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# Quality of Main Performance Indicators and Employee Empowerment as Predictors of Work Effectiveness on Employee Productivity in the Manufacturing Industry in West Java and Banten Province

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**Abstract:** *The purpose of this research is to analyze quality of main performance indicators and employee empowerment as predictors of work effectiveness on employee productivity in the manufacturing industry in West Java and Banten Province. In this study using quantitative research. Population in this study is the Manufacturing Industry in West Java and Banten Province with a total of 3 companies in the foam manufacturing industry with a population of 1,079 employees. So, the number of samples in this study amounted to 155 respondents. Data analysis used structural equation modeling (SEM)-partial least square (PLS). The results of this research show that quality of main performance indicators has a significant effect on employee empowerment in the manufacturing industry in West Java and Banten Province. Quality of main performance indicators has a significant effect on work effectiveness in the manufacturing industry in West Java and Banten Province. Quality of main performance indicators has no significant effect on employee productivity in the manufacturing industry in West Java and Banten Province. Employee empowerment has a significant effect on work effectiveness in the manufacturing industry in West Java and Banten Province. Employee empowerment has no significant effect on employee productivity in the manufacturing industry in West Java and Banten Province. Work effectiveness has a significant effect on employee productivity in the manufacturing industry in West Java and Banten Province.*

**Keywords:** *Quality of Main Performance Indicators, Employee Empowerment, Work Effectiveness, Employee Productivity.*



## **1. INTRODUCTION**

Quality of main performance indicators is measuring tools that describe the effectiveness of the company in reaching its enterprise goals. Companies use key performance indicators to degree the achievement of reaching the objectives set (Staron et al., 2007). As for a number of the traits of the key performance indicators, namely non-financial measures, measures which can be frequently used, measures which can be recognized with the aid of using management, everyone in an employer has understood and understood the key performance indicators, responsibilities to people and team, has a completely good sized effect, has a tremendous effect. Key performance indicators are measured in daily, weekly and month to month periods. Good key performance indicators are an crucial rely and constantly get hold of interest from management. When a person deviates from the key performance indicators, the control can take a selection and speak to the character accountable for the key performance indicators. In the world of work or industry, fundamental transformations in complex organizational structures are in full swing. Organizations face a complex and dynamic work environment with increasing globalization and global economic competitiveness (Scott and Tiessen, 1999). As everyone knows, the constant changes in the productivity and effectiveness of teamwork required to create new effective systems, coupled with the increasing demands from business, have brought instability to the world of work or industry as a new challenge. Productivity and effectiveness of teamwork in organizations based on rewards, leadership, training, goals, wages, motivation, measurement, and information technology.

Many companies use subjective performance measurement tools in evaluating employee performance, or value parameters that are not specific, measurable, achievable, realistic, and time sensitive, actionable (SMART) this greatly affects likes and dislikes in assessing so giving an assessment of subordinates is not objective and not linear with the company's targets and objectives. The impact of this pattern results in the objectivity of the assessment which does not make a positive contribution to the company. Especially for the manufacturing industry, an effective measuring tool is needed to measure and evaluate employee performance with the quality of key performance Indicators as an objective and productivity-oriented performance measurement tool that uses more detailed, clear, and measurable assessment parameters.

Plant performance productivity is a barometer of employee performance assessment and employee job satisfaction that reflects the contribution of work or work productivity to individual employees and also the productivity of team or group work given to the company's organization. An objective employee performance appraisal is basically one of the key factors in developing the company's organization so that it can run effectively and efficiently, because when a human



resources policy or program in the organization has a positive impact on employees directly, it will provide positive values as well on the company. Employee job satisfaction is usually considered a short term evaluation that will have a long-term impact if it is not resolved immediately.

The purpose of this research is to analyze quality of main performance indicators and employee empowerment as predictors of work effectiveness on employee productivity in the manufacturing industry in West Java and Banten Province.

## **Literature Review**

### **Quality of Main Performance Indicators**

Quality of main performance indicators can describes three concepts, 1)selection of key indicators to represent the health of the organization, 2)exception reporting or, in other words, the ability to present only those indicators whose performance is significantly different from the expected results, and 3)the visual display of information (Scott and Tiessen, 1999). Quality of main performance indicators has a lifetime and require constant updating. Sometimes, replacement is also required.

### **Employee Empowerment**

Human resource management is the policies and practices involved in carrying out the people or human resource aspects of a management positions, including, recruiting, screening, training, rewarding, and appraising. That is, human resource management is the policies and ways that are practiced and related to human empowerment or the human resources aspects of a management position including recruitment, selection, training, rewards and appraisals.

Human resource management is the policies, practices and systems that influence employees behavior, attitudes, and performance. Meaning human resource management is the policies, practices and systems that influence employee behavior, attitudes, and performance.

The empowerment indicators are as follows, 1)the work done is important, 2)work activities have meaning, 3)care about what is done, 4)determine for yourself how the work is done, 5)have the autonomy to make decisions in the work process, 6)opportunity to choose the way to do work, 7)has a large impact on events within the department, 8)have control over the events within the department, and 9)the work done has an influence on the results achieved by the company (Staron et al., 2007).

### **Performance Measurement**

While the benefits of a good performance measurement system according to are, 1)tracking performance against customer expectations so that it will bring the company closer to its customers and make all people in the organization involved in



efforts to provide customer satisfaction, 2) motivate employees to perform services as a chain of internal customers and suppliers identify various wastes while encouraging efforts to reduce waste, and 3) making strategic goals that are usually still vague become more concrete so as to accelerate the organizational learning process, d) build consensus to make a change by giving a reward for the expected behavior (Narutomo, 2012).

### **Effectiveness**

There are 7 dimensions that affect effectiveness, namely the dimensions of 1) productivity, 2) quality, 3) effectiveness, 4) flexibility, 5) excellence, (6) development, and 7) satisfaction. Effectiveness is doing the right thing, while efficiency is doing the right thing, or effectiveness is the extent to which we achieve our goals and efficiency is how we mix all resources carefully (Yuniza et al., 2022).

### **Productivity**

Productivity is a mental attitude and human perspective to make tomorrow better than today and make today better than yesterday. In a simple and technical sense, the second understanding of productivity is the ratio between the output and input used (Tanjung, 2019).

That unproductive activities, attitudes or perspectives are categorized in four ways, namely, 1) assuming that without working we can get something valuable, 2) fear of making decisions because there is an element of risk, 3) feeling satisfied because it is considered good enough even though it has not reached excellent, and 4) extending consumptive actions until tomorrow and not stopping now, so that it is concluded that the person or group or organization of the company will be able to achieve their wishes or goals if there is one effort and sacrifice. In this case, there is a ratio of input and output.

## **2. RESEARCH METHODS**

In this study using quantitative research. Quantitative research is systematic scientific research on the parts and phenomena as well as the causality of their relationships (Setyosari, 2010). The purpose of quantitative research is to develop and use mathematical models, theories and hypotheses related to a phenomenon.

Population is a generalization area consisting of subjects or objects that have certain quantities and characteristics determined by the researcher to be studied and then drawn conclusions (Abdillah and Jogiyanto, 2015). Population in this study is the Manufacturing Industry in West Java and Banten Province with a total of 3



companies in the foam manufacturing industry with a population of 1,079 employees. Sample is part of the number and characteristics possessed by the population, if the population is large, and the researcher is not likely to study everything in the population, so the sample is taken from the population as a source of data that can represent the entire population (Priyatno, 2009). Calculation results for determining the number of samples based on error rates of 1%, 5%, and 10%. In this study the error rate or sampling error in determining the number of samples is at an error rate of 5%. Sample technique used in this study is random sampling technique. Random sampling technique is the taking of sample members from the population carried out randomly so as to provide equal opportunities for each member of the population to be selected as a member of the sample (Hair et al., 2014). So, the number of samples in this study amounted to 155 respondents.

Data analysis used structural equation modeling (SEM)-partial least square (PLS). Covariance-based SEM, measures the magnitude of the relationship between two variables to be variant-based, namely a measure of the correlation between the same two random variables (Ferdinand, 2006; Ferdinand, 2014). PLS is often applied for three reasons, namely data attribution, sample size, and the use of formative indicators. PLS is a structural equation model orientation that is used to test theories or prediction purposes (Ghozali, 2008).

### 3. RESULTS

#### Descriptive Index

Table 1. Employee Productivity

PRODUKTIVITAS KARYAWAN (Z)																
VAR	SKALA PENELITIAN										TOTAL	NILAI		INDEX %		
	STS (1)		TS (2)		KS (3)		S (4)		SS (5)			INDEX	LOW		HIGH	
	F	%	F	%	F	%	F	%	F	%						
WA	0	0%	0	0%	0	0%	55	35%	100	65%	155	100%	720	1550	7750	9,29
SW	0	0%	1	1%	0	0%	69	45%	85	55%	155	100%	703	1550	7750	9,07
SD	0	0%	0	0%	1	1%	71	46%	83	54%	155	100%	702	1550	7750	9,06
QW	0	0%	0	0%	0	0%	68	44%	87	56%	155	100%	707	1550	7750	9,12
E	0	0%	0	0%	0	0%	71	46%	84	54%	155	100%	704	1550	7750	9,08
Kesimpulan Index % untuk Variable Produktivitas Karyawan "CUKUP BAIK"																45,63

Employee productivity has an index with a score of 45.63% with the predicate good enough, the overall indicator has an even score with an average of 9.00%, meaning that the five indicators as a whole have an even contribution to support employee productivity and the highest indicator is work ability with an index score of 9.29%, which means that of the five employee productivity indicators that have the biggest contribution to influence, it is the employee's work ability, so



when the company wants high work productivity, it must be supported by good employee work abilities.

Table 2. Quality of Main Performance Indicators

KUALITAS INDIKATOR KINERJA UTAMA/KPI (X1)																	
VAR	SKALA PENELITIAN										JUMLAH		TOTAL		NILAI		INDEX %
	STS (1)		TS (2)		KS (3)		S (4)		SS (5)		TOTAL		INDEX	LOW	HIGH		
	F	%	F	%	F	%	F	%	F	%	F	%					
SEP	18	12%	1	1%	0	0%	62	40%	74	48%	155	100%	638	1550	7750	8,23	
SEE	18	12%	1	1%	18	12%	62	40%	56	36%	155	100%	602	1550	7750	7,77	
MEP	1	1%	17	11%	1	1%	62	40%	74	48%	155	100%	656	1550	7750	8,46	
MEE	0	0%	18	12%	19	12%	62	40%	56	36%	155	100%	621	1550	7750	8,01	
AEP	1	1%	17	11%	1	1%	61	39%	75	48%	155	100%	657	1550	7750	8,48	
AEE	0	0%	17	11%	1	1%	60	39%	77	50%	155	100%	662	1550	7750	8,54	
REP	1	1%	0	0%	0	0%	80	52%	74	48%	155	100%	691	1550	7750	8,92	
REE	0	0%	1	1%	18	12%	24	15%	112	72%	155	100%	712	1550	7750	9,19	
TEP	18	12%	0	0%	18	12%	80	52%	39	25%	155	100%	587	1550	7750	7,57	
TEE	18	12%	0	0%	0	0%	99	64%	38	25%	155	100%	604	1550	7750	7,79	
Kesimpulan Index % untuk Variable Kualitas Indikator Kinerja Utama "SANGAT BAIK"														82,97			

Quality of main performance indicators has an index with a score of 82.97% with a very good predicate, the overall indicator has an even score with an average of 8.00%, meaning that the ten indicators as a whole have a fairly even contribution to support employee productivity and the highest indicator is relevant employee empowerment with an index score of 9.19%, meaning that of the ten quality indicators, the main performance indicators that have the biggest contribution to influence are relevant to employee empowerment, so when the company wants high work productivity, it must supported by the quality of relevant key performance indicators to be able to empower employees which will increase employee productivity.

Table 3. Employee Empowerment

PEMBERDAYAAN KARYAWAN (X2)																	
VAR	SKALA PENELITIAN										JUMLAH		TOTAL		NILAI		INDEX %
	STS (1)		TS (2)		KS (3)		S (4)		SS (5)		TOTAL		INDEX	LOW	HIGH		
	F	%	F	%	F	%	F	%	F	%	F	%					
AWP	1	1%	0	0%	1	1%	59	38%	94	61%	155	100%	710	1550	7750	9,16	
RE	1	1%	0	0%	0	0%	98	63%	56	36%	155	100%	673	1550	7750	8,68	
RWE	0	0%	1	1%	17	11%	79	51%	58	37%	155	100%	659	1550	7750	8,50	
MD	1	1%	0	0%	18	12%	42	27%	94	61%	155	100%	693	1550	7750	8,94	
AGS	1	1%	0	0%	0	0%	96	62%	58	37%	155	100%	675	1550	7750	8,71	
AE	0	0%	18	12%	1	1%	61	39%	75	48%	155	100%	658	1550	7750	8,49	
Kesimpulan Index % untuk Variable Pemberdayaan Karyawan "CUKUP BAIK"														82,49			



Employee empowerment has an index with a score of 52.49% with the predicate good enough, the overall indicator has an even score with an average of 8.00%, meaning that the six indicators as a whole have a fairly evenly distributed influence contribution to support employee productivity and indicators. The highest is the authority for work plans or authority work plans with an index score of 9.16 %, meaning that of the six employee empowerment indicators the largest contribution is authority for work plans or authority work plans, so when the company wants high work productivity, then must be supported by a systematic in the authority to regulate work planning to be able to empower employees which will increase employee productivity.

Table 4. Work Effectiveness

EFEKTIVITAS KERJA (Y)																
VAR	SKALA PENELITIAN										JUMLAH	TOTAL	NILAI		INDEX %	
	STS (1)		TS (2)		KS (3)		S (4)		SS (5)				TOTAL	INDEX		LOW
	F	%	F	%	F	%	F	%	F	%	F	%				
JS	1	1%	0	0%	0	0%	101	65%	53	34%	155	100%	670	1550	7750	8,65
STG	0	0%	0	0%	0	0%	70	45%	85	55%	155	100%	705	1550	7750	9,10
LTG	0	0%	0	0%	0	0%	101	65%	54	35%	155	100%	674	1550	7750	8,70
Kesimpulan Index % untuk Variable Efektivitas Kerja "KURANG BAIK"																26,44

Work effectiveness variable has an index with a score of 26.44% with the predicate of less good, the overall indicator has an even score with an average of 8.00%, meaning that the ten indicators as a whole have a fairly even contribution to support employee productivity and the highest indicator are short term goals with an index score of 9.10%, meaning that from the three indicators of work effectiveness, the one that has the greatest influence contribution is the ability to make short-term goals, so when the company wants high work productivity, it must be supported by relevant short-term targets so that work effectiveness is maintained properly which will increase employee productivity.

Hypothesis Testing

Table 5. Hypothesis Testing

Hypothesis	Code	Path Coefficients	T Statistics	P Values	Results
H <sub>1</sub>	X <sub>1</sub> ->X <sub>2</sub>	0.785	52.695	0.000	Received
H <sub>2</sub>	X <sub>1</sub> ->Z	-0.302	2.278	0.023	Received
H <sub>3</sub>	X <sub>1</sub> ->Y	-0.017	0.298	0.766	Rejected
H <sub>4</sub>	X <sub>2</sub> ->Z	0.270	2.187	0.029	Received



H <sub>5</sub>	X <sub>2</sub> ->Y	0.096	1.773	0.077	Rejected
H <sub>6</sub>	Z->Y	0.880	49.544	0.000	Received

Information:

X<sub>1</sub>=Quality of Main Performance Indicators

X<sub>2</sub>=Employee Empowerment

Z=Work Effectiveness

Y=Employee Productivity

The results of this research show that quality of main performance indicators has a significant effect on employee empowerment in the manufacturing industry in West Java and Banten Province. Quality of main performance indicators has a significant effect on work effectiveness in the manufacturing industry in West Java and Banten Province. Quality of main performance indicators has no significant effect on employee productivity in the manufacturing industry in West Java and Banten Province. Employee empowerment has a significant effect on work effectiveness in the manufacturing industry in West Java and Banten Province. Employee empowerment has no significant effect on employee productivity in the manufacturing industry in West Java and Banten Province. Work effectiveness has a significant effect on employee productivity in the manufacturing industry in West Java and Banten Province.

#### 4. CONCLUSION

The results of this research show that quality of main performance indicators has a significant effect on employee empowerment in the manufacturing industry in West Java and Banten Province. Quality of main performance indicators has a significant effect on work effectiveness in the manufacturing industry in West Java and Banten Province. Quality of main performance indicators has no significant effect on employee productivity in the manufacturing industry in West Java and Banten Province. Employee empowerment has a significant effect on work effectiveness in the manufacturing industry in West Java and Banten Province. Employee empowerment has no significant effect on employee productivity in the manufacturing industry in West Java and Banten Province. Work effectiveness has a significant effect on employee productivity in the manufacturing industry in West Java and Banten Province.





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