



Effect of Goods and Services Procurement Management with Direct Selection Method on PT Sumberbumi Global Niaga Ship Operations

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Abstract: PT Sumberbumi Global Niaga is engaged in services, namely shipowners whose ships owned by the company are leased to cargo owners. So that the shipping fleets are proof that there has been an opportunity to develop the shipping business. In line with the development of the shipping business, good operational performance is very much needed in a shipping company considering the increasingly competitive field. Based on the data, the existing problems discuss the management of procurement of goods and services, the method of direct selection of operations. The purpose of this study was to determine how much influence and management of the procurement of goods and services with the direct selection method together on ship operations. In this study found the results of data from the influence of the management of procurement of goods and services with the direct selection method together on ship operations. For this shipping company, it is necessary to pay attention to things that encourage the creation of time optimization in the provision of spare parts as feedback from the company in order to achieve ship operational targets..

Keywords: Procurement of Goods and Services, Direct Selection Method

INTRODUCTION

Sea transportation mode of transportation is currently experiencing significant progress. Shipping companies have an important role as companies that provide sea transportation services both to transport people (passengers), goods (load), animals and plants. PT. Sumberbumi Global Niaga is one of the shipping companies engaged in Shipowner. This company uses a system where the ships owned by the company are leased to the cargo owners.

In order to fulfill the contract in the agreed agreement, it is necessary to have good ship operations and good ship performance. Good ship performance must be supported by good procurement of goods and services in their supply. The smooth operation of the ship certainly cannot be separated from the procurement of goods and services with good coordination

between the company, the supplier and the ship crew. This coordination is very influential on the process of procuring spare parts needed by ships.

Procurement of goods and services is an activity in the work plan to meet the needs of users of goods and services. Procurement of goods and services or often known as procurement is an activity to obtain goods/services by a ministry/institution/work unit whose process starts from planning needs until the completion of all activities to obtain goods/services (Presidential Regulation number 70 of 2012, 2012:2). PT Sumberbumi Global Niaga uses the direct selection method in the process of procuring goods and services to meet the needs on board. The procurement process is quite complicated, resulting in document processing that does not always run smoothly and on time.

These factors cause delays in the procurement of goods and services for ships at PT. Sumberbumi Global Niaga causing disruption of ship operations. These constraints affect the satisfaction and trust of the cargo owner as a service user who is bound by a contract with the shipping company.

Therefore, ship owners must address problems that occur during the process of procuring goods and services regularly and continuously. The timely departure of ships according to the contract of carriage can be realized if management in the procurement of ship spare parts is improved. If it can be done well then the possibility of PT. Sumberbumi Global Niaga gets a bigger profit.

METHOD

Research time

This research was carried out when the author conducted Land Practice at PT Sumberbumi Global Niaga for 12 (twelve) months, starting from August 18, 2020 to August 18, 2021.

Research Place

This research was conducted by the author at PT Sumberbumi Global Niaga on Jl. North Rawabuntu Block UH No. 2-3 Sector 1-2 EXT, BSD Rawabuntu Serpong, South Tangerang, Prov. Banten.

Approach Method

The approach method that the author uses in this study is a quantitative method. Quantitative method is a process of finding knowledge that uses data in the form of numbers as a tool to analyze information about what you want to know.

Data collection technique

Data collection techniques used in this study consisted of the following techniques:

1. Observation

Observations or observations were made when researchers carried out Land Practices at PT Sumberbumi Global Niaga, by directly observing activities in the field.

2. Documentation

Document is written records of various activities or events in the past, all documents related to the research concerned need to be recorded as a source of information.

Research subject

1. Research Population

The population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions according to Sugiyono (2013: 80). In this case, the author uses a population, namely the calculation of ship operations in the form of on hire and off hire PT Sumberbumi Global Niaga,

2. Research Sample

The sample is part of the number and characteristics possessed by the population according to Sugiyono (2013: 81). The sample used is the calculation of ship operations in the form of on hire and off hire as much as 5 months.

RESULTS AND DISCUSSION

Variable Descriptive Statistics

Descriptive statistics are used to describe a data in statistics. To interpret the results of descriptive statistics from data on the length of the process of procuring goods and services, data on the length of the direct selection process in procurement and data off hire of vessels can be seen in the following table:

Descriptive Statistics of the Process of Procurement of Goods and Services (X1)

Analisis Statistik Deskriptif Variabel X1

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ProsesPengadaanbarang DanJasa_X1	5	35	55	45.20	7.396
Valid N (listwise)	5				

Sumber : SPSS 25.0

Descriptive Statistics of Direct Election Process (X2)

Analisis Statistik Deskriptif Variabel X2

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ProsesPemilihanLangsung_X2	5	15	25	20.20	4.207
Valid N (listwise)	5				

Sumber : SPSS 25.0

In the table above show that, the variable Direct Selection Process with a total of 5 data (N) having a maximum score of 25 while a minimum score of 15 with an average score of 20.20 and a standard deviation of 4.207.

Ship Off Hire Descriptive Statistics (Y)

Analisis Statistik Deskriptif Variabel Y

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
JumlahOff-HireKapal_Y	5	17.28	36.26	28.4160	7.43470
Valid N (listwise)	5				

Sumber : SPSS 25.0

In the table above shows that, the variable Off Hire Ship with a total of 5 data (N) has a maximum score of 36.26 while a minimum score of 17.28 with an average score of 28.4160 and a standard deviation of 7.43470.

Correlation Coefficient Analysis

To determine the strength or weakness of the relationship between variable X and variable Y, then with this analysis it will be known the value of r (correlation coefficient) below is the result of SPSS 25.00 calculation, namely:

[Tabel Statistik SPSS Korelasi

Model Summary

Model	R	R Square		Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
		Change	Change			F	df1	df2	Change	
1	.989 ^a	.979	.957	1.54117	.979	45.543	2	2	.021	

a. Predictors: (Constant), ProsesPemilihanLangsung_X2, ProsesPengadaanbarangDanJasa_X1

Sumber : SPSS 25.0

The above shows that between the variable of trunk and service procurement (X1) and the direct selection variable (X2) on the ship's off hire variable (Y) there is a correlation coefficient (r) in the direction (positive) of 0.989 with a significance of 0.021. With a significantly smaller value of 0.050, it can be concluded that there is a correlation between the procurement of goods and services (X1) and the direct selection variable (X2) on the off-hire vessel variable (Y), where the correlation is perfect and positive.

Classic assumption test

Normality test

Normality test of a data can be done by using statistical test analysis, and statistical test in this study using Kolmogorov-Smirnov (KS) statistical test. If the Kolmogorov-Smirnov statistic is significant above a certain significance, it can be concluded that the normality assumption is met. The level of significance used in this study was 0.05. The results obtained from the Kolmogorov-Smirnov test can be seen in the following table:

Hasil Uji Kolmogorov-Smirnov (K-S)

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		5
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.08976846
Most Extreme Differences	Absolute	.196
	Positive	.196
	Negative	-.144
Test Statistic		.196
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.

Sumber : SPSS 25.0

The results of the normality test above show the acquisition of a significant value of 0.20 which is greater than 0.05. Thus, it can be concluded that the residual distribution pattern is normally distributed, so that the regression model meets the normality test.

Multicollinearity Test

One way to detect multicollinearity is by looking at the tolerance value and its opposite VIF. Tolerance measures the selected independent variables that are not explained by other independent variables. A low tolerance value is the same as a high VIF value (VIF=1/tolerance) and indicates the presence of high colony. The cut off value commonly used is the tolerance

value of 0.10 or equal to VIF above 10. The results of the multicollinearity test by looking at the tolerance and VIF values are as follows:

Hasil Uji Multikolonieritas Dengan Nilai Tolerance Dan VIF

Model		Coefficients ^a					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	-13.707	5.011		-2.735	.112		
	ProsesPengadaanbarangDanJasa_X1	1.070	.120	1.064	8.912	.012	.753	1.327
	ProsesPemilihanLangsung_X2	-.308	.211	-.175	-1.462	.281	.753	1.327

a. Dependent Variable: JumlahOffHireKapal_Y

Sumber : SPSS 25.0

Based on the above calculation, the tolerance value for no independent variable has a tolerance for the procurement of goods and services of 0.753 and a direct selection variable of 0.753. All variables have a tolerance value > 0.1 as well as using a VIF value of all variables of < 10, it can be concluded that there are no signs of multicollinearity in the regression model.

Heteroscedasticity Test

Heteroscedasticity test can use the Glejser test. The basis for decision making in this test is if the significance value is 0.05, it can be concluded that there is no heteroscedasticity problem, but on the contrary if the significance value is <0.05, it can be concluded that there are 25 heteroscedasticity problems. The results of the heteroscedasticity test obtained are as follows:

Hasil Uji Heterokedastisitas

Model		Coefficients ^a					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	-13.707	5.011		-2.735	.112		
	ProsesPengadaanbarangDanJasa_X1	1.070	.120	1.064	8.912	.012	.753	1.327
	ProsesPemilihanLangsung_X2	-.308	.211	-.175	-1.462	.281	.753	1.327

a. Dependent Variable: JumlahOffHireKapal_Y

Sumber : SPSS 25.0

Based on the table above, it can be seen that the variable for the procurement of goods and services has a significance value of 0.012, which means that the value of Sig < 0.05, it can be concluded that there are symptoms of heteroscedasticity and the direct selection variable has a significance value of 0.281 which (Sig.) > 0.05, it can be concluded that there is no heteroscedasticity occurs in this regression model.

Multiple Linear Regression Analysis

Multiple linear regression analysis in this study was used to determine the direction and how much influence the independent variable had on the dependent variable (Ghozali, 2018).

Hasil Uji Regresi Linier Berganda

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-13.707	5.011		-2.735	.112
	ProsesPengadaanbarangDanJasa_X1	1.070	.120	1.064	8.912	.012
	ProsesPemilihanLangsung_X2	-.308	.211	-.175	-1.462	.281

a. Dependent Variable: JumlahOffHireKapal_Y

Sumber : SPSS 25.0

From the regression equation, it can be seen that the relationship between the independent variable and the dependent variable can be formulated as follows:

$$Y = -13,707 + (1,070) X1 + (-0.308) X2$$

1. The regression coefficient value for the procurement of goods and services is 1.070 and is positive, which means that if the variable for the procurement of goods and services decreases by 1 unit, the dependent variable, namely ship operations, will also decrease by 1.070 and vice versa.
2. The direct selection regression coefficient value is -0.308 and is negative, which means that if the direct selection variable decreases by 1 unit, then the dependent variable, namely ship operations, will also decrease by -0.308 and vice versa.

Hypothesis testing

The hypothesis test that the author uses is the t-test Count. The t-test was used to test the significant level of the effect of the independent variable partially on the dependent variable.

Hasil Uji T

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1 (Constant)	-13.707	5.011		-2.735	.112
ProsesPengadaanbarangDanJasa_X1	1.070	.120	1.064	8.912	.012
ProsesPemilihanLangsung_X2	-.308	.211	-.175	-1.462	.281

a. Dependent Variable: JumlahOffHireKapal_Y
Sumber : SPSS 25.00

While the results of the t table are:

$$\text{Table } = t(a/2 : nk) = t(0.025 : 2)$$

$$\text{T table } = 4.302$$

1. Is knownvalue Sig. for the effect of X1 on Y of 0.012 < 0.05 and the value of t.count 8.912 > t.table 4.302 then there is the effect of variable X1 on Y.
2. Is knownvalue Sig. for the effect of X2 on Y of 0.281 > 0.05 and the value of t.count -1.462 < t.table 4.302 then there is no effect of the X2 variable on Y.

F Uji testor the feasibility test of a model aims to determine the effect of the independent variables (before and after the event) on the dependent variable (at the time of the event) simultaneously (together).

Hasil Uji F

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	216.349	2	108.174	45.543	.021 ^b
	Residual	4.750	2	2.375		
	Total	221.099	4			

a. Dependent Variable: JumlahOffHireKapal_Y
b. Predictors: (Constant), ProsesPemilihanLangsung_X2, ProsesPengadaanbarangDanJasa_X1
Sumber : SPSS 25.00

While the results from Ftable:

$$\text{Ftable } = F_{(k ; n - k)} = F(2 ; 5 - 2) = F(2;3)$$

= 9.55

Information :

n : Number of Samples

k : Number of Variables X

Based on the results F test calculation above can be seen that the calculated f value is 45.453 which is greater than Ftable 9.55 with a significant value of 0.021 which is smaller than 0.05. Then it can be concluded that the hypothesis can be accepted.

Coefficient of Determination

Coefficient determination is the magnitude of the contribution of the independent variable to the next variable. The greater the coefficient of determination, the higher the ability of the dependent variable.

Koefisien Determinasi X1 terhadap Y

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.978 ^a	.956	.941	1.80974

a. Predictors: (Constant), ProsesPengadaanbarangDanJasa_X1

b. Dependent Variable: JumlahOffHireKapal_Y

Sumber : SPSS 25.00

From see the results of the calculation above where R square is 0.956 or 95.6%. This shows the magnitude of the positive influence of the procurement of goods and services on ship operations by 95.6% while the remaining 4.5% is the influence of other factors.

Koefisien Determinasi X2 terhadap Y

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.354 ^a	.125	-.166	8.02938

a. Predictors: (Constant), ProsesPemilihanLangsung_X2

b. Dependent Variable: JumlahOffHireKapal_Y

Sumber : SPSS 25.00

By seeing the calculation results above where R square is 0.125 or 12.5%. This shows the magnitude of the positive effect of direct election on ship operations by 12.5% while the remaining 87.5% is the influence of other factors.

Coefficient of Determination of X1 and X2 to Y

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.989 ^a	.979	.957	1.54117

a. Predictors: (Constant), ProsesPemilihanLangsung_X2,

ProsesPengadaanbarangDanJasa_X1

b. Dependent Variable: JumlahOffHireKapal_Y

Sumber : SPSS 25.00

With see the results of the calculation above where R square is 0.979 or 97.9%. This shows the magnitude of the positive influence of the procurement of goods and services with the direct selection method on ship operations of 97.9% while the remaining 2.1% is the influence of other factors.

CONCLUSION

Based on the results of testing the three proposed research hypotheses, the following conclusions can be drawn: Management procurement of goods and services is very influential on ship operations at PT. Sumberbumi Global Niaga. It is also proven that if the procurement of goods and services is not managed properly, it can hamper the operations of PT. Sumberbumi Global Niaga; The direct selection method in the procurement of goods and services has a low influence on the ship operations of PT. Sumberbumi Global Niaga; The management of the procurement of goods and services with the direct selection method jointly affects the operations of PT. Sumberbumi Global Niaga.

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