

The Influence of Motivation, Work Environment, and Leadership on Employee Work Productivity at PT. Pos Indonesia Persero

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Abstract

This study aims to analyze the effect of motivation, work for the environment, and leadership on employee productivity partially. This research was conducted at PT Pos Indonesia Plemburan Yogyakarta branch. The population in this study were permanent employees of PT Pos Indonesia Plemburan Yogyakarta branch, amounting to 114 employees with non-probability sampling technique using a purposive sampling method. This type of research used a survey method and used a quantitative approach. Based on the results of the study using the t-test, it was found that the motivation variable had a significant effect on employee work productivity. The result is that motivation, work environment, and leadership have a positive and significant effect on the work productivity of employees at PT Pos Indonesia Plemburan Yogyakarta Branch. Meanwhile, based on the results of the coefficient of determination test (R^2) of 0.302 or 30.2%.

Keywords: Motivation, Work Environment, Leadership, Productivity

INTRODUCTION

A company must be able to improve its human resources to handle increasingly advanced technological equipment and be able to comply with company regulations that have been determined by the company to be able to achieve the targets and goals set by the company in winning the business competition. In winning the business competition, a company needs employees who have high productivity (Sugara et al., 2020).

In addition to capital, facilities and infrastructure, technology, and applicable regulations, companies or organizations need quality Human Resources (HR). Good human resources will contribute well in terms of achieving productivity and improving quality, achieving the company's vision and mission. This seems good in domestic life, social organization, especially when someone enters the world of work. A person will interact and enter into the part of the organization where he works. According to Robbins (2006), an organization is a deliberately managed social unit consisting of two or more people, which functions on a relatively continuous basis to achieve a common goal or set of goals (Alexandri et al., 2019).

Human resources are the most important and very determinant of all the resources available in an organization, both public and private organizations (Waruwu et al., 2020). Every company must be able to motivate all its employees (Ramadhan, 2019).

Employee performance is influenced by salary/wages, work environment, organizational culture, leadership and work motivation, work discipline, and job satisfaction. If the motivation is good and the work environment is good, the resulting performance will also be good. Motivation (Nurhastuti, 2019). Job satisfaction itself is defined as a positive attitude based on the results of evaluating what is expected to be obtained through the efforts made in carrying out a job with the results or rewards it receives (Sukardi, 2021).

LITERATURE REVIEW

Performance is a system used to assess and figure out whether an employee has completed his/her work entirely. (Sukriyani, 2021). Work productivity is the ratio between the results of inputs and expenditures as well as the role of labor in unit time. If productivity increases, it is usually caused by an increase in the efficiency of the material, time, labor, and work system, an increase in the skills of the workforce, and production techniques. Work productivity is the ability possessed by each employee in producing goods and services from various resources (Grassetti & Hunanyan, 2018).

Workplace motivation is also vital for boosting productivity. A working employee has a wide range of motivations. As a company leader, you should be able to comprehend how to motivate your subordinates. The only thing that matters is that employees are motivated to work. Motivation can be defined as a person's circumstances that encourage him or her to do something (Srie Hartati et al., 2020). Workplace motivation is also vital for boosting productivity. A working employee has a wide range of motivations. As a company leader, you should be able to comprehend how to motivate your subordinates. The only thing that matters is that employees are motivated to work. Motivation can be defined as a force that originates from within or outside a person that stimulates work behavior in line with the requirements, intensity, and time frame associated with intrinsic and extrinsic motivation in the performance of work. Work motivation is important for a firm since it serves as a motivator for employees. There must be components in any action that a person engages in. (Sukardi, 2021).

Aspects that can affect work productivity include skills, education, discipline, motivation, mental and ethical attitudes, income levels, nutrition and health, income levels, social security, work environment and climate, industrial relations, management, production facilities, technology, capabilities, managerial, achievement opportunities, education, and training, government policies, job opportunities. From these factors, researchers will choose three factors that can affect the high and low work productivity of employees, including the level of motivation or work motivation, the work environment as a place for daily work activities, and leadership or superiors who have certain qualities. To increase employee productivity, organizational leaders must motivate subordinates, and create a conducive work environment to be able to provide comfort for employees. In addition, the company must be able to provide a leader who has good relations between superiors and subordinates. Therefore, motivation, work environment, and leadership are very important for an organization in increasing the work productivity of its employees (Pramono, 2020).

Leadership is one aspect that can affect an organization. Universally, leadership can be defined as the process of directing and influencing the task activities of people in groups. Leadership is a technique of a leader influencing the attitude of his subordinates, so they want to work together and work productively in achieving organizational goals (Alexandri et al., 2019).

METHODS

Concept Definition Motivation. Motivation is the need for a person whose movement is tiered, if a low need has been fulfilled he will want a bigger need. **Work Environment.** States that the work environment is the totality of equipment, tools, and materials experienced, the surrounding area where a person works, the way he works, and his work arrangements both as individuals and as groups. **Leadership.** Leadership is a process of one's activity in moving others by managing, guiding, influencing others, in doing something to achieve the desired result. **Productivity** is the dimension of productive efficiency, a comparison between output and input.

Operational Definition

1. Motivation indicators are as follows:
 - 1) Physiological needs
 - 2) Security needs
 - 3) The need to be liked
 - 4) Self-esteem needs
 - 5) Self-actualization needs
2. States that the factors that affect the work environment are:
 - 1) Illumination/Light
 - 2) Air Circulation
 - 3) Decoration/Layout
 - 4) Employee Relations
 - 5) Security
3. Leadership indicators are:
 - 1) Affect
 - 2) Ability to invite
 - 3) Directing
 - 4) Creating and sparking ideas

4. Productivity indicators are:

- 1) Ability
- 2) Results achieved
- 3) Work spirit
- 4) Self-development
- 5) Quality
- 6) Efficiency

Type of Research. The type of research conducted is by using the survey method. Survey research is research on small or large populations, by studying data taken from samples in that population so that relative distribution events and relationships between sociological or psychological variables are found.

Types and Sources of Data. Researchers used quantitative methods, which is the type of data that is measured or calculated directly, in the form of data or descriptions expressed in the form of numbers or the form of numbers. The source of data used by researchers is primary data. Primary data is data given directly to collectors. In this research, the data is in the form of questionnaire answers that will be given to permanent employees of PT Pos Indonesia Yogyakarta branch in Plemburan.

Population and Sample. The population is a generalization area such as objects/subjects that have certain quantities and characteristics that are determined by researchers to be studied after which conclusions are drawn. The population in this research is employees of PT Pos Indonesia Yogyakarta branch in Plemburan, totaling 239 consisting of 159 permanent employees and 80 contract employees.

The sample is part of the characteristics and number of the population. In this research, the entire population was not taken, but samples that could describe the nature of the population to be researched were permanent employees, totaling 114 people. By using the calculation of the Slovin formula with an error tolerance level of 5% to obtain the number of research samples.

$$n = N/(1+n(e)^2)$$

N = Population Size

n = Sample Size

e = Margin Of Error, is the percentage of the sampling error rate that can be tolerated 5%.

Calculation:

$$n=159/(1+159 (0.05)^2)$$

$n = 113.774597$ rounded up to 114. So, the number of samples that can be taken from the calculation above is 114 respondents.

Sampling Method. The sampling technique in this research is the Nonprobability Sampling technique with the Purposive Sampling method. Purposive sampling is a method of sampling data sources based on certain considerations. In this research, the sample category is permanent employees at PT Pos Indonesia Yogyakarta branch in Plemburan as many as 114 employees

Method of collecting data. This research uses data in the form of a questionnaire. By giving written questions to the respondents. Various alternative answers to the questionnaire have been provided using

A Likert scale consisting of:

SS = Strongly Agree score 5

ST = Agree score 4

RG = Doubtful score 3

TS = Disagree score 2

STS = Strongly Disagree score 1

Relationship Between Variables

1. The Relationship of Motivation Variables with Productivity

Motivation is very important to increase employee productivity in a company because motivation is an impulse that exists in a person to take an action. It is hoped that with motivation, it is hoped that each employee can generate the will to work hard and be enthusiastic in achieving high work productivity.

Work motivation has a positive and significant effect on work productivity (Budirianti et al., 2020) (Sudibjo & Nasution, 2020). The variable of work motivation has a negative and significant effect on employee work productivity (Pratama, 2020). With this research, it can be concluded that if employees have a high level of motivation, their work productivity will increase (Waruwu et al., 2020). From the description above, the hypothesis formed in this research is as follows:

H₁: Work motivation has a positive and significant effect on employee productivity

2. The Relationship of Work Environment Variables with Productivity

A conducive work environment that supports the continuity of one's work performance can automatically increase productivity. A conducive, safe work environment that supports employee activities every day can increase employee productivity.

The influence of the work environment on employee work productivity proves that the work environment has a significant positive effect on work productivity (Pratama, 2020) (Mulyadi et al., 2020). The work environment has a negative and insignificant effect on employee work productivity (Aisyaturrido et al., 2021). This shows that a conducive and comfortable work environment in daily life can increase employee productivity. From the description above, the hypothesis formed in this research is as follows:

H₂: The work environment has a positive and significant effect on employee productivity

3. The Relationship of Leadership Variables with Productivity

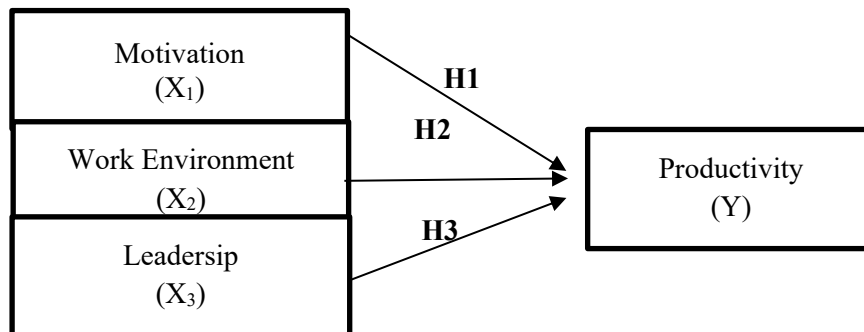
Leadership is the activity of directing someone to achieve organizational goals. A good leader is a leader who has good relations between superiors and subordinates so that they can move and direct an organization.

The influence of leadership on employee productivity leadership has a negative and insignificant effect on employee productivity (Alexandri et al., 2019). This shows that a leader who can provide good direction to his subordinates can increase employee productivity (Tarigan & Rozzyana, 2018). From the description above, the hypothesis formed in this research is as follows:

H₃: Leadership has a positive and significant effect on employee work productivity

The framework of thought is a network of associations that are arranged, explained, and elaborated logically between variables that are thought to be relevant to the problem situation and identified through processes such as interviews, observations, and literature surveys.

In describing the relationship between the independent variables Motivation (X₁), Work Environment (X₂) and Leadership (X₃) on the dependent variable Productivity (Y) is shown in the following framework:



Figures. 1 Research Framework

RESULTS AND DISCUSSION

Characteristics of respondents observed in this study include based on the research results, it is known that the majority of respondents aged 21-30 years are 30.70%.

1. Validity Test

The validity test can be tried by correlating the item score with the total item score. In determining whether or not an item is used, it is tried to test the significance of the correlation coefficient with a significance level of 0.05, which means an item is declared valid if it has a significant correlation with the total score. The test was tried with a two-sided test with a significance level of 0.05. The test criteria are as follows:

- a) If the r count $>$ r table, is declared valid because the problem items have a significant correlation with the total score.
- b) If the r count $<$ r table, it is declared invalid because the problem item is not significantly correlated with the total score.

The research results from the validity test show that all questions from the motivation, work environment, leadership, and employee productivity variables have r count $>$ from r table (0.1840), so that the questions from the 4 variables can be declared valid or suitable to be used as research instruments.

2. Reliability Test

An actual reliability test is a tool for measuring a questionnaire which is an indicator of group variables. In the reliability test, the method used is the Cronbach Alpha value. A questionnaire is said to be reliable if Cronbach's Alpha $>$ 0.600. The result is that all variables used have Cronbach's Alpha values $>$ 0.600. Therefore, it can be concluded that all question items are reliable and can be used as research instruments.

3. Regression Result

Normality test. The normality test is 0.05, if the significance is greater than 0.05 or 5%, the data is normally distributed. Asymp.Sig value is $0.980 > 0.05$ so it can be concluded that the data is normally distributed. Multicollinearity Test. from the test results, the value of VIF Motivation (X₁) $1.315 < 5$, Work environment (X₂) $1.277 < 5$, and Leadership (X₃) 1.269

< 5 means that there is no multicollinearity problem between variables. Heteroscedasticity test. Based on the Glejser test, it is shown that the significance value of the motivation variable (X1) is $0.354 > 0.05$, the work environment (X2) is $0.656 > 0.05$ and leadership (X3) is $0.761 > 0.05$, which means there is no heteroscedasticity.

Multiple regression analysis is based on functional or causal bonds of 2 or more independent variables with one dependent variable. Multiple regression analysis was attempted if the number of independent variables was minimal. Multiple linear regression analysis was performed using the SPSS version 20 software program for windows with the following results:

Table 1. Multiple Linear Regression Analysis Test Results

Model	Coefficients				
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
(Constant)	16.255	4.379		3.712	.000
1 Motivasi	.269	.092	.265	2.940	.004
Lingkungan Kerja	.228	.090	.226	2.545	.012
Kepemimpinan	.345	.126	.242	2.734	.007

a. Dependent Variable: Produktivitas

Following multiple linear regression equation is obtained:

$$Y = 16.255 + 0.269 X1 + 0.228 X2 + 0.345 X3 + e$$

From the multiple linear regression equation, it can be explained as follows:

- 1) The constant value is 16.255, which means that if the motivation variable, work environment, and leadership have a value of 0, then the productivity variable has a value of 16.255.
- 2) The regression coefficient of motivation (X1) of 0.269 is positive with a significance level of $0.004 < 0.05$, which means that motivation has a positive effect of 0.269 on productivity. This means that if there is an increase in the motivation variable by one percent or one unit of account, then productivity will increase by 0.269. Vice versa, if there is a decrease in the motivation variable by one percent or one unit of account, then the productivity will decrease by 0.269.
- 3) The regression coefficient of the work environment (X2) of 0.228 is positive with a significance level of $0.012 < 0.05$, meaning that the work environment has a positive effect of 0.228 on productivity. This means that if there is an increase in the work environment variable by or percent or one unit of account, then productivity will increase by 0.228. Vice versa, if there is a decrease in the work environment variable by one percent or one unit of account, then the productivity will decrease by 0.228.
- 4) The leadership regression coefficient (X3) of 0.345 is positive with a significance level of $0.007 < 0.05$, meaning that leadership has a positive effect of 0.345 on productivity. This means that if there is an increase in the leadership variable by one percent or one unit of account, the productivity will increase by 0.345. Vice versa, if there is a decrease

in the leadership variable by one percent or one unit of account, then the productivity will decrease by 0.345.

4. Hypothesis testing

1. F test (Goodness of fit)

The goodness of fit test is to test how exactly the observed frequency matches or matches the expected frequency.

Table 2. F-Test (goodness of Fit)

ANOVA ^a						
	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	554.043	3	184.681	17.310	.000 ^b
1	Residual	1173.615	110	10.669		
	Total	1727.658	113			

a. Dependent Variable: Produktivitas

b. Predictors: (Constant), Kepemimpinan, Lingkungan Kerja, Motivasi

Statistically, the value of Goodness of fit can be measured from the statistical value of F. All independent variables are said to be able to predict the dependent variable well if the probability value of the F statistic is less than 0.05 or 5%. The goodness of fit test was carried out using the SPSS version 20 software program for windows with the following results F value of 17.310 with a significance value of 0.000 <0.05, which means this model is feasible to use in research.

2. t-test

The t-test or partial test is used to determine whether each independent variable has an influence or not on the dependent variable. The hypothesis is accepted if the significance value is < 0.05. However, the hypothesis is rejected if the significance value is > 0.05. The t-test was carried out using the SPSS version 20 software program for windows with the following results:

- 1) The motivation variable (X1) has a positive and significance value of 0.004 <0.05, then H1 is accepted, which means that the hypothesis that motivation has a positive and significant effect on employee productivity at PT Pos Indonesia Plemburan Yogyakarta is proven.
- 2) The work environment variable (X2) has a positive and significance value of 0.012 <0.05, so H2 is accepted, which means that the hypothesis that the work environment has a positive and significant effect on employee productivity at PT Pos Indonesia Plemburan Yogyakarta is proven.
- 3) The leadership variable (X3) has a positive and significance value of 0.007 <0.05, so H3 is accepted, which means that the hypothesis that leadership has a positive and significant effect on employee productivity at PT Pos Indonesia Plemburan Yogyakarta is proven.

3. Coefficient of Determination (Adjusted R²)

The coefficient of determination (Adjusted R²) is a tool that measures how far the model's expertise in explaining the variation of the dependent variable. The value of the coefficient of determination (Adjusted R²) is between zero and one, the small value of the coefficient of determination (Adjusted R²) means that the expertise of the independent variable in explaining the dependent variable is very limited. A value

close to one means that the independent variable provides almost all the data needed to predict the variation of the dependent variable. The coefficient of determination test (Adjusted R^2) was carried out using the SPSS version 20 software program for windows with the following results: Adjusted R^2 value of 0.302 or 30.2% means that the variables of motivation, work environment, and leadership can explain the effect of productivity of 30.2% on the productivity variable. While 69.8% is explained by other variables not included in this research.

Based on the results of the t-test on the motivation variable, the results in this research support the research of Saleh and Utomo (2018), Sutrisno and Sunarsi (2020) which proves that work motivation has a positive and significant effect on work productivity. This research proves that motivation has a positive effect of 0.269 (26.9%) with a significance level of 0.004 ($0.004 < 0.05$). The t-test on the work environment variable in this research, this research supports proprietary which proves that the work environment has a positive and significant effect on work productivity (Sukriyani, 2021). This research proves that the work environment has a positive effect of 0.228 (22.8%) with a significance level of 0.012 ($0.012 < 0.05$). The results of the t-test on the leadership variable in this research supports the research of (Alexandri et al., 2019) which proves that leadership has a positive and significant effect on work productivity. This research proves that leadership has a positive effect of 0.345 (34.5%) with a significance level of 0.007 ($0.007 < 0.05$).

Summary

1. Motivation has a positive and significant effect on employee work productivity at PT Pos Indonesia Plemburan Yogyakarta Branch.
2. The work environment has a positive and significant effect on the work productivity of employees at PT Pos Indonesia Plemburan Yogyakarta Branch.
3. Leadership has a positive and significant effect on employee work productivity at PT Pos Indonesia Plemburan Yogyakarta Branch.
4. Based on the results of the coefficient of determination (Adjusted R^2) of 0.302 or 30.2%, it means that the variables of motivation, work environment, and leadership can explain the effect of productivity of 30.2% on the productivity variable. While 69.8% is explained by other variables not included in this research.

Suggestion

The suggestions obtained are based on the results of research, discussion, and conclusions, namely:

1. Based on the results of research motivation has a positive influence on the work productivity of employees of PT Pos Indonesia Plemburan Yogyakarta Branch. Therefore, companies should be more motivated to motivate their subordinates so that they can generate the desire of employees to work hard and enthusiastically to achieve high work productivity.
2. Based on the results of research, the work environment has a positive and significant influence on the work productivity of PT Pos Indonesia's employees, Plemburan Branch, Yogyakarta. Therefore, companies must further improve in creating a conducive and safe work environment and support employees' daily activities.
3. Based on the results of research, leadership has a positive and significant impact on the work productivity of employees of PT Pos Indonesia Plemburan Yogyakarta Branch. Therefore, the leader must be more in providing direction and encouragement to his subordinates.

4. Judging from the results of Adjusted R^2 that the magnitude of the influence of the motivation variable, work environment, and leadership on work productivity is 30.2%. While 69.8% is explained by other variables that can affect work productivity other than the factors studied in this research. For further researchers, it is expected to add variations to other variables such as skills, education, training, and work discipline, so that they can add insight and variations of other variables that influence employee work productivity.

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