INFLUENCE OF WORK DISCIPLINE AND SUPERVISION TO INCREASING EMPLOYEE PRODUCTIVITY IN PT. CITRA ROBIN SARANA MEDAN

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ABSTRACT

This research begins with the discovery of problems in employee productivity. The problem seen in this research is low work productivity of employees caused by work discipline and supervision of less than optimal. This study aims to analyze the effect of work discipline and supervision on employee productivity at PT. Citra Robin Sarana Medan. This research is a causal associative research using quantitative approach. Population in this research is all employees of PT. Robin Sarana Medan image of 284 people. The sampling technique was random sampling using Slovin formula so that the samples were obtained which amounted to 74 people. The analysis method used is multiple linear regression with the independent variable of work discipline (X1) and supervision (X2), the dependent variable is employee work productivity (Y). The results showed that simultaneously discipline work and supervision have a positive and significant effect on employee work productivity PT. Citra Robin Sarana Medan. This can be seen from the test result $F_{count} > F_{table}$ ($18,520 > 3,12$) with significance $0,000 < 0,05$ so hypothesis H_0 is rejected and H_1 accepted. The value of coefficient of determination (R^2) of 0.324 means that 32.4% variation in employee productivity variables can be explained by variations of work discipline and supervision variables. While for partial test, work discipline variable (X1) shows the value of $t_{count} > t_{table}$ of $4,210 > 1,669$ with significant $0,000$ ($0,000 < 0,05$), and t test of supervisory variable (X2) obtained by $t_{count} > t_{table}$ that is $2,651 > 1,669$ and a significant of $0,000$ ($0,000 < 0,05$). So it can be stated that partially both work discipline variables (X1) and supervisory variables (X2) have a positive and significant effect on employee productivity variable (Y). Thus, this study is important to overcome the reality problem in most of company.

Keywords: *Work Discipline, Supervision and Employee Productivity.*

PRELIMINARY

Background

The pace of economic growth lead to more complex problems that exist within a company. Getting competent human resources and experts in their field is one of them. Many ways and concepts are done to get employees who have the expertise and high professionalism in work. The company's goals will not be achieved without the active role of skilled and disciplined workforce, even though the tools of the company are sophisticated. Organizing employees is very difficult and complex because they have thoughts, feelings, status, doubts and heterogeneous backgrounds. Therefore, labor cannot be managed and fully controlled such as arranging machines, capital and buildings. The problem of work discipline is still difficult to overcome because there are still many problems that exist within the company.

According to Malayu (2013: 193), "Discipline is the awareness or willingness of a person to comply with all company regulations and applicable norms. Willingness is an attitude, behavior and deed of a person in accordance with written and unwritten corporate rules ". According to Handoko (2010), "Generally good discipline is provided when employees come to the office or company regularly and on time, if they dress well in their workplace, when using materials and equipment with care, if they produce a satisfactory amount and quality of work, and follow the work that is determined by the company and when it finishes in good spirits.

To encourage the creation of work discipline, a manager must act decisively to his subordinates. In an effort to avoid unexpected behavior and increase work productivity, the company

must be able to establish strict sanctions against regulatory violations, so as to avoid repeated unwanted behavior. Thus, work discipline can increase and work productivity also increases.

In addition to work discipline, supervision is also required to ensure all work is done in accordance with the specified in improving work productivity. Supervision is the activity of managers who work to get the jobs done in accordance with the established plan and or desired result (Lubis 2015: 154). Thus it is important for a manager to strive to improve employee productivity so that the company can grow and maintain its business.

PT. Citra Robin Sarana Medan is a company engaged in the production of pest spraying equipment and the production of agricultural equipment from metal located in Jalan Paya Bakong, 36 Kabupaten Deli Serdang. At this company in the last five years showed a decrease in employee productivity. This is due to the lack of employee discipline and supervision. This can be seen in the table below:

YEAR	ATTENDANCE			
	Leave (%)	Sick (%)	Permission (%)	Loss (%)
2013	1,02	1,23	1,01	1,32
2014	1,50	1,15	1,15	1,44
2015	1,65	1,25	1,47	1,60
2016	2,01	1,03	1,40	2,76
2017	1,39	1,20	1,26	4,01

Source: PT. Citra Robin Sarana Medan

Table 1. List of Employee Attendance in the Year 2013-2017

Based on table 1 above, it can be seen that the absenteeism of the year 2013-2017 has increased. This shows that employee discipline is decreasing. In addition, other work discipline problems are also still often overlooked by employees. As a result there is shrinking production of the product failed or damaged.

Problem of supervision of work at PT. Citra Robin Sarana Medan also considered less effective. Employees tend to get less supervision from managers in this case supervisor. There are only 3 supervisors who supervise all employees, amounting to 284, so that employee discipline is not maximal. Supervisor checks the field only every 2 hours to every part of the work, sometimes do not even check because of having busy or other work to be done. In addition, managers are also less assertive in taking action against employees who are not disciplined, especially the defaulters, so the absence of employees continue to repeat and as a result the company's productivity decreased.

Work supervision and work discipline of employees become very important for PT. Citra Robin Sarana Medan. Companies need to improve effective oversight so that employee discipline attitudes can increase to spur employee productivity. Based on the background of the problem, the authors are interested to conduct research with the title "The Effect of Work Discipline and Supervision Against Increasing Employee Productivity At PT. Citra Robin Sarana Medan".

Identification of Problems

Based on the background that has been described earlier, the researchers identified the problem as follows:

- Low levels of employee discipline resulted in decreased employee productivity.
- Lack of supervision given by managers of the company thus affecting the decline in employee productivity.
- Supervision is done not maximal because of the number of supervisors work to be done while the number of supervisors that there are only 3 people so that employee productivity is not maximal.

Formulation of the problems

The problems that will be presented in this writing are:

- How the influence of work discipline on employee productivity at PT. Citra Robin Sarana Medan?

- b. How the influence of work supervision on employee productivity at PT. Citra Robin Sarana Medan?
- c. Is there any influence of work discipline and work supervision on work productivity of PT. Citra Robin Sarana Medan?

Research Purposes

The purpose of this study are:

- a. To test and analyze the influence of work discipline on employee work productivity at PT Citra Robin Sarana Medan.
- b. To test and analyze the effect of work supervision on employee productivity at PT Citra Robin Sarana Medan.
- c. To test and analyze the influence of work discipline and work supervision on work productivity of PT Citra Robin Sarana Medan employees.

THEORETICAL FOUNDATION

The Understanding of Discipline

According to Hasibuan (2012: 193) discipline is the awareness and willingness of a person to comply with all corporate rules and social norms that apply. Meanwhile, according to Rivai (2014), Discipline is a tool used by managers to communicate with employees so that they are willing to change a behavior as well as an effort to raise awareness and willingness of a person to comply with all applicable rules and social norms.

Purpose of Work Discipline

According Sastrohadiwiryono (2011: 292) specifically the purpose of fostering work discipline of the workforce, among others:

- a. In order for the workers to observe all regulations and employment policies and regulations and company policies that apply, both written and unwritten, and carry out management orders.
- b. Can carry out the work as well as possible and able to provide maximum service to parties with an interest to the company.
- c. Can use and maintain facilities and infrastructure as well as possible.
- d. Workforce is able to produce high productivity in accordance with company expectations, both in the short and long term.

Indicators of Work Discipline

Sinungan (2013: 194-198) indicators that affect the level of discipline of an organization's employees, including:

- a. Goals and abilities
- b. Leadership example
- c. Remuneration
- d. Justice
- e. Waskat
- f. Penalty sanctions
- g. Firmness, and
- h. Humanitarian relations

The Understanding and Objectives Supervision

According to Simbolon (2013: 61), "Supervision is a process whereby the leader wants to know the results of the implementation of the work undertaken subordinates in accordance with the plans, orders, goals, policies that have been determined." Meanwhile, according to Terry (2011: 395) interpret "Supervision as determination what which has been implemented, that is to evaluate the performance of

work and if necessary, apply corrective actions so that the results of work in accordance with the established plan".

The main purpose of monitoring is to see to it that what is planned becomes a reality.

According to Prabu (2011) supervision aims for the results of the implementation of the work obtained efficiently (efficient) and effectively (effective) in accordance with predetermined plans.

Productivity

Labor productivity is one measure of the company in achieving its objectives. Human resources are the most strategic element in the organization, which must be recognized and accepted by management. Human labor is a dynamic production factor that has the ability to think and work motivation, if the company's management is able to increase their motivation, then work productivity will increase.

According to Robbins (2012:156) work productivity can be interpreted as a concrete result (product) produced by individuals or groups, during a certain time in a work process. Work productivity shows the level of ability of employees in achieving the results (output), especially in terms of quality. Meanwhile, according to Anoraga (1992:17) in Yuniarsih (2014) explained that work productivity shows the level of process efficiency generates from resources used, better quality with the same effort.

Productivity can be measured by two main standards, namely physical productivity and value productivity. Physical productivity is measured from the quantity and quality aspects of the product produced, while the productivity of values is measured on the basis of values of ability, attitude, discipline, motivation and commitment to work.

Factors Affecting Productivity

According Sunyoto (2012), while the factors that affect employee productivity are as follows:

- a. Motivation
- b. Education
- c. Work discipline
- d. Skills
- e. Attitude of work ethics
- f. Nutrition and health
- g. Income level
- h. Work environment and work climate
- i. Technology
- j. Production facilities
- k. Social Security
- l. Management
- m. An opportunity for achievement

Measurement Methods Productivity

Sinungan (2013:23) argues that generally productivity measurements mean distinguishable ratios in three very different types:

- a. Comparisons between present and historical execution do not indicate whether the present execution is satisfactory, but merely suggests whether it increases or decreases.
- b. Comparison of implementation between a unit (individual, section and process) with others. Such measurements show relative achievement.
- c. Comparison of the current implementation with the target. It's best to focus on the goal.

Measurement of employee productivity used in this research is the amount of product produced divided by amount of labor during 1 year period. (Rivai 2014).

RESEARCH METHODS

The research conducted is associative because it wants to see the effect of variable discipline and supervision of work productivity of employees. And the results of associative research serves to

explain, predict and control a symptom (Sugiyono, 2012). The object of this research is PT. Citra Robin Sarana Medan, located at Jalan Paya Bakong no. 36 Kabupaten Deli Serdang. The study was conducted from January to March 2018. According to Arikunto (2013: 90) "Population is a generalization region consisting of objects or subjects that have certain qualities and characteristics set by the researchers to be studied and then drawn conclusions." Population in this study is all employees of PT. Citra Robin Sarana Medan is as many as 284 people. The sample is part of the number and characteristics possessed by the population (Sugiyono, 2012). Given the large population, the writer in determining the minimum number of samples using Slovin formula with the percentage error of 10%, so that the number of samples obtained as many as 74 people. The sample in this study was taken by using random sampling approach.

The purpose of this study is to analyze whether the discipline of work and supervision affect employee productivity at PT. Citra Robin Sarana Medan. The data used in this study is sourced from the primary data that is data obtained from the company. In addition to primary data, also used secondary data that comes from interviews, books, literature, journals and other sources.

To know the change of level of dependent variable that is employee work productivity caused by change in independent variable in this research that is work discipline and supervision, hence this research use multiple regression analysis model in logarithmic form. In processing the data used analysis tool that is SPSS 21 (Statistical Product and Service Solution) for Windows. The model used is Cobb-Douglas production function, can generally be described as follows (Sugiyono, 2014):

$$Y = b X_1^{b_1} X_2^{b_2} X_3^{b_3} \quad (1)$$

For further calculations, the function (1) is then changed in the form of a linear logarithm, so that the mathematical equation becomes:

$$\ln Y = \ln b_0 + b_1 \ln X_1 + b_2 \ln X_2 + b_3 \ln X_3 + e$$

Where:

Y	= Employee Productivity
b ₀	= Intercept
b ₁ , b ₂ , b ₃	= Coefficient of Regression
X ₁	= Work Discipline
X ₂	= Supervision
e	= Error

Before performing multiple linear regression analysis it is necessary to test the classical assumption, to know the result of estimation which done free from symptom of multicollinearity, autocorrelation and heterokedastisitas. To test the influence of free variables simultaneously or simultaneously to the dependent variable contained in the model used F test. To determine the effect of independent variables partially to the dependent variable with the assumption of other independent variables are considered constant used t test.

RESULTS AND DISCUSSIONS

Based on statistical calculations using SPSS version 21 program, the validity test shows corrected total correlation (rhitung) of all statements > rtable value (0.361). A variable is said to be valid if it gives a value of rhitung > rtable (Situmorang, 2011: 143). Thus the whole revelation in the questionnaire is valid. To test the reliability of the three variables used are work discipline, supervision and employee productivity show reliable results, because the value of Cronbach Alpha is greater than the rtable is 0.897 > 0.80. A variable is said to be reliable if it gives Cronbach Alpha > value of rtable (Situmorang, 2011: 147). This is evidenced by the variable value of work discipline (X₁) of 0.815, supervision variable (X₂) of 0.832 and employee productivity variable (Y) of 0.897.

Then after the data declared valid and reliable, the data is processed through the classical assumption test. The first test is performed by normality test which aims to test whether in the regression model, disturbing or residual variable is normally distributed. After processing through SPSS version 21, it appears that the histogram image of the bell-shaped line, does not deviate from left or right. This shows that the data is normally distributed and satisfies the assumption of normality. In addition, the Normal P-P Standardized Residual Plot of Regression shows the data (dots) spread around the diagonal line and follows the direction of the diagonal line so as to show normal distributed data.

From the One-Sample Kolmogorov-Smirnov Test, it was obtained that Asymp. Sig. (2-tailed) has a significant 0.967 above the 5% significance value (0.05), hence the data used is normally distributed.

Furthermore, Multicollinearity Test is done to test whether the regression model found a correlation between independent variables. If there is a correlation, then there is a multicollinearity problem. The test result states that there is no symptom of multicollinearity between independent variables. It can be seen from the tolerance value and VIF value, the calculation result shows that the tolerance value is 0.878 with the value of VIF of 1.139, so that the value is in accordance with the decision making criteria where the tolerance value > 0.1 and the VIF value < 5. With the word otherwise there is no multicollinearity in the regression model used.

Based on data heteroscedasticity test in this research by observing the pattern contained in Scatterplots, the result can be seen that the points spread randomly (random) and spread over and below the number 0 on the Y axis. It can be concluded that there is no heteroscedasticity on regression model. When viewed from the test glejser obtained probability value (sig.) for work discipline variables (X1) of 0.742 > 0.05 that there is no heteroscedasticity. Supervision (X2) has a significant value of 0.149 > 0.05 that there is no heteroscedasticity, so the regression model in this study is feasible to use.

Results of Data Analysis

The test instrument used to analyze the hypothesis in this research is to use multiple linear regression analysis to test the independent variable of work discipline and supervision on the dependent variable of employee work productivity. The coefficient table produces multiple linear regression output which can be seen in table 2 below:

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.743	2.948		2.966	.004
	Work Discipline	.338	.080	.432	4.210	.000
	Supervision	.179	.067	.272	2.651	.010

a. Dependent Variable: Employee Productivity

Source: Processing Data by
SPSS

Table 2. Multiple Regression Analysis

Based on the results of data processing in table 2, Unstandardized Coefficients section B obtained multiple linear regression equation, as follows:

$$Y = 8,743 + 0,338X_1 + 0,179X_2 + e$$

Based on the equation can be explained as follows:

- Constant (a) = 8.743. This means that although the independent variable (X1) that is work discipline and independent variable X2 is supervision is 0 then employee work productivity (Y) is fixed at 8.743.
- Coefficient X1 (b1) = 0.338. Variable work discipline on employee work productivity with regression coefficient equal to 0,338. It means that every increase of work discipline variable is 1 unit, then work productivity of employee (Y) will increase equal to 0,338.
- Coefficient X2 (b2) = 0,179. Variable supervision on employee work productivity with regression coefficient equal to 0,179. This means that every increase of control variable is 1 unit, then employee productivity (Y) will increase by 0,179.

Coefficient of Determination Hypothesis (R^2)

Testing coefficient of determination (R^2) aims to determine how big the ability of independent variables explain the dependent variable. In the SPSS output, the coefficient of determination lies in the Summary Model table and the written R Square.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.586 ^a	.343	.324	1.49730	2.085
a. Predictors: (Constant), Supervision, Work Discipline					
b. Dependent Variable : Employee Productivity					

Source: Processing Data by SPSS

Tabel 3. Results of Coefficient Determination Testing

From table 3, shows the value of adjusted R Square of 0.324 which means equal to 32.4% work productivity of employees of PT. The image of Robin Sarana Medan can be explained by the discipline of work and supervision, while the remaining 67.6% is explained by another variable not examined in this study.

Hypothesis Testing Simultaneously (Test-F)

Hypothesis test simultaneously done to see together influence or positive and significant relation of independent variable (X1 and X2) in the form of influence of work discipline and supervision on work productivity of employees at PT. Citra Robin Sarana Medan.

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	83.040	2	41.520	18.520	.000 ^a
	Residual	159.176	72	2.242		
	Total	242.216	74			
a. Predictors: (Constant), Supervision, Work Discipline						
b. Dependent Variable: Employee Productivity						

Source: Processing Data by SPSS

Table 4. Simultaneous Test Results (F-Test) ANOVA^b

Based on table 4, it can be seen that $F_{count} > F_{table}$ ($18,520 > 3,12$) which means H_0 hypothesis rejected and H_1 accepted with significance $0,000 < 0,05$ it can be concluded that the independent variables (X1 and X2) in the form of work discipline and supervision simultaneously have a significant effect on employee work productivity at PT. Citra Robin Sarana Medan.

Partial Hypothesis Testing (t-Test)

T-test is done to test the partial influence of work discipline and supervision on work productivity of employees of PT. Citra Robin Sarana Medan.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.743	2.948		2.966	.004
	Work Discipline	.338	.080	.432	4.210	.000
	Supervision	.179	.067	.272	2.651	.010
a. Dependent Variable: Employee Productivity						

Source: Processing Data by SPSS

Table 5. Partial Test Results (t-Test) Coefficients^a

Based on table 5, it can be explained as follows:

- a. The t-calculated variable of work discipline (X1) is greater than t-table value that is $4,210 > 1,669$ and significant is 0.000 ($0,000 < 0.05$). Hence hypothesis H0 is rejected and H1 accepted. This means that work discipline has a positive and significant effect on employee productivity at PT. Citra Robin Sarana Medan.
- b. The threshold value of the supervisory variable (X2) is greater than the t-table value of $2.651 > 1.669$ and the significant is 0.000 ($0,000 < 0.05$). Hence hypothesis H0 is rejected and H1 accepted. This means that supervision has a positive and significant effect on employee productivity at PT. Citra Robin Sarana Medan.

CONCLUSIONS AND SUGGESTIONS

Conclusions

The conclusions that can be drawn from this research are as follows:

- a. Partial test results (t-test) showed that the discipline of work and supervision respectively have a positive and significant effect on employee productivity at PT. Citra Robin Sarana Medan.
- b. Test results simultaneously (F-test) showed that both work discipline and supervision together have a positive and significant effect on employee productivity at PT. Citra Robin Sarana Medan.
- c. The result of determination test (R2) shows that work discipline and supervision able to explain 32.4% work productivity of employees. While the remaining 67.6% can be explained by factors that are not included in this study.

Suggestions

Suggestions that the author can provide based on the results of this study are as follows:

- a. Variable of work discipline have positive and significant effect to work productivity of employees, therefore PT. Citra Robin Sarana Medan should pay attention and improve employee discipline in the company especially regarding the presence and timeliness in the implementation of work because both of these things will have a direct effect on work productivity. Management needs to provide direction and motivation to improve employee work discipline, including the leadership of the company to provide examples of good discipline so that employees can imitate them. As well as reinforce sanctions for violations committed employees, so that employees will try to minimize errors in the job.
- b. The supervisory functions undertaken by supervisors and managers should be more effective in accordance with the standards set by the company. Therefore, it is necessary to evaluate the supervision that has been done whether it is appropriate procedures or not. Further supervision should be followed up by management in the form of corrections and evaluation reports of employee performance as well as the imposition of strict sanctions for employees and supervisors if doing irregularities in the implementation of work. In addition, supervision should be done directly, to avoid the greater deviations in the implementation of work performed by employees. By monitoring directly, the employee can be reprimanded when making a mistake. For the number of supervisors in charge also need to be added for supervision can be done optimally.

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