

THE EFFECT OF ACCOUNTING INFORMATION SYSTEMS AND INTERNAL CONTROL OF EMPLOYEE PERFORMANCE

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Abstract: This study learns to study the existence of accounting information systems and internal controls on employee performance. The population of this study is the company part of the Internal Control Unit, Business and Product Development, Broadband SBU, Corporate Finance, and HCM & Quality at PT. INTI Persero Bandung. The sampling technique in this study used a purposive sampling method of 43 respondents consisting of managers and part staff of the Internal Control Unit, Business and Product Development, Broadband SBU, Corporate Finance, HCM & Quality. The data used using primary data and data analysis methods in this study are descriptive methods and verification methods using quantitative. The technique of collecting data is by distributing questionnaires directly to PT. Persero Persero. The statistical test tool used in this study is the classic Assumption Test, Multiple Linear Regression Test, Coefficient coefficient analysis test, Test coefficient of determination and t test The results of this study prove that: 1) Accounting Information Systems against Employee Performance, 2) Internal Control affects Employee Performance.

Keywords: Accounting Information Systems, Internal Control and Employee Performance

INTRODUCTION

According to Judith (Husnurrosyidah, 2018: 272) performance is a function of the ability of workers to accept job goals, the level of goal attainment, and the interaction between work goals, the level of goal attainment, and the interaction between goals and abilities of workers.

According to Marlinawati (Arsiningsih, Diatmika and Darmawan: 2015) states the effectiveness of accounting information systems is a measure that provides an overview of the extent to which targets can be achieved from a set of resources that are set to collect, process, and store electronic data, then convert it into information that useful and provide formal reports that are needed both in quality and time. Besides accounting information systems can facilitate employees in completing their work.

According to Krismiaji (2015: 216) internal control is "organizational plans and methods used to protect or protect assets, produce accurate and reliable information, improve efficiency, and to encourage compliance with management policies".

Research purposes

Knowing how much the influence of Accounting Information Systems on Employee Performance at PT. INTI (Persero). Knowing how much the influence of Internal Control on Employee Performance at PT. INTI (Persero).

Accounting Information System

Accounting Information System according to Romney and Steinbart translated by Safira and Puspasari (2015: 10), "which means a system that collects, records, stores and manages data to produce information for decision makers".

Internal Control

According to Warren, et al (2016: 229) "Internal control (internal control) is a policy to protect assets from misuse, ensure the accuracy of business information, and ensure that applicable laws and regulations have been followed"

Employee Performance

Understanding of performance according to Supriyanto (2017: 108) is a result achieved by a person in carrying out the tasks given to him based on skill, experience, and ability and time.

Hypotheses

Effects of Accounting Information Systems on Employee Performance

In research on the influence of accounting information systems on employee performance conducted by Parjanti E, et al (2014), shows that Accounting Information Systems are very influential on Employee Performance. These results indicate that the better the information system in an organization, the better the performance of employees in the company also increases.

Effects of Internal Control on Employee Performance

Binilang N.N, et al (2017) test results show that Internal Control has a positive and significant effect on employee performance at the Manado Boulevard Hotel, influenced by the increase and decrease in internal control.

Sugiyono (2017: 64) explains that: "Hypothesis is a temporary answer to the formulation of research problems, where the research problem formulation has been stated in the form of sentence questions. So the hypothesis can also be stated as an empirical answer with data ". In accordance with the literature review, theoretical thinking and previous studies, the hypotheses proposed are as follows:

H 1: Accounting Information Systems affect Employee Performance

H 2: Internal Control influences Employee Performanc

METHODS

Object of research

The object of this research by the author is PT. INTI (Persero) which is located at Jalan Moh. Toha No. 77 Cigelereng, Regol, Bandung

Data Sources and Data Collection Methods

Sources of information used in this study to obtain data can use two types of data, namely:

Primary Data Secondary Data

The data collection that the authors use in this study is a questionnaire (questionnaire) is a data collection technique in which a question or statement given to respondents who have been determined then the respondent must answer according to facts and circumstances.

Population and Samples

In this study the population amounted to 215 respondents and used as a research sample of 43 respondents at PT. INTI (Persero)

Data Quality Test

Validity test

According to Sugiyono (2018: 267) in quantitative research, the main criteria for the research data are valid, reliable and objective. Validity is the degree of accuracy between the data that occurs in the object of research with the power that can be reported by researchers. Thus valid data is "no different" data between the data reported by the researcher and the data that actually occurs on the research object.

After the questionnaire was made, then the questionnaire was tested on several respondents. Validity test should be performed on each item in the validity test. The results of r count we compare with r table where $df = n-2$ with $sig = 5\%$. If r

table <r count is valid. Test the validity of using Product Moment correlation techniques using the following formula:

$$r = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2] [n \sum y^2 - (\sum y)^2]}}$$

(Sujarweni 2015:108)

Information :

r = Correlation Coefficient

n = Number of respondents trials

x = Score of each item

y = Score of all items of respondents in trial

Reliability Test

According to Sujarweni (2015: 108-110) Reliability test is a measure of the stability and consistency of respondents in answering matters relating to the constructs of questions

which are dimensions of a variable and are arranged in a questionnaire.

Meanwhile, according to Sugiyono (2017: 149) understanding reliability basically is the extent to which the results of a measurement can be trusted, if the results of measurements made repeatedly are relatively similar then the measurement is considered to have a good level of reliability.

Reliability test can be done together with all questions. If the Alpha value > 0.60, then reliable, with the following formula:

$$r \left[\frac{k}{(k-1)} \right] \left[1 - \frac{\sum \sigma_b^2}{\sigma_t^2} \right]$$

(Sujarweni 2015:110)

Keterangan :

r = instrument reliability coefficient (cronbachalfa)

k = number of questions

$\sum \sigma_b^2$ = total item variance

σ_t^2 = total variance

Interval (MSI) according to Sugiyono (2017: 268).

Classical Assumption Test

Normality Test

According to Ghazali (2016: 154) normality test aims to test whether in the regression model, confounding or residual variables have a normal distribution. A good regression model is one that has a nominal or near normal data distribution. There are two ways to detect whether residuals are normally distributed or not, namely by graphical analysis and statistical tests. The following is an explanation of the analysis:

Data Analysis Technique

Method of Successive Internal (MSI)

Transforming data from ordinal into useful intervals to fulfill some of the parametric analysis requirements in which the data presented by the author is ordinal data must be increased to interval scale data. The simplest transformation technique using the Method of Successive

Graph Analysis One way in research to see residual normality is to look at a histogram graph that compares observational data with distributions that are close to normal distributions. In principle, normality can be detected by looking at the spread of data (points) on the diagonal axis of the graph or by looking at the histogram of the residuals. The basis for decision making is:

- a) If the spread data around the diagonal line and follows the direction of the diagonal line or the histogram graph shows a normal distribution pattern, then the regression model meets the normality assumption.
- b) If the data spreads far from the diagonal and / or does not follow the direction of the diagonal line or the histogram graph does not show a normal distribution pattern, then the regression model does not meet the assumption of normality.

Multicollinearity Test

According to Ghazali (2016: 103) multicollinearity test aims to test whether the regression model found a correlation between independent variables. Multicollinearity testing is a test that aims to test whether the regression model found a correlation between independent variables. 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 of small value from the t-table. This shows that there is no linear relationship between the independent variables that are affected by the dependent variable.

To detect the presence or absence of multicollinearity, it is done by looking at Tolerance Value and Tolerance Inflation Factor (VIF). Tolerance Value measures the variability of selected independent variables that are not explained by other independent variables. So a low Tolerance value is the same as a high VIF value because $VIF = 1 / \text{Tolerance Value}$.

The value commonly used to indicate the presence of multicollinearity is the value of Tolerance Value > 0.1 or equal to VIF value > 10, so there is no multicollinearity between the independent variables.

Heteroscedasticity Test

According to Ghazali (2016: 134) Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. If the variance from one observation residual to another observation is fixed, then it is called Homoscedasticity and if different is called heteroscedasticity. A good model is one that does not occur heteroscedasticity. One way to find out whether there is heteroscedasticity in a multiple linear regression model is to look at the scatterplot graph or the predicted value of the dependent variable. The basis of the analysis is:

- 1) If there are certain patterns, such as the dots that form a regular pattern (wavy, fused and then narrowed), then the heteroscedasticity has occurred.
- 2) If there is a clear pattern, and the points spread above and below the number 0 on the Y axis, then there is no heteroscedasticity.

Analysis of Multiple Linear Regression

Regression analysis is a study of the dependent variable (dependent) with one or more independent variables (independent variables) with the aim of estimating or predicting the dependent average based on the value of known independent variables (Ghozali, 2017: 95). Analysis of the data used in this study is multiple regression. The multiple regression equation implies that in a regression equation with one dependent variable and more than one independent variable.

Analysis Koefisien Korelasi

Correlation analysis shows the direction and strength of the relationship between two or more variables, the direction expressed in the form of a positive or negative relationship, while the strength or weakness of the relationship is expressed in the magnitude of the correlation coefficient.

To find out whether the opinion of a positive and significant relationship between independent variables is the accounting information system and partial internal control with the dependent variable, namely employee performance.

Determination Coefficient Test (R^2)

The coefficient of determination (R^2) basically measures how far the model's ability to explain the independent variables (Ghozali, 2013: 97). The partial

determination coefficient is used to partially determine the effect of one of the independent variables (X) on the dependent variable (Y)

Test t

Regression partial test (t-test) is intended to see whether the independent variable (independent) individually has an influence on the dependent variable (dependent), assuming the other independent variables are constant. The test criteria used by comparing the significant value obtained with a significant level that has been determined is 0.05. If the significant value < 0.05 then the independent variable is able to significantly influence the dependent variable or the hypothesis is accepted (Ghozali, 2013: 98).

RESULT AND DISCUSSION

Table 1
Recapitulation of Test Results for Variable Validity in Accounting Information Systems (X1)

Statement	Item r count	r table (n = 43)	Information
Statement 1	0,623	0,301	Valid
Statement 2	0,852	0,301	Valid
Statement 3	0,692	0,301	Valid
Statement 4	0,657	0,301	Valid
Statement 5	0,740	0,301	Valid
Statement 6	0,667	0,301	Valid
Statement 7	0,758	0,301	Valid
Statement 8	0,747	0,301	Valid
Statement 9	0,846	0,301	Valid
Statement 10	0,682	0,301	Valid

Table 1. shows that all statements are valid, because the corrected item total correlation value of all statements is

greater than or equal to the value of r_{table} 0.301.

Table 2
Recapitulation of Test Results for Validity of Internal Control Variables (X2)

Statement	Corrected Item- Total Correlation (rcount)	rtable (n=43)	Information
Statement 11	0,695	0,301	Valid
Statement 12	0,738	0,301	Valid
Statement 13	0,781	0,301	Valid
Statement 14	0,671	0,301	Valid
Statement 15	0,813	0,301	Valid
Statement 16	0,578	0,301	Valid
Statement 17	0,798	0,301	Valid
Statement 18	0,614	0,301	Valid
Statement 19	0,686	0,301	Valid
Statement 20	0,609	0,301	Valid
Statement 21	0,670	0,301	Valid
Statement 22	0,684	0,301	Valid
Statement 23	0,697	0,301	Valid

Table 2 also shows that all statements are valid, because the value of the corrected item total correlation of all statements is greater than or equal to the value of r_{table} 0.301.

Table 3
Recapitulation of Test Results for Employee Variable Validity (Y)

Statement	Corrected Item- Total Correlation (rcount)	rtable (n=43)	Information
Statement 24	0,587	0,301	Valid
Statement 25	0,796	0,301	Valid
Statement 26	0,806	0,301	Valid
Statement 27	0,753	0,301	Valid
Statement 28	0,716	0,301	Valid
Statement 29	0,760	0,301	Valid

Table 3. also shows that all statements are valid, because the corrected item total correlation value of all statements is greater than or equal to the value of r_{table} 0.301

Table 4
Reliability Test Results

Variable	Cronbach's Alpha	N of Item	Information
Accounting information system	0,892	10	Reliabel
Internal control	0,899	13	Reliabel
Employee performance	0,824	6	Reliabel

Based on table 3. It shows that Cronbach's Alpha over accounting information system variables is 0.897, internal control variables are 0.920, employee performance variables are

0.836 so it can be concluded that the statements in the questionnaire all of these variables are reliable because they have a Cronbach's alpha value greater than 0.6.

Table 5 Multicollinearity Test Results

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance VIF
1	(Constant)	4,500	2,872		1,567	,125	
	Accounting information system	,191	,098	,361	1,945	,059	,292 3,427
	Internal control	,222	,093	,443	2,386	,022	,292 3,427

a. Dependent Variable: Kinerja_Karyawan

Based on the table above it can be concluded that the VIF value of each variable is below 10 and the tolerance value of each variable is greater than 0.1 so that it can be stated that the research

data does not experience multicollinearity so that the existing regression model is appropriate to be used in predicting employee performance.



Figure 1 Heterokedasticity Test

From the picture above shows the pattern of points on scatterplot graphs scattered randomly and do not form certain clear and scattered patterns either above or below zero on the Y axis. It can

be concluded that there is no heterokedasticity in the regression model of this study, so that the model regression is appropriate for subsequent analysis.

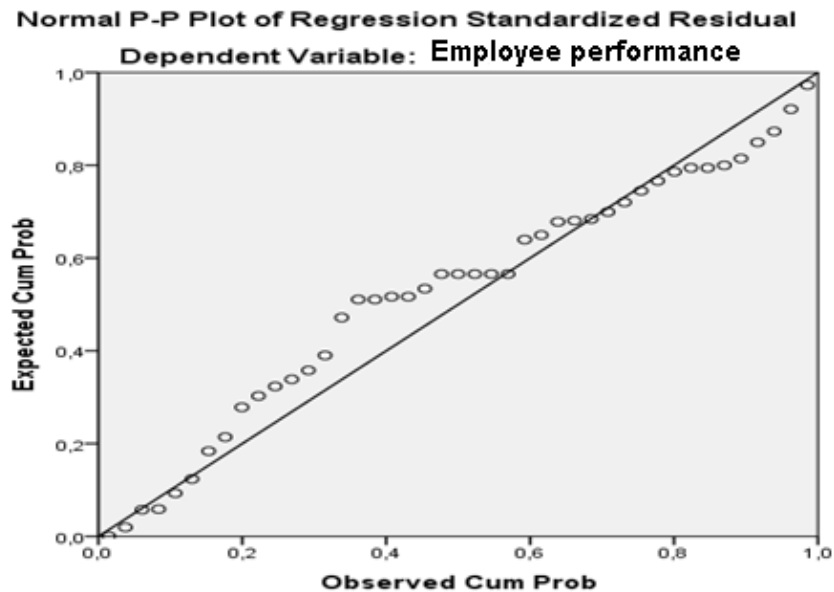


Figure 2 Normality Graph

From Figure 2. It can be seen that the research variable has a data distribution that spreads around the diagonal line and spreads in the direction of the diagonal

line. Thus it can be concluded that the research data is normally distributed, so that it meets the assumption of normality.

Tabel 6 Hasil Uji Regresi Linier Berganda

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	4,500	2,872		1,567	,125		
Accounting information system	,191	,098	,361	1,945	,059	,292	3,427
Internal control	,222	,093	,443	2,386	,022	,292	3,427

a. Dependent Variable: Kinerja_Karyawan

From the above output we can know the value of constants and regression coefficients so that it can be formed multiple linear regression equations as follows:

$$Y = 4,500 + 0,191X_1 + 0,222X_2 + e$$

The above equation can be interpreted as follows:

$\beta_0 = 4,500$ = meaning that if the accounting information system variable (X1) and internal control (X2) have no value (0), then the employee performance variable value is 4,500

$\beta_1 = 0,191$ meaning that each addition of one unit of accounting information system variables (X1) and other variables is constant, it will increase the value of employee performance variables (Y) by 0.191.

Conversely, each decrease in one unit of accounting information system variables (X1) and other variables is constant, it will reduce the employee performance variable (Y) by 0.191.

$\beta_2 = 0,222$ it means that every addition of one unit of internal control variable (X2) and other variables is constant, it will increase the value of employee performance variable (Y) by 0.222. Conversely, every decrease of one unit of internal control variable (X2) and other variables is constant, it will reduce the value of employee performance variable (Y) by 0.222.

Table 7 Results of Correlation Coefficient Calculations Correlations

		Accounting information system	Internal control	Employee performance
Accounting information system	Pearson Correlation	1	,842**	,735**
	Sig. (2-tailed)		,000	,000
	N	43	43	43
Internal control	Pearson Correlation	,842**	1	,747**
	Sig. (2-tailed)	,000		,000
	N	43	43	43
Employee performance	Pearson Correlation	,735**	,747**	1
	Sig. (2-tailed)	,000	,000	
	N	43	43	43

** . Correlation is significant at the 0.01 level (2-tailed).

Based on the results of the above calculation, it can be seen that the correlation between Accounting Information Systems (X1) And Employee Performance (Y) is 0.735. This shows that there is a positive correlation between Accounting Information Systems and

Employee Performance. In addition, the correlation between Internal Control (X2) and Employee Performance (Y) is 0.747. This shows that there is a strong positive correlation between Internal Control on Employee Performance

Table 8 Calculation Results for the Coefficient of Determination Model Summary^b

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	,773 ^a	,597	,577	1,82882

a. Predictors: (Constant), internal control, Accounting information system

b. Dependent Variable: Employee performance

$$\begin{aligned}
 \text{KD} &= R^2 \times 100\% \\
 &= (0,773)^2 \times 100\% \\
 &= 59,7\%
 \end{aligned}$$

Thus, a coefficient of determination of 59.7% is obtained which indicates the

meaning of the variable Accounting Information System (X1) and Internal Control (X2) giving a simultaneous

(together) effect of 59.7% on Employee Performance (Y) . While the remaining 40.3% is influenced by other factors not examined by the authors

**Table 9 Partial Test Results (t test)
 Coefficients^a**

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	4,500	2,872		1,567	,125		
Accounting information system	,191	,098	,361	1,945	,059	,292	3,427
Internal control	,222	,093	,443	2,386	,022	,292	3,427

a. Dependent Variable: Kinerja_Karyawan

From the above calculation, the calculated t value for the Accounting Information System is 1.945 and t table is 1.68. Because the value of t arithmetic > t table

then H₀ is rejected, meaning that the Accounting Information System affects Employee Performance.

**Table 10 Partial Test Results (t test)
 Coefficients^a**

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1 (Constant)	4,500	2,872		1,567	,125		
Accounting information system	,191	,098	,361	1,945	,059	,292	3,427
Internal control	,222	,093	,443	2,386	,022	,292	3,427

a. Dependent Variable: Kinerja_Karyawan

From the above calculation, the calculated t value for Internal Control is 2.338 and t table is 1.68. Because the value of t arithmetic > t table then H₀ is rejected, meaning that Internal Control affects Employee Performance.

an effect of 0.737. Accounting Information System has a value of t arithmetic < t table where 1,945 < 1.68 with a significance level of 0.59 > 0.05 so that it can be stated that the accounting information system significantly influences employee performance.

Discussion

A. Effects of Accounting Information Systems on Employee Performance

Based on the partial test results, the accounting information system variable on Employee Performance has

These results are also in line with research conducted by Cahyanti I.G.A.D and Suartana I.W (2018) which shows that Accounting Information Systems have a positive effect on employee performance

Effects of Internal Control on Employee Performance

Based on the partial test results, the variable Internal Control on Employee Performance gives an effect of 0.747. Accounting Information System has a value of t arithmetic $<t$ table where $2,386 < 1.68$ with a significance level of $0.22 > 0.05$ so it can be stated that Internal Control significantly influences employee performance.

This result is also in line with research conducted by Binilang N.N, et al (2017) which shows that Internal Control has a positive and significant effect on Employee Performance.

CONCLUSION

From the results of research regarding the Effect of Accounting Information Systems and Internal Control on Employee Performance at PT. INTI (Persero) with a total of 43 respondents, the following conclusions are obtained:

1) The results of partial testing indicate that Accounting Information Systems affect the Performance of Employees at PT. INTI (Persero) has been running well and has a positive correlation on Employee Performance, so the better application of Accounting Information Systems will improve Employee Performance.

2) The partial test results show that Internal Control has an effect on the Performance of Employees at PT. INTI (Persero) that has been running very well and has a positive correlation on Employee Performance, so the better the application of Internal Control will improve the Performance of Employees.

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