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Analysis of Knowledge, Implementation and Monitoring of K3 on Occupational Health and Safety Management System (SMK3) at Pt. Mujur Lestari Labuhan Batu Selatan

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ABSTRACT

Occupational Health and Safety (K3) is aimed as an effort to create a workplace that is safe, healthy, free from environmental pollution, so that it can reduce and or be free from work accidents and occupational diseases and can have an impact on increasing work efficiency and productivity. The need for implementation and Monitoring of the Occupational Health and Safety Management System at PT. Mujur Lestari must have a good corporate culture and be able to contribute to SMK3. For that PT. Mujur Lestari makes implementation and monitoring to minimize the risk of work accidents for employees. The sample used in this study were employees of PT. Mujur Lestari, totaling 81 people. The data collection method used a questionnaire while the analytical method used was multivariate analysis. The results showed that there was an influence between knowledge on the Occupational Health and Safety Management System (SMK3) at PT. Mujur Lestari with a tcount greater than ttable, the effect of applying the Occupational Health and Safety Management System (SMK3) with a tcount greater than ttable, the effect of Monitoring on the Occupational Health and Safety Management System (SMK3) with a greater tcount from ttable and there is no relationship between the implementation and Monitoring of the Occupational Safety and Health Management System (SMK3). The conclusion shows that the knowledge variable has a positive and significant effect on the Occupational Safety and Health Management System (SMK3), the application variable has a positive and significant impact on the Occupational Safety and Health Management System (SMK3) and the Monitoring variable has a positive and significant effect on the Occupational Safety and Health Management System. (SMK3).

Keywords: Occupational Health and Safety (K3), Occupational Health and Safety Management System (SMK3)

BACKGROUND

An employee in carrying out his obligations must also get his rights in work such as protection in doing work, but in reality what is currently the world of corporate work, employees in the protection he work does not match what he aspires to, it can be said that in work employees get very much Potential work hazards result in accidents that can be dangerous when employees work. Based on the case above, it can be said that employee protection carried out by the company to reduce work accidents is a management system in which there is a regulation for employees in reducing work accidents and companies can avoid losses at work. The regulation is a management system that must be implemented in a company, namely the Occupational Safety and Health Management System (SMK3), (Rini, 2013).

PT.Mujur Lestari has applied the SMK3 system around 2015, in line with the requirement for all palm oil organizations or

companies to implement Indonesian Sustainable Palm Oil (ISPO) as regulated in the Minister of Agriculture/11-2015 namely "Indonesian Sustainable Palm Oil Certification System" or "Indonesian Sustainable Palm Oil Certification System" (ISPO). One of the principles in the ISPO is regarding the safety and health of employees. Through Ministry of Agriculture No. 11 of 2015, the company compiled a comprehensive SMK3 policy, where the guideline is PP No. 50 in 2012. The company has received an ISPO certificate in 2019, actually the SMK3 concept is going well at PT Mujur Lestari, but work accidents still often occur.

Table 1. Number of Accident at PT. Mujur Lestari on 2016-2019

Tahun	Number of Accident		
	Near Miss (Almost Happened)	Minor Injury (Without Loss of Work Hours)	Accident (Loss of Working Hours)
2016	9	12	3
2017	7	5	4
2018	4	7	3
2019	6	8	4

Based on the data obtained above, it is necessary to have K3 Activities, which aim to create a comfortable, healthy and free work area from area pollution that can or can reduce work accidents, so that employees at work can increase their income and work results. Work accidents that are caused are not individual/group and material for employees and industrial owners, but can disrupt the production process evenly, disturb the area and can have an impact on residents (Lusia Salmawati, 2015). Implementation or implementation is an implementation of the system that occurs by carrying out the program when the program is implemented and can make changes to decisions so that operational patterns occur so that these changes can be achieved when ratified, with reference to the work in the company's output that has been decided. (Mulyadi, 2015).

In addition to implementation, Monitoring is also very necessary because Monitoring is a result of the vision of all organizations that these activities are carried out according to plan. against the monitoring plan in order to see the weaknesses or errors so that they are corrected and to prevent them from happening again.

Knowledge Dimensions and Indicators in K3

Knowledge in K3 is the output of an event experienced by individuals or groups performed through the human senses to a specific location and processing can occur in the senses contained in the human senses, namely the senses of sight, hearing, smell, and taste through the skin (Priyanti, 2011).

Knowledge in K3 is the first step in the work determination procedure which is an attempt to make early prevention of K3 hazards when working in the company (Robbins, 2006). The indicators for measuring employee knowledge in K3 are:

a. Quality of work is the thinking and measurement of employees about the way they work and the results obtained in the attitude of workers at work.
b. The quantity of work that is the result of the total in the results which consists of the number of work activities completed.
c. Punctuality is the beginning of an activity that must be completed as soon as possible in terms of cooperation in order to get results by maximizing the available time.
d. Effectiveness is the extent to which the use of organizational resources (manpower, money, technology, raw materials) is maximized with the intention of increasing the results of each unit in the use of resources.
e. Independence is the level of an employee who will be able to carry out his work functions without asking for help, guidance from other people or supervisors.
f. Work commitment is a level where employees have a commitment to work with the agency and employee responsibilities to the office.

Dimensions and Implementation Indicators in K3

Companies must pay attention to the implementation of K3 implementation at work, can minimize unwanted things regarding the risk of work accidents that result in losses to the company. Based on the Ministry of Manpower Rule 5/1996 regarding SMK3, that article explains what companies must do, namely:

a. Companies must establish policies for implementing K3 and employees must be trained so that there is a commitment to implementing OSH.
b. The company plans to make regulations, targets and missions that are effective in implementing K3.
c. Implementation of the company's SMK3 when the K3 policy must be implemented effectively by increasing the capacity or additional regulations needed by the company in achieving the policies, targets and objectives of occupational safety and health;
d. Companies in the implementation of K3 must continue to measure, monitor and always evaluate the implementation of K3 and carry out revision actions and prevention of work accidents.
e. K3 in the company must be reviewed in a measurable manner in order to always improve the implementation of SMK3 within the Company.

Policies on the implementation of SMK3 must be made, ratified and signed by the owner of the company in which the goals and objectives must be clearly stated, socialized to workers and properly archived and always reviewed regularly. Regarding the provisions of Article 5, it is explained that every company is obliged to implement/apply SMK3 in the company if there are 100 workers in the company and the work has a dangerous risk.

K3 Monitoring

K3 Monitoring is an implementation of work in the field that must be monitored against the implementation that should occur so that the work is appropriate or not carried out in the field of work (Anggraini, 2012). According to Murhaini (2014) it can be said that Monitoring consists of an assessment of a processing that can be measured so that it can be directly verified validly.

Monitoring is the practice of working in order to achieve the vision and mission of the company and company management. That is, with regard to thinking and making a program of activities that have been planned. Planning and monitoring practices have a parallel relationship in achieving organizational goals (Yahya, 2006).

Occupational Health and Safety Management System (SMK3)

Understanding this system is a regulation/system in which it consists of structure, planning, implementation responsibilities, procedural or HR processes when it is used for development, implementation, achievement, review and maintenance of policies in the context of controlling K3 itself/related work accidents for the purpose of useful occurrence, safe, efficient and productive work location/ place.

According to (Setyoko, 2017) the Occupational Health and Safety Management System is a part system which includes organizational structure, planning, responsibilities, implementation, procedures, processes and resources needed for the development of implementation, achievement, assessment and maintenance of occupational safety and health. (K3).

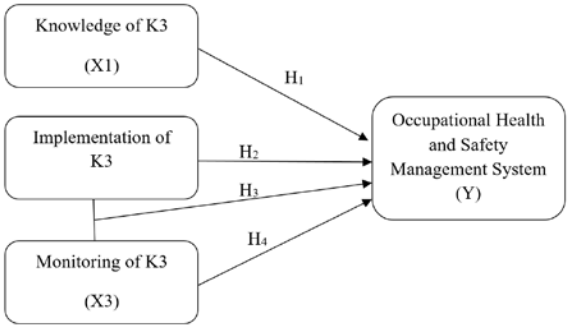

Figure 1. Conceptual Framework

Hypothesis:

1. Knowledge (X1) has a positive and significant effect on the Occupational Health and Safety Management System (Y)
2. Implementation of (X2) has a positive and significant effect on the Occupational Health and Safety Management System (Y)
3. Monitoring (X3) has a positive and significant effect on the Occupational Health and Safety Management System (Y)
4. Implementation (X2) and Monitoring (X3) have a positive and significant effect on the Occupational Health and Safety Management System (Y)

RESEARCH METHOD

This research uses quantitative research methods. The population becomes the object of research, namely the workers of PT. Mujur Lestari with a total of 407 people spread from several divisions and is the latest employee database from the research. The sampling used in this research is a random sampling method or it can be said by simple random sampling and its determination uses the Slovin formula. The number of samples in this study were 81 respondents. In this study, the instrument in this research is a tool to collect data. The tools used are checklist sheets, questionnaire leaflets (open/closed questionnaires), procedures for conducting interviews and cameras to obtain photo documentation.

RESULT AND DISCUSS

Multiple Linear Regression Test

Multiple linear regression analysis was conducted in this study to examine the effect of two or more independent variables (independent) on one dependent variable (dependent). This study analyzes the effect of implementing and monitoring the Occupational Health and Safety Management System (SMK3). Research variables were regressed with the help of the IBM SPSS version 25 application.

Table 2. Multiple Linear Regression Test

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15,336	6,362		2,411	,018
	Knowledge	,080	,145	,070	,550	,584
	Implementation	,171	,086	,260	2,002	,049
	Monitoring	,092	,115	,089	,799	,427

a. Dependent Variable: Occupational Health and Safety Management System

Hypotheses test

F Test

This test is intended to determine whether there is an effect of the independent variable together with the dependent variable. This test is also known as the model feasibility test or more popularly referred to as the simultaneous test model.

Table 3. F Test

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	72,075	2	36,037	3,647	,031[b]
	Residual	770,691	78	9,881		
	Total	842,765	80			
a. Dependent Variable: Occupational Health and Safety Management System (SMK3)						
b. Predictors: (Constant), Monitoring, Implementation						

The SPSS output table above shows the F value of 3.647 f table value 0, and a significance of 0.031 < 0.05, it can be concluded that H4 is not accepted, namely the application (X2), and Monitoring (X3) has no significant effect on the Occupational

Health and Safety Management System. (Y).

T Test

The T test in multiple linear regression is intended to test whether the parameters (regression coefficients and constants) that are estimated to estimate the multiple linear regression equation/model are the right parameters or not. The exact meaning here is that the parameter is able to explain the behavior of the independent variable in influencing the dependent variable.

Table 4. T Test

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15,336	6,362		2,411	,018
	Knowladge	,080	,145	,070	,550	,584
	Implementation	,171	,086	,260	2,002	,049
	Monitoring	,092	,115	,089	,799	,427
a. Dependent Variable: Occupational Health and Safety Management System						

1. The value of tcount for the Knowledge variable is 0.550 and ttable is 0.05 so that tcount > ttable (0.550 > 0.05). The significance of the knowledge variable on the related variables is 0.584 or greater than the alpha value of 0.025, so it can be said that the knowledge variable has a significant and significant effect on the Occupational Health and Safety Management System (SMK3) at PT Makmur Lestari
2. The value of tcount for the application variable is 2.002 and ttable is 0.05 so that tcount > ttable (2.002> 0.05). The significance of the Monitoring variable on the related variables is 0.049 or greater than the alpha value of 0.025. So it can be said that the application variable has a positive and partially significant effect on the Occupational Health and Safety Management System (SMK3) at PT Makmur Lestari
3. The value of the monitoring variable tcount is 0.799 and ttable is 0.05 so that tcount > ttable (0.779 > 0.05). The significance of the Monitoring variable on the related variables is 0.427 or greater than the alpha value of 0.025. So it can be said that the Monitoring variable has an effect and is significant on the Occupational Health and Safety Management System (SMK3) at PT Makmur Lestari.

Coefficient of Determination Test (R^2)

The determinant coefficient shows the ability of the independent variables, namely: Knowledge (X1), Application (X2) and Monitoring (X3), in explaining the dependent variable Occupational Health and Safety Management System (SMK3) (Y) together.

Table 5. Coefficient of Determination Test (R^2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,299[a]	,089	,054	3,157
a. Predictors: (Constant), Monitoring, Knowladge, Implementation				

The R-Square value of 0.89, it shows that the proportion of the influence of knowledge, application and Monitoring variables on the Occupational Health and Safety Management System (SMK3) variable is 89%. This means that knowledge, application and Monitoring in the Occupational Health and Safety Management System (SMK3) PT. Mujur Lestari has a proportion of influence on the Occupational Health and Safety Management System (SMK3) PT. Mujur Lestari is 89% while the remaining 11% (100% - 89%) is influenced by other variables that are not in this linear regression model. The impact caused by the implementation and Monitoring of the Occupational Health and Safety Management System (SMK3), which contributed a value of 89%, was large.

CONCLUSION

1. Knowledge has a significant and positive influence on the Occupational Health and Safety Management System (SMK3)
2. The application has a positive and significant impact on the Occupational

Health and Safety Management System (SMK3).

3. Monitoring also has a positive and significant impact on the Occupational Health and Safety Management System (SMK3).
4. Implementation and Monitoring is unacceptable and insignificant to the Occupational Health and Safety Management System (SMK3).

Conflict of Interest: None

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