

THE EFFECTS OF USING THE INFORMATION TECHNOLOGY, INTERNAL CONTROL SYSTEMS AND TRAINING SYSTEMS ON THE ACCOUNTING INFORMATION SYSTEM PERFORMANCE

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Abstract: This study purpose to examine the effect information technology use, internal control systems and process of the training system on the accounting information systems of Bank Pembangunan Daerah Bali, Renon Substation Office. The results from this study produce which using the information technology is able to affect the accounting information systems performance, internal control systems are able to affect of the accounting information system performance, and training systems are able to influence the accounting information systems performance. This study results to provide additional information about how the influence of using the information technology, internal control systems and system training on the accounting information systems performance.

Keywords: information Technology, internal control system, system training, accounting information system performance.

I. INTRODUCTION

Performance is the image from the level of achievement of an activity implementation programs and policies to form goals, objectives, vision and mission in an organization as described through the organization's strategic planning (Indarjanti, 2012). Accounting information systems is a role in accounting sector because the accounting information processing systems based on computer are offered which aims to make it easier for accountants to producing the reliable, relevant, timely, complete, understandable, and tested information. According to (Gelinas & Dull, 2012) an accounting information system is a system used for collecting, process and information report related to finance affairs and activities of business. Some business organizations have competitive advantage by supplementing the information system that has been updated. Accounting information systems were needed to controlling the organization management. Support from the accounting information systems with a computerized process can produce accurate accounting information system performance in a company (Yunus, 2013). The good and the bad of accounting information systems performance will be found from the user decision of the accounting information system itself. If the system user can run the system effectively, then the accounting information system process can be effective. (Bodnar et al., 2012) explain that accounting information systems performance can collect and store data on activities carried out by the organization, the data processes to be good management information to making a plan decision, implementation and activities of monitoring and providing good control standards to protect the assets of an organization, to ensure that data must be available when needed, and must be accurate and reliable. Therefore, the process of accounting information systems is very influential by using the information technology, internal control systems and training.

In the process of implementation, the performance of Accounting information systems encountered problems in the process of using information technology used in an organization. Information technology is technology to process data, including data processing, the process of obtaining, compiling, storing, and manipulating data in various ways to produce quality information, that is, information becomes accurate, relevant and timely. According to (Hilmi, 2016) Information Technology is a combination of computer and communication to help in solving problems with high creativity and make people more effective in using them. Utilization of information technology to support the various needs and development of organizations, individuals and companies will bring something positive.

The information technology using in mostly companies that will make it easy for users to create, change, store, communicate and disseminate information. According to (Arini, 2017) Utilization of information technology is closely related to the accounting information system performance, in terms of information technology carried out effectively by users of information technology, then that's technology in the organization can run well. With so the higher using the information technology and the accounting information system process will be increase. Can be seen in research conducted (Ekawati, 2016) which states that using of a positive and significant influence is held by information technology influence on the accounting information systems performance.

Another factor that also influences of an accounting information system performance is an internal control. The internal control is the process which in information technology influences and designs within an organization in achieving certain goals or objectives. (Njeri, 2014) in his research on internal control of performance in Kenya and found that in the organization, individuals who have strong internal control systems will have high performance. Internal control is a way to provide direction and supervision and measurement of organizational resources. According to (Mulyadi, 2002: 120) Internal control system is an organization's internal control structure consisting of policies and procedures that are made in providing guarantees so that organizational aims can be reached. In the process of securing the proceeds of a company's sales, it is necessary to have inspection procedures designed to prevent and detect fraud. Internal control requires an accounting information system because all company transaction activities are recorded, processed, and distributed quickly and accurately to those who need it. The application of accounting information systems to support internal control is a company policy in the implementation of operational control and supervision of the company. Besides that, it can help the management in obtaining the right information to determine the policies that will be pursued next, and can create a smooth operation of the company in obtaining internal improvements in the company.

The implementation of internal control supported by the system of accounting is expected for increase the possibility of internal control and minimize non-achievement of targets, while also producing credible accounting information reports, thereby encouraging business efficiency and continuously monitoring that the policies that have been set are really truly run. Thus, it is expected to create a smooth operational company in order to achieve company goals. Adequate internal control in providing controls to support the achievement of the accounting information systems performance will running well. The internal control systems involved in developing a system for the purpose of producing quality from the accounting information system performance that gives satisfaction to their user and can support the achievement of system development goals and organizational goals. This research is supported by Ahmad (2009) which results that impact of the internal control to the accounting information system.

On the improving of the accounting information systems performance, a user is really necessary to knowing whether the information obtained is accurate and relevant to accounting. According to Jen (2002) argues that the involvement of users who increasingly often will work up the accounting information systems performance because the positive relationship between user involvement in developing process on the systems of information in the accounting information systems performance. Of course, training user needs to be held, given the rapid technological development that causes changes every time. This can be achieved with good training. With training it can increase employee confidence in dealing with accounting information systems.

According to Komara (2006) the training program is very important, because it can get the excellence in identifying their information requirements with seriousness in the limitations of information systems and these advantages can improve the performance. Training is an effort to improve employees' knowledge and ability to carry out their work more effectively and efficiently. (Efryns & Zafanya, 2009) with the assumption of *Ceteris Paribus*, that other factors have not changed, employee training has a positive influence on company performance. Training can make employee confidence increases to improve performance towards a new system. Thus, the training taught will make employees become more skilled in carrying out tasks and improve employee performance, accounting information system performance will be better. Where

this is in line with Magkuprawira (2003) which states that job training is the process of providing knowledge and expertise and certain attitudes. This makes employees more skilled and can carry out their duties and responsibilities better and in accordance with standards.

This research is different from the previous studies, this study was conducted at PT. Bank Pembangunan Daerah Bali (BPD Bali). PT. Bank Pembangunan Daerah Bali is a bank owned by the regional government of Bali which has a very important role and function in regional economics so that its performance is highly considered by the local government. BPD prioritizes KUR (Kredit Usaha Rakyat) for micro, small and medium enterprises (MSMEs) with an aim to producing the output of activities so as to achieve prosperity and worthiness of life, because MSMEs are one part of the economic structure that supports increased economic growth, before KUR facilities are given, so the BPD must feel confident that the KUR given will really return. Credit will be given if the bank believes that the credit given to the prospective customer will be received according to the terms and conditions agreed by both parties. Of course, the bank expects that the money lent to the debtor and its interest will be paid off on time. Therefore, in channeling credit the bank always strives to hold comprehensive credit supervision and supervision.

Table 1: Yearly BPD Loan Credit (%)

	2013	2014	2015	2016	2017	2018
Amount of Troubled Credit	0.33	0.35	1.96	1.47	3.10	3.17

Source: PT. BPD Bali, 2018

Based on Table 1 above, Bank Pembangunan Daerah Bali in the past 6 years shows an increase in problem loans. The increase in the number of problem loans will have an impact on declining profits, which in turn will reduce the financial performance of the Bank Pembangunan Daerah Bali. Reporting from Kontan.Co.ID-Jakarta. PT. Bank Pembangunan Daerah Bali will increase the distribution of KUR by Rp 950 billion in 2019. This is far from the achievement of KUR results for the last 6 years that has experienced an increase in bad loans. Even in 2018 an increase in bad loans to 3.17%. It is feared that the problem loans will continue to increase and will lead to decreased company performance. With non-performing loans the bank's activities will be hampered because the main profit of a bank is obtained from the difference between the deposit interest given to the deposit with the interest on the loan or credit channeled, this causes a decrease in the level of public trust in the bank. This situation requires of the Bank Pembangunan Daerah Bali to prioritize the accounting information systems performance on using technology for prevent the occurrence of problem loans.

II. HYPOTESIS

The Information Technology Effect of Accounting Information Systems Performance

Strategic using on the information technology will be able to bring the company to increase its profitability which is one indicator of Performance. The development of technology can improve company performance results, because in its use in companies to process data, process, obtain, compile and store data to obtain quality information. In addition, the use of good technology can provide relevant, accurate and timely information so as to obtain strategic information in decision making in the company.

Clemons *et al.*, (1993) state that information technology has the ability to reduce the cost of coordination between companies with agents outside the company without increasing transaction risk in question. Information technology can monitor and decrease specification relationships in explicit coordination. Ratnaningsih (2014) found the positive impact of using the information technology on the accounting information systems performance.

H1: The Positive Impact of Using the Information Technology on the Accounting Information Systems Performance.

The Internal Control Systems effect on the Accounting Information Systems Performance

The Internal control is effectiveness to help an organization or company provide sufficient confidence regarding the organization's financial reporting information. According to Susanto (2008) Internal control is a processing to affected through design on a board of directors, management and employees who provide guarantees aimed at ensuring that an organization will be able to managed the operational can be efisien and effective, disclosure on appropriate and accountable statements of financial, and adherence to regulations of applicable, and laws of applicable and regulations.

Internal control is the process of directing, controlling, and measuring the resources of an organization. Internal control system is the most important thing in prevention and detection embezzlement and protection organizational and resources tangible (such as engine and ground) and the intangible (such as savour or property rights of intellectual). By implementing internal control effectively and efficiently it can improve insight into the accounting information systems performance. This is in accordance with Hanum (2017) who said the best of internal controls implemented, the best impacted performance. This is supported by previous research (Sajjaj, 2016) A very positive and significant impact from the internal control on the accounting information systems performances.

H2: Internal control has a very positive and significant impact on the accounting information systems performances

The System Training Effect on Performance of Accounting Information Systems

Training is a process to improve the ability and skills of employee performance to achieve the company's goals and objectives. Training can increase knowledge and work skills, so that it can make work productivity increase. With the training process carried out by the company can help the smooth running of operational activities of the employees themselves and the company. With training using information systems can provide the ability to identify information requirements and information limitations so that it can lead to improved performance. The better the level of training implementation in the system user intended to be able to understand the system to be used and have an impact on the higher level of performance generated.

According to (Almilia, 2007) argued that the process of using an accounting information system would be better if programs and education were used and introduced. With a training program, users will get the ability to identify them requirements of information through information system performance and capabilities. Research stated by (Anggreni, 2016) that the training program has a positive and significant influence on the accounting information systems performance.

H3: System training has a positive effect on the performance of accounting information systems

III. RESEARCH METHODS

This research has been conducted at the Bank Pembangunan Daerah Bali, Renon Substation located in Denpasar City and has used an accounting information system to manage accounting data. The reason for choosing this location is based on the consideration that there are micro, small and medium scale (MSME) credit developments in a number of sectors that use the Bank Pembangunan Daerah Bali as a place for savings and loans. Meanwhile, the Renon Substation was chosen because it is located in Denpasar City which is the center of the city and the center of the economy. The rapid development of financial institutions triggered a tight competition between the Bank Pembangunan Daerah Bali and other financial institutions, therefore an accounting information system which is need to improve the Bank Pembangunan Daerah Bali performance so that it can compete with other financial institutions.

The population in this study were all office units of PT. Bank Pembangunan Daerah Bali, Renon Substation. PT. Bank Pembangunan Daerah Bali, Renon Substation consists of 1 Substation Office, 3 Branch Offices and 2 Cash Offices. Sampling is carried out by saturated sampling technique. Saturated sampling is a sampling technique by using all members of a sample population.

In analyzing the relationship between the variable of independent and the variable of dependent, which using the analysis of multiple linear regression. Data obtained from the questionnaire were then analyzed using a data processing program (SPSS) in order to obtain more accurate results. In this study using a regression model that is intended from the following equation:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \dots \dots \dots (1)$$

Explanation:

Y = Accounting information system performance

α = A constant

X₁ = Information technology usage

X₂ = Internal control system

X_3 = Training system

$\beta_1, \beta_2, \beta_3$ = regression coefficient

e = Residual error (confounding variable)

IV. RESULTS AND DISCUSSION

The descriptive statistical analysis results in this study can be seen in Table 2:

Table 2: Descriptive Statistics Analysis Results

Variable	N	Min.	Max.	Mean	Std. Deviasi
Accounting information system performance (Y)	108	16	24	21,21	2,579
Information technology usage (X1)	108	47	72	60,73	8,428
Internal control system (X2)	108	14	20	17,68	2,390
Training system (X3)	108	30	48	42,33	5,673

Source: Data processed, 2019

A minimal value of 16 and a maximal value of 24 with a median value of 21.21 are the values held by the accounting information system Performance Variables. The average value of 21.21 indicates that the response of respondents in answering statements on the questionnaire tends to feel agree on each statement item meaning that the accounting information systems performance tends will be high. Standard deviation of the accounting information system performance variable is 2.579. This shows that the average standard deviation is 2.579.

A minimal value of 47 and a maximal value of 72 with a median value of 60.73 are the variables used in this information technology. The average value is 60.73 which is the response was shown on the respondents in answering statements on the questionnaire tends to feel agree on each statement item meaning that using the information technology tends will be high which means that respondents tend to consider the importance of using information technology in the application of accounting information systems. The standard deviation of the use of information technology variables is 8,428. This shows that the average standard deviation of data is 8.428.

The variable of the internal control system has a minimum value of 14 and the maximum value of 20 with an average value of 17.68. The average value of 17.68 indicates that the respondent's response in answering statements on the questionnaire tends to feel agree on each statement item meaning that the internal control system tends to be high which means the respondent tends to consider the internal control system important in the implementation of accounting information systems. The standard deviation of the variable internal control system is 2.390. This shows that the average value of the standard deviation of the data is 2.390

A minimum value of 30 and a maximum value of 48 with an average value of 42.33 are found in this information technology usage variable. The average value of 42.33 indicates that the response of respondents in answering statements on the questionnaire tends to feel agree on each statement item meaning that the training system tends to be high which means that respondents tend to consider the importance of system training in implementing accounting information systems. The value of 5.673 is the standard deviation of the system training variables. This shows that the average value of 5,673 from the standard deviation of the data.

Table 3: Results of Multiple Linear Regression Analysis

Variable	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	-2.395	0.813		-2.946	0.004
Information Technology Usage	1.07	0.145	0.481	7.404	0
Internal Control System	0.155	0.037	0.198	4.142	0
Training System	0.803	0.187	0.323	4.286	0

Adjusted R Square	0,976
F Count	1463.893
Significance of F	0,000

Source: Data processed, 2019

In table 3 some linear regression equations are arranged as follows:

$$Y = -2,395 + 1.070X_1 + 0,155X_2 + 0,803X_3$$

Value of 1.070 on the regression coefficient of the use of information technology (β_1) shows that the performance of accounting information systems is very positively related to the variable use of information technology. This means that every 1 unit by using the information technology has increased in variables assuming a variable internal control system and constant system training, it will improve the accounting information systems performance by 1,070 units. Internal control system regression coefficient (β_2) of 0.155 shows that system variables with internal control have a close relationship with the accounting information systems performance. This means that every 1 unit increase in the internal control system variable assuming the constant use of information technology and training system variables, it will increase the accounting information systems performance by 0.155 units. System training regression coefficient (β_3) of 0.803 shows that the system training variable have a close relationship on the accounting information systems performance. This means that increasing the system training variable every 1 unit assumes the constant use of information technology and the internal control system variable will increase the accounting information system performance by 0.803 units.

Table 3 *adjusted R²* value of 0.976 this means that 97.6% variation in accounting information system performance affected from the variable use of information technology (X1), internal control system (X2) and system training (X3) and the remaining 2.4% is influenced by other variable models not listed in the research model.

The p-value test results indicate that the value of 0,000 is less than 0.05, that means using the information technology, internal control systems and training systems together have a significant influence on the accounting information systems performance. The significant value of t is 0,000 less than 0.05, so that H0 is rejected and H1 is accepted. This means that the use of information technology affects the accounting information systems performance. The significance value of t is 0,000 which is smaller than 0.05, so H0 is rejected and H1 is accepted. This means that the internal control system affects the performance of accounting information systems. The significant value of t is 0,000 less than 0.05, which results in H0 being rejected and H1 accepted. This means that there is an effect on the performance of existing accounting information systems on system training

The test results show the significance value (Sig.t) coefficient of 0.000 is smaller than $\alpha = (0.05)$, meaning that using the information technology can to influence the accounting information systems performance, so that H1 is accepted. The increase of using the information technology owned by employees, the accounting information systems performance will be good and vice versa if using the information technology owned by employees is low, then employee performance will decrease. The use of information technology can bring the company to increase its profitability which is one indicator of Performance. The development of technology can improve company performance results, because in its use in companies to process data, process, obtain, organize and store data to obtain quality information. In addition, the use of good technology can provide relevant, accurate and timely information so as to obtain strategic information in decision making in the company. This result is very consistent with research by Clemons et al. (1993) and Ratnaningsih (2014) which states that the accounting information systems performance has a very good effect on the use of information technology.

The second hypothesis testing is carried out to determine the ability of internal control system on the accounting information systems performance. In table 3 can be seen about the results of the first hypothesis testing. The test results show the significance value (Sig.t) coefficient of 0.000 is smaller than $\alpha = (0.05)$, meaning that the performance of the accounting information system is greatly affected by the internal control system, so that H2 was accepted. This indicates that the higher the internal control system, the better the accounting information system performance. Effective internal control can help an organization or company provide sufficient confidence regarding the organization's financial reporting information. Internal control is a way of directing, controlling, and measuring the resources of an organization. Internal control systems play a role in preventing and detecting embezzlement and protection from organizational resources both tangible (such as machinery and land) and intangible (such as reputation or intellectual property rights). By implementing

internal controls effectively and efficiently it will improve the performance of accounting information systems. These results are very consistent with research conducted by Hanum (2017) and Sajjaj (2016). They stated that the internal control system had a very positive effect on the accounting information system performance.

The third hypothesis testing is used to determine the ability of system training about the accounting information systems performance. The results of the third hypothesis testing can be seen in Table 3. The test results show the significance value (Sig.t) coefficient of 0,000 is smaller than $\alpha = (0.05)$, meaning that system training is able to influence the accounting information systems performance, because of that H3 is accepted. That is, if the training system is more often done, then the accounting information systems performance is getting better. Training is a process to improve employee performance abilities and skills in an effort to achieve company goals. Training can increase knowledge and work skills, so that it can make work productivity increase. The influence of training for employees has important role for the company development. With the training process carried out by the company can help the smooth running of operational activities of the employees themselves and the company. With training programs, employees can gain the ability to identify information requirements where the limitations of this information system can affect performance. These results are consistent with research conducted by Almilia, (2007) and Anggreni, (2016). They stated that system training had a positive effect on the performance of accounting information systems.

V. CONCLUSION

The results of this study provide the additional information about how the influence of the use of information technology, internal control systems and system training on the performance of accounting information systems. The empirical evidence obtained through this research that showing the using of information technology, internal control systems and system training have an effect on the performance of accounting information systems. This shows that the advanced of using the information technology, internal control systems and system training, the performance of the accounting information system be perfect. It was supported by the existence of TPB theory as a grand theory that assumes that humans are rational creatures and use information that is possible for them, systematically. It was supported by two models, namely TAM which shows that the desire for individual behavior to use a system is determined by two beliefs, namely: (a) Perceived benefits (defined usefulness), which is defined where a person feels confident that using the system will improve the performance of his work , and (b) Ease of use (perceived ease of use), which is defined where someone feels confident using the system does not require any effort (free of effort). This research is also supported by the HOT model which places important components in accounting information systems namely human, organization and technology as well as the relationship between each other. Based on the things above, it can be explained that this study has relevance between the use of theory and existing variables.

Based on these results, PT Bank BPD Bali needs to increase the interest in using the system for employees, this can be done by providing training in work, especially system training with the existence of a system training in using accounting information systems that will have an impact on the interests of employees who are interested and accustomed to using accounting information system at work, so that they get strategic information in making decisions in the company. In addition, it is necessary to improve accounting information systems and the need for insights in terms of the use of accounting information systems for employees.

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