The Effect Of Supply Chain Management And Corporate Communication Skills On Production Performance At PT. Berlian Manyar Sejahtera

Bugi Nugraha[1]*, Intan Sianturi[2], Rizqi Aini Rakhman[3]

[1,2,3]Surabaya Shipping Polytechnic, Indonesia
*Corresponding Author:
Email: bugi.nugraha@poltekpel-sby.ac.id

Abstract.

The aim of this research is to determine the influence of Supply Chain Management and company communication capabilities on production performance at PT. Berlian Manyar Sejahtera.This research approach uses quantitative research using an explanatory survey research design. Data collection in this research used two techniques, namely: Through questionnaires, andDocumentation methodintended to complete the data.Data analysis methods are part of the analysis process with methods appropriate to the type of research after the research data collection stage.This research uses multiple linear regression analysis. The results of the research show that 1) There is an influence of supply chain management on production performance at PT. Berlian Manyar SejahteraThus it gets highersupply chain management, the higher the production performance at PT. Berlian Manyar Sejahtera. 2)There is an influence of company communication capabilities on production performance at PT. Berlian Manyar Sejahtera.Thus, it gets higherthe company's communication capabilities, the higher the production performance at PT. Berlian Manyar Sejahtera. 3) There is an influence of supply chain management and company communication capabilities together on production performance at PT. Berlian Manyar Sejahtera. Thus, the higher the company's supply chain management and communication capabilities, the higher the production performance at PT. Berlian Manyar Sejahtera.

Keywords: *Supply chain management, company communication capabilities and production performance.*

I. INTRODUCTION

Companies today face rapid environmental changes and operate in increasingly competitive markets. This is indicated by the increasing number of companies emerging and providing the same products or services. Often, consumers have to be wiser and more critical in choosing the products or services they use in order to get maximum results. This condition will make competition even tighter, so that every company must start competing to provide the best service in order to satisfy its customers. This condition encourages company organizations to build integrated relationships with suppliers and customers in the company's supply chain management system(Lin, YH, & Tseng, 2016).In an era of increasingly tight business competition, it is very important for companies to increase their strategic competitiveness. Companies must be able to take advantage of several possible niches to become more competitive and productive so that they can improve company performance(Arawati, A., & Za'faran, 2011)With consumer needs increasing very quickly and several disruptions that can occur in the supply process, supply chain management is very necessary in adapting to the existing business environment. This will directly become a competitive advantage for the company(Thatte, 2013).Company performance is a benchmark indicator of a company's development. A competitive business focuses on how to increase value to consumers, namely providing products and services that are more valuable than competitors(Sukati, I., Abdul Hamid, AB, Baharun, R., Tat, HH, & Said, 2011). In order for a company to compete and develop, the company must have competitive advantage. his encourages companies to be able to compete on how to provide products to consumers but at low prices and products and services to the right place and at the right time.

Many companies also realize that it is not enough to increase efficiency within a company organization, they must make their entire supply chain more competitive and efficient.With consumer needs increasing very quickly and several disruptions that can occur in the supply process, supply chain management is very necessary in adapting to the existing business environment. This will directly become a competitive advantage for the company(Thatte, 2013).A factor that is no less important in creating company performance is the company's communication capabilities.(Tuan, NP, & Yoshi, 2010)in his research, to create a company's competitive advantage, individual resources are needed to work together to create integrated organizational capabilities.(Tuan, NP, & Yoshi, 2010)shows that the company's capabilities have a

significant positive effect on competitive advantage, meaning that good company capabilities are able to increase the company's competitive advantage.Sukati, I., Abdul Hamid, AB, Baharun, R., Tat, HH, & Said (2011)AndThatte (2013). shows that supply chain management has a significant positive effect on (competitive advantage), meaning that good supply chain management practices can increase competitive advantage. MeanwhileSingh, R., Sandhu, H.S., Metri, B.A., & Kaur, (2010)shows that supply chain management practices have a significant negative effect on competitive advantage.Ueki (2013)in his research shows that supply chain management practices do not have a significant effect on competitive advantage, meaning that improving supply chain management practices does not affect competitive advantage.

Shukor et al., (2020) convey that supply chain agility is a strategic capability that allows companies to quickly respond and perceive uncertainty internally and externally through effective integration, agile companies can turn challenges into opportunities that can be exploited.Based on the research that has been carried out, the majority of research believes that supply chain factors and company capabilities cannot be denied as the main things that play a role in improving company performance, although there are still some researchers who have different opinions from the conclusions obtained from the research results. Most of this research was conducted on respondents from the manufacturing industry sector.One industry that is greatly influenced by supply chain factors is PT. Berlian Manyar Sejahtera. Industrial growth PT. The increasingly high level of Manyar Sejahtera diamonds has implications for the high level of competition between industries. Companies need to think about the right strategy to face increasingly fierce competition. The company's strategy in creating a good performance system requires proper planning using information technology. A good company must be realized immediately because of the rapid development of increasingly innovative and varied technology so that it can survive and be able to excel in the market and new threats from competitors. Based on the description above, it is very important to carry out research entitled "The Influence of Supply Chain Management and company communication capabilities on production performance at PT. Berlian Manyar Sejahtera".

II. METHODS

This research approach uses quantitative research using an explanatory survey research design. The survey method is used in accordance with the research objectives which want to generalize and provide explanations of the population through observing samples from a population through observation and using questionnaires as the main data collection tool.(Arikunto, 2017). Explanatory means providing explanations or things related to explaining, either explaining current events or circumstances, or explaining future events or circumstances.This research design, when linked to the research methodology paradigm, is explanatory research which aims to provide an explanation of the causal relationship between variables through hypothesis testing and aims to obtain appropriate tests in drawing causal conclusions (cause-effect) between two or more variables through hypothesis testing.(Sugiyono, 2018). Through empirical research, the hypothesis will be tested for truth.Population is the entire group of people, events, or things that are interesting to study(Sekaran, 2003). In determining the number of samples to be selected, because the population is unknown, sampling is carried out using the following formula:

$$n\frac{[Za/2]^2}{E}$$ (Arikunto, 2017)

$$n = \frac{[1,96]}{0,20}$$

$$n = 96.04$$

Information :

n : Sample Size

Za/2: Standard value outside normal standard list how confidence level (a) 95%

E: The level of determination used by stating the maximum error size of 20%

Based on the calculation above, the number of samples used was 96.04 respondents. In order for this research to be more suitable, the sample was taken to be 100. So the number of samples that will be used in this research is 100 respondents.Data collection techniques are the most strategic steps used by researchers

who aim to obtain data in research. This research requires clear and specific data(Sugiyono, 2018). Data collection in this research uses two techniques, namely: Through questionnaires, namely providing a list of written statements that respondents must choose according to their characteristics related toresearch variable. This documentation method is intended to obtain data based on existing data sources in the school.This documentation method is intended to complete the data.Data analysis methods are part of the analysis process with methods appropriate to the type of research after the research data collection stage.This research uses multiple linear regression analysis.

III. RESULTS AND DISCUSSION

1. Validity Test and Reliability Test Results

The results of the validity test are presented in the form of table 1 below:

Table 1. Validity Test Results for supply chain management variables

Question	r Count	r Table	Conclusion
Supply chain management			
X1.1	0.810	0.1966	Valid
X1.2	0.844	0.1966	Valid
X1.3	0.863	0.1966	Valid
X1.4	0.888	0.1966	Valid
X1.5	0.857	0.1966	Valid
X1.6	0.902	0.1966	Valid
X1.7	0.881	0.1966	Valid
X1.8	0.715	0.1966	Valid
Corporate communication capabilities			
X2.1	0.718	0.1966	Valid
X2.2	0.907	0.1966	Valid
X2.3	0.875	0.1966	Valid
X2.4	0.878	0.1966	Valid
X2.5	0.910	0.1966	Valid
X2.6	0.866	0.1966	Valid
X2.7	0.899	0.1966	Valid
X2.8	0.892	0.1966	Valid
X2.9	0.908	0.1966	Valid
Production performance			
Y1	0.878	0.1966	Valid
Y2	0.881	0.1966	Valid
Y3	0.825	0.1966	Valid
Y4	0.863	0.1966	Valid
Y5	0.829	0.1966	Valid
Y6	0.835	0.1966	Valid
Y7	0.931	0.1966	Valid
Y8	0.843	0.1966	Valid
Y9	0.830	0.1966	Valid

Source: Primary data processed with SPSS, 2023.

Table 1 shows that of all the questions from each variable, all questions were declared valid, because the calculated r was greater than the r table. Next, a reliability test is carried out, which is one of the activities to test whether the data is correct or not so that it can be used to determine the quality of a research result. In this research, reliability is seen from the value of Cronbach's alpha, which must be greater than equal to 0.60, thus indicating that the data has adequate reliability. The results of the reliability tests for the three variables are presented in table 2 below:

Table 2. Reliability Test Results

Variable	Cronbach's Alpha
supply chain management	0.941
corporate communication capabilities	0.961
production performance	0.954

Source: Primary data processed with SPSS, 2023.

From the results of the questionnaire reliability test in table 4.8, it shows that the Cronbach's alpha data value was > 0.60. So it can be interpreted that of all the variables, namely all the variables are reliable.

2. Regression Prerequisite Test

Normality test to see whether the variable data being tested is normally distributed and suitable for statistical testing using the Kolomogorof-Smirnof test, the following conditions are obtained:Sig value < 0.05, data distribution is not normal. Sig value > 0.05, normal data distribution. Normality Test Results can be seen in table 4.9 as follows:

Table 3. Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residuals
N		100
Normal Parameters, b	Mean	.0000000
	Std. Deviation	3.28122386
Most Extreme Differences	Absolute	,086
	Positive	,056
	Negative	-.086
Statistical Tests		,086
Asymp. Sig. (2-tailed)		.068c

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Based on the results of data analysis in the Appendix, it is known that the value of asymp. Sig (2-tailed) from the Kolmogrof-Smirnov test on the Asymp value. Sig. (2-tailed) of 0.068 is greater than the α value of 0.05, so it can be concluded that the standardized residual value is stated to be normally distributed or the data is normally distributed.TestMulticollinearityis a method used to find out and detect whether or not there is a close linear relationship between the independent variables in the calculation. The multicollinearity test is as follows:

Table 4. Multicollinearity Test

Coefficientsa

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	supply chain management	,249	4,021
	corporate communication capabilities	,249	4,021

a. Dependent Variable: production performance

Based on the table above, it can be seen that there are two parameters used to detect multicollinearity, namely the tolerance value and the VIF (Variance inflation factor) value, where the Tolerance value is > 0.10 and the VIF value must be VIF < 10. From the results of the calculation above, we get a tolerance value of > 0.1 where the value is > 0.1 and the VIF value is not less than 10.00, meaning that multicollinearity is not detected.The heteroscedasticity test is used to determine whether or not there is an indication of variance between inhomogeneous residuals which results in the estimated value obtained being no longer efficient. Heteroscedasticity occurs if there is a correlation coefficient for each independent variable that is significant at the 5% significance level. A good regression model is one where heteroscedasticity does not occur. There are several ways to detect the presence or absence of heteroscedasticity, one of which is by looking at the scatter plot. A good regression model is obtained if the residual scatter diagram does not form a particular pattern and if the data radiates around zero (on the Y axis). Apart from that, there is no particular pattern on the graph, such as converging in the middle, then narrowing and then widening and vice versa.

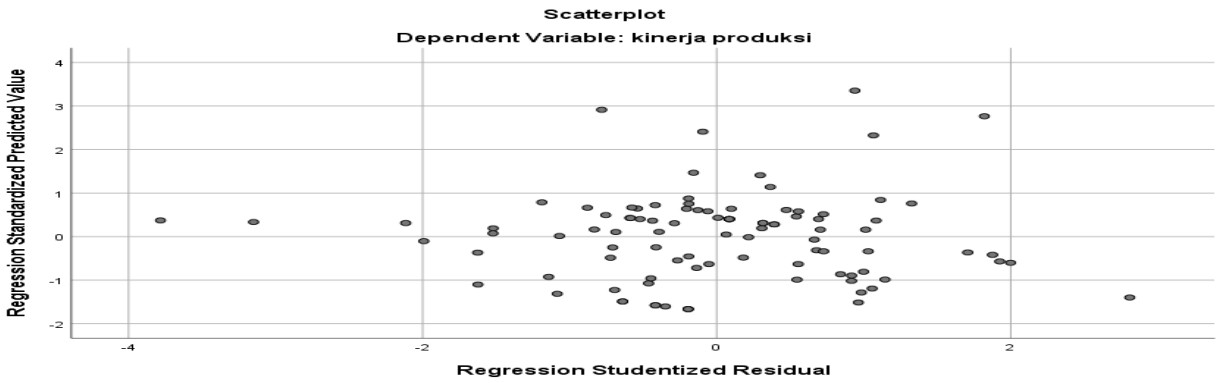

Fig 1. Heteroscedasticity test

Source: Data Processing Results Using the SPSS 26.0 for Windows Software Program

Figure 1 explains that the scattered data does not form a particular pattern and is spread around the zero point on the Y axis. This means that it can be concluded that the data to be studied meets the heteroscedasticity assumption.

3. Regression Analysis

Multiple linear regression is used to determine the magnitude of the difference between one variable and another variable with the following formula:

$$Y = a1 + b1X1 + b2X2 + e$$

The results of the multiple linear test can be seen in the coefficients table as follows:

Table 5. Results of Multiple Linear Regression Analysis

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,089	,958		1,136	,259
	supply chain management	,251	,082	,230	3,066	,003
	corporate communication capabilities	,726	,075	,723	9,618	,000

a. Dependent Variable: production performance

Based on the results of the regression analysis obtained in table 4.11, the regression equation can be written as follows:

Y = a1 + b1X1+ b2X2+ e

Y = 1.089+ 0.251+ 0.726+0.958

From the regression equation above it can be interpreted as follows:

1) α = 1.089 shows that if the values of X1,
2) b1= 0.251 states that if X1 increases, then Y will increase by 0.251 assuming there is no increase in the constant value of X2.
3) b2= 0.726 states that if X2 increases, then Y will increase by 0.726 assuming there is no increase in the constant values of X1 and X2.

4. Determination Analysis (R2)

Multiple regression analysis is used to determine the influence between the independent variables consisting ofcompany communication capabilities, supply chain managementon the dependent variable, namelyproduction performance. From calculations using the SPSS 26.0 for Windows program, the regression results obtained are multiple regression coefficient values which as a whole appear in the table as follows:

Table 6. Determination Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.929a	,864	,861	3.31488

a. Predictors: (Constant), company communication capabilities, supply chain management

Based on table 6, it shows an R value of 0.929, which means that the correlation or relationship between the independent variables consisting of brand image and brand trust has a very strong relationship. The R Square value shows 0.864, this means that the influence of the independent variables consists ofsupply chain management and company communication capabilitieswith the dependent variableproduction performanceis 86.4% while the rest is influenced by other factors.

5. T test

The t statistical test basically shows how much influence an explanatory or independent variable individually has in explaining variations in the dependent variable. Based on the analysis, the following analysis results were obtained:

Table 7. t test

tcount	ttable	Sig.
3,066	1.66071	0.003
9,618	1.66071	0,000

From the data above, the following analysis results are obtained: First,Tcalculated resultssupply chain managementof 3,066 while ttable =1.66071, then the value of tcount > ttable. Meanwhile, the significance value of the variable is calculatedsupply chain managementof 0.003, meaning <0.05. Based on these results, H0 is rejected and Ha is accepted which is meaningfulThere is an influence of supply chain management on production performance at PT. Berlian Manyar Sejahtera. Second,Resultstcountcorporate communication capabilitiesof 9,618 while ttable =1.66071, then the value of tcount > ttable. Meanwhile, the significance value of the variable is calculatedcorporate communication capabilitiesof 0.000, meaning <0.05. Based on these results, H0 is rejected and Ha is accepted which is meaningfulThere is an influence of company communication capabilities on production performance at PT. Berlian Manyar Sejahtera.

6. F Test

To determine the influence of supply chain management and company communication capabilities together on production performance at PT. Berlian Manyar Sejahtera in its testing was carried out with the F Test. The F Test is intended to determine the influence of all variables X1 and Berlian Manyar Sejahtera using a comparison of Fcount and Ftable with a significance level of 5% and N 100, obtained Ftable is 3.09 using a confidence level of 95%, α = 5%, df2 (number of variables -1) or 3-1 = 1, and df 2 (nk-1) or 100-2-1 = 97 (n is the number of respondents and k is the number of independent variables). The results obtained from Ftable are3.09. Based on calculations with the help of the SPSS for Windows Versions 26.00 program, the following results were obtained:

Table 8. Simultaneous Test Results (F-Test)

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6761.913	2	3380.957	307,684	,000b
	Residual	1065.877	97	10,988		
	Total	7827.790	99			

a. Dependent Variable: production performance

b. Predictors: (Constant), company communication capabilities, supply chain management

Based on Table 8, it shows that based on the output above the Fcount and Ftable values, it can be seen that Fcount (307.684) > Ftable (3.09) so that Ho is rejected and H4 is accepted. Hypothesis testing is also carried out by comparing the significance value with the significance level. A significance value of 0.000 is less than the significance level of 0.05, so it shows that the independent variables together have a significant influence on the dependent variable. The accepted hypothesis is that there is an influence of supply chain management and company communication capabilities together on production performance at PT. Berlian Manyar Sejahtera. Then the result is that H0 is rejected, thus the results are significant. So the conclusion is that the independent variables used in this research together have an influence on the dependent variable.

Discussion

1. The influence of supply chain management on production performance at PT. Berlian Manyar Sejahtera

The research results show thatThere is an influence of supply chain management on production performance at PT. Manyar Sejahtera Diamonds are proven by the comparison of value acquisitiontcount > ttable. Meanwhile, the significance value of the variable is calculatedsupply chain managementof 0.003, meaning <0.05. Based on these results, H0 is rejected and Ha is accepted. Thus it gets highersupply chain management, the higher the production performance at PT. Berlian Manyar Sejahtera.

*Supply Chain Management*as a series of approaches that integrate suppliers, manufacturers and warehouses in the most efficient way and when doing this; minimize overall system costs and meet service level requirements(Akdogan & Demirtas, 2014). Supply Chain is a series of value-adding activities that connect a company's suppliers and its customers(Sukati et al., 2012).*Supply Chain*includes all parties involved, directly or indirectly, in fulfilling customer requests.*Supply Chain*including manufacturers, suppliers, carriers, warehouses, retailers and even customers themselves. In any organization, such as a manufacturer, the supply chain includes all functions involved in receiving and filling customer demand.

2. The influence of company communication capabilities on production performance at PT. Berlian Manyar Sejahtera

The research results show thatThere is an influence of company communication capabilities on production performance at PT. Manyar Sejahtera Diamonds are proven by the comparison of value acquisitiontcountcorporate communication capabilitiesof 9,618 while ttable =1.66071, then the value of tcount > ttable. Meanwhile, the significance value of the variable is calculatedcorporate communication capabilitiesof 0.000, meaning <0.05. Based on these results, H0 is rejected and Ha is accepted. Thus, it gets higherthe company's communication capabilities, the higher the production performance at PT. Berlian Manyar Sejahtera.

The results of this study are in accordance with(Devito, 2011)Communication skills refer to a person's ability to communicate effectively. This ability includes things such as knowledge about the role of the environment (context) in influencing the content and form of communication messages. For example, the knowledge that a topic may be worthy of communication to certain listeners in certain environments but may not be appropriate for other listeners and environments. According to(Payne, 2005)indicators measuring communication skills are communication motivation, communication knowledge, and communication skills.

3. The influence of supply chain management and company communication capabilities together on production performance at PT. Berlian Manyar Sejahtera

The research results show thatThere is an influence of supply chain management and company communication capabilities together on production performance at PT. Berlian Manyar Sejahtera, proven by the comparison of the obtained values of Fcount (307,684) > Ftable (3.09) so that Ho is rejected and H4 is accepted. Hypothesis testing is also carried out by comparing the significance value with the significance level. A significance value of 0.000 is less than the significance level of 0.05, so it shows that the independent variables together have a significant influence on the dependent variable. The accepted hypothesis is that there is an influence of supply chain management and company communication capabilities together on production performance at PT. Berlian Manyar Sejahtera. Thus, the higher the company's supply chain management and communication capabilities, the higher the production performance at PT. Berlian Manyar Sejahtera.

*Supply Chain Management*is a network of companies that work together to create and deliver a product to the end user. Supply Chain Management or SCM has become an important discovery that developed at that time. Strong analytical methods make SCM a system that is able to make a company develop better than before. Supply chain management is a system that has the function of monitoring the flow of raw materials until the finished product reaches consumers perfectly(Lusiana et al., 2017). These companies usually include suppliers, factories, distributors, shops or retailers, as well as supporting companies such as logistics service companies(Chopra & Meindl, 2007).

IV. CONCLUSION

Based on the results of the research and discussion, it can be concluded that: There is an influence of supplychain management on production performance at PT. Manyar Sejahtera Diamonds are proven by the comparison of value acquisitiontcount > ttable. Meanwhile, the significance value of the variable is calculatedsupply chain managementof 0.003, meaning <0.05. Based on these results, H0 is rejected and Ha is accepted. Thus it gets higher*supply chain management*, the higher the production performance at PT. Berlian Manyar Sejahtera.There is an influence of company communication capabilities on production performance at PT. Manyar Sejahtera Diamonds are proven by the comparison of value acquisitiontcountcorporate communication capabilitiesof 9,618 while ttable =1.66071, then the value of tcount > ttable. Meanwhile, the significance value of the variable is calculatedcorporate communication capabilitiesof 0.000, meaning <0.05. Based on these results, H0 is rejected and Ha is accepted. Thus, it gets higherthe company's communication capabilities, the higher the production performance at PT. Berlian Manyar Sejahtera. There is an influence of supply chain management and company communication capabilities together on production performance at PT. Berlian Manyar Sejahtera, proven by the comparison of the obtained values of Fcount (307,684) > Ftable (3.09) so that Ho is rejected and H4 is accepted.

Hypothesis testing is also carried out by comparing the significance value with the significance level. A significance value of 0.000 is less than the significance level of 0.05, so it shows that the independent variables together have a significant influence on the dependent variable. The accepted hypothesis is that there is an influence of supply chain management and company communication capabilities together on production performance at PT. Berlian Manyar Sejahtera. Thus, the higher the company's supply chain management and communication capabilities, the higher the production performance at PT. Berlian Manyar Sejahtera.Based on the conclusions above, the results of this research can be recommended for:For lecturers, the results of this research can help lecturers in the lecture learning process related to supply chain management material, company communication skills and production performance; For the Surabaya Shipping Polytechnic, it is hoped that the results of this research can contribute to the research and scientific knowledge at the Surabaya Shipping Polytechnic as an effort to improve the quality of maritime education in Indonesia. Adding to the collection of scientific works in the field of maritime education; For researchers, the results of this research can increase researchers' insight into the influence of supply chain management and company communication capabilities on production performance.

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