



## TRAINING MODEL TO INCREASE EMPLOYEE WORK PRODUCTIVITY

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**Abstract:** The objectives of this study are as follows: To determine the level of influence of the implementation of existing education and training programs on employee productivity. Based on the data processing results, it is known that the elements of the implementation of education and training programs that must be considered and improved are as follows: Training Materials, Non-Formal Education, Training Schedules, Instructor Friendly, Training Variations, Training Methods, and Training Manual Books. Meanwhile, the elements of implementing education and training programs that must be maintained are as follows: Formal Education, Instructor Skills, Instructor Ability, Training Facilities, Training Curriculum, Training Evaluation. The implementation of education and training programs affects employee work productivity, and the implementation of training programs is more dominant. This is because the implementation of training programs is carried out more often and is more applicable even though it still seems theoretical on employees' work. Therefore, the right education and training program will impact increasing the productivity of its employees.

**Keywords:** Performance Evaluation, Training, Productivity.

### INTRODUCTION

Changes in communication/information demand that Human Resources (HR) plays a more optimal role in an organization. In connection with this, the flow of globalization is unavoidable in HR performance. In other words, companies or organizations that want to balance this flow should be able to prepare themselves in the world of business competition. One of the companies engaged in the processed industry with export quality to be marketed is one of them to Japan, a country that is very consistent with quality. Today, the employees of PT. AGRONESIA BANDUNG shows a decrease in work productivity.

Based on the description of the problem above, if the development of employee knowledge, especially education and training programs, is ineffective and efficient, it is not by "the right job and the right man," then work productivity will decrease. Close the possibility

that the company will experience a lot of losses. Therefore, it is necessary to evaluate the performance of employee education and training programs using an analysis of interests and performance and measuring its effect on the work productivity of employees at PT. AGRONESIA BANDUNG, so that through this research, it is hoped that it will serve as an evaluation and input for PT. AGRONESIA BANDUNG, especially for HR, improves the current knowledge development system, especially its education and training programs.

### **Formulation of the problem**

To what extent does the implementation of education and training programs affect employee work productivity?

### **Research purposes**

It was knowing the effect of implementing education and training programs on employee work productivity.

## **LITERATURE REVIEW**

Globalization of the world economy and the national economic crisis for companies engaged in export products are significant challenges. Careful preparation and government policies regarding export-import will be one of the strengths to penetrate the global market.

Company resources consist of tangible assets, intangible assets, and organizational capabilities (Hill and Jones, 1998:123 and Collis and Montgomery, 1998:27-28). Not all resources owned by the company are the core capabilities of the company concerned. A resource can be categorized as a core capability if it meets the criteria of being valuable, rare, cannot be imitated perfectly and cannot be replaced, and can be organized (Hill and Jones, 1998:123; Hitt et al., 1997:98; and Barney in Wheeley, 1998). and Hunger, 2000:82). The role of human resources in a company is very decisive in improving the company's performance because the element of HR in a company is very important. Therefore, the ability and motivation of HR are needed for the company's progress, so education and training programs need to be considered in the framework of developing the capabilities and motivation of HR.

This is by Bernardin's opinion, namely human resources allocation, appraisal, and evaluation, including education and training & development (training). Thus, from the opinions of these experts, it can be concluded that education and training programs are very important to be considered by companies.

Four theories are usually used to determine whether individuals are satisfied or dissatisfied in certain situations, namely fulfillment theory, reward theory, discrepancy theory, equity theory, and individual satisfaction. This is what will create work productivity. David J. Cherrington (1989).

Based on the theoretical description above, employee development policies, in this case, education and training programs, affect employee work productivity. Haque and Falk

(2000) researched that industries in the processing industry are more suitable for using work productivity measurements based on "standard direct labor hours to actual direct labor hours."

From several theories that have been described above, then with the theory described by Flippo regarding effective employee development methods, education and training can increase the level of HR work productivity. Finally, it can be concluded from the existing framework as the basis for making the model as below. The research paradigm is as follows:

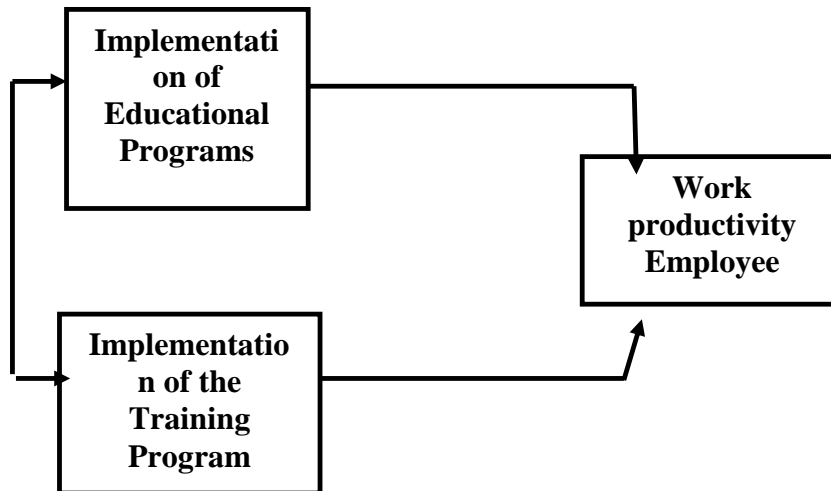


Figure 1. Paradigma

### Hypothesis

"Education and training affect employee productivity."

## RESEARCH METHOD

### Research Design

Based on the consideration of the study objectives, this research is **verified**. Descriptive research is research that aims to obtain a description of the characteristics of the variables. The nature of verification research wants to test the truth of a hypothesis carried out through data collection in the field. Where in this study will be tested whether the implementation of education and training programs affect work productivity. Considering the nature of this research is descriptive, and verification carried out through data collection in the field, the research method used is descriptive survey method and explanatory survey method. The type of investigation used is correlational, namely the type of research that states a correlation or linkage between the independent variables, in this case, the implementation of education and training programs on the dependent variable, namely work productivity. The unit of analysis of this study is the individual, which means using the observation unit of the staff of PT. AGRONESIA BANDUNG.

Judging from the time horizon, this research is cross witness, i.e. information from part of the population (sample of respondents) is collected directly at the scene empirically, to know the opinion of some of the population on the object being studied, as stated by (Sekaran), 2003; 161, Malhotra, 2002; 81). B. Operationalization of Research Variables

## Sample

In this study, the sample size is determined by the form of statistical test used. The statistical test used is path analysis, where the path coefficient is a correlation coefficient. Thus the minimum sample size for this path analysis can be determined through the minimum sample size formula for the correlation coefficient, which is carried out iteratively (repeated calculations).

By conducting preliminary research to obtain parameters  $\rho$  where research on the same topic has never been done, it is obtained  $\rho$  (smallest correlation coefficient) = 0.653. So with  $\rho = 0.653$ ,  $\alpha = 0.05$  and  $\beta = 0.10$  then obtained a sample size (n) of at least 99 people. Sampling from each population strata in this study was by using a simple random sampling method; that is, each member of the population has the same opportunity to be selected as a sample. The population in this study were employees of PT. AGRONESIA BANDUNG.

## Analysis Method

The path analysis method is used to answer the problem formulation because it wants to test the causal relationship between variables. The discussion of the results of this study includes analyzing the implementation of education and training programs as the independent variable and work productivity as the dependent variable, from the results of interviews with as many as 100 employees of PT. AGRONESIA BANDUNG was used as the respondent and tested the hypothesis for effect between the implementation of education and training programs and employee work productivity. The causal relationship between the sub-variables can be described in the form of a diagram as follows:

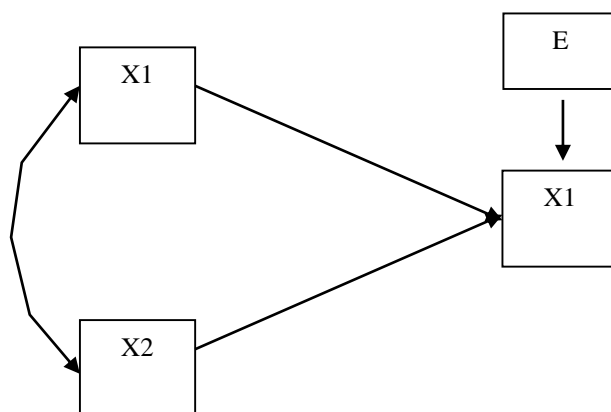


Figure 2. Diagram Described

Information:

- X1 = Implementation of Educational Programs
- X2 = Implementation of the Training Program
- Y = work productivity

Before concluding the causal relationship that has been described in the path diagram, the significance of each path coefficient that has been calculated is first tested. To test the coefficient of the path can be taken in two ways, namely overall (overall) and individually.

1. Overall Testing (overall)

The hypotheses in this overall test are:

$$H_0 : p_{Yx1} = p_{Yx2} = p_{Yx3} = \dots = p_{Yxk} = 0$$

$$H_1 : \text{At least one } p_{Yxi} \neq 0$$

With F-snedecor test statistics:

$$F = \frac{(n - k - 1)R^2_{YX_1 X_2 \dots X_k}}{k(1 - R^2_{YX_1 X_2 \dots X_k})}$$

With degrees of freedom  $v_1 = k$  and  $v_2 = nk - 1$

2. Individual Testing

If in the overall test  $H_0$  is rejected, it means that at least lack there is a  $p_{Yxi} \neq 0$ . To find out which  $p_{Yxi}$  is equal to zero, or to test the proposed conceptual hypothesis, testing is carried out individually.

Statistical hypotheses to be tested:

a.  $H_0 : p_{Yxi} = 0$  against  $H_1 : p_{Yxi} \neq 0$

b.  $H_0 : p_{Yxi} \leq 0$  against  $H_1 : p_{Yxi} > 0$

Test formula

$$t_i = \frac{p_{YX_i}}{\sqrt{\frac{(1 - R^2_{YX_1 X_2 \dots X_k})CR_i}{n - k - 1}}} \quad I = 1, 2, \dots$$

The test statistic above follows a t distribution with degrees of freedom  $nk - 1$ .

**RESULT AND DISCUSSION**

**The Influence of the Implementation of Education and Training Programs on Work Productivity.**

The discussion of the results of this study includes analyzing the implementation of education and training programs on employee work productivity as the dependent variable, the results of interviews with as many as 99 employees who are used as respondents. The causal relationship between these variables can be described in the form of a diagram as follows:

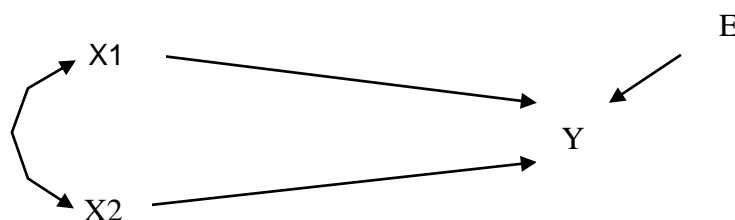


Figure 3. Variable Diagram

X1 = Implementation of Education Programs  
 X2 = Training Program Implementation  
 Y = Work Productivity  
 E = Other factors that affect employee productivity.

Furthermore, the significance of the correlation coefficient between variables X1 to X2 will be tested with the following hypothesis:

Ho :  $\rho_{x_1x_2} = 0$

H1 :  $\rho_{x_1x_2} \neq 0$

With test statistics as follows:

$$t = \frac{r\sqrt{(n-k-1)}}{\sqrt{1-r^2}}$$

then the correlation coefficient and its testing are shown in the table below:

**Table 1. correlation Coefficient**

Coefficient	Correlation	t-test	Sig.	Conclusion
$r_{x_1x_2}$	0.439	2.136	0.000<0.05	Ho Rejected There is a significant relationship

From the results of the correlation coefficient calculation above, it turns out that the correlation coefficient is significant so that the calculation can be continued.

The path coefficient is determined through the formulation:

$$PY_{xi} = \sum_{j=1}^k CR_{ij} r_{y_{x_j}} \quad i = 1, 2, \dots, 7$$

And the overall effect of X1 and X2

$$R_{Y_{X_1X_2\dots X_7}}^2 = \sum_{i=1}^k p_{Y_{X_i}} r_{Y_{X_i}} = 0.626$$

while the path coefficients of other variables outside the variables X1 and X2 are determined through:

$$p_{Y_{1\epsilon_1}} = \sqrt{1 - R_{Y_{X_1X_2\dots X_7}}^2} = 0.777$$

It means that implementing education and training programs affects work productivity by 39.56%, and the remaining 60.37% is influenced by other factors not included in the study.

Based on the theoretical framework that there is an influence between the implementation of education and training programs on work productivity, then we will test the overall hypothesis in the following form:

Ho :  $p_{Y_{x_1}} = p_{Y_{x_2}} = 0$

H1: There is at least one  $p_{Y_{x_i}} \neq 0$

Test statistics used

$$F = \frac{(n - k - 1)R^2_{YX_1X_2 \dots X_k}}{k(1 - R^2_{YX_1X_2 \dots X_k})}$$

$$= 20,446$$

With sig. level based on analysis with SPSS software obtained:

Sig. = 0.000 is smaller than 0.005, and then Ho is rejected, meaning that it can be continued on individual testing with the following hypothesis:

Ho:  $p_{Yxi} \leq 0$

H1:  $p_{Yxi} > 0$

And the test statistics used are:

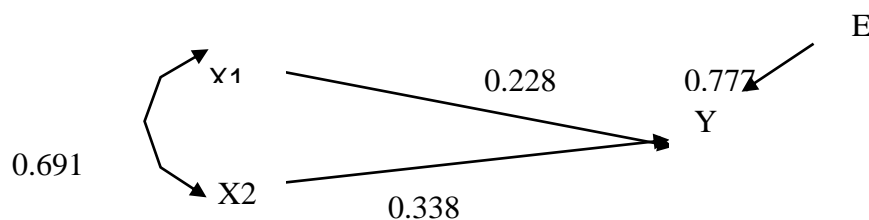
$$t_i = \frac{p_{YX_i}}{\sqrt{\frac{(1 - R^2_{YX_1X_2 \dots X_k})CR_i}{n - k - 1}}} \quad i = 1,2,3$$

Then the path coefficients along with the tests are obtained as follows:

**Table 2. Path Coefficients**

Coefficient	Track	t-test	Sig.	Conclusion
$r_{yx1}$	0.228	1,941	0.045 < 0.05	Ho Rejected There is a significant relationship
$r_{yx2}$	0.338	3,794	0.000 < 0.05	Ho Rejected There is a significant relationship

The complete causal structure between variables X1, ... X7, and Y can be expressed in the figure below.



Based on the picture above, the implementation of education and training programs affects work productivity, and the most dominant influence is the implementation of training programs.

**CONCLUSION**

The implementation of education and training programs affects employee work productivity, and the implementation of training programs is more dominant. This is because the implementation of training programs is carried out more often and is more applicable even though it still seems theoretical on employees' work. Therefore, the right education and training program will impact increasing the productivity of its employees.

### Suggestion

1. The implementation of education and training programs that must be considered and improved are as follows: Training Materials, Non-Formal Education, Training Schedules, Instructor Friendly, Training Variations, Training Methods, and Training Manuals. Meanwhile, the elements of implementing education and training programs that must be maintained are as follows: Formal Education, Instructor Skills, Instructor Ability, Training Facilities, Training Curriculum, and Training Evaluation.
2. Based on the conclusion above, there is a significant effect between the implementation of education and training programs on work productivity, therefore to increase work productivity, education and training programs must be adjusted and planned in detail with job needs.

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