance and increase the reuse of it. For employees of LPD in Tegallalang District to increase their knowledge and understanding of accounting information system performance and to LPD supervisors to always pay attention to the LPD financial reports and situation so that it

is in accordance with regional regulations and the regulations of the Bali Governor. For further research, it is suggested to add other variables that are thought to have an effect on accounting information system performance such as top management support and work motivation.

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