

# The Effect of Information Technology, Employee Professionalism, and Supervision to the Improvement of Employee Performance

## (Study in Staffing Agency Lumajang)

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**Abstract:-** This research aims to analyze the effect of information technology, employee professionalism, and supervision to the employee performance. This research was conducted in Staffing Agency Lumajang on January to March 2021. The sample of this research was all Civil Servants who work for Staffing Agency Lumajang as many as 46 people. In this research, the primary data was collected by using questionnaires. The data analysis method used was multiple regressions. The results showed that information technology, employee professionalism, and supervision affected the employee performance in Staffing Agency Lumajang both simultaneously and partially.

**Keywords:-** Information Technology, Professionalism of Employees, Supervision, Employees' Performance.

### I. INTRODUCTION

The development of industrial revolution 4.0 in this era has made advancements in information technology that can spread throughout the world very rapidly and touch all sectors of human life, both in urban and rural areas. From that fact, there needs to be innovation in information technology, especially in staffing services to adjust the development of the era.

The Lumajang government has innovated in information technology in terms of staffing services for civil servants through the Regional Staffing Agency. This is proven by the use of smartphones to fill employee attendance and daily activities, followed by other online staffing services such as promotion proposal services, periodic salary increases, retirement, employee leave, and filling employee performance targets. However, there are still many obstacles in its implementation, including the quality of applications that still need to be improved, server capacity, signal strength from providers, and the quality of human resources employees in the Lumajang Government.

Civil servants are part of the profession, so in order to carry out the work professionally, it must be considered and pay attention to professionalism. According to Kabella (2016) employee professionalism can improve employee performance in solving the problems faced. Then, according to Mustaqiem

(2010) Civil servants are very possible to provide services to the community professionally as long as they have a commitment and professionalism is always maintained.

Supervision is a control effort conducted by the leadership in monitoring, directing, evaluating, and rewarding employees based on the results of the work. Meanwhile, the relationship between supervision and employee activities was conveyed by Grant and Cravens (1996) that good supervision will increase employee activity. In addition to be affected by individuals as human resources, employee performance is also strongly affected by organizational situation factors because each individual has their differences. Therefore, it takes the support of organizational situations that can support individual work to produce good performance Kreitner and Kinicki (2014)

From the explanations above, it can be concluded that the purpose of this study is to identify and analyze the effect of information technology, employee professionalism, and supervision on improving employee performance. So that it can provide input for agencies in formulating the right human resources strategy to increase the performance of employees in improving services to the community quickly, precisely, and quality in the present and the future.

### II. LITERATURE REVIEW

According to Mangkunegara (2013) performance is the result of work and quantity achieved by an employee in carrying out the duties by the responsibilities given. While Robbins (2006) stated that performance is a measurement of the expected optimal work results. Many factors affect performance, including organizational climate, leadership, job quality, workability, initiative, motivation, durability or reliability, the quantity of work, and work discipline. According to Moehariono (2012) performance is an overview of the level of achievement of the implementation of a program of activities or policies in realizing the tools, objectives, vision, and mission of the organization as outlined in an organization's strategic planning.

There has been a lot of research on the factors that affect performance. Previous researchers have developed the idea of their research by adding the independent variables as the factor

that affected the performance. In this research, the author focuses on information technology, professionalism, and supervision as factors that affect performance. The researcher chose to focus on these three factors by considering studies with similar independent variables that have been conducted by several previous studies.

The use of information technology as a factor affecting the performance of human resources has previously been conducted by Fitriani (2018), Marwan (2017), Muzakki, et.al (2016), Jaryono and Widuri (2011), and Endraswari (2006). These studies showed that the use or utilization of technology has a positive and significant effect on performance. These studies showed that the application of technology in disciplinary work has a good impact on profit companies to educational institutions in Indonesia.

The effect of professionalism on employee performance has been researched before. There have been at least three previous studies that raised professionalism as an independent variable, including Bolung *et al* (2018), Dewi and Wasiati (2013), and Sulistya (2008). Professionalism was partially proven to have a significant impact on employee performance even though it was not the only independent variable in these studies. In the public sector, Bolung *et al* (2018) proven the effect of professionalism on the employees' performance of regional development planning agencies of North Sulawesi province. Similarly, the research conducted by Dewi and Wasiati (2013) in RSUD dr. Abdoer Rahem Situbondo and Sulistya (2008) used civil servants as the research object in Rembang.

According to Usman (2010) supervision is the process of monitoring, assessing and reporting plans for the achievement of the goals set for corrective action for further improvement. The importance of supervision in achieving the objectives of entities in maximizing employee performance has been previously researched by Sofyani (2018), Manik (2017), Oktaliani (2017), and Handayani and Martini (2010).

**III. DATA**

This research used quantitative data or qualitative data that was used as quantitative. It was due to the results of the respondents' answers were processed by using statistics. The primary data was obtained by the respondents' answers through questioner. The respondents of this study were civil servants who worked for the Staffing Agency Lumajang as many as 46 people. The questions in the questionnaire were organized using a likert scale to make it easier for respondents to fill out questionnaires. Other data in this study were taken using interview techniques, library studies, and documentation.

**IV. METHODOLOGY**

This research used quantitative data analysis method and descriptive statistics. The data obtained through questioner were analyzed to get the conclusion and make decision. The data obtained will be processed and interpreted using the SPSS for windows 24 application program analysis tool.

Instrument tests include validity tests and reliability tests were conducted to ensure that the data from questionnaires in the form of respondents' answers are valid and reliable. Furthermore, the Classic Assumption test which includes normality test, multicollinearity test, and heteroscedasticity test.

In testing the effect between variables, the study used multiple regression methods. Multiple regression models are models where non-free variables depend on two or more free variables. The hypothesis tests used in this study are three, namely the determination coefficient test (R<sup>2</sup>), the F test (simultaneous), and the t test (partial).

**V. RESULT AND DISCUSSION**

The test results of the instrument validity data showed that all items r analysis results are greater (>) than r table, so all items are declared valid likewise with the results of reliability tests. The analysis obtained a value of Cronbach's Alpha of 0.742; 0,762; 0,903; 0.815, while the critical r value (two-sided test) at a significance of 5% with n=46 (df=n-2=44), obtained by 0.2907, it can be concluded that the items of the research instrument are reliable.

The classic assumption test started from a data normality test through the One-Sample Kolmogorov-Smirnov. The results showed that the employee performance variable significance value of 0.200, which is above 0.05, means that the residual value is distributed normally or meets the classic assumption of normality. The multicollinearity tests through VIF tests showed that each free variable was smaller than 10 and no free variable had a Tolerance value of less than 0.10 so the results concluded there was no multicollinearity in the regression model. As for heteroscedasticity tests, the scatterplot chart showed the dots do not form a specific pattern and spread randomly above or below the number 0 and the Y-axis. It can be concluded that the regression model is free from heteroscedasticity.

The first hypothesis test performs a coefficient of determination test determined by the adjusted value of R Square.

Table 1 Determination Coefficient Test Results

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,851 <sup>a</sup>	0.725	0.705	2.01822	2.210

- a. Predictors: (Constant), EMPLOYEE SUPERVISION, INFORMATION TECHNOLOGY, EMPLOYEE PROFESSIONALISM
- b. Dependent Variable: EMPLOYEE PERFORMANCE

The Model Summary table provides information about the value of the coefficient of determination. It is known that the value of the coefficient of determination or R Square is 0.725, indicating that the proportion of variable influence of

information technology, employee professionalism and employee supervision on employee performance is 72.5%. That is, information technology, employee professionalism and employee supervision had a proportion of the impact on employee performance at 72.5% while the remaining 27.8% is influenced by other variables not present in the linear regression model.

Model feasibility testing or more popularly known as F-test is the initial stage of identifying regression model that is estimated to be feasible or not. The name of this test is referred to as test F, because it follows the distribution of F whose testing criteria are like One Way Anova.

Table 2 F Test Results (Simultaneous Test)

ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	449.904	3	149.968	36.818	.000 <sup>b</sup>
Residual	171.075	42	4.073		
Total	620.978	45			

a. Dependent Variable: EMPLOYEE PERFORMANCE

b. Predictors: (Constant), EMPLOYEE SUPERVISION, INFORMATION TECHNOLOGY, EMPLOYEE PROFESIONALISM

Prob value. The F count (sig) in the table above is worth 0.000 less than the significance level of 0.05 so it can be concluded that the linear regression model is estimated feasible to be used to explain the influence of information technology, employee professionalism and supervision on employee performance or it can be said that the variables of information technology, employees professionalism and supervision jointly affect the employees performance.

The T-tests in multiple linear regression is intended to test whether the expected parameters for estimating multiple linear regression model equation is already the right parameters.

Table 1 T Test Results (Partial Test)

Variable	T Count	T table	Sig.	Desc.
Information technology	1.695	1.68195*	0.097*	signifikan
Employee Profesionalism	5.076	2.01808*	0.000*	signifikan
Employee Supervision	2.814	2.01808*	0.007*	signifikan

The test results that can be seen in the Coefficient table as above means:

1. The t-count value of the information technology variable is greater than the T table (1,695 > 1.68195) and the prob value. T count of information technology-free variables is 0.097 which is smaller than 0.05, so the Information

Technology variable has a significant effect on employee performance variables.

- The t-count value of the employee professionalism variable is greater than t-table (5.076 > 2.01808) and the prob value. T count of the independent variable of employee professionalism is 0.000 which is smaller than 0.05 so that the variable of employee professionalism has a significant effect on the Employee Performance variable.
- The t-count value of the employee supervision variable is greater than t table (2.814 > 2.01808) and the prob value. T count of the independent variable of employee supervision is 0.007 which is smaller than 0.05 so that the variable of employee supervision has a significant effect on the Employee Performance variable.

VI. CONCLUSION

The results of the research and conclusions as stated above, there are several implications that can be observed in an effort to improve the performance of civil servants in the Staffing Agency Lumajang, among others:

- There needs efforts to improve the professionalism of employees continuously through various training activities, seminars, workshops or outbound that can improve the performance of employees Staffing Agency Lumajang.
- There needs to be an improvement in the quality of supervision from the leadership to subordinates in order to have a balanced and equitable process in assessing employee performance which in turn will improve the overall performance of employees at the Staffing Agency Lumajang.
- There needs to be integration of the application of information technology, professionalism of employees and quality supervision to better improve the performance of employees in the Staffing Agency Lumajang.

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