

The Influence of Motivation, Leadership and Productivity on Performance at PT. Perimex Perimex Village

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ABSTRACT

This study aims to determine the effect of motivation on employee performance at PT. Perimex, knowing the influence of leadership on employee performance at PT. Perimex, knowing the effect of productivity on the performance of employees of PT Perimex and knowing the effect of motivation, leadership and productivity simultaneously on the performance of employees of PT. Perimex is implemented at PT. Perimex with the population, namely all employees of PT. Perimex amounted to 96 people with saturated sampling technique using total sampling obtained a research sample of 96 people. As for the results of the research, partially obtained the value of motivation t count (X1) is 3.371 and the table value is 1.984 provided that the value of $t_{count} > t_{table}$ ($3.371 > 1.984$) and the value of $sig < 0.05$ ($0.001 < 0.05$), partially obtained the value of t count. Leadership (X2) is 3, Leadership and Productivity make a big contribution in explaining employee performance of 76.80% while the 23.20% chance is influenced by other factors outside of research. The conclusion of the study is that motivation has a significant effect on employee performance, leadership has a significant effect and is the dominant variable that affects employee performance, productivity has a significant effect on employee performance and simultaneously motivation, leadership and productivity have a significant effect on employee performance.

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1. Introduction

PT. Perimex is a company engaged in the oil palm plantation business, and in the past it also owned a Crumb-Rubber Sheet Management Factory. And over time, in 2010 the Crumb-Rubber Factory was closed due to PT. Perimex no longer cultivates rubber, but has switched to oil palm, and the surrounding community has also switched the function of plants, namely from rubber to oil palm. Daper company PT. Perimex is very aware of the importance of product quality to customers.

Motivation is an encouragement given to humans, especially subordinates, so that they are willing to work hard by giving all their skills to achieve company goals. Motivation questions how to encourage the morale of subordinates because basically the company does not only expect capable, capable, and skilled employees.

Leadership is management with good leadership, thus the management process will run smoothly and employees will be enthusiastic about carrying out their duties. Whether or not the goals of a company are achieved or not, are largely determined by the ability of managers to carry out their leadership to direct their subordinates. The skills and dignity of a leadership will encourage the morale of their subordinates to work.

Productivity is the production of goods and services by using resources efficiently. Therefore productivity is defined as the ratio between output and input in a certain time. The problem of productivity is low labor, to increase productivity means to work more actively and quickly, improve the quality of goods and life.

2. Literature Review

2.1 Theory of Influence of Motivation on Performance

a. Motivation Indicators

According to Nitisemito in Prasetyo (2014: 4-5). is as follows :

1. High or Low Level of Attendance
2. Work Productivity Level
3. Damage Rate
4. Demands

2.2 The Theory of the Influence of Leadership on Performance

According to Hasibuan (2012: 170), leadership is a leader influencing subordinates to work productively to achieve organizational goals.

a. Leadership Indicators

According to French and Raven in Siswanto (2011: 162). stated that:

1. Coercive power
2. Reward power (reward power)
3. Legitimate power (official power)
4. Expert power
5. Referent power (power comes from the leader)

2.3 Theory of Effect of Productivity on Performance

a. Productivity indicators

According to Muchdarsyah (2015: 30-35). Measurement of productivity is generally divided into two types, namely:

1. Total productivity is the ratio of total input output per unit time. All factors of input (labor, materials) to the total output must be taken into account.
2. Partial productivity is the ratio of the output of one type of input or input per unit of time, such as labor wages, workload, and others.

b. Performance Indicators

According to Dale Timple (2014: 15). The performance factors consist of two, namely:

1. Internal factors, namely factors that are associated with a person's characteristics.
2. External factors, namely factors that affect a person's performance that come from the environment.

2.4 conceptual framework

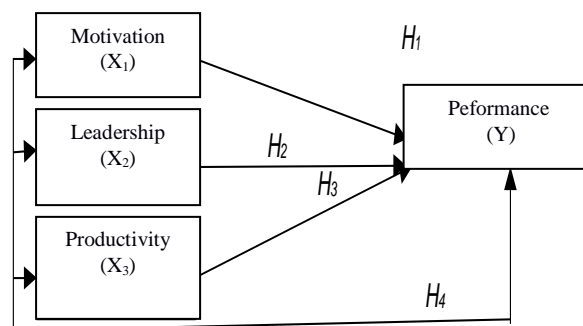


Fig 1 Conceptual Framework

2.5 Hypothesis

Based on the conceptual framework that has been put forward, the research hypothesis

This is formulated as follows:

- H1: Motivation has an effect on employee performance at PT Perimex, Sukaluwei Village
- H2: Leadership affects employee performance at PT Perimex Desa Sukaluwei
- H3: Productivity has an effect on employee performance at PT Perimex Desa Sukaluwei
- H4: Motivation, Leadership, and Productivity have an effect on Employee Performance at PT Perimex Sukaluwei village



3. Research Methods

3.1 Research Approach

According to Sugiyono (2016: 8). Quantitative research methods are defined as research methods based on the philosophy of positivism, used to examine populations or samples, collect data using research instruments, analyze quantitative or statistical data.

3.2 Types and Sources of Data

According to Zulfadrial (2012: 46), the types and sources of data are divided into two, namely primary data and secondary data. Primary data is data obtained and collected directly by researchers at the organization. Meanwhile, the meaning of secondary data is data obtained from parties or other existing sources.

a. Identification and Operational Definition of Research Variables

Table 1
Operational Definition of Research variables

Variable	Operational Definition	Indicator	Measurement
Motivation (X1)	Motivation is a process that explains the intensity, direction, and persistence of an individual to achieve his goals. According to Feriyanto and Triana (2015: 71).	1. High or low attendance 2. The level of work productivity 3. Damage rate 4. Demands according to Niti semi to in Prasetyo (2014: 4-5)	Likert scale
Leadership (X2)	Leadership is the way a leader influences the behavior of subordinates so that they are willing to cooperate and work productively to achieve organizational goals. According to SPHasibuan Malayu (2011: 170)	1.Coercivepower (force of coercion) 2.Rewardpower (reward power) 3.Legitimate power (official power) 4..Expert power 5. Referent power (power sourced from the leader) According to French and Rave in Siswanto (2011: 162)	Likert scale
Productivity (X3)	Productivity is producing or increasing the highest possible yield of goods and services by using resources efficiently. According to Muchdarsyah (2011: 198).	1.Total productivity 2. Partial productivity. According to Muchdarsyah (2015: 30- 35).	
Employee Performance (Y)	Employee performance is the quality and quantity of work achieved by an employee in carrying out his duties in accordance with the responsibilities assigned to him. According to Mangkunegara (2011: 67).	1. Internal factors 2. External factors According to Dale Timple (2014: 15).	Likert scale

3.3 Test the Validity and Reliability of Variable Instruments

a. Validity test

According to Ghozali (2016: 52). validity test is used to measure whether a questionnaire is valid or not. A questionnaire is said to be valid if the questionnaire questions are able to reveal something. If r count is greater than r table, the questionnaire is said to be valid otherwise if r count is less than r table then a questionnaire is said to be invalid.

1. If r count > r table then the question item is said to be valid.
2. If r count < r table, the question item is said to be invalid.

b. Reliability Test

According to Ghozali (2016: 48). Reliability test is a tool for measuring a questionnaire which is an indicator of a variable or construct. Decision making for reliability testing if Cronbach's Alpha is rated > 0.70.

c. Classic assumption test

According to Ghozali (2017: 33). If classical assumptions are met, the regression estimation with ordinary least square (OLS) will be BLUE (Best Linear Unbiased Estimator), meaning that decision making through the F test and T test is not allowed.

d. Normality test

According to Ghozali (2013: 160). The normality test aims to test whether in the regression model the confounding or residual variables have a normal distribution. There are two ways to detect whether the residuals are normally distributed or not, namely by graph analysis and statistical tests.

1. If the significant value is > 0.05, then the data is normally distributed.
2. If the significant value < 0.05, then the data are not normally distributed.

e. Multicollinearity Test

According to Ghozali (2013: 105). Multicollinearity test aims to test whether the regression model found a correlation between the independent variables (independent). The cut off value that is commonly used to indicate multicollinearity is a tolerance value < 0.10 or equal to the VIF value > 10.

f. Test Heteroscedasticity

According to Ghozali (2013: 139). The heteroscedasticity test aims to test whether the regression model has an inequality of variance from the residuals of one observation to another. If the variance from the residual of one observation to another observation is still called homoscedasticity, if it is different, it is called heteroscedasticity. There are several ways to detect the presence or absence of heteroscedasticity, namely:

1. Looking at the plot graph on the basis of analysis, if there is a pattern of dots forming a certain pattern, heteroscedasticity has occurred.
2. If there is no clear pattern the dots spread above and below the 0 on Y axis then there is no heteroscedasticity.

3.4 Research Data Analysis Model

a. Research Model

According to Sugiyono (2014: 277). Multiple linear regression analysis intends to predict how the state (fluctuation) of the dependent variable (criterion). So a multiple regression analysis will be carried out if the number of independent variables is at least 2.

$$Y = a + b_1X_1 + b_2X_2 + e$$

1) Coefficient of Determination (R²)

According to Ghozali (2016: 95). The coefficient of determination in the far-reaching measurement of the model's ability to explain the variation in the dependent variable.

2) Simultaneous Hypothesis Testing (Test F)

The F statistical test shows whether all independent variables have an overall influence on the independent variables (Ghozali, 2017: 22). Hypothesis testing aims to measure the effect of the liquidity ratio (current ratio). Leverage (debt to equity ratio). Profitability (return on assets) and inflation of independent variables on stock prices. The criteria for simultaneous testing with a brief significance of $\alpha = 5\%$ include:

1. If the significance value of the F test > α is 0.05, the null hypothesis is accepted.
2. If the significance value of the F test < α is 0.05, the null hypothesis is rejected

3) Partial Hypothesis Testing (t test)

According to Ghozali (2017: 23), the t test aims to test how much influence one independent variable has on the dependent variable. By assuming the other independent variables are constant. There are criteria in the t test, namely:

1. If the t test > 0.05 H₀ is accepted, but if the t test < 0.05 H₀ is rejected
2. If the t test > 0.05 H₀ is accepted, H₂ is rejected

4. Result and Discussion

4.1. Hypothesis Test Results

a. Descriptive statistics

Descriptive statistics show the condition of each variable used in this study, described as the research results of each research variable such as the minimum, maximum, mean and standard deviation values of each variable, both independent and dependent. The descriptive test results of statistical data from all variables include:

Table 2
Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Motivation	96	16.00	40.00	33.1354	5.31853
Leadership	96	17.00	50.00	41.0625	6.95521
Productivity	96	8.00	20.00	16.6042	3.17052
Employee performance	96	8.00	20.00	16.6458	3.01916
Valid N (listwise)	96				

Source: SPSS Output Results

Based on the statistical data in Table III.1, it shows that based on the Motivation Variable (X1) it has a mean of 33.1354 with a standard deviation value of 5.31853. This mean value has a value higher than the specified minimum, which is 16.00. This shows that the motivation given by the leadership of PT. Perimex tends not to be accepted by employees so it still needs attention.

The leadership variable (X2) has a mean of 41.0625 with a standard deviation value of 6.95521. This mean value has a value higher than the specified minimum value of 17.00. This shows that respondents tend to be able to accept the leadership that is applied but still needs to be addressed so that the right leadership is created in leading employees for PT Perimex.

Variable Productivity (X3) has a mean of 16.6042 with a standard deviation of 3.17052. This mean value has a value that is higher than the specified minimum value of 8.00. This shows that respondents tend to have good productivity but still need to be addressed so that good work productivity is created for all employees of PT. Perimex.

The employee performance variable (Y) has a mean of 16.6458 with a standard deviation of 3.01916. This mean value has a value that is higher than the specified minimum value of 8.00. This shows that the performance of PT Perimex employees is relatively good but still needs to be addressed so that maximum performance is achieved.

b. Classic assumption test

The classical assumption test is intended to determine the fulfillment of a BLUE linear regression model (Best Linear Unbiased Estimator). This classic assumption test consists of normality test, multicollinearity test and heteroscedasticity test. A linear regression model will fulfill the BLUE assumption if the model has normal data, is free of multicollinearity and free of heteroscedasticity.

c. Normality test

According to Ghozali (2018: 161) normality test is a test tool used to test whether the multiple linear regression model data is normally distributed. Normality test aims to test whether the regression model is normally distributed. The normality test can be done by graphical analysis, namely the Normal PP Plot of Regression Standardized Residuals. Is the point spread around the diagonal line, then the data is normally distributed. The Normality Test in this study is as follows:

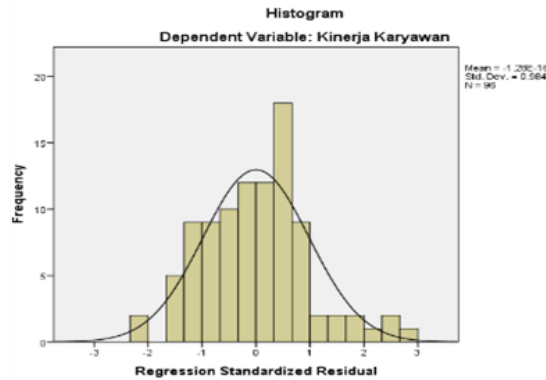


Fig 2 Histogram Graph

Data Sources: SPSS Output Results (2021)

Based on the data in the histogram graphic image, the residual data has shown that it describes the shape of an abnormal distribution pattern and a normal curve that forms a perfect bell. Furthermore, the Normal PP Plot of Regression Standardized Residual image is as follows:

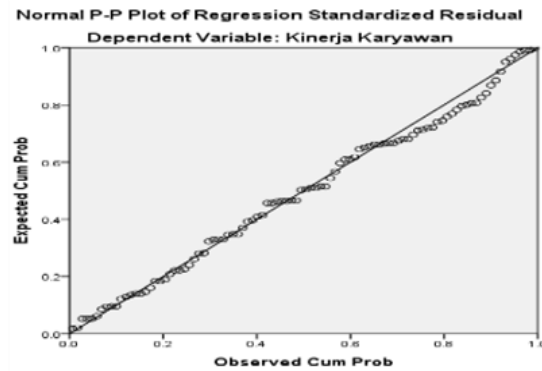


Fig 3 Normal PP Plot Graph

Source: SPSS Output Results (2021)

Based on the data from Figure III.2, it can be seen that the P-Plot shape depicts the distribution points slightly away from the diagonal line, the points spreading follow the data along the diagonal line, this means that the data is normally distributed. In addition, the normality test can also be performed using the Kolmogorov-Smirnov test at a significant level of 5% (0.05). The results of the Kolmogorov-Smirnov test can be seen in the following table:

Table 3
Kolmogorov-Smirnov Normality Test
One-Sample Kolmogorov-Smirnov Test

		Employee performance
N		96
Normal Parameters ^{a, b}	Mean	16,6458
	Std. Deviation	3,01916
Most Extreme Absolute Differences	Positive	.184
	Negative	.133
Test Statistic		.184
Asymp. Sig. (2-tailed)		.200 ^b

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Data Sources: SPSS Output Results (2021)



Based on the data, it can be seen that the data is normally distributed with a statistical test value of 0.184 with an Asymp.Sig (2-tailed) value of 0.200 where this figure is above the 0.05 or 5% significance level. or the asymp.sig (2-tailed) value > 0.05, thus the Asymp.Sig value > 0.05 (0.200 > 0.05).

d. Multicollinearity Test

According to Ghozali (2018: 107) the multicollinearity test aims to test whether or not there is a correlation between the independent variables in the regression model. Because a good regression model is that there is no correlation between independent variables. Symptoms of multicollinearity can be seen from the magnitude of the Tolerance and VIF (Variance Inflation Factor) values. These two measures indicate which independent variable is explained by the other dependent variable. Tolerance is measuring the variability of the selected independent variable that is not explained by other independent variables. The value used for Tolerance > 0.10 and VIF < 1.0 means that there is no multicollinearity. The amount of Tolerance and VIF (Variance Inflation Factor) values can be seen in the following table:

Table 4
Multicollinearity Test
Coefficient^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Motivation	.220	4,538
	Leadership	.174	5,744
	Productivity	.319	3,138

a. Dependent Variable: Employee Performance
Data Sources: SPSS Output Results (2021)

Based on the data in the table, it shows that all the values of the independent variables have a Tolerance value > 0.10 and VIF < 10.0 where the Tolerance value of each variable in the form of Motivation, Leadership and Productivity as the independent variable is (0.220 > 0.10), (0.174 > 0.10) and (0.319 > 0.10) while the VIF value of each independent variable in the form of motivation, leadership and productivity is (4,538 < 10.0), (5,744 < 10.0) and (3,138 < 10, 0), thus in this study there was no multicollinearity

e. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. A good regression model is that there is no heteroscedasticity test. The heteroscedasticity test can be done with graphs and statistical analysis in the form of a scatterplot test. Through graphic analysis, a regression model is not considered heteroscedasticity if the dots spread out randomly and do not form a clear pattern and are spread above or below the zero on the Y axis as seen in the following Figure:

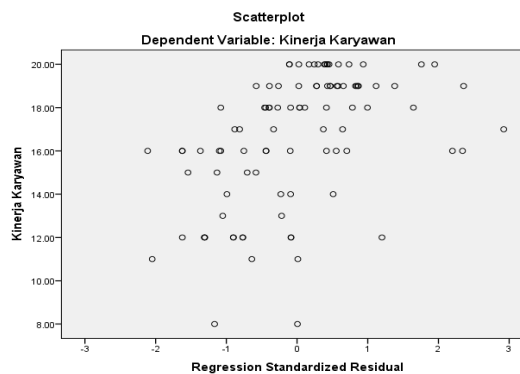


Fig 4 Scatterplot Heteroscedasticity Test

Data Sources: SPSS Output Results (2021)

Based on the data in Figure 4, it is known that the points spread randomly and do not form a certain clear pattern and are spread either above or below the zero on the Y axis. the influence of motivation, leadership and productivity on employee performance as an independent variable.

4.2 Multiple Linear Analysis Model

Table 5
Test Multiple linear regression
Coefficient^a

Model	Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
	B	Std. Error	Beta	ce	VIF
1 (Constant)	.074	.952		.074	.952
Motivation	.201	.060	.355	.201	.060
Leadership	.194	.051	.447	.194	.051
Productivity	.117	.083	.123	.117	.083

a. Dependent Variable: Employee Performance

Based on the data in the table, it is known that the multiple linear regression equation is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

$$\text{Employee performance} = 0.074 + 0.201 X_1 + 0.194 X_2 + 0.117 X_3$$

Information :

- Y = Employee Performance
- a = Constant
- b₁, b₂, b₃ = Regression Coefficient for each Independent Variable
- X₁ = Motivation
- X₂ = Leadership
- X₃ = Productivity
- e = 0.05 level of allowance for error

The explanation of the multiple linear regression equation in Table 5 is as follows:

- a. Constant value
 The constant value is 0.074, this indicates that if the independent variable (X) is motivation, leadership and productivity, the value is 0 or none, then the employee performance (Y) is 0.074.
- b. Motivation Regression Coefficient (X1)
 The regression coefficient value of X1 is 0.201, meaning that if there is an increase or addition to X1 while the variables X2 and X3 constant, then the Y value will also increase and vice versa. This means that if the motivation has increased by 1 while the other independent variables are constant, the employee's performance will also increase by 0.201 units and vice versa.
- c. Leadership Regression Coefficient (X2)
 The regression coefficient value of X2 is 0.194, meaning that if there is an increase or addition to X2 while the variables X1 and X3 constant, then the Y value will also increase, and vice versa. This means that if the leadership has increased by 1 while the other independent variables are constant, the employee's performance will also increase by 0.194 units and vice versa.
- d. Productivity Regression Coefficient (X3)
 The regression coefficient value X3 is 0.117, meaning that if there is an increase or addition to X3 while the variables X1 and X2 are constant, then the Y value will also increase and vice versa. This means that if the productivity has increased by 1 while the other independent variables are constant, the employee's performance will also increase by 0.117 units and vice versa.

4.4 Research Hypothesis Test

a. Partial Hypothesis Test (t test)



Table 6
Partial Statistical Test Results (t test)
Coefficient^a

Model	t	Sig.	Collinearity Statistics	
			Tolerance	VIF
1 (Constant)	.077	.939		
Motivasi	3.371	.001	.220	4.538
Kepemimpinan	3.774	.000	.174	5.744
Produktivitas	2.400	.016	.319	3.138

Based on the data in Table III.5, we will describe the effect of each independent variable partially on the dependent variable, as follows:

1. The results of the t test value (partial) Motivation (X1) on employee performance (Y) where partially obtained the t value of Motivation (X1) is 3.371 and the t-table value is 1.984 (in the formula Excel = TINV (0.05.96)) with the provision of tcount > t table (3.371> 1.984) and sig value <0.05 (0.001 <0.05), so it is stated that motivation partially has a positive and significant effect on the performance of PT NV Perimex employees.
 2. The results of the t-test (partial) Leadership (X2) on employee performance (Y) where partially obtained the tcount of Leadership (X2) is 3.774 and the t-table value is 1.984 (in the formula Excel = TINV (0.05.96)) provided that the t-count value > t table (3.774> 1.984) and sig value <0.05 (0.000 <0.05), so it is stated that leadership partially has a positive and significant effect on employee performance of PT NV Perimex.
 3. The results of the t-test value (partial) Productivity (X3) on employee performance (Y) where partially obtained the t value of Productivity (X3) is 2,400 and the t-table value is 1.984 (in the formula Excel = TINV (0.05.96)) provided that the t-count value > t table (2,400> 1,984) and sig value <0.05 (0.001 <0.05), so it is stated that productivity partially has a positive and significant effect on employee performance of PT NV Perimex.
 4. The results of the partial dominant test (t test) between (X1, X2 and X3) on employee performance (Y) where partially obtained the value of each tcount of variables X1, X2 and X3 is 3.371; 3,774 and 2,5400 with sig values <0.05 (0.001; 0.000 and 0.016 <0.05), so it is stated that leadership is partially the dominant variable which has a positive and significant effect on the performance of PT NV Perimex employees.
- b. Simultaneous Hypothesis Test (Test F)**

Table 7
Simultaneous Statistical Test Results (Test F)
ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	671,556	3	223,852	105,937	.000b
Residual	194,402	92	2,113		
Total	865,958	95			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Productivity, Leadership, Motivation

□

Based on the data in the table, the simultaneous effect on employee performance (Y) will be explained where simultaneously the F value is obtained_{count} Motivation (X1), Leadership (X2) and Productivity (X3) is 105.937 and the t table value is 2.466 (in the Excel formula = FINV (0.05,4.96)) provided that the value of Fcount> Ftable (105.937> 2.466) and the value of sig < 0.05 (0.000 <0.05), so it is stated that Motivation, Leadership and Productivity simultaneously have a positive and significant effect on the performance of PT Perimex employees.

c. Adjusted Determination Coefficient (R2)

Table 8
Adjusted Determination Coefficient Test (R²)
Capital Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.881a	.776	.768	1.45364	2,000

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

b. Dependent Variable: Employee Performance

Based on the data in the table, it is known that the AdjustedRSquare value is 0.768 or adjusted R² x 100% of 76.80%, which means that the independent research variables in the form of Motivation, Leadership and Productivity style make a big contribution in explaining employee performance by 76.80% while the rest is 23.20. % is influenced by other factors outside of this study such as variables of work climate, training, compensation, work culture, competence, personal factors and situation factors, government policies and the national economic situation.

5. Conclusions

1. Motivation partially has a significant effect on employee performance with a sig value <0.05 (0.001 <0.05)
2. Leadership partially has a significant effect on employee performance and is the dominant variable that affects employee performance where the value is sig <0.05 (0.00 <0.05).
3. Productivity partially has a significant effect on employee performance with a sig value <0.05 (0.016 <0.05)
4. Motivation, leadership and productivity simultaneously have a significant effect on employee performance with a sig <0.05 (0.000 <0.05).

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