Development of a Workload-Based Work Productivity Model

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ABSTRACT

Human resource capabilities are a key factor in increasing employee work productivity, so research needs to be carried out. The aim of this research is to find out whether work workload has a positive and significant effect on work productivity at PT. Primafood International. To find out whether Workload The analysis technique used in this research is quantitative data analysis, namely testing and analyzing data by calculating numbers and then drawing conclusions from the test using descriptive statistical and correlation test tools, data processing using SPSS statistical software. From the partial research results, there is no influence of workload on employee work productivity at PT. Primafood International. There is a positive and significant influence of work workload on product work productivity at PT. Primafood International.

Keywords: Workload, Stress, Work Productivity

INTRODUCTION

Every company tries to use the resources it has to produce the maximum input so that it provides profit, with profit the company can compete with other companies and the company can last for a long time. To achieve high productivity requires a strategy and measurable steps in its management, only with efficient and effective management can the company increase productivity every certain period of time. Based on the benefits of productivity, it can be understood that productivity is the ability to produce output or work results of quality and quantity as expected by using existing resources efficiently and effectively.

According to the Oxford Dictionary in (Wibowo, 2017) , productivity *is* an action, process or way of acting or performing organizational functions. Actually, productivity is a construct, where many experts have different points of view in defining productivity. Workload is a collection or number of activities that must be completed by an organizational unit or job holder within a certain period of time. The workload depends on how the person handles it. If someone works in an unsatisfied and unpleasant state, the work will be a burden for him (Insan et al., 2022) . According to (Sedarmayanti, 2012) productivity is a translation of the word performance which means the result of an employee or worker's work, a management process in which the results of the work must have concrete evidence that can also be measured.

According to (Sedarmayanti, 2012) employee productivity is influenced by several factors, namely:
a. Quality of Work is the level of good or bad work received by an employee, which can be seen in terms of accuracy and neatness of work, skills and abilities.
b. Quantity of Work is the amount of workload or amount of work that must be completed by an employee, measured by quantitative ability in achieving targets or work results for new jobs.

c. Job placement is the process of placing an employee who is in accordance with their educational background or expertise in a job. This is reviewed from the employee's ability to understand things related to the tasks they do.

d. Workload is a personal improvement that a person does to achieve a career plan and an improvement by the personnel department to achieve a work plan according to the organizational path or level.

e. Work stress is a factor related to employee psychology caused by excessive workload which will affect employee work productivity levels.

f. Competence is the ability of an employee to complete his/her work in his/her own way or initiative which is considered to be effective and efficient and is able to create new changes for the improvement and progress of the organization.

g. Innovation The ability to create new changes for the improvement and progress of the organization. This is seen from brilliant ideas in overcoming organizational problems. h. Initiative Covers several aspects such as the ability to take the right steps in facing difficulties, the ability to do a job without help, the ability to take the first step in an activity.

Workload is one of the things that can affect the productivity of human resources, having a workload can encourage high productivity, but a workload that is too high can cause the target to not be achieved so that it can reduce employee productivity, as understood workload according to (Wakhyuni et al., 2021) is a collection or number of activities that must be completed by an organizational unit or job holder within a certain period of time. Workload depends on how the person handles it. If someone works in a dissatisfied and unpleasant state, the work will be a burden for him. (Andika, 2019)

Workload is the amount of work that must be carried out by a position or organizational unit and is the result of the multiplication of work volume and norms within a certain period of time (Aswan & Aina, 2022) . According to (Davis & Werther Jr, 2022) various indicators that need to be considered in workload are as follows: a. Targets to be achieved Individual views regarding the size of the work targets given to complete their work. Views regarding the work results that must be completed within a certain period of time b. Working Conditions Include how the individual views the conditions of his work, for example making quick decisions when processing goods, and dealing with unexpected events such as doing extra work outside the specified time c. Use of working time Work Time used in activities that are directly related to production d. Work standards The impression that the individual has about his work, for example feelings that arise regarding the workload that must be completed within a certain period of time .

Based on the results of research conducted by Martina, it resulted in On the contrary, a low workload will increase productivity. In addition, workload has a significant effect on work productivity because it has a Sig <0.05. A significant effect means that workload plays a role in productivity (Trisnawaty & Parwoto, 2021) .

The following is the average sales data for PT Promafood International from October, November, December (2022) to December 2023.

Table 1. Average Sales Data of PT Primafood International

Month	Sales Target	Average Achievement	Average Difference in Achievement	Average Percentage
October	6,750,000	4,011,962	2,738,038	59
November	6,180,000	4,486,962	1,693,038	73
December	6,490,000	4,961,962	1,528,038	76
January	6,503,077	4,486,962	2,016,115	69

Based on the initial survey facts at PT Prima Food Internasional, the workload borne by employees exceeds their capabilities, sometimes employees still do the wrong work and there are still some employees who still have minimal awareness of doing their work. This is because these employees experience work stress with the very large workload they bear.

RESEARCH METHODS

The research approach is causal research (cause-and-effect relationship) is "Research that wants to see whether a variable that acts as an independent variable affects another variable that becomes a dependent variable". The population in this study were all employees of PT. Primafood International totaling 60 people. Based on this assumption, in this study all research subjects (population) were used as samples, namely all employees at PT. Primafood International totaling 60 employees, thus this study is called a saturated sample. The sample is a part or representative of the population being studied (Rusiadi & Subiantoro, 2014) .

The population in this study were all employees of PT. Primafood International totaling 60 people. According to (Rusiadi, 2014) "Sample is a part or representative of the population being studied. In this study the author used a Non Probability Sampling sampling technique, namely by using census sampling or saturated sampling because the entire population is used as a sample if the population is below 100. Based on this assumption, in this study all research subjects (population) were used as samples, namely all employees at PT. Primafood International totaling 60 employees, thus this study is called a saturated sample

According to (Pakpahan, 2014), data collection techniques are what and how researchers collect data. Data collection is an important activity in research because data collection determines the success or failure of a study. So in research data collection techniques must be careful. The data collection techniques used in this study are as follows:

According to (Pakpahan, 2014) observation is an activity to see a condition directly towards the object being studied. In this study, observation activities were carried out to determine the condition of PT Indoteknik Tjandra Utama regarding the variables studied in this study in order to find out the problems/phenomena that exist there.

According to (Pakpahan, 2014) a questionnaire is a question/statement compiled by researchers to find out the opinions/perceptions of research respondents about a variable being studied. Questionnaires can be used if there are quite a lot of research respondents and a list where there are questions/statements that must be answered or filled in by respondents. Here the author uses a closed questionnaire, where the answers to each question/statement

have been provided and then respondents are free to provide an answer to each question according to the alternative answers that have been prepared.

The conceptual framework describes the pattern of relationships between variables, namely independent variables or those that influence dependent variables or variables that experience changes due to changes in independent variables. In this study, the conceptual framework can be described with a relationship pattern such as Figure I below.

Figure 1. Conceptual Framework

Validity test shows the extent to which a measuring instrument measures what is to be measured (Situmorang and Lutfi M, 2014) . Valid means that the data obtained by using the tool (instrument) can answer the research objectives (Sugiyono, 2009) . Validity testing is carried out using the SPSS version 23.00 program, The validity test of each question is greater (>) 0.30 then the question item is considered valid. Reliability is the level of reliability of a research instrument. A reliable instrument is an instrument that when used repeatedly to measure the same object will produce the same data. Reliability testing will be able to show the consistency of the respondents' answers contained in the questionnaire. Reliability testing is carried out by testing the statement items that have been declared valid in the validity test and their reliability will be determined. The reliability of a variable construct is said to be good if it has a Cronbach's alpha value greater (>) 0.60.

To test the normality of the data in this study, it was detected through graphical and statistical analysis produced through regression calculations with SPSS.

1. Histogram, which is a test using the provision that normal data is bell-shaped. Good data is data that has a normal distribution pattern. If the data skews to the right or skews to the left, it means that the data is not normally distributed.
2. Normality Probability Plot graph, the conditions used are:
   a. If the data is spread around the diagonal line and follows the direction of the diagonal line, then the regression model meets the normality assumption.
   b. If the data is spread far from the diagonal and/or does not follow the direction of the diagonal line, then the regression model does not meet the normality assumption.
3. Kolmogorov Smirnov test. The test is conducted to determine whether the data distribution is normal or not.
   a. If the Asymp sig value > 0.5 then the data is normally distributed
   b. If the Asymp sig value < 0.5 then the data is not normal.

Multicollinearity test is intended to detect correlation symptoms or relationships between independent variables in the regression model. The assumption of multicollinearity states that independent variables must be free from multicollinearity symptoms. Multicollinearity test can be done by: if the tolerance value> 0.1 and the VIF (Variance Inflation Factors) value <10, then it can be concluded that there is no multicollinearity between independent variables in the regression model (Pakpahan, 2014) .

The heteroscedasticity test is a data test that has a Sig. value of less than 0.05 (Sig. <0.05), namely if the data has a value smaller than the Sig. value of 0.05 then the data has

heteroscedasticity and the way to detect the presence or absence of heteroscedasticity in research is done by using the glajser test, the glajser test is one of the statistical tests carried out by regressing independent variables against absolute values, (Sukardi, 2008) .

Multiple regression analysis, which is an analysis method used to determine the influence between two or more independent variables on a variable. The multiple linear regression model using the SPSS 17.00 for windows software program is: Y = a + b1X1 + e.

The t-statistic test is also called the individual significance test. This test shows how far the independent variable partially influences the dependent variable. In this study, the t-test processing uses the SPSS v. 24 program. If the significance value (t count <t table) then Ho is rejected if the significance value (t count > t table) then Ho is accepted.

RESULTS AND DISCUSSION

According to Sugiyono (2015:70), to determine the feasibility: to determine the feasibility of the items in a list of questions (questionnaire) that will be presented to respondents, a validity test is required for each question. If the validity test is greater than (>) 0.30, then the question items are valid.

Table 2. Validity Test of Workload Variable (X)
Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X2.1	26.6167	40,478	.405	.885
X2.2	26.3000	37,569	.639	.862
X2.3	26.6500	33,757	.703	.856
X2.4	26.6000	38,007	.607	.865
X2.5	26.4833	35,508	.772	.848
X2.6	26.5333	36,728	.644	.861
X2.7	26.3833	37,732	.635	.862
X2.8	26.3000	36,824	.725	.853

Source: Processed by Author (202 4)

Based on the table above, the validity value of the statement for Workload is entirely valid because the Corrected Item-Total Correlation value is > 0.3 and can be used in further calculations because all are declared valid.

Reliability testing can be done using the help of the SPSS program which will provide colleagues to measure reliability with the Cronbach Alpha statistical test. A construct or variable is said to be reliable if it provides a Cronbach Alpha value > 0.60.

Table 3. Reliability Test Results

Variables	Cronbach's Alpha	N of Items
Workload	,877	8

Source: SPSS 24 Calculation Results (processed data), 2024

Based on table 4.10 above, it is known that *the Cronbach Alpha value* is > 0.6 0 so that the variable is said to be reliable . To find out whether the research data is normal or not, you can see from the normality test through SPSS whether it forms normal data or not.

Table 4. Kolmogorov Smirnov Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		60
Normal Parameters a,b	Mean	.0000000
	Std. Deviation	4.63558326
Most Extreme Differences	Absolute	.090
	Positive	.052
	Negative	-.090
Test Statistics		.090
Asymp. Sig. (2-tailed)		.200 c,d

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
Source: Research Results (202 4)

From the table, it is obtained that all Asymp. Sig. (2-tailed) values of each variable are > 0.05 so that the data is normally distributed and can be continued to the next test.
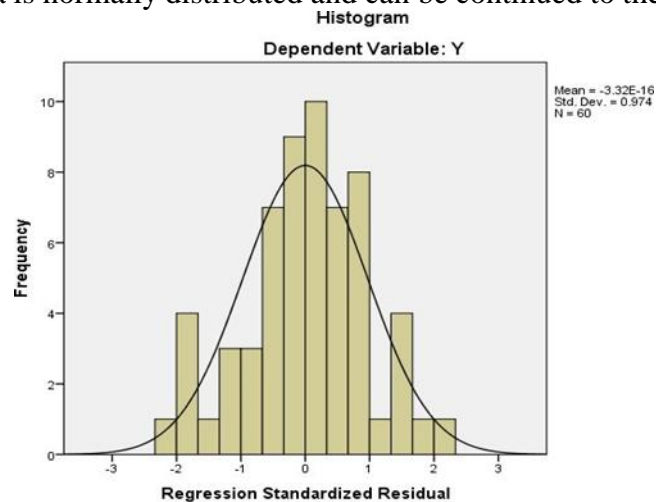

Figure 5. Histogram Graph

Based on the graph above, it can be concluded that the data distribution is normal because the histogram graph shows that the data distribution follows a diagonal line that is not skewed to the left or right.
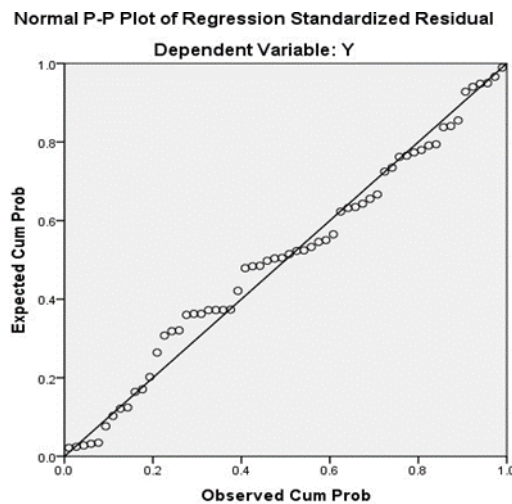
Figure 6. Normal P-Plot

From the image, we get the result that all data is distributed. Normally, the data distribution is around the diagonal line.

According to Ghozali (2016), the multicollinearity test aims to test whether the regression model finds a correlation between independent variables. In a good regression model, there should be no correlation between independent variables, because of the high correlation between the variables. independent in a multiple linear regression model. If there is a high correlation between the independent variables, then the relationship between the independent variables and the dependent variables is disrupted. Multicollinearity testing is done by looking at the VIF between independent variables. If the VIF shows a number smaller than 10 indicates that there are no symptoms of multicollinearity. In addition, a model is said to have symptoms of multicollinearity if the VIF value between independent variables is greater than 10.

Table 5. Multicollinearity Test

Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1　(Constant)	10,460	3.926		2,664	.010		
X1	.228	.123	.246	1,846	.070	.627	1,595

a. Dependent Variable: Y
Source: Processed Data (202 4)

From the data above after being processed using SPSS, it can be seen that the tolerance value of each variable is smaller than the VIF value <10, this proves that the VIF value of each variable is free from multicollinearity symptoms.
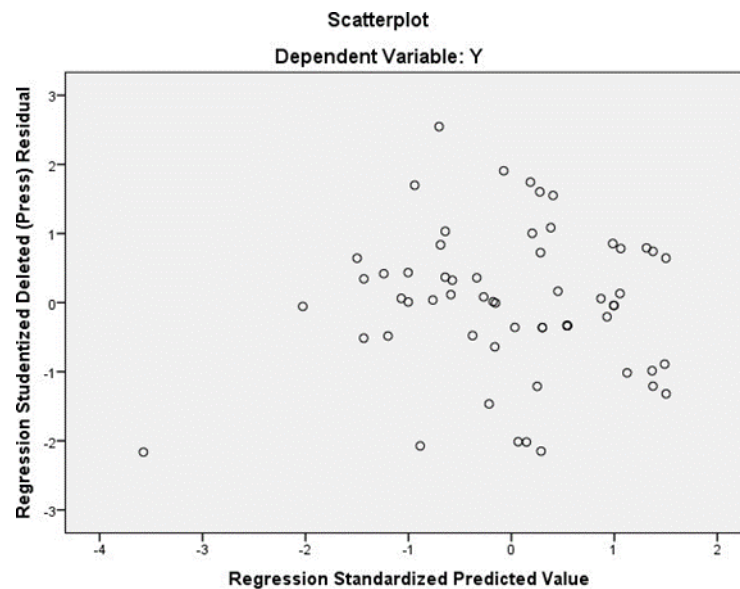
Figure 7. Scatter Plot Graph

From the image above, it can be seen that there is a clear pattern, and the points are spread above and below 0 on the Y axis, so there is no heteroscedasticity.

Based on the calculations carried out using SPSS 22.0 above, the multiple regression equation for the regression model will be obtained as follows: $Y = 10,460 + 0.228X1 + e$.

Table 6. Multiple Linear Regression Analysis Test

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	10,460	3.926		2,664	.010		
X1	.228	.123	.246	1,846	.070	.627	1,595

Source: Data processed by SPSS 2023

The Influence of Workload on Work Productivity

From the results of this study, the significance value of job placement based on the t-test was obtained at tcount>ttable (0.028 <1.66) and a significant level (Sig 0.978> α0.05). Thus, H2 is rejected and H0 is accepted, the conclusion is: there is no effect of workload on work productivity. This is in line with research conducted by (Saefullah & Amalia, 2017)

CONCLUSION

Based on the t-test, it was obtained that t count> t table (0.028 < 1.66) and Sig 0.978> α0.05, thus Ho is accepted and H1 is rejected. The conclusion: there is no effect of Workload on Work Productivity.

Based on the conclusions above, productivity management strategies that can be given to companies include:
   a. It is recommended to the Management of PT. Prima Food International Belawan not to give too big a target to its employees which aims to reduce the workload and the target of the work can be achieved.
   b. It is recommended to the Management of PT. Prima Food International Belawan to provide clear explanations and information regarding the work that will be given to its employees so that the work can be carried out properly and completed.

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