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The Improvement of Productivity to Increase Company Competitiveness in PT. X Binjai

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Abstract

Productivity is a measurement of the ability for an input in resulting of an output. The productivity for a company is an important element that can create the effectiveness, efficiency, and quality for its operational activities. This research is aimed to design a developmental system of productivity and improvement of productivity which can be applied by the company in increasing the competitiveness. Its methodology used is explanatory research. The productivity is made by measuring data of manpower, material, energy, and capital. The model of productivity improvement is using employee base technique. The research shows that the productivity index of manpower, material, energy and capital is fluctuated. In running the activity of productivity process, there is still inefficiency in distributing the manpower, material, energy, and capital for the company.

Keywords: productivity improvement, productivity indexes.

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1. Introduction

The efforts to achieve company goals can be realized through output increase. It will increase company productivity for producing finished goods or services, profit-oriented or not. An increase in the output of company will increase productivity to anticipate all challenges in maintaining the competitiveness of company.

In addition to increasing productivity, the efforts can be made through increasing output. Also, it can be made through increasing the input used to produce output. In other words, increasing the output produced and suppressing the input are used to produce output (Sumanth, 1984).

In the current era of globalization, the issue of increasing productivity is one of the main parameters for every institution to win the competition to face rapid environmental changes. It is, therefore, productivity is an important element for an institution. This can be done in order productivity can create efficiency, product innovation, quality improvement for increasing competitiveness.

In general, productivity is the comparison between output and input. Productivity is a measure of the ability of one unit of input to produce output. Inputs are production resources, namely: man power, materials, energy, capital, production costs and equipment costs. Meanwhile, the output is the total or the sum of the values of all the results and all other income earned in a certain period (Adam, 1981).

In the private sector or business organizations, the problem of increasing productivity has always been the main issue. It is due to the increasing demands on the quality of the products produced. Good product quality is an important instrument towards competitive advantage (Hamman, Halmajan, & Egli, 2001).

At the enterprise level, productivity measurement is mainly used as a management tool to analyse and promote production efficiency. A company organization needs to know at which level of productivity the company operates. Also, it is in order to be able to compare it with the productivity standards set by management, measure the level of productivity improvement from time to time, and compare the productivity of similar industries. This is important so that companies can increase their competitiveness in the market.

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PT. X is a company engaged in the soy sauce industry located in Langkat Regency trying to increase company productivity in facing increasingly competition. However, there is a phenomenon that indicates a decrease in employee productivity which is reflected in the level of employee discipline, namely often not coming to work (absent), employee turnover of 3%, low development of selling areas causing the production process to be discontinuous, product innovation is relatively low and product quality control is rarely carried out.

Up to now, the company has never measured productivity, so it has not been able to implement a productivity program properly. In this regard, it is necessary to measure productivity and design a productivity improvement system along with identifying the factors that affect productivity in order to know at what level the company's productivity is attainment and the factors that affect productivity so that the company can use it to determine strategies to increase competitiveness in the future.

The objective of this study is to design a productivity improvement system that can be applied by companies in order to increase competitiveness.

1.1 Conceptual Frame of Research

In the current condition, the company in carrying out its operational activities uses existing input resources to produce output. The existing inputs consist of man power, materials, energy and capital. The output produced is in the form of income from the sale of large and small bottles of soy sauce, both salty and sweet, in addition to producing waste.

To find out the actual production capacity and number of workers, the standard time for the packing section is calculated, consisting of: washing bottles, filling bottles, sticking labels, closing bottles and tying bottles.

Productivity is calculated by comparing the output to each input. Likewise, the productivity index is calculated based on constant prices and the profitability index is calculated based on current prices.

In the final stage, it is proposed to improve the company's productivity, which can be used as a recommendation to increase the company's competitiveness. The productivity improvement carried out is based on the employee-based technique model, namely a productivity improvement model that concentrates on labour input, while for other inputs such as energy, materials and capital, other researchers can continue. Graphically, the research concept framework can be seen in Figure 1.

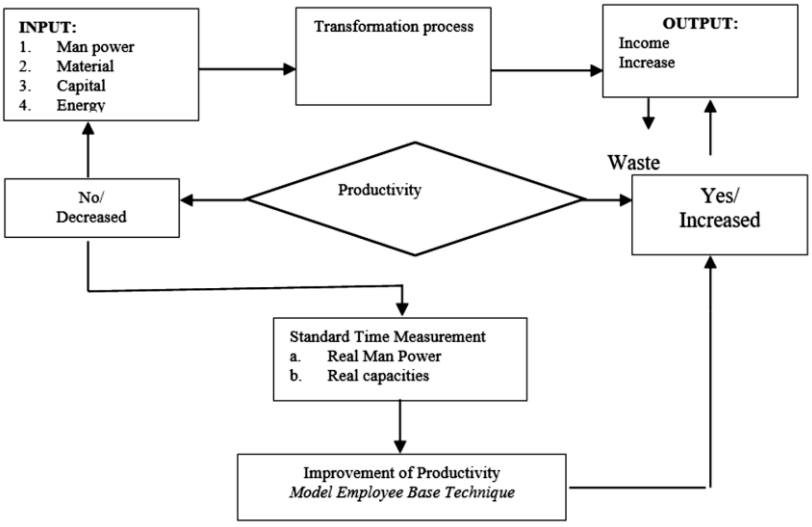

Figure 1. Research Concept Framework

2. Research methodology

The research was conducted in the form of a survey using an explanatory research approach, namely research that explains the relationship between the input variables used and the resulting output.

The variables in this study consisted of two types, namely:

a. The independent variables consist of: X_1 (leadership), X_2 (motivation), X_3 (environment) work, X_4 (salary), X_5 (ability), and X_6 (work discipline).
b. Dependent variable: Y = productivity

3. Results and Discussion

The purpose of measuring the standard time: a) to get the standard time of completion of the work, b) to get the number of workers and actual production capacity. Standard time is the time it takes a normal worker to complete a job in the best work system.

To calculate the standard time, it is necessary to know beforehand the production process for making the soy sauce. The production process of Panah's soy sauce brand consists of two parts: a) the semi-finished process, and b) packing (the final process).

Semi-finished processes: a) steaming, b) stirring, c) fermentation, d) drying, e) mixing of salt water, f) cooking I, and g) cooking II.

Packing: a) washing empty bottles, b) filling soy sauce into bottles, c) closing bottles, d) labelling, and e) tying bottles per dozen.

The time measurement is carried out directly, namely the place where the work is carried out on a number of populations for each part of the process by using a stop watch. The time measurement is established that the standard work method, the production process runs normally per shift of seven effective working hours, the output is calculated in units per dozen.

Calculation of standard time for the final product consists of: a) washing bottles, b) filling soy sauce, c) closing bottles, d) sticking labels and e) tying bottles.

In principle, for the activities of washing bottles, closing, sticking and binding, the processing time is the same for both large and small bottles, but the difference is only in the part of the process for filling large bottles and small bottles, because the volumes are different. For this reason, the standard time calculation is carried out only for the filling part for large bottles and small bottles, while other processes are calculated assuming the processing time for large bottles is the same as for small bottles because the processing time is the same.

Several steps were taken to calculate standard time: a) measuring cycle time, b) data adequacy test, c) calculating standard deviation, d) data uniformity test, e) calculating normal time, f) number of workers.

To calculate the normal time, it is necessary to add an adjustment factor (rating factor). The adjustment factor according to Westinghouse consists of: a) skills, b) effort, c) working conditions and d) consistency (Tarwaka, Solikhul, & Sudiajeng, 2004)

To calculate the standard time added with allowances, the amount of allowance is given based on the predisposing factors consisting of eight types: a) energy expended, b) work attitude, c) work movements, d) eye fatigue, e) temperature conditions, f) atmospheric conditions, g) environmental conditions and h) personal needs. The concessions provided consist of three things, namely; a) personal needs, b) relieving fatigue and c) unavoidable obstacles. All three are real things needed by workers. The results of the measurement of cycle time for each packing section are in Table 1 and the calculation of the standard time in Table 2.

3.1. Partial Productivity and Productivity Index

The purpose of productivity measurement is to find out information about the internal problems of the company's system. Partial productivity calculation consists of: man power productivity, material productivity, energy productivity and capital productivity (Sinulingga, 2010). Likewise for the calculation of the productivity index consisting of the man powerproductivity index, material productivity index, energy and capital productivity index. The results of the calculation of partial productivity and productivity index based on constant prices are tabulated in Table 4.

From the calculation results in Table 4, it can be interpreted that the company in 2019, 2020 and 2021 experienced a decrease in the man powerproductivity index by 17%, 24% and 31%, respectively.

Table 1. Cycle Time Calculation

No	Parts					
	Washing	**Big Bottles Filling**	**Small Bottles Filling**	**Bottles Closing**	**Label Attaching**	**Bottles Tying**
1	5.2	1.5	1.2	1.0	1.1	1.0
2	5.2	1.4	1.1	1.2	1.0	0.9
3	5.1	1.5	1.0	1.2	1.1	0.9
4	5.1	1.5	1.0	1.1	1.0	1.1
5	5.3	1.4	1.1	1.0	1.0	1.1
6	5.3	1.4	1.2	1.0	1.2	1.0
7	5.2	1.6	1.1	1.2	1.1	1.0
8	5.1	1.5	1.2	1.1	1.2	1.1
9	5.1	1.4	1.0	1.2	1.1	1.0
10	5.2	1.6	1.2	1.1	1.0	1.1
11	5.2	1.5	1.0	1.0	1.0	0.9
12	5.2	1.5	1.0	1.0	1.2	1.1
13	5.2	1.4	1.2	1.2	1.2	1.1
14	5.3	1.6	1.1	1.1	1.1	1.1
15	5.1	1.6	1.2	0.9	0.9	1.0
16	5.1	1.5	1.0	1.0	1.2	1.1
17	5.1	1.4	1.1	1.1	1.0	1.0
18	5.1	1.5	1.0	1.2	1.0	1.1
(· X)	93.1	26.8	19.7	20.1	19.4	18.6
($\bar{X}$)	5.2	1.5	1.1	1.1	1.1	1.0
· X^2	481.63	40.0	21.69	22.63	21.06	11932
(· X)^2	8667.61	718.24	388.09	404.01	376.36	345.96

Table 2. Standard Time Calculation Results

Number	Packing Part	Standard Time (minutes/dozen/person)
1	Bottles Washing	6,25
2	Big Bottle Ketchup Filling	1,65
3	Small Bottle Ketchup Filling	1,24
4	Bottles Closing	1,36
5	Label Attaching	1,52
6	Bottles Tying	1,18

Table 3. Standard Time Calculation Results, Number of Man Power and Packing Part Capacity

No	Packing Part	Standard Time (minutes/dozen /person)	Number of Man power (person)	Number of corrected man power	Capacity at this moment (dozen/shift)	Corrected capacity (dozen /shift)
1	Bottles Washing	6,25	31	18	1.200	2.083
2	Big Bottles Filling	1,65	6	5	1.200	1.527
3	Small Bottles Filling	1,24	6	4	1.200	2.032
4	Bottles Closing	1,36	6	4	1.200	1.853
5	Label Attaching	1,52	6	5	1.200	1.656
6	Bottles Tying	1,18	6	4	1.200	2.136
	Total (persons)			**20**		

The material productivity index in the period 2007, 2008 and 2009 decreased by 1.1%, 18% and 37%, respectively.

The energy productivity index in 2018 decreased by 3%, in 2019 it increased by 0.2% and in 2020 it fell again by 7%.

The Capital Productivity Index in 2018, 2019, 2020 and 2021 decreased by 23%, 34% and 54%, respectively.Of all the input factor productivity, it takes the consequences to the total productivity of PT. X Langkat in the 2020 period which also fell by 11%, in 2008 it fell by 20% and in 2009 it fell again by 35%.

Table 4. Partial Productivity, Productivity, and Productivity Index

Year	2018	2019	2020	2021
Output (IDR/year)	13.685.760.000	13.970.880.000	14.484.096.000	13.685.760.000
Output Index (%)	100	102	105	100
Input (IDR/year) :				
a. Man power	2.626.800.000	2.831.801.773,87	3.248.820.283,13	3.371.292.028,67
b. Material	1.333347.000	1.526.261.010,4	1.725.021.494,41	2.114.218.146,91
c. Energy	1.958.866.000	2.042.698.106,41	2.068.563.471,82	2.132.888.538,33
d. Capital	2.200.000.000	2.896,234.894,63	3.549.351.944,16	4.737.682.026,73
Total Input	8,119.013,000	9.296.995.788,31	10,591.757.193,5	12.356.080.740,6
Productivity Partial (Rp/Rp)				
a.Man power	5,88	4,93	4,45	4,05
b. Material	10,26	9,15	8,39	6,47
c. Energy	6,98	6,83	7,00	6,41
d. Capital	6,22	4,82	4,08	2,88
Total Productivity	1,68	1,50	1,36	1,10
Total Productivity Factor (Rp/Rp)	1,15	0,81	0,57	0,16
Indexes Productivity (%)				
a.Man Power	100	83	19	69
b. Material	100	89	82	63
c. Energy	100	97	100,2	93
d. Capital	100	77	66	46
Total Input	100	89	81	65
Input Indexes:				
a.Man Power	100	107	124	128
b. Material	100	114	129	159
c. Energy	100	104	106	109
d. Capital	100	131	161	215

Source: Secondary Data Processed

The provisional conclusion from Table 5 shows that the company's productivity fluctuates (unstable) due to fluctuations in productivity. It is presumed that there was an internal problem in the company that caused the rise and fall of productivity. The productivity assessment is used to monitor the company's internal conditions (internal problems), especially those related to the efficient use of resources and resources; in producing the company's output. Based on Table 4, the changes in the output and input indices, partial productivity, total productivity, and productivity indices are calculated in Tables 5, 6 and 7.

Table 5. Indexes Change of Output and Input (%)

Description	Year				Change (%)			
	2018	2019	2020	2021	2006	2019	2020	2021
Output Indexes	100	102	105	100	100	2	5	0
Input Indexes								
Man power	100	107	124	128	100	7	24	28
Material	100	114	129	159	100	14	29	59
Energy	100	104	106	109	100	4	6	9
Capital	100	131	1,61	215	100	31	61	115

Source: Secondary Data processed

Table 6. Changes on Partial Productivity and Total Productivity

Partial Productivity	Year				Change (IDR/IDR)			
	2018	2019	2020	2021	2018	2019	2020	2021
Man power	5,88	4,93	4,45	4,05		-0,95	-0,48	-0,40
Material	10,26	9,15	8,39	6,47		-1,11	-0,76	-1,92
Energy	6,98	6,83	7,00	6,41		-0,15	0,17	-0,59
Capital	6,22	4,82	4,08	2,88		-1,40	-0,74	-1,20
Total	1,68	1,50	1,36	1,10		-0,18	-0,14	-0,26

Source: Secondary Data Processed

Table 7. Changes on Productivity Indexes (%)

Productivity Indexes	Year				Change (%)			
-	2018	2019	2020	2021	2018	2019	2020	2021
Man power	100	83	76	-	69	-17	-24	-31
Material	100	89	82	-	63	-11	-18	-37
Energy	100	97	100,2	-	93	,3	0,2	-7
Capital	100	77	66	-	46	-23	-34	-54
Total (%)	100	89	80	-	65	-11	-20	-35

Source: Secondary Data processed

3.2. *Price Profitability Index (IPF) and Price Improvement Index (IPH)*

The purpose of measuring the profitability index is to provide information about the external problems of the company's system. The profitability index is calculated based on current prices (Shimizu, Wainai, & Nagai, 1991)

By utilizing the results of the calculation of the productivity index based on constant prices and the profitability index based on current prices, it can be determined the price improvement index (IPH) which is basically the ratio between the Profitability Index (IPF) and the Productivity Index (IP). The results of the calculation of IPF and IPH can be seen in Table 8. An index number greater than 1.00 means that there is an increase, being smaller than 1.00 means that there is a decrease compared to the situation in the base period.

From the results of the calculations interpreted in Table 9, several conclusions can be drawn regarding the performance of the company for 4 periods (2018-2020):

a. Labour productivity in 2019 decreased by 31% (100%-69%):
b. The level of labour wages increased as shown by the index of the improvement in labour input prices, namely IPH in 2018 (IPHL4) = 1.36. An increase in the wage rate indicated by the magnitude of IPHL4 = 1.36 resulted in an increase in labour productivity of 1%, with a net effect of reducing profitability by 6%, namely (94%-100%).
c. To increase productivity in the 2010 period, management must focus on the use of material, energy and capital inputs, because the productivity of these three inputs decreased by 14%, 11% and 14%, respectively.
d. The decrease in material input factors can be caused by not controlling the inventory of raw materials, not based on how many needs are in accordance with the orders received and the existing production capacity, thus causing material productivity to decrease.
e. The decrease in energy input factors which can also affect the decline in productivity of raw materials, in this case the company will experience energy wastage in a certain unit at the same time can affect the productivity of capital.
f. Capital that has been invested, but not running optimally, then this has an impact on the cost of capital that has been invested.
g. The production process is not continuous due to overstock, this has something to do with the decline in the productivity of raw materials. energy and capital.

Table 8. Profitability Indexes (%) and Price Change Indexes (IDR/IDR)

Year	2018	2019	2020	2021
Output (current (IDR/year)	13.685.760.000	14.747.040.000	16.495.776.000	17.107.200.000
Output Indexes	1,00	1,07	1,11	1.03
Input (IDR/year) :				
Man power	2.626.800.000	2.967.600.000	3.393.600.000	3.709.200.000
Material	1.333.347.000	1.526.551.000	1.725.470.000	2.114.345.000
Energy	1.958.866.000	2.043.147.500	2.068.666.900	2.136.301.160
Capital	2.200.000.000	2.900.000.000	3.560.000.000	4.750.000.000
Total Input	**8.119.013.000**	**9.437.298.500**	**10.747.736.900**	**12.709.846.160**
Input Indexes				
Man Power	1,00	1,12	1,14	1,09
Material	1,00	1,14	1,13	1,22
Energy	1,00	1,04	1,01	1,03
Capital	1,00	1,31	1,22	1,33
Input Total	**1,00**	**1,16**	**1,32**	**1.56**
Profitably Indexes (%)				
Man Power	100	95	97	94
Material	100	93	98	84
Energy	100	102	109	100
Capital	100	81	90	77
Input Total	**100**	**92**	**98**	**87**
Productivity Indexes (%)				
Man Power	100	83	76	69
Material	100	89	82	63
Energy	100	97	102	93
Capital	100	77	66	46
Total	**100**	**89**	**80**	**65**
Price Fix Indexes				
Man Power	1,00	1.14	1,27	1,36
Material	1,00	1,04	1,19	1,33
Energy	1,00	1,05	1,09	1,07
Capital	1,00	1,05	1,36	1,67
Input Total	**1,00**	**1,03**	**1,22**	**1,33**

Source: Secondary Data Processed

3.3. *Validity Test and Reliability Test*

The instrument that will be used to collect data must be tested first for the level of validity and reliability so that it can be seen that the instrument used is valid as an appropriate data collection tool. Measurement of validity and reliability by testing the questionnaire to 30 respondents. The calculation of the validity test was carried out with SPSS 16.0 (Nazir, 2003).

3.4. *Validity Test Results*

The instrument is declared valid if the product moment correlation value (r-count) r is greater than the r-table value at a significance level of <5%. The results of the validity test are in Table 9.

From the results of the validity test in Table 10, it appears that the score of each question item has a significant correlation with the total score, it is shown that the correlation coefficient value of each item is greater than the table correlation value at a significant level of 5%, thus the question items used are valid. . Or in other words the research instrument that has been carried out, it is found that the r-count value of each instrument tested is greater than the r-table value (r-count > r-table), where the r-table value in this study is 0.404.

Table 9. Validity Test Results

Variables	Questions	Value of r_{count} (correlation)	Value of r_{table}	Remarks
	$X_{1.1.1}$	0,700		Valid
	$X_{1.1.2}$	0,613		Valid
X1	$X_{1.1.3}$	0,743	0,404	Valid
	$X_{1.2.1}$	0,660		Valid
	$X_{1.2.2}$	0,853		Valid
	$X_{1.2.3}$	0,727		Valid
X_2	$X_{2.1.1}$	0,748		Valid
	$X_{2.1.2}$	0,690	0,404	Valid
	$X_{2.2.1}$	0,642		Valid
	$X_{2.2.2}$	0,617		Valid
	$X_{3.1.1}$	0,564		Valid
X_3	$X_{3.1.2}$	0,600		Valid
	$X_{3.1.3}$	0,569	0,404	Valid
	$X_{3.2.1}$	0,626		Valid
	$X_{3.2.2}$	0,714		Valid
X4	$X_{4.1.1}$	0,621		Valid
	$X_{4.1.2}$	0,484	0,404	Valid
	$X_{4.2.2}$	0,839		Valid
X_5	$X_{5.1.1}$	0,624		Valid
	$X_{5.1.2}$	0,541	0,404	Valid
	$X_{5.2.1}$	0,524		Valid
X6	$X_{6.1.1}$	0,405		Valid
	$X_{6.1.2}$	0,603	0,404	Valid
	$X_{6.2.1}$	0,666		Valid
	$Y_{1.1}$	0,576		Valid
Y	$Y_{1.2}$	0,571	0,404	Valid
	$Y_{2.1}$	0,782		Valid
	$Y_{2.2}$	0,648		Valid

Source: Primary Data Processed

From the results of the validity test in Table 10, it appears that the score of each question item is significantly correlated with the total score. This is indicated by the value of the correlation coefficient of each item is greater than the table correlation value at a significant level of 5%, thus the questions used are valid. In other words, the research instrument that has been carried out, obtained that the rcount value of each instrument tested is greater than the rtable value ($r_{count}>r_{table}$), where the rtable value in this study is 0.404.

3.5. Reliability Test Results

Reliability is the level of reliability of a measurement. Measurements that have high reliability are those that are able to provide consistent measurement results. In this study, the reliability test used the cronbach alpha method, where the instrument was declared reliable if the cronbach alpha value reached at least 0.6 (Nurgiyantoro, 2000). The results of the reliability test can be seen in Table 10.

Table 10. Reliability Test Results

Variable	Alpha Cronbach	Reliability Limit	Remarks
X_1(leadership)	0,774	0,6	Reliable
Y(Productivity)	0,734	0,6	Reliable

Source : Primary Data processed

From the results of calculations using SPSS 16.00 software, Cronbach's alpha value is greater than the reliability limit of 0.6 (Nurgiyantoro, 2000), meaning that the instrument used is reliable.

3.6. *Regression Analysis Results*

To analyze the data in identifying the factors that affect productivity, it uses multiple linear regression, namely to analyze the effect of the independent variable (X) on the dependent variable (Y). The results of the regression analysis can be seen in Table 11. The effect of the independent variable on the dependent variable was tested with a significance level of = 5%.

Table 11. Summary of Regression Analysis Results

Variable	F_{hitung}	F_{tabel}	Remarks	B (CoefficientRegression)	t_{count}	Sig.	t_{table}	Remarks
Leadership (X_1)				1,030	18,358	0,172		Very Significant
Motivation(X_2)				0,039	0,92 1	0,000		significant
			As a whole					significant
Environment (X_3)	112.401	1,39	Significant factor to productivity ($F_{hitung}>F_{table}$)	-0,066	-1,511	0,359	1,984	Without significant influence
Salary (X_4)				-0,019	-0,500	0,133		Without
Ability (X_5)				0,103	2,676	0,618		Significant influence
Discipline (X_6)				-0,023	-0,518	0,008		Without significant influence

Source: Primary Data processed

From the calculation results, it is obtained Multiple linier Analysis results such as follows :

$$Y = (-0,3l9)+l,030X_l+0,039X_2+(-0,066)X_3+(-0,019)X_4+0,103X_5+(-0,023)X_6$$
$$Y = 1,030X,+0,039X_2-0,066X_3-0,019X4+0,103X5-0,023X6-0,319$$

3.7. *Productivity Improvement*

Based on the results of research and studies as well as by looking at the various conditions that exist in the company PT. X Langkat, the productivity improvement model used is **employee based technique**. It is based on several considerations, such as: a) from the results of calculations with standard time the company has an excess (inefficiency) of labour as many as 20 people, b) labour productivity tends to decrease, c) leadership and ability factors contribute significantly in improving productivity.

By looking at the three results, the productivity improvement used is with a workforce approach. For other inputs such as materials, energy and capital, it is suggested to be continued in the next researcher.

Some of the indicators included in improving productivity with a workforce approach are: supervision, training, education, job rotation, promotion, improvement of the work environment, employee rotation. rewards, learning curve, communication, job enrichment, job enlargement and skill improvement. Referring to indicators in improving productivity with a workforce approach, the company does the following:

a. Training on the concept of productivity so that it can be applied in their respective jobs which is expected to increase productivity.
b. Selecting employees who are able to work at standard times and have high productivity so as to increase productivity.
c. Rearranging the workplace so that it can shorten the working time in taking work equipment and materials.
d. Improving work methods in the final process section, because work methods are also one part that can affect productivity.
e. Making repairs or rearranging the work station in the final process (packing),
f. Making standard operating procedures so that all work processes are standard.
g. Increasing the leadership role of workers to increase productivity.

h. Improving the skills of workers to be more competitive so that they can compete with other similar industries.

4. Conclusion and Recommendation

From the results of the research conducted, some conclusions were obtained:

a. The level of company productivity from 2006 to 2009 was unstable (fluctuating) with a downward trend. This situation is caused by the lack of efficiency in the management of existing input factors or resources (labour, materials, energy and capital).
b. The level of labour utilization still tends to be inefficiency so that labour productivity decreases.
c. Production capacity can still be increased by an average of 27.25%.
d. The factors that affect the level of productivity are leadership and ability.
e. To support future productivity improvements in order to increase the competitiveness of the company, the expansion of the selling area is one of the future goals in order to spur the output produced so that the achievement of increasing productivity can be successful.
f. To support the company's competitiveness, standard operating procedures are used to evaluate the efficiency, effectiveness of the quality of the products produced for the sake of the continuity of the synergies in the production process.

From the conclusions obtained, it is recommended:

a. To increase productivity and profitability, the company needs to provide a deep understanding of the meaning and concept of productivity.
b. To improve productivity, it is necessary to form a team with a clear division of tasks in conducting data collection and analysis as well as evaluation which of course must receive support from top management.
c. Management provides rewards for employees with high productivity so that they can continuously motivate employees to work and provide punishment to employees with low productivity.
d. The promotion system for employees should be based on the productivity achievement criteria. .
e. It is better to optimize the company's internal factors such as man power, material, energy and capital inputs in their use
f. Companies must also pay attention to external factors such as sales development to a wider area so that there is no overstock which ultimately affects the level of productivity to decline.

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