Implementation of Occupational Health and Safety and Use of Material Handling Equipment on Employee Performance Productivity at Pt Jaga Lautan Utama 2021

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IMPLEMENTATION OF OCCUPATIONAL HEALTH AND SAFETY AND USE OF MATERIAL HANDLING EQUIPMENT ON EMPLOYEE PERFORMANCE PRODUCTIVITY AT PT JAGA LAUTAN UTAMA 2021

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Abstract

PT Jaga Lautan Bersama is national integrated logistics service provider that specializes in sea or ocean freight tug barges, logistics projects, and jacking rolling systems as well as integrated logistics solutions. This study aims to empirically examine the effect of the application occupational health and safety and material handling equipment on employee performance productivity at PT Jaga Lautan Bersama. The sample in this study amounted to 30 employees. This research is quantitative descriptive research using a questionnaire and observation method with multiple linear regression approach and hypothesis testing. The result showed a multiple linear equation $Y = -0,12 + 0,728X_1 + 0,154X_2$, testing the hypothesis with the f test obtained and F count value of 70,568 with probability (p) = 0,000. Based on the provision of the test where the probability value (p) $\leq$ 0,05, $F_{count} > F_{table}$ 70,568 > 3,35, so Ho is rejected and Ha is accepted, so it can be said that the variable of occupational health and safety and material handling equipment simultaneously have a significant effect on the productivity of employee performance.

Keywords: occupational health and safety, material handling equipment, employee performance productivity

Introduction

In the last decade, especially in the field of communication media, many innovative advances have been made rapidly, human assets are by no means simple, because different superstructures and foundations are expected to help recognize the value of human assets. Human resources regardless of their form or purpose are the core elements of an organization. Organizations are created with a vision of benefiting people and to fulfill their mission, organizations are managed and controlled by people. Productivity is needed in industries and organizations engaged in goods and services. Productivity is a measure of the result achieved by an organization or mechanical place in creating a product and service. Productivity is said to be high if the result obtained are superior to the work tools used. On the other hand, productivity is said to be low if the output produced is less than the source of labor used. Technically, productivity is comparison between the results obtained (output) with the required resources (inputs). That way (Faslah & Savitri, 2017) suggest the productivity inputs (labor, capital. The natural resources, energy, etc.) and outputs (goods and services) quality and quantity. In government regulation of the Republic of Indonesia number 88 of 2019 concerning occupational health that in order to ensure that the workforce is healthy, protected, and useful, it is necessary to make essential welfare efforts for a coordinated, comprehensive and mandatory effort of welfare security department. In the context of logistics, the focal point material handling equipment maintenance has the option to move materials and goods over appropriate distances within distribution centers, industrial facilities, cross-dock and transportation terminals. The motivation behind material care is relied on to increase usability, skill, natural appeal, and safe tasks. In the job safety analysis of PT Jaga Lautan Bersama, there are several work steps carried out in a project to avoid the risks faces during the implementation and use of material handling equipment that must be understood so that job safety can be carried out properly at work. When doing work, it is expected that every employee can be equipped with knowledge and application of occupational health and safety which a high level of risk of workplace of accidents. The selection of equipment and technology for material handling equipment must use the correct method to regulate the movement materials and products in sufficient quantities. Right place and time, right sequence, right location and conditions, and done right in effective manner. According to (Afandi, 2018) performance is the result of work that can be completed by a person or association in an organization in accordance

with their respective skills and duties with the ultimate goal of achieving authorized goal, not abusing the law and not contradicting ethics and morals. According to (Suwardi & Daryanto, 2018) occupational and health safety identifies areas related to the health, safety and welfare of people working in factories and project sites. Occupational and health safety also protect co-workers, workers' families, consumers, etc. which may be affected by working conditions. According to (Debrina Puspita, 2017) material handling or material or material transfer is the act moving material from one point to another (at a certain distance).

Methodology
This study aims to analyze and evaluate the effect of the application of Occupational Health and Safety (K3) and the use of materials handling equipment on the productivity of PT Jaga Lautan Bersama's employees. Data collection methods in this study consisted of questionnaires, observation, and library research. The data processing methods in this study consist of editing, scoring and tabulation. The data instrument test used in this study is the validity test and the reliability test. The data analysis method used in this research is descriptive statistics. Descriptive statistics are statistics used to describe the collected data as it is and analyze it without the intent to make conclusions or generalizations that can be applied publicly. Data analysis and conclusions are drawn using simple statistics, and quantitative data can be modified by defining metrics based on response variability scores. Variations of answers ranged from 1 to 5 by giving a score for each alternative answer. The range of scores for each answer was searched to determine the criteria. That is, the distance from one criterion to another is 0.8. The number obtained by subtracting the lowest value from the highest value and dividing it by the number of alternative answers.

In this study, the population that the author uses as the object of research is all employees of the PT Jaga Lautan Bersama unit, totaling 30 people. In this study, the population was relatively small. If the population is relatively small, less than 30, the sampling technique uses all members of the population to be sampled.

Results and Discussion
PT Jaga Lautan Bersama is a national integrated logistics service provider company that specializes in Sea/Ocean Freight Tug Barge, LCT, Project Logistics and Jacking Rolling System and Integrated Logistics Solutions. The logistics services provided can be tailored to customer needs. These services include multi-modal transportation, project logistics distribution services and jacking rolling tools and integrated logistics solutions with area coverage throughout Indonesia. PT Jaga Lautan Bersama focuses on the market segment of companies engaged in the manufacturing, agriculture, mining, energy industries such as oil and gas, EPC (Engineering Procurement & Construction), and others.

DESCRIPTION STATISTICAL ANALYSIS
Data analysis and conclusions use simple statistics, and quantitative data can be modified by defining metrics based on response variability scores. Variations of answers from 1 to 5 by giving a score for each alternative answer. The range of scores for each answer is sought to determine the criteria. That is, the distance from one Criterion to another is 0.8. The number obtained by subtracting the lowest value from the highest value and dividing it by the number of alternative answers. Written in numeric format as follows.

Interval Angka Penafsiran	Kriteria Penampilan
0,6 - 1,4	Tidak Baik
1,5 - 2,3	Kurang Baik
2,4 - 3,2	Cukup Baik
3,3 - 4,1	Baik
4,2 - 5,0	Sangat Baik

The average value of the indicator on the X1 variable (Occupational Health and Safety) obtained an interpretation number of 3.55 (4.33 - 4.63) which can be interpreted as being in a good category, thus the implementation of Occupational Health and Safety at PT Jaga Lautan Bersama has been running smoothly. good.

The average value of the indicator on the X2 variable (Material Handling Equipment) obtained an interpretation number of 3.51 (4.33 – 4.5) which can be interpreted as being in a good category, thus the use of Material Handling Equipment at PT Jaga Lautan Bersama has been running smoothly. good.

The average value of the indicator on the Y variable (Employee Performance Productivity) obtained an interpretation number of 3.56 (4.36 - 4.56) which can be interpreted as being in a good category, thus the productivity of employee performance at PT Jaga Lautan Bersama has been going well .

Simultaneous Significance Test (F Test)

The F test is used to determine the effect of the independent variables simultaneously (simultaneously) on the dependent variable. In this case, the Application of Occupational Health and Safety and the Use of Material Handling Equipment on Employee Performance Productivity from the Statistical Analysis Program (SPSS) Version 25, the results of the analysis obtained are:

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	222.275	2	111.138	70.564	.000[b]
	Residual	42.525	27	1.575		
	Total	264.800	29			

a. Dependent Variable: Produktivitas Kinerja Karyawan

b. Predictors: (Constant), MHE, K3

Based on the analysis data above, if Fcount > Ftable then Ha is accepted, meaning that the independent variable simultaneously has a significant influence on the dependent variable. In table 4.8 above, the Fcount value is 70.568. The Ftable value of 3.35 can be seen in the attachment of Table F.

Conclusion

Based on the results of the research described in chapter IV, the following conclusions can be drawn:

1. From the analysis of Variable X1 (Occupational Health and Safety) the respondents' answers are as many as 240 answers with details of the total respondents' answers (SS) strongly agreeing as many as 109 with a percentage of 45.41%, respondents' answers (S) agreeing as many as 127 with a percentage of 52.91% , respondent's answer (N) is neutral as much as 4 with a percentage of 1.67%. This shows that the implementation of occupational health and safety at PT Jaga Lautan Bersama is good, because most of the respondents' answers agree and strongly agree. The above is also supported by hypothesis testing, the tcount value is 11.268 and the regression coefficient (β) is 0.827 with probability (p) = 0.000. The results of the analysis show that the probability value (p) 0.05, it can be concluded that occupational health and safety has a positive effect on employee performance productivity.

2. From the analysis of Variable X2 (Material Handling Equipment) the respondents' answers are as many as 240 answers with details of the total respondents' answers (SS) strongly agreeing as many as 103 with a percentage of 42.91%, respondents' answers (S) agreeing as many as 129 with a percentage of 53.75% , respondents' answers (N) were neutral as many as 8 with a percentage of 3.33%. This shows that the use of material handling equipment at PT Jaga Lautan Bersama is good, because most of the respondents' answers agree and strongly agree. The above is also supported by hypothesis testing, the tcount value is 4.685 and the regression coefficient (β) is 0.573 with probability (p) = 0.000. The results of the analysis show that the probability value (p) 0.05, it can be concluded that material handling equipment has a positive effect on employee performance productivity.

3. From the analysis of Variable Y (Employee Performance Productivity) the respondents' answers are as many as 240 answers with details of the total respondents' answers (SS) strongly agree with 114 with a percentage of 47.5%, respondents' answers (S) agree as many as 121 with a percentage of 50.41% , respondents' answers (N) were neutral as many as 5 with a percentage of 2.08%. This shows

that the productivity of employee performance at PT Jaga Lautan Bersama is good, because most of the respondents' answers agree and strongly agree. The above is also supported by simultaneous testing, the Fcount value is 70.568 with probability (p) = 0.000. Based on the provisions of the F test where the probability value (p) 0.05, it can be said that the variables of occupational health and safety and material handling equipment simultaneously have a significant effect on employee performance productivity.

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