# THE EFFECT OF LABOR AND WORK SKILLS ON WORK PRODUCTIVITY OF PT MANNA HANNA ENERGI BOGOR WEST JAVA

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#### Abstract

This study aims to examine the effect of labor and work skills on employee productivity at PT Manna Hanna Energi. This research is a type of descriptive quantitative research where the data used in this study are qualitative data. The study population included 60 employees of PT Manna Hanna Energi. Data collection using questionnaires, data analysis techniques used in this study using descriptive statistical analysis while the method of analysis used in this study is PLS (Partial Least Square) using SmartPLS version 3.0.m3. The results showed that Labor has a positive and significant effect on Work Productivity. This shows that the effect of labor on work productivity is significant. Moreover, Labor has a positive and significant effect on Work Skills. This shows that the effect of labor on work skills is significant. Meanwhile, work skills have a positive and significant effect on work productivity. This shows that the influence between Work Skills and Work Productivity is significant.

Keywords: Work Productivity, Labor, Work Skills

### 1. INTRODUCTION

The company's production is one of its most significant functions. In order for a company's actions to be more effective, the factors of production must be used. A product or service's production operations are those that prepare it for sale to the general public. Human and natural resources are just two examples of factors that contribute to the production process.

The natural resources needed in production activities are raw materials, materials, and others. Likewise, the human resources needed in production activities are labor. According to Suparmoko (2002) the workforce is the population of working age or the total population in a country in producing goods or services, generally the workforce is between 15-64 years. Meanwhile, according to Law No. 13 of 2003 Articles 1 and 2, in (Sendjun H. Manulang, 2001) workers are people who are able to carry out work to produce goods or services either to meet their own or community needs. Every company needs a workplace, working hours and decent wages in accordance with government regulations. Labor is also defined as human resources which according to Pasalong (2013) defines the quality of human resources is a workforce that has high competence, knowledge, skills and morals.

Human resources, also known as labor, who work in a company must possess knowledge and abilities that are consistent with the criteria established by the company. Knowledge and talents held by each workforce member are among the factors taken into account by the organization while producing a product. The outcomes attained or the output created can be seen from how well and efficiently each workforce member performs his or her job.

Each production activity requires a workforce to possess certain abilities or to have previously mastered certain competencies. The abilities required for each function in a company are those that the company desires from its workers. According to Muzni Ramanto Soemarjadi and Wikdati Zahri (1991), skill can be linked with the term dexterity (Arisandi, 2014). Individuals that are considered skillful are those who perform or complete their tasks promptly and accurately. Labor and skills are the most critical variables in any manufacturing activity in a company.

The existence of a workforce accompanied by work skills makes the work carried out quickly and in accordance with the targets desired by the company. In a company, employee productivity is the end result of every activity contained in every company that carries out production activities. According to Cascio (1998) in (Nuszep, 2004) productivity as a measurement of output in the form of goods or services in relation to inputs in the form of employees, capital, materials or raw materials and equipment. In line with Cascio's (1998), Sedarmayanti (2001) highlight that work productivity shows that individual is a comparison of the effectiveness of the output (achievement for maximum work) with the efficiency of one of the inputs (labor) which includes quantity and quality in a person's performance time with the input process as input within a certain time.

Work productivity will be in accordance with the goals of the company, the results achieved in the company will be maximized, and the company targets will be easily surpassed, if the workforce has the appropriate abilities and knowledge and is accompanied by the skills possessed by the workforce, such as skills in mastering the work. Labor, work skills, and work productivity are all things that companies, such as PT Manna Hanna Energi in Bogor, require.

PT Hanna Manna Energi (MHE) is a company engaged in manufacturing services with specialists in metal (iron) products. Currently, PT Manna Hanna Energi Bogor's manufacturing services consist of laser cutting, bending, welding, turret punching, shearing, painting, press / stamping, machining, fabrication and also the manufacture of dies & jigs. MHE's customers are not only from big companies such as PT. Yutaka and PT. Ohaka, but also accept orders from small companies and even individuals. Orders that PT Manna Hanna Energi receive can be in the form of continuous orders, job orders or one time orders with a quantity of 500 pcs to hundreds of thousands of pcs. Since every consumer will be treated with the utmost care, regardless of their size.

PT Manna Hanna Energi demands a high-morale workforce, and PT Manna Hanna Energi operates outside of established restrictions regarding working hours. With work hours that do not match the unpaid overtime, the company's employees do not have a positive work morale. The work skills required as skills in carrying out their work, accompanied by training provided by the company to employees who are apprentices with equal pay, but not with the Manna Hanna Energi company, where training provided to employees with the status of apprentices is not compensated by the company. Employee work productivity aims to advance the company, but with low morale and unpaid apprentice training, the resulting production does not meet the target, resulting in work productio. There are so many employees that lack the information and even the abilities that the organization requires. Employees can learn what the company wants and the type of workforce the company desires

through the training provided by each company. Each company requires a unique set of talents. With proper training and expertise in completing the work, the workforce's capabilities can be enhanced in order to deliver the necessary output.

The productivity generated by this activity is the outcome of the presence of labor and job abilities that maximize the production of a product or service. PT Manna Hanna is one of the more productive companies. The obtained results are fairly stable. At PT Manna Hanna Energi, output will be enhanced even more if the workforce's abilities and knowledge are complemented by training to enhance those skills. PT Manna Hanna Energi manufactures motorcycle spare parts.

Based on the description of the background above, the authors conducted research and gave the title of the research with "The effect of Labor and Work Skills on Work Productivity of PT Manna Hanna Energi".

### 2. LITERATURE REVIEW

#### 2.1. Labor

According to Suparmoko (2002)s tates that the workforce is the population of working age or the total population in a country in producing goods or services, generally the workforce is between 15-64 years. In Law No. 13 of 2003 Articles 1 and 2, in (Sendjun H. Manulang, 2001) states that workers are people who are able to carry out work to produce goods or services either to meet their own or community needs.

According to Hutapea & Nurianna Thoha (2008) there are indicators of the quality of human resources or labor, namely:

- 1) Understand their respective fields
- 2) Knowledge
- 3) Ability
- 4) Spirit at work
- 5) Organizing

#### 2.2. Work Skills

According to Spencer in (Wibowo, 2007), skill is the ability to do certain physical or mental tasks. Mental competence or cognitive skills include analytical and conceptual thinking. Meanwhile, according to Triton (2009) highlight that skills are things or steps that we master because we practice or do them continuously. Hence, employees who have high skill levels will be able to achieve better performance than employees who have low work skills.

Skills are the ability or proficiency of employees in completing their duties and responsibilities at work. Skills are very important because to measure employee productivity and employee achievement, it means that it can measure the extent to which employees can be successful in carrying out their duties and work.

Muzni Ramanto Soemarjadi and Wikdati Zahri (1991) in (Arisandi, 2014) states that skill can be equated with the word dexterity. People who can be said to be skilled people are people who carry out or complete their work quickly and correctly.

The dimensions and indicators used in this study adapt the theory of Yuniarsih and Suwanto (2008) in (Pratiwi, 2013) which is divided into dimensions and indicators as follows:

- a. Skill Dimensions.
  - With the following indicators :
  - 1. Skills in mastering work
  - 2. Skills in getting the job done
  - 3. Accuracy in completing work
- b. Personality Dimension

With the following indicators:

- **1.** Ability to control yourself
- 2. Confidence in getting the job done
- 3. Commitment to work
- c. Exercise DimensionWith the following indicators:Ability to train ourself to be better

#### 2.3. Work Productivity

The product is the result (output a thing produced). Production is an activity or process of producing something. Work productivity is a behavior that is applied by individuals or groups according to (Siagian, 2011) that in terms of behavior, a person's personality often places himself in various forms of attitudes, ways of thinking and ways of acting on various things that affect a person's personality or organization which is reflected in his behavior which in turn will be reflected in his performance.

Work productivity according to Cascio (1998) in (Nuszep, 2004) states that productivity as a measurement of output in the form of goods or services in relation to inputs in the form of employees, capital, materials or raw materials and equipment. In line with the above perspective, Sedarmayanti (2001) in (Nuszep, 2004) states that work productivity shows that individual is a comparison of the effectiveness of the output (achievement for maximum work) with the efficiency of one of the inputs (labor) which includes quantity, quality in a person's performance time with the input process as input within a certain time. Work productivity is a measure of work results or output which is an indicator of employee performance in an organization.

According to Simamora (2006) the factors used in measuring work productivity include quantity of work, quality of work and timeliness. Meanwhile, in this study, researchers measure work productivity by using the following indicators:

1) Working quantity

The quantity of work is a result achieved by employees in a certain number with a comparison of existing standards or set by the company.

- 2) Work quality Quality of work is a standard of results related to the quality of a product produced by employees in this case is an employee's ability to complete work technically with a comparison of standards set by the company.
- 3) Punctuality

Punctuality is the degree to which an activity is completed at the beginning of the specified time, from the point of view of coordinating with the outputs and maximizing the time available for other activities. Punctuality is measured from the employee's perception of an activity that is provided at the beginning of the time until it becomes output.

#### 3. RESEARCH METHOD

This research is a type of quantitative research. The method of data analysis used Structural Equation Modeling-Partial Least Square (SEM-PLS) Smart PLS software version 3. The population in this study were employees at PT Manna Hanna Energi, Bogor West Java which according to pre-study observation data amounted to 60 people. The population is heterogeneous so technically sampling is Non-Probability Sampling that carried out by Accidental Sampling method, with a total sample of 60 respondents. The testing stages are validity test, reliability test, while inner model includes convergent validity, discriminant validity, composite validity, Cronbach's alpha, and outer model includes path coefficient test and hypothesis testing (Sugiyono, 2014)

#### 4. **RESULT AND DISCUSSION**

#### 4.1. Result Research

#### 4.1.1. Validity Test

Based on the research that has been done, the Validity Test results of the Labor (X1), Work Skills (X2) and Work Productivity (Y) are obtained in Table 1.

r (X1), Work Skills (X2) and Work Productivit				
Indicator	r-statistic	r-table	Description	
X1.1	0.816	0.195	Valid	
X1.2	0.805	0.195	Valid	
X1.3	0.796	0.195	Valid	
X1.4	0.755	0.195	Valid	
X1.5	0.798	0.195	Valid	
X1.6	0.729	0.195	Valid	
X1.7	0.528	0.195	Valid	
X1.8	0.741	0.195	Valid	
X1.9	0.839	0.195	Valid	
X2.1	0.591	0.195	Valid	
X2.2	0.779	0.195	Valid	
X2.3	0.868	0.195	Valid	
X2.4	0.903	0.195	Valid	

Table 1 Validity test of
Labor (X1), Work Skills (X2) and Work Productivity (Y)

X2.5	0.748	0.195	Valid
Y1	0.651	0.195	Valid
Y2	0.897	0.195	Valid
Y3	0.873	0.195	Valid
Y4	0.893	0.195	Valid

### 4.1.2. Reliability Test

Table 2ReliabilityTestResults				
Variable Cronbach Critical Descrip Alpha Value				
Labor	0.907	0.600	Reliable	
Work Skills	0.840	0.600	Reliable	
Work productivity	0.849	0.600	Reliable	

# 4.1.3. Inner Model

### 1) Convergent Validity

Table 3 Convergent Validity

Variable Indicator Outer loadin				
Labor (X1)	X1.1	0.816		
	X1.2	0.805		
	X1.3	0.796		
	X1.4	0.755		
	X1.5	0.798		
	X1.6	0.729		
	X1.7	0.528		
	X1.8	0.741		
	X1.9	0.839		
Work Skills (X2)	X2.1	0.591		
	X2.2	0.779		
	X2.3	0.868		
	X2.4	0.903		
	X2.5	0.748		
Work Productivity (Y)	Y1	0.651		
	Y2	0.897		
	Y3	0.873		
	Y4	0.893		

# 2) Average Variance Extracted (AVE)

Table 4AVE value			
Variable	AVE		
Labor (X1)	0.580		

Work Skills (X2)	0.617
Work Productivity (Y)	0.697

#### 3) Composite Reliability

Table 5 Composite Reliability Value		
Variable Composite Reliability		
Labor (X1)	0.925	
Work Skills (X2)	0.888	
Work Productivity (Y)	0.900	

#### 4) Cronbach's Alpha

Table 6 Cronbach's Alpha Value			
Variable	Cronbach's Alpha		
Labor (X1)	0.907		
Work Skills (X2)	0.840		
Work Productivity (Y)	0.849		

# 4.1.4. Outer Model

# 1) Path Coefficient Test

Table 7 R-Square			
Variable R-Square Value	<b>R-Square Value</b>		
Work Skills (X2)	0.480		
Customer Satisfaction (Y)	0.757		

### 2) Hypothesis testing

The Effect	Original Sample	<b>T-Statistics</b>	P. Value	Results
Labor => Work Productivity	0.343	2,346	0.016	Accepted
Labor => Work Skills	0.693	10,290	0.000	Accepted
Work Skills =>Work Productivity	0.596	4,300	0.000	Accepted

### 4.2. Discussion

### 4.2.1. The Effect of Labor on Work Productivity

The first hypothesis tests whether Labor has a positive effect on Work Productivity. The test results show that labor has a positive and significant effect on work productivity as indicated by the Original Sample value of 0,343 and T Statistic 2,346 > 1,96 T-Table and P-Values = 0,019 (< 0,05). The results of the hypothesis indicate that the workforce has a positive and significant effect on work productivity, which is proven true or H1 is accepted

# 4.2.2. The Effect of Labor on Job Skills

The second hypothesis examines whether Labor has a positive effect on Work Skills. The test results show that the value of the workforce has a positive and significant effect on work skills as indicated by the Original Sample value of 0,693 and T Statistic 10,920 > 1,96 T-Table and P-Value = 0,000 (< 0,05). The results of the hypothesis indicate that the workforce has a positive and significant effect on work skills, which is proven true or H2 is accepted.

### 4.2.3. The Effect of Work Skills on Work Productivity

The third hypothesis examines whether work skills positively affect work productivity. The test results show that the value of work skills has a positive and significant effect on employee work productivity as indicated by the original sample value of 0,596 T-Statistic 4,300 > 1,96 T-Table and T-Values = 0,000 (< 0,05). The results of the hypothesis state that work skills has a positive and significant effect on employee work productivity, which is proven true or H3 is accepted.

# 5. CONCLUSION

To sum up everything that has been stated so far, the following conclusions can be drawn in this study, namely :

- 1. The results of data analysis concluded that Labor had a positive and significant effect on Work Productivity. This means that if the workforce is good, it will affect the increase in employee productivity as well. On the other hand, if the workforce is poor, it will affect the decrease in work productivity.
- 2. The results of data analysis indicate that the workforce has a direct positive and significant effect on work skills. The results of this study can be concluded that the workforce is very important to train work skills. Therefore, the better the workforce, the work skills will increase. Conversely, if the workforce is poor, the skills possessed will not increase as well.
- 3. The results of the data analysis show that work skills have a direct and significant positive effect on work productivity. The results of this study can be concluded that by increasing work skills, work productivity will also increase. On the other hand, if there is no increase in work skills, the work productivity will not increase.

### Suggestions

According to the result and conclusions of this study, researchers suggest several things, namely :

1. Labor

PT Manna Hanna Energi should establish a regulation declaring that the labor should capable of doing work, producing high-quality work, and maintaining a positive and high morale in order to boost work productivity.

2. Job Skills

PT Manna Hanna Energi should provide training to its employees so that their talents can be further developed and more employees achieve success.

3. Work productivity

PT Manna Hanna Energi should provide work targets for employees so that the quality and results achieved are in accordance with the provisions given by the company.

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