



Analysis of the Influence of Leadership Style and Motivation on the Level of Employee Productivity at PT. Sumber Setamurni

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ABSTRACT

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This study aims to determine the effect of leadership style and motivation on the level of employee productivity at PT. Sumber Setamurni. The type of research used in this research is associative quantitative method. The sample in this study was 50 employees. In this study, the questionnaire will be distributed as measured by a Likert scale. The analytical method used is multiple linear regression analysis, ttest (partial testing), F test (simultaneous testing). From the results of the study that leadership style has a positive and significant effect on employee productivity. Meanwhile, motivation has a positive and significant effect on employee productivity. Meanwhile, leadership style and motivation affect employee productivity. This makes leadership style the most dominant variable affecting employee productivity at PT. Sumber Setamurni.

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1. Introduction

In today's era, many companies compete to show their superiority. In general, leadership is also one of the factors that determine the survival of a company, because a good leadership style is a very important factor in providing direction to employees to be able to empower their employees. Basically the leader in the company is responsible for human resource issues by paying attention to the aspect of improving the quality of the workforce and employee morale, it is hoped that productivity will increase. In line with the development of an increasingly global business world, the management of a company must be carried out professionally and productively. Every company that is founded has the hope that in the future it will experience very rapid development in the scope of business. The company also wants to create good productivity in its field. Even though a company has a perfect plan, company and strict supervision, but if employees carry out their duties not with high interest then the company will not achieve optimal results. Optimal results are work targets which are generally broken down into time periods. To achieve the target, the role of human resources is very decisive. The Human Resources needed at this time are Human Resources who are able to master technology quickly, and are responsive to technological changes. Human resources are resources that have feelings, desires, skills, knowledge, encouragement, power, and work (ratio, taste and intention). All of these potential human resources affect the organization's efforts in achieving its goals. (E. Sutrisno, 2016)

PT. Sumber Setamurni is an accredited company and was established in 2013 in November. By providing a variety of iron and steel products that already have products with international quality even though PT. Sumber Setamurni has expanded to almost all regions in Indonesia, but for a company headquartered in Central Jakarta. Researchers found the problems that exist in the company PT. Sumber Setamurni is about employee productivity, the factors that affect employee productivity are about leadership style, in the form of motivation to their subordinates, and not having a direct relationship with their subordinates so that between superiors and subordinates there is no personal contact, so employees cannot obey what the leader is ordered to do.



Based on the background of the problem that the researcher has described above which makes researchers interested in researching with the title "Analysis of The Influence of Leadership Style and Motivation on The Level of Employee Productivity at PT. Sumber Setamurni."

2. Method

2.1 Location and Time

The research was conducted at PT. Sumber Setamurni whose address is at Jalan Pulau Sulawesi Complex Industrial Estate Number 7 Medan City. The research time is planned from October 2021 to January 2022.

2.2 Population and Sample

Jaya (2019:10), the population is the total number consisting of objects or subjects that have certain characteristics and qualities determined by researchers to be studied and then drawn conclusions. Jaya (2019:10), the sample is part of a number of characteristics possessed by the population used for research. The population in this study were all employees of PT. Sumber Setamurni with a total of 50 employees. The technique for determining the sample is using saturated sampling so that as many as 50 samples are obtained.

2.3 Data Collection Method

Data collection through questionnaires is done by asking questions to the parties related to the problem. To assess respondents' responses, the author uses a Likert scale that uses several question items to measure individual behavior by responding to 5 choice points on each question item.

2.4 Validity and Reliability Test

The data obtained need to be tested for accuracy and reliability so that the results of data processing can be more precise and accurate. Therefore, it is necessary to know how high the validity and reliability of the measuring instrument (instruments) used are. Based on the research, each questionnaire item variable was tested for validity, all questionnaires had met the valid criteria and were eligible to be used as questionnaires in further research. While in the reliability test, all questionnaire items are reliable variables and can be used as research instruments.

3. Result and Analysis

3.1 Normality Test

The residual normality test is used to test whether the residual value resulting from the regression is normally distributed or not. A good regression model is to have residuals that are normally distributed.

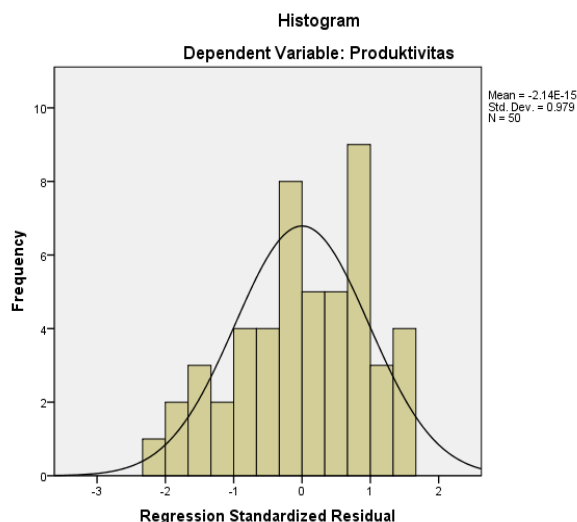


Figure 1. Histogram Graphic

Based on the picture above, it can be seen that the line forms a bell, neither to the left nor to the right. This shows that the data are normally distributed and meet the assumption of normality.

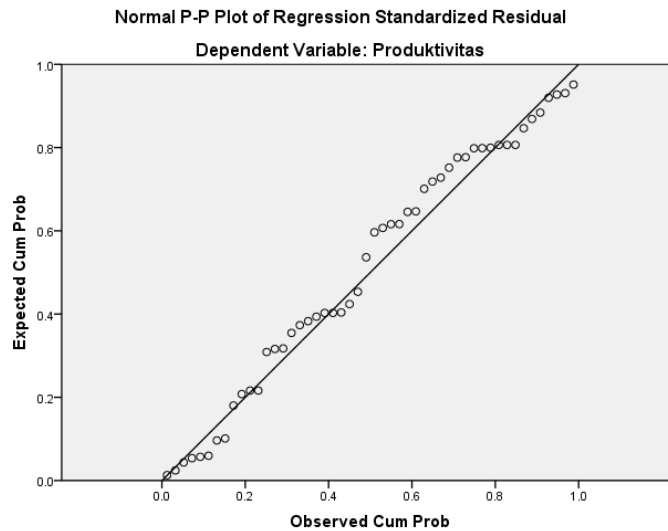


Figure 2. Normal Probability Plot of Regression Graphic

Based on the picture above, it can be seen that the data (dots) spread around the diagonal line and follow the diagonal line. So from the picture it can be concluded that the regression model residuals are normally distributed.

Table 1
One-Sample Kolmogorov Smirnov Test

		Unstandardized Residual
N		50
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.52088375
Most Extreme Differences	Absolute	.098
	Positive	.064
	Negative	-.098
Kolmogorov-Smirnov Z		.696
Asymp. Sig. (2-tailed)		.718

a. Test distribution is Normal.

b. Calculated from data.

Source: Research Result, 2022

Based on the table above, the results of the Kolmogorov-Smirnov normality test prove that the significance value is greater than 0.05, namely 0.718, so it can be concluded that the data is classified as normally distributed.

3.2 Multicollinearity Test

The test method commonly used is to look at the Tolerance and Variance Inflation Factor (VIF) value in the regression model where the VIF value is less than 10 and has a Tolerance value of more than 0.1.

Table 2
Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Leadership Style	.995	1.005
Motivation	.995	1.005

a. Dependent Variable: Work Productivity

Source: Research Result, 2022

Based on the table, it can be seen that all variables have a tolerance value of more than 0.1 and a VIF value of less than 10 so it can be concluded that there are no problems in the multicollinearity test.



3.3 Heteroscedasticity Test

Heteroscedasticity is a condition where in the regression model there is an inequality of variance from the residuals from one observation to another observation where a good regression model does not occur heteroscedasticity.

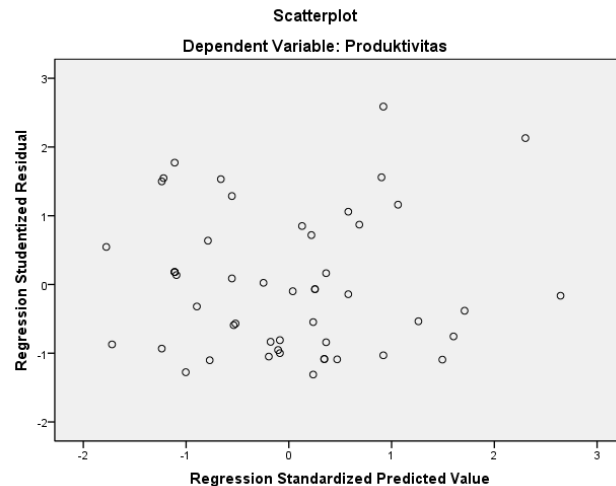


Figure 3. Scatterplot Graphic

Based on the scatterplot graph presented, it can be seen that the points spread randomly and do not form a clear pattern and spread both above and below zero on the Y axis. This means that there is no heteroscedasticity in the regression model, so the regression model can be used to predict Work Productivity based on the input of the independent variables.

3.4 Multiple Linear Regression Analysis

Multiple regression analysis is an analysis to determine whether there is a significant effect between two or more independent variables on one independent variable.

Table 3
Multiple Linear Regression Analysis Test
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.574	2.923		1.907	.063		
	Leadership Style	.360	.077	.534	4.641	.000	.995	1.005
	Motivation	.201	.085	.271	2.352	.023	.995	1.005

a. Dependent Variable: **Productivity**

Source: Research Result, 2022

$$\text{Productivity} = 5.574 + 0.360 \text{ Leadership Style} + 0.201 \text{ Motivation} + e \quad (1)$$

Based on the above equation, then: Constant (a) = 5.574. This means that if the independent variables, namely leadership style and motivation, have a value of 0, then work productivity is 5,574. Where if there is an increase in leadership style, there will be an increase in work productivity of 0.360. Likewise with work motivation where if there is an increase in motivation then work productivity will increase by 0.201.

3.5 Coefficient Determination

Determination Analysis or also called R Square symbolized by R² is used to determine the magnitude of the influence of the independent variable (X) together on the dependent variable (Y) where the smaller the coefficient of determination, this means the influence of the independent variable (X) on the variable bound (Y) is getting weaker. On the other hand, if the coefficient of determination is close to 1, then the influence of the independent variable on the dependent variable is getting stronger. Thus, if the coefficient of determination is 0, this indicates that there is no percentage contribution of influence given by the independent variable to the dependent variable. However, if the coefficient of determination is 1, then the contribution given by the independent variable to the dependent variable is perfect.

Table 4
Coefficient Determination Test
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.616 ^a	.380	.354	1.553

a. Predictors: (Constant), Motivation, Leadership Style

b. Dependent Variable: Productivity

Source: Research Result, 2022

Based on the table above, the coefficient of determination R Square is 0.380. This shows that the variables of leadership style and motivation ability explain their influence on work productivity by 38%. While the remaining 62% is the influence of other independent variables not examined in this study such as conflict, discipline, compensation and others.

3.6 Simultaneous Hypothesis Test (F Test)

The F test or regression coefficient test is used to determine whether the independent variable simultaneously has a significant effect on the dependent variable. In this case, to find out whether the independent variable simultaneously has a significant effect on the dependent variable or not. The test uses a significance level of 5%. The criteria for evaluating the hypothesis in this F test are:

H₀ Accepted if: F_{count} < F_{table},

H_a Accepted if: F_{count} > F_{table}

Table 5
ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.479	2	34.739	14.406	.000 ^a
	Residual	113.341	47	2.412		
	Total	182.820	49			

a. Predictors: (Constant), Motivation, Leadership Style

b. Dependent Variable: Productivity

Source: Research Result, 2022

Based on the table above, it is obtained that the value of F_{table} (3.11) and significant = 5% (0.05), namely F_{count} (14.406) and sig.a (0.000a). This shows that the results of the study accept H_a and reject H₀. The comparison between F_{count} and F_{table} can prove that simultaneously leadership style and motivation have a significant effect on work productivity.

3.7 Partially Hypothesis Test (t Test)

The t test or partial regression coefficient test is used to determine whether the independent variable partially has a significant effect on the dependent variable or not. In this case, to find out whether the independent variable partially has a significant effect on the dependent variable or not. The test uses a significance level of 0.05 and a two-tailed test. The t test criteria are:

H₀ Accepted if: t_{count} < t_{table}

H_a Accepted if: t_{count} > t_{table}

Table 6
Coefficient Test

Model	t	Sig.
1 (Constant)	1.907	.063
Leadership style	4.641	.000
Motivation	2.352	.023

a. Dependent Variable: Productivity

Source: Research Result, 2022

Based on the table above, it can be concluded that leadership style and motivation partially have a significant effect on work productivity which can be seen in t_{count} greater than t_{table} (1.993) and significance less than 0.05.



4. Conclusion

The conclusions that researchers can draw from the results of research that have been carried out are as follows:

- a. The results of the partial test calculation show that leadership style and motivation partially have a significant effect on work productivity which can be seen in t_{count} greater than t_{table} (1.993) and significance less than 0.05.
- b. The results of the joint test calculations obtained that the value of F_{table} (3.11) and significant = 5% (0.05), namely F_{count} (14.406) and sig.a (0.000a). This shows that the results of the study accept H_a and reject H_0 . The comparison between F_{count} and F_{table} can prove that simultaneously leadership style and motivation have a significant effect on work productivity.
- c. The value of the coefficient of determination R Square is 0.380. This shows that the variables of leadership style and motivation ability explain their influence on work productivity by 38%. While the remaining 62% is the influence of other independent variables not examined in this study such as conflict, discipline, compensation and others.

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