



The Influence of Labor Productivity and Raw Material Inventory Management on the Operational Performance of Companies

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Abstract. Based on observations, the background to this research is the fluctuating in production numbers and the number of employees at PT Kewalram Indonesia. This is thought to be related to labor productivity and raw material inventory management. This research aims to determine the influence of labor productivity and raw material inventory management on the company's operational performance at PT Kewalram Indonesia, both partially and simultaneously. The object of this research is employees at PT Kewalram Indonesia unit 1. The type of research is associative quantitative, primary data type, data collection techniques are observation, interviews, literature study and questionnaires. The population in this study was 1.872 employees at PT Kewalram Indonesia Unit I and a sample of 95 employees. The research results show that there is a significant influence between labor productivity and the company's operational performance. This can be seen from the value of $t_{\text{count}} > t_{\text{table}}$ ($18,994 > 1,986$) of 79.5% from the R^2 test results. There is a significant influence on raw material inventory management seen from the $t_{\text{count}} > t_{\text{table}}$ value ($8,981 > 1,986$) and the contribution of Raw Material Inventory Management to Operational Performance is 46.4% from the R^2 test results. Simultaneously, Labor Productivity and Raw Material Inventory Management influence the Company's Operational Performance at PT Kewalram Indonesia Unit 1, this can be seen from the value of $t_{\text{count}} > t_{\text{table}}$ ($44,422 > 3,09$) and the contribution of Labor Productivity and Raw Material Inventory Management to the Company's Operational Performance simultaneously amounting to 49.1% of the R^2 test results with a significance point of $0,000 < 0,05$.

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INTRODUCTION

In today's era of business development, there is increasingly intense competition. Companies are not only required to have strategies but also must continuously make improvements to enhance quality. Having good quality within a company creates satisfaction for its consumers. Once consumers are satisfied with the products they receive, they will continue to purchase them repeatedly [1]. Therefore, the company must improve its performance in order to achieve the goals expected by the company. Performance is an illustration of the level of achievement in the implementation of activities or policies in realizing the targets, objectives, vision, and mission of the organization through strategic planning of the organization [2].

Improving company performance is achieved through human resources. Human Resources (HR) play an important role in an organization because HR is the main driver of organizational activities, whether as an operator, maintainer, or producer of every system within the organization. HR with strong capabilities greatly support the achievement of the company's vision and mission to advance and develop [3]. Therefore, there must be training and human resource development as an effort to improve performance that is quality, competent, and can also keep up with the company's development according to the position held or to be held, and also to be able to work well, effectively, and efficiently [4].

In addition, another factor that can affect company performance is labor productivity, which can be understood as the comparison between the results achieved (output) and the total resources used (input). The higher the employee productivity in a company, the greater the profits that will be earned [5].

PT Kewalram Indonesia is the first accredited textile company to receive ISO accreditation (ISO 9001 : 2015 & STANDARD 100 by OEKO-TEX®), where the company produces yarn made from raw material, namely cotton, which is then processed into various types of yarn. Currently, PT Kewalram has developed into an integrated textile facility equipped with advanced machines for spinning and embroidery. The company also has a substantial presence in the domestic market with a variety of product offerings. PT Kewalram has achieved a leadership position in its product range based on its steadfast commitment to the highest quality standards and driving total consumer satisfaction [6]. The following is the production volume and the number of employees at PT Kewalram Indonesia Unit 1 over the past five years :

**Table 1. Production Volume at PT Kewalram Indonesia Unit 1
Period 2019-2023**

No	Year	Production Quantity	Persentase
1	2019	101.208	-
2	2020	87.308	-13,73%
3	2021	95.984	9,94%
4	2022	83.508	-13,00%
5	2023	77.160	-7,60%

Source : PT Kewalram Indonesia Unit I

**Table 2. Number of Employees di PT Kewalram Indonesia Unit 1
Period 2019-2023**

No	Year	Number of Employees	Persentase
1	2019	2.706	-
2	2020	2.119	-21,69%
3	2021	2.029	-4,25%
4	2022	1.886	-7,05%
5	2023	1.872	-0,74%

Source : PT Kewalram Indonesia Unit I

Based on tables 1 and 2, it can be seen that the production volume and the number of employees at PT Kewalram Indonesia Unit 1 fluctuate every year. This is suspected to be influenced by delays in raw materials, which cause production processes to stop, and this is considered one of the factors that may reduce production volume.

METHOD

This type of research is associative quantitative. Quantitative is a method based on positivism, a philosophical doctrine that considers phenomena, reality, or events can be classified, observed, measured, and related to each other in a cause-and-effect manner [7]. Meanwhile, associative research explains the relationship between two or more variables, but does not prove which variable is the cause and which is the effect. [8]. The type of data used is primary data, with the primary source being data obtained and collected directly by the researcher from the source or location of the research object [7], with data collection techniques including observation, interviews, literature review, and questionnaires.

The population of this study is employees at PT Kewalram Indonesia Unit 1, totaling 1,872 people. The sample determination in this study uses a Non-Probability Sampling technique, a sampling method that does not provide the same opportunity or chance for each population component or element to be selected as a sample [9]. Using Slovin's formula, the sample that should be taken is 95 people. The determination of respondents uses Purposive Sampling, where sample selection is based on techniques for determining samples with certain considerations [10].

RESULTS AND DISCUSSION

The Effect of Labor Productivity on Company Operational Performance at PT Kewalram Indonesia Unit 1

The results of the labor productivity test, consisting of 12 items, and the company's operational performance, consisting of 11 items, are valid with the reliability test results for financial compensation showing a Cronbach's Alpha of 0.645 (high reliability). Meanwhile, the employee performance variable has a Cronbach's Alpha of 0.642 (high reliability). Based on the data normality test results for both variables, it is concluded that they are normally distributed. The results of the coefficient of determination analysis test are as follows:

Table 3. Analysis of the Coefficient of Determination
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.892 ^a	.795	.793	.04428

a. Predictors: (Constant), Labor productivity

b. Dependent Variable: Company Operational Performance

Berdasarkan tabel 3, dapat diketahui bahwa nilai koefisien determinasi (R^2) yang ditunjukkan sebesar 0,795 atau Based on Table 3, it can be seen that the coefficient of determination (R^2) value is 0.795 or 79.5%. This indicates that the influence of labor productivity on operational performance is 79.5%, while the remaining 20.5% is affected by other factors. Meanwhile, the results of the t-test are : 79,5%. Hal ini menunjukkan

bahwa pengaruh produktivitas tenaga kerja terhadap kinerja operasional yaitu sebesar 79,5% dan sisanya 20,5% dipengaruhi oleh faktor lain. Sedangkan hasil uji t yaitu:

**Tabel 4. T-test
Coefficients^a**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1	(Constant)	47.505	.067			712.612
Financial Compensation	Labor productivity	.024	.001	.892		18.994

Dependent Variable: Company Operational Performance

Based on Table 4, it can be seen that the calculated t-value is 18.994 > 1.986 with a significance value of 0.000 < 0.05, so it can be concluded that H_0 is rejected and H_1 is accepted, meaning that labor productivity has a significant effect on the operational performance of the company at PT. Kewalram Indonesia Unit 1.

The Effect of Raw Material Inventory Management on the Operational Performance of PT Kewalram Indonesia

The test results for non-financial compensation, which consisted of 6 items, are valid with the reliability test results for non-financial compensation showing a Cronbach's Alpha of 0.652 (high reliability). The normality test results concluded a normal distribution. The coefficient of determination analysis test is as follows:

**Tabel 5. Coefficient of Determination Analysis
Model Summary^b**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682 ^a	.464	.459	.544

a. Predictors: (Constant), **Non-Financial Compensation**

b. Dependent Variable: Kinerja Operasional Perusahaan

Berdasarkan tabel 5, dapat diketahui bahwa nilai koefisien determinasi (R^2) yang ditunjukkan sebesar 0,464 atau 46,4%. Hal ini menunjukkan bahwa pengaruh produktivitas tenaga kerja terhadap kinerja operasional yaitu sebesar 46,4% dan sisanya 53,6% dipengaruhi oleh faktor lain. Sedangkan hasil uji t yaitu:

**Tabel 6. Uji t
Coefficients^a**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1(costand)	41.738	.785			53.183	.000
Pengelolaan persediaan bahan baku	.265	.030	.682		8.981	.000

a. Dependent Variable: Kinerja operasional Perusahaan

Berdasarkan tabel 6, dapat diketahui bahwa nilai t hitung sebesar 8,981 > 1,986 dengan nilai signifikan 0,000 < 0,05 maka dapat disimpulkan bahwa H_0 ditolak dan H_1

diterima, artinya pengelolaan persediaan bahan baku berpengaruh secara signifikan terhadap kinerja operasional perusahaan di PT. Kewalram Indonesia.

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Adapun hasil analisis korelasi berganda yaitu:

Tabel 7. Analisis Korelasi berganda
Model Summary

Model	R	Adjusted R Square		Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
		R Square	Adjusted R Square			F Change	df1	df2	
1	.682 ^a	.465	.453	.547	.465	39.981	2	92	.000

a. Predictors: (Constant), Produktivitas tenaga kerja, Pengelolaan persediaan bahan baku

Berdasarkan tabel 7, dapat diketahui bahwa besarnya hubungan produktivitas tenaga kerja dan pengelolaan persediaan bahan baku secara simultan terhadap kinerja operasional dengan koefisien korelasi (R) adalah 0,682 ini menunjukkan pengaruh kedua variabel kuat. Sedangkan hasil analisis regresi berganda yaitu:

Tabel 8. Analisis Regresi Berganda
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	43.897	1.246		35.229	.000
	Produktivitas tenaga kerja	-.033	.015	-.168	-2.202	.030
	Pengelolaan persediaan bahan baku	.250	.030	.643	8.421	.000

a. Dependent Variable: Kinerja Karyawan

Berdasarkan tabel 8, dapat dibuat model persamaan regresi berganda sebagai berikut:

$$Y = \alpha + b_1X_1 + b_2X_2$$

$$Y = 43,897 - 0,033 X_1 + 0,250X_2$$

Adapun hasil analisis koefisien determinasi yaitu:

Tabel 9. Analisis Koefisien Determinasi
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.701 ^a	.491	.480	.533

a. Predictors: (Constant), Pengelolaan persediaan bahan baku, Produktivitas tenaga kerja

Berdasarkan tabel 9, dapat diketahui bahwa nilai koefisien determinasi (R^2) yang ditunjukkan sebesar 0,491 atau 49,1%. Hal ini menunjukkan bahwa pengaruh produktivitas tenaga kerja dan pengelolaan persediaan bahan baku secara simultan terhadap kinerja operasional yaitu sebesar 49,1% dan sisanya 50,9% dipengaruhi oleh faktor lainnya. Berikut merupakan hasil uji F yaitu:

Tabel 10. Uji F
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	25.282	2	12.641	44.422	.000 ^b
Residual	26.180	92	.285		
Total	51.463	94			

a. Dependent Variable: Kinerja operasional perusahaan

b. Predictors: (Constant), Pengelolaan persediaan bahan baku, Produktivitas tenaga kerja

Berdasarkan tabel 10 menunjukkan bahwa F_{hitung} , sebesar 44,422 dengan signifikan sebesar 0,000 lebih kecil dari 0,05 maka H_0 ditolak dan H_1 diterima dengan nilai $F_{hitung} > F_{tabel}$ yaitu $44,422 > 3,09$ sehingga dapat disimpulkan bahwa produktivitas tenaga kerja dan pengelolaan persediaan bahan baku secara simultan berpengaruh signifikan terhadap kinerja operasional di PT Kewalram Indonesia unit I.

CONCLUSION

Berdasarkan hasil penelitian yang dilakukan mengenai produktivitas tenaga kerja dan pengelolaan persediaan bahan baku terhadap kinerja operasional di PT Kewalram Indonesia Unit I bahwa dapat disimpulkan bahwa Produktivitas tenaga kerja berpengaruh terhadap kinerja operasional di PT Kewalram Indonesia unit I. Hal tersebut dapat dilihat berdasarkan nilai $t_{hitung} > t_{tabel}$ ($18,994 > 1,986$). Maka dapat disimpulkan bahwa H_0 ditolak dan H_1 diterima. Adapun hasil analisis koefisien determinasi besarnya nilai R^2 adalah 0,795 atau 79,5%. Sehingga dapat disimpulkan bahwa pengaruh produktivitas tenaga kerja terhadap kinerja operasional sebesar 79,5% sisanya 20,5% berupa kontribusi variabel lain. Pengelolaan persediaan bahan baku berpengaruh terhadap kinerja operasional di PT Kewalram Indonesia Unit I. Hal tersebut dapat dilihat berdasarkan nilai $t_{hitung} > t_{tabel}$ ($8,981 > 1,986$). Maka dapat disimpulkan bahwa H_0 ditolak dan H_1 diterima. Adapun hasil analisis koefisien determinasi besarnya nilai R^2 adalah 0,464 atau 46,4%. Sehingga dapat disimpulkan bahwa pengaruh pengelolaan persediaan bahan baku terhadap kinerja operasional sebesar 46,4% sisanya 53,6% berupa kontribusi variabel lain. Produktivitas tenaga kerja dan pengelolaan persediaan bahan baku secara simultan berpengaruh terhadap kinerja operasional di PT Kewalram Indonesia. Hal tersebut dapat dilihat berdasarkan nilai $F_{hitung} > F_{tabel}$ ($44,422 > 3,09$). Maka dapat disimpulkan bahwa H_0 ditolak dan H_1 diterima. Adapun hasil analisis koefisien determinasi besarnya nilai R^2 adalah 0,491 atau 49,1%. Sehingga dapat disimpulkan bahwa pengaruh pengelolaan persediaan bahan baku terhadap kinerja operasional sebesar 49,1 sisanya 50,9% berupa kontribusi variabel lain.

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