

The Effect of Accounting Information Systems on Employee Performance of PT Eratel Prima at the Jabodetabek Branch

Hillary Bumbungan¹, Jonathan Brillianto²

¹State University of Surabaya, Surabaya, East Java, Indonesia

²State University of Surabaya, Surabaya, East Java, Indonesia

Mail: hillary.23201@mhs.unesa.ac.id

ABSTRACT

PT Eratel Prima is one of the companies engaged in the cigarette distribution sector in Indonesia. To improve the effectiveness of the company's performance, PT Eratel Prima implemented an accounting information system called the Eratel Prima Integrated System. This study aims to assess and evaluate the impact of the implementation of the accounting information system on employee performance. The research method used is quantitative influence or correlation (correlational research) to find whether or not there is a relationship between the two variables being studied. The data used to assess the effectiveness of employee performance is prima data obtained through questionnaires distributed to employees of the company. The research results show that there is a positive influence or contribution from the accounting information system on employee performance. The increasing number of information systems will also have a good impact on employee performance. Thus, this research will present the process and results of data analysis regarding the relationship between accounting information systems and employee performance at PT Eratel Prima Jabodetabek Branch.

Keywords: Accounting Information System, Employee Performance, Effectiveness, Efficiency, Quality

INTRODUCTION

Introduction should be about one page, containing the background, reasons to do the research, problem formulation, purpose of the research and without sub-heading, bullets, or numbering. Introduction should be about one page, containing the back-ground, reasons to do the research, problem formulation, purpose of the research and without sub-heading, bullets, or numbering. Introduction should be about one page, containing the background, rea-sons to do the research, problem formulation. As time goes by, the number of companies born is increasing. Based on data in the Industrial Information Report by the Data and Information Centre of the Ministry of Industry, it shows that in 2022 there will be 37,609 companies in Indonesia, while in 2023 there will be 70,330 companies. The data shows an increase that almost doubled within 1 year. The increase in the number of companies cannot be separated from the influence of modernization on human life and companies that provide easy access to information that is not limited to time and place.

In this increasingly modern era, technology has become part of all aspects of human life. It cannot be separated from companies that are increasingly competing to develop and increase profits or profits. Technology has been implemented in various sectors of governance in the company, such as production, distribution, finance, etc. The implementation of technology in companies is used to support companies in achieving their goals through business strategies that

have been made (Darmawan & Wijaya, 2022). Therefore, technology must be able to be managed properly and correctly so that its utilization is in line with the company's goals.

Jabodetabek, an acronym for Jakarta-Bogor-Depok-Tangerang-Bekasi, is a national strategic area covering DKI Jakarta Province and its surroundings. The area has become one of the megapolitan cities in Indonesia where cities and regencies in it agglomerate into one rapidly developing area (Ibrahim, 2016). DKI Jakarta itself is the center of government and the center of the economy in Indonesia, so that all developments including technology move rapidly in the middle of this region. It also cannot be separated from its influence on the development of accounting information systems that are integrated with technology. The rapid advancement of technology in the economic center makes companies in this region increasingly compete to create technology-based systems in order to facilitate their work. This is done to increase the effectiveness of the company so that it can survive and compete.

One example of technology implementation in companies is accounting information systems. According to Putra, Purba, & Nuralia (2022), an accounting information system is a type of information system used by companies to collect, classify, process, and analyze financial (accounting) information to carry out company business activities. Through this system, it can then help internal (such as management) and external parties in making decisions and other policies. In addition, Rahmansyah & Darwis (2020) reveal that the accounting information system is a system used by companies, one of which is in the finance department to help manage the company's fund flow activities. From these two opinions, it can be concluded that the accounting information system is a system used by companies with the main objective of helping manage the company. With this accounting information system, company information can be managed properly so that it can provide convenience for internal and external parties to the company in terms of decision making.

PT Eratel Prima is one of the companies engaged in cigarette distributors in Indonesia. In distributing cigarettes, the company needs a system that is integrated with all company activities to facilitate and improve company performance. PT Eratel Prima itself has implemented an Accounting Information System in corporate governance. The system is named Eratel Prima Integrated System (EPIS). EPIS is used by companies to record stock of goods, sales, Account Receivable (AR), Bilyet Giro (BG), cash, including for raw data monitoring.

Frequent errors in the system become an obstacle for employees. One of the causes of the error is upgrading the system because it is always adjusted to user needs. When an error occurs, employees cannot access the system, so the data needed cannot be processed. In addition, employees also cannot input the data they have processed. This certainly hampers employee performance and has a negative impact on the company. Therefore, the effectiveness and quality of accounting information systems are important to improve.

Based on this explanation, this study aims to assess and evaluate the implementation of PT Eratel Prima's accounting information system. Through this research, it is expected to improve the quality of the accounting information system so as to have a better impact on employee performance.

Some previous researchers have conducted research that is relevant to this study. Research conducted by Nadya Dwi Lolita and Dini Widyawati with multiple linear regression analysis methods proves that the effectiveness of the application of accounting information systems has a positive influence on employee performance at the Regional Financial and Asset Management Agency (BPKAD) of Surabaya City. This study has limitations on questionnaire instruments based on the perception of respondents' answers. Research conducted by Farida Fitriani Ismail and Dedy Sudarmadi on PT Beton Elemen Persada is to determine the effect of accounting information

systems and internal control on the performance of employees of PT Beton Elemen Persada, and to find out which variables are influential among these variables. The results of the study showed that accounting information systems and internal controls have an influence on employee performance. This study uses a saturated sample and the method used is the questionnaire method. Research on the effect of accounting information systems, work motivation, and the use of information technology on employee performance conducted by Indriani Rahma Shintia and Akhmad Riduwan shows that accounting information systems, work motivation, and the use of information technology have a positive effect on employee performance. The sampling technique in this study used purposive sampling method and the data collection technique used was the survey method.

RESEARCH METHOD

1. Research Types and Variables

The type of research used is quantitative research with a correlation research method (quantitative influence). Correlation research (quantitative influence) is research that involves data collection in determining whether there is a relationship between two or more variables under study (Santoso & Madiistriyatno, 2021). The population of this study itself is all employees of PT Eratel Prima, Jabodetabek Branch.

There are two types of variables that will be tested in this study, namely the dependent variable and the independent variable. The dependent variable is employee performance while the independent variable is the accounting information system.

2. Sampling Technique

In determining the sample, the purposive sampling method is used, namely the method of determining the sample based on the criteria set by the researcher. The goal is that the sample used is considered to be able to represent the population so as to produce a quality and relevant sample. The sample selection criteria are as follows.

- Permanent employees of PT Eratel Prima Jabodetabek Branch.
- Permanent employees of PT Eratel Prima Jabodetabek Branch in the field of finance.

Based on these criteria, the population of this study is permanent employees of PT Eratel Prima Jabodetabek Branch, while the sample is permanent employees of PT Eratel Prima in the finance section of the Jabodetabek branch. After obtaining the data, the next is data analysis. The data analysis technique used is the multiple linear method using SPSS.

3. Data Collection Technique

The data used is primary data obtained from questionnaires distributed by researchers to a predetermined sample. The questionnaire method is a data collection method that is done by giving a set of questions or written statements to respondents to answer (Sugiyono, 2014). The questionnaire was distributed using Google Form which contained several statements that were answered by respondents. The questionnaire filling is based on a Likert scale. The Likert scale is one way or method used to measure the attitudes, income, and perceptions of respondents (Simamora, 2022). The answer choices are divided into five and each has its weight, which is as follows.

Table 1. Likert Scale Weights

Description	SD	D	N	A	SA
Score	1	2	3	4	5

Description:

- SD: strongly disagree
- D: disagree
- N: neutral

- A: agree
- SA: strongly agree

4. Hypothesis

Hypothesis is a temporary conjecture in which there is a relationship between variables and will later be tested (Yam & Taufik, 2021). The hypothesis serves as a guideline to direct research and will be tested for truth through data analysis. This test aims to determine whether the proposed relationship between these variables can be proven statistically or is just an assumption.

H₀: there is no influence between accounting information system variables on employee performance

H₁: there is an influence between accounting information system variables on employee performance

ANALYSIS AND DISCUSSION

Description of Respondent Characteristics

The following are the results of the descriptive analysis of respondents explaining their characteristics based on age, gender, latest level of education, and length of service.

Table 2. Characteristics of respondents based on age

Age Range	Total	Percentage (%)
20-25	4	40%
26-30	1	10%
31-35	4	40%
35-40	0	0%
40-45	1	10%

Based on table 2, it can be identified that the highest percentage of respondents' age is in the age range of 20-25 years as many as 4 people (40%) and 31-35 years as many as 4 people (40%), then followed by the age range of 26-30 years as many as 1 person (10%) and 40-45 years as many as 1 person (10%), while for the age range of 35-40 years there are none. This may indicate that PT Eratel Prima Jabodetabek Branch prioritizes employees with productive age (15-64 years) to work in the finance department, where in this age range employees are considered to have sufficient ability and experience to work so that they can adapt to the new world of work.

Table 3. Characteristics of respondents based on gender

Gender	Total	Percentage (%)
Male	3	30%
Female	7	70%

Based on table 3, it can be identified that the highest percentage of respondents' gender is female as many as 7 people (70%) and followed by male as many as 3 people (30%). This happened due to inadvertence in the research. The distribution of questionnaires was carried out randomly to employees of PT Eratel Prima Jabodetabek Branch, especially to finance employees who were willing to participate in the research through the distributed questionnaires.

Table 4. Characteristics of respondents based on the last level of education

Last Education	Total	Percentage (%)
High School	2	20%
Diploma	1	10%
Bachelor's degree	7	70%

Based on table 4, it can be identified that the highest percentage of respondents' last education is at the undergraduate level as many as 7 people (70%), followed by high school as many as 2 people (20%), and finally diploma as many as 1 person (10%). This can indicate that PT Eratel Prima Jabodetabek Branch prioritises accepting employees with the latest education, namely undergraduate.

Table 5. Characteristics of respondents based on length of service

Period of Employment	Total	Percentage (%)
< 1 tahun	4	40%
1-3 tahun	3	30%
4-6 tahun	2	20%
> 6 tahun	1	10%

Based on table 5, it can be identified that the highest percentage of respondents' tenure is for < 1 year as many as 4 people (40%), followed by 1-3 years as many as 3 people (30%), then 4-6 years as many as 2 people (20%), and > 6 years as many as 1 person (10%). The length of service that is still relatively new can occur because the finance department employees at PT Eratel Prima Jabodetabek Branch are new employees.

Description of Research Variables

The following are the results of the answers to the questionnaires that have been filled in by the financial employees of PT Eratel Prima Jabodetabek Branch regarding aspects of the Accounting Information System and Employee Performance.

Table 6. Respondents' results on Accounting Information Systems

No	Question	Mean
1	The Accounting Information System used can reduce the risk of errors in my tasks.	4,4
2	The features available in the Accounting Information System are complete and meet my needs.	3,8
3	The accounting information system used is very easy to access.	4,1
4	The Accounting Information System used can provide fast and accurate data results.	4,2
5	The Accounting Information System used often experiences interruptions.	4
Overall Mean of Variable X (Accounting Information System)		4,1

Based on table 6, the majority of employees agree with the statement that 'The Accounting Information System used is able to reduce the risk of errors in their work,' with the highest average score of 4.4. This shows that the Accounting Information System implemented by PT Eratel Prima Jabodetabek Branch plays an important role in supporting employee work, thus helping to improve the quality of their performance (reducing the risk of errors).

Table 7. Respondents' results on Employee Performance

No	Statement	Mean
1	With the accounting information system, I can complete my tasks quickly rather than using the manual method.	4,3
2	I feel more productive with the Accounting Information System.	4,3
3	I find it easy to use the Accounting Information System at PT Eratel Prima.	4
4	I really understand the use of the Accounting Information System used.	3,9
5	The Accounting Information System used is in accordance with what I need.	4
Overall Mean of Variable Y (Employee Performance)		4,1

Based on table 7, the majority of employees agree to the statements that 'With the accounting information system, I can complete my tasks quickly rather than with manual methods' and 'I feel more productive with the Accounting Information System,' with the same highest average score of 4.3. This shows that most agree that their performance as employees of PT Eratel Prima Jabodetabek Branch is more productive and effective with the Accounting Information System. A good employee performance assessment will certainly have a positive impact on the company, which will increase the effectiveness and efficiency of the company's business activities. In other words, the company will grow and be able to run its business properly.

Validity and Reliability Test

According to the Big Indonesian Dictionary (KBBI), validation is the validation or testing of the truth of something. Validity test is a test used to show the extent to which the measuring instrument used in measuring something that you want to measure. Ghozali (2009) states that the validity test is used to measure the validity of a questionnaire. A questionnaire can be said to be valid when the questions on the questionnaire are able to reveal something that will be measured by the questionnaire.

Reliability is an indicator that shows the level of trust or reliability of a measuring instrument. The reliability test is carried out to assess the consistency of the measuring instrument, namely whether the tool provides stable results when the measurement is repeated (Janna & Herianto, 2021). A measuring instrument is considered reliable if it is able to produce similar results even though measurements are taken many times.

The condition for a data to be said to be valid is when r -Count is greater than r -Table. The r -Table value is based on the product moment correlation table with a significant level of 5%, so the r -Table value is 0.632. In addition, a data is also said to be valid when the Sig value. Smaller than 0.05. Meanwhile, the requirement for data to be reliable is when the Cronbach's Alpha value is more than 0.6. Berikut hasil uji validitas dan reliabilitas yang diperoleh menggunakan aplikasi SPSS.

Table 8. Variable validity and reliability tests of Accounting Information Systems

Statement	r-count	r-Table	P (Sig.)	Description Valid	Cronbatch's Alpha	Description Reliable
X1	0,671	0,632	0,034	Valid	0,792	Reliable
X2	0,667	0,632	0,035	Valid		
X3	0,950	0,632	0,000	Valid		
X4	0,890	0,632	0,001	Valid		
X5	0,689	0,632	0,027	Valid		

Based on table 8, all statements related to the Accounting Information System variable are declared valid. This can be seen from the r-Count value which is greater than the r-Table of 0.632, which indicates that each statement is valid. In addition, the Significance (Sig.) value also shows validity because all of them are above 0.05. Based on table 8, it can also be seen that all statements of the Accounting Information System variable are reliable because the Cronbatch's Alpha value of 0.792 is greater than 0.6.

Table 9. Validity and reliability test of Employee Performance variables

Statement	r-count	r-Table	P (Sig.)	Description Valid	Cronbatch's Alpha	Description Reliable
Y1	0,879	0,632	0,001	Valid	0,882	Reliable
Y2	0,879	0,632	0,001	Valid		
Y3	0,899	0,632	0,000	Valid		
Y4	0,748	0,632	0,013	Valid		
Y5	0,742	0,632	0,014	Valid		

Based on table 9, all statements related to the Employee Performance variable are declared valid. This can be seen from the r-Count value which is greater than the r-Table of 0.632, which indicates that each statement is valid. In addition, the Significance (Sig.) value also shows validity because all of them are above 0.05. Based on table 9, it can also be seen that all statements of the Employee Performance variable are reliable because the Cronbatch's Alpha value of 0.882 is greater than 0.6.

Classical Assumption Test

According to Gunawan (2020), the multicollinearity test is a regression model test used to determine whether there is a correlation between variables. Multicollinearity test is used to determine the presence or absence of multicollinearity Variance Inflation Factor (VIF) and Tolerance.

The standards of the multicollinearity test are: 1) If the Tolerance value is greater than or $\geq$ 0.01, it means that there is no multicollinearity. 2) If the Variance Infation Factor (VIF) value is below or $\leq$ 10.0, it means that there is no multicollinearity. The following multicollinearity test results are obtained using the SPSS application.

Table 10. Multicollinearity test results

	Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	4,871	3,993		1,220	0,257		
	Accounting Information System	0,762	0,194	0,812	3,937	0,004	1,000	1,000

a. Dependent Variable: Employee Performance

Based on table 10, it can be seen that the Tolerance value is 1.000 which is greater than ($\geq$) 0.01 so it can be interpreted that there is no multicollinearity. In addition, based on the VIF value, it can also be interpreted that there is no multicollinearity because the results in the table show a VIF value of 1.000 which is smaller ($\leq$) than 10.0.

According to Gunawan (2020), the normality test is a test used to determine and measure whether the data obtained has a normal distribution or not, and whether the data obtained comes from a normally distributed population. The regression model is said to be good, if the residual value is normally distributed. In this study, the data normality test used was the Kolmogorov-Smirnov normality test.

Based on the Kolmogorov-Smirnov test, a data is considered normal if the value of the Asymp. Sig. (2-tailed) $\geq$ 0.05 then the data is normally distributed. Conversely, if the value of Asymp. Sig. (2-tailed) $\leq$ 0.05 then it is said to be abnormal. The following are the results of the normality test obtained using the SPSS application.

Tabel 11. Normality test results

		Unstandardized Residual
N		10
Normal Parameters ^{a,b}	Mean	0,0000000
	Std. Deviation	1,29736977
Most Extreme Differences	Absolute	0,148
	Positive	0,148
	Negative	-0,148
Test Statistic		0,148
Asymp. Sig. (2-tailed)		0,200 ^{c,d}

Based on table 11, it can be seen that the Asymp. Sig. (2-tailed) of 0.200 which is greater than ($\geq$) 0.05 so it can be concluded that the data is normally distributed and can be used in research.

Simple Linear Regression Analysis

Simple linear regression analysis is a method used to determine the effect of one variable on another (Darma, 2021). This method is used when there is only one independent variable (X). Variable X (Accounting Information System) is said to have an effect on variable Y (Employee Performance) if the simple linear regression results show the t-Count > t-Table value. The t-Table value is obtained by means of:

$$t\text{-Table} = (\alpha/2 : n-k-1) \\ = (0,05/2 : 10-1-1)$$

$$= (0.25 : 8) \rightarrow \text{Judging by the distribution of t-Table values}$$

$$= 2,306$$

The following are the results of simple linear regression analysis obtained using the SPSS application.

Table 12. Simple linear regression calculation results

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,871	3,993		1,220	0,257
	Accounting Information System	0,762	0,194	0,812	3,937	0,004

Based on table 12, it can be seen that the t-Count value is $3.937 > t\text{-Table of } 2.306$, so it can be concluded that the Accounting Information System variable (X) has an effect on the Employee Performance variable (Y). Sig. value of $0.004 < 0.05$, so it can be concluded that the Accounting Information System variable (X) has an effect on the Employee Performance variable (Y).

In this study, the effect of accounting information systems on employee performance was analysed through the coefficient of determination (R^2) value, as shown in table 13.

Table 13. Coefficient of determination (R^2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,812	0,660	0,617	1,376

The results of data analysis show that the R Square value is 0.660. This means that the regression model is able to explain 66% of the variation in employee performance, while the remaining 34% is influenced by other factors not included in the model.

Hypothesis Testing

In testing the hypothesis, the t test is used with the formula, namely:

$$t = b / S_b$$

Description: b = regression coefficient, S_b = standard error of regression coefficient, t = t-Count value (t-Observation).

The test criteria at the $\alpha = 5\%$ significance level are as follows: 1) If the significant value of the t test is greater than 0.05, then H_0 is accepted, which indicates that the accounting information system has no effect on employee performance at PT Eratel Prima Jabodetabek Branch; 2) If the significant value of the t test is less than 0.05, then H_0 is rejected, which means that the accounting information system has an effect on employee performance at PT Eratel Prima Jabodetabek Branch.

Table 14. Hypothesis testing results

Variable	t-Count	Sig.	Statement
Accounting Information System	3,937	0,004	Influential

Based on table 14, it can be seen that the significance value (Sig.) is 0.004 smaller than 0.05 so that H1 can be accepted, which means that accounting information systems affect employee performance at PT Eratel Prima Jabodetabek Branch.

Discussion

The results of data analysis conducted using the SPSS application show that the t-Count value is $3.937 > t\text{-Table of } 2.306$. This value indicates that the Accounting Information System variable (X) affects the employee performance variable (Y). In addition, based on the significance value (Sig.) which is 0.004 greater than 0.05 which also indicates the influence of variable X on variable Y. The amount of contribution or influence of variable X on variable Y is indicated by the coefficient of determination. Based on the results of data analysis, the coefficient of determination (R^2) is 0.660. This value indicates that the Accounting Information System (X) affects Employee Performance (Y) by 66%, while the remaining 34% is influenced by factors outside the model.

Previous research conducted by Melasari (2017) and Mulyanti (2020) also showed the same thing. Based on the research conducted, the Accounting Information System has a positive effect on Employee Performance. This shows that increasing the quality of the Accounting Information System will also improve Employee Performance at the company. Accounting Information Systems are useful as information providers, therefore the information must be tailored to the needs of the employees who use it. With the AIS, employees will easily access all the information needed so that they can work more effectively and efficiently.

CONCLUSION

Based on the research results described earlier, the conclusion drawn is that in order to survive in the midst of the modern era, PT Eratel Prima Jabodetabek Branch has implemented a technology-based Accounting Information System. The information system is used by all employees in the finance department. The goal is to increase the effectiveness and efficiency of employee performance. The research conducted shows that there is an influence or contribution from the Accounting Information System on Employee Performance positively. The better the quality of the system, the better the performance of its employees. This is certainly in line with the objectives of implementing the Accounting Information System carried out by PT Eratel Prima. Apart from the Accounting Information System, there are still other variables that can affect employee performance. Therefore, researchers suggest that further research can identify and describe these other variables so that they can help organizations or companies evaluate and improve their activities so that they can further maximize employee performance.

REFERENCES

- Darmawan, D., & Wijaya, A. F. (2022). Analisis dan Desain Tata Kelola Teknologi Informasi Menggunakan Framework COBIT2019 pada PT.XYZ. *Journal of Computer and Information Systems Ampera*, 1-17.
- Putra, A. D., Purba, L. M., & Nuralia. (2022). *Journal of Computer and Information Systems Ampera*. *Journal of Computer and Information Systems Ampera*, 1-5.
- Rahmansyah, A. I., & Darwis, D. (2020). Sistem Informasi Akuntansi Pengendalian Internal Terhadap Penjualan (Studi Kasus : CV. ANUGRAH PS) . *Jurnal Teknologi dan Sistem Informasi (JTSI)*, 42-49.
- Santoso, I., & Madiistriyatno, H. (2021). *Metodologi Penelitian Kuantitatif*. Tangerang: Indigo Media.

- Simamora, B. (2022). Skala Likert, Bias Penggunaan dan Jalan Keluarnya. *Jurnal Manajemen* , 84-93.
- Ibrahim, F. (2016). Peranan Kota Bogor, Depok, Tangerang, Bekasi, Dan Cianjur (Bodetabekjur) Dalam Menyokong Pembangunan Kota Jakarta. *Jurnal Bumi Indonesia* , 1-10.
- Sugiyono. (2014). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Yam, J. H., & Taufik, R. (2021). Hipotesis Penelitian Kuantitatif. *PERSPEKTIF : Jurnal Ilmu Administrasi* , 96-102.
- Ghozali, I. (2009). *Aplikasi analisis multivariate dengan program SPSS*. Semarang: Universitas Diponegoro.
- Janna, N. M., & Herianto. (2021). *Konsep Uji Validitas Dan Reliabilitas Dengan Menggunakan SPSS*.
- Gunawan, C. (2020). *Mahir menguasai SPSS panduan praktis mengolah data penelitian*. Sleman: Deepublish.
- Darma, B. (2021). *STATISTIKA PENELITIAN MENGGUNAKAN SPSS*. Jakarta: GUEPEDIA.
- Melasari, R. (2017). Pengaruh Sistem Informasi Akuntansi Terhadap Kinerja Karyawan Dengan Integritas Karyawan Sebagai Variabel Pemoderasi Pada Perbankan Di Tembilahan. *Jurnal Akuntansi dan Keuangan* , 1-15.
- Mulyanti, K. (2020). Pengaruh Sistem Informasi Akuntansi Terhadap Kinerja Karyawan Pada Pt Iron Bird Logistics. *Land Journal* , 188-194.