

**ANALYSIS OF INFLUENCE OF PRICE, SERVICE QUALITY, BRAND  
IMAGE TO CUSTOMERS' PURCHASE DECISION OF KOREAN  
MARINE TRANSPORT CO., LTD.  
( A Case Study at PT. Samudera Indonesia Tbk. Semarang )**

*Dwi Rachmawati. Siti Nur Barokah\*, M.Nahar*  
International Business Management Semarang State Polytechnic

**Abstract**

The competition among shipping company is strict. The objective of this research is to analyze the influence of price, service quality, and brand image to customers' purchase decision of Korean Marine Transport Co., Ltd. at PT. Samudera Indonesia Tbk. Semarang. This research used a multiple linear regression analysis. The primary data used in this research is collected from questionnaire. The amounts of the respondents are 56 who are customers of PT Korean Marine Transport Co., Ltd, at PT. Samudera Indonesia Tbk. Semarang. The calculation of multiple linier regressions which is carried out by SPSS 20 showed that price, service quality, and brand image variables have significant positive influenced on purchase decision in partially and simultaneously and the most dominant variable is service quality. The contribution of price, service quality, and brand image to purchase decision is 60.2% while 39.8% are influenced by other variables that were not described in this research.

**Keyword :** *Price, Service Quality, Brand Image, Purchase Decision.*

## Introduction

Indonesia is an archipelago which is composed of seventeen thousand islands and surrounded by ocean. These conditions support the need for inter-sea transport, to facilitate activities, both domestic and international trade. The shipping industry provides tremendous benefits for trading in Indonesia where its own activities are to deliver goods from one place to another. These activities contribute place utility benefits namely goods that are somewhere less useful to be moved to a place where the benefits are greater.

The shipping industry has been developing rapidly. The existence of shipping companies facilitate business people, especially international business using a shipping company to send the goods to customers abroad. The flow of international trade is increase every day. This enables the shipping company to have tight relationship with international businessmen. A lot of shipping companies in Indonesia requires the businessmen have to determine the right shipping company to use.

Competition in the shipping service industry is getting tighter. Companies are competing to create the right strategy to be applied in the market and to gain customers so that they will decide to buy services that suit their needs. To find information about a shipping company which will be used is important to know the credibility of shipping company. In addition, professional services, speed of delivery, shipping costs to be considered in the case of customers in deciding to choose a shipping company.

Korea Marine Transport Co., Ltd. (KMTC) was established in Korea on April 1954 as a shipping company and on August 1995 KMTC opened a new route namely Korea - Singapore-Indonesia, and appointed PT. Samudera Indonesia as a representative or general agent representing KMTC in Indonesia. Looking at a good market in Indonesia in 1996 KMTC opened a cruise route to Semarang.

Based on the data of the amount of inbound and outbound cargo for each shipping company in Tanjung Emas port Semarang, the table inbound and outbound volume cargo of KMTC is fluctuate, in 2014 inbound cargo in Tanjung Emas port using shipping service of KMTC line is 0,84% and 1,07% for outbound, then in 2015 increase slightly by 0.01% for inbound and decrease by 0.02% for outbound, after that inbound decrease from 0,83% to 0,70% whereas outbound increase from 1.09% to 1,23% in 2016. This number is not satisfactory for a shipping company that has existed for decades, although the KMTC is a favorite choice for service destination of Korea but not for service of other destinations.

The low market share of KMTC at Tanjung Emas port requires companies to design appropriate marketing strategies to achieve the company's goals, one of them is the quality of service. Quality of service is the overall features and nature of production or service that affect its ability to satisfy the stated or implied needs (Kotler and Keller, 2009).

In this research, the researcher tries to know and to analyze the factors affecting the purchase decision of service of shipping company and how to improve the purchase decision at Korean Marine Transport. Co, ltd.

There are many factors that cause customers to choose KMTC as a choice, among others, attributes contained in KMTC are price, quality, and brand image. Tjiptono (2008: 104) states that product attributes are product elements that consumers considered to be important and these attributes serve

## Literature Review

### Price

A product has economic value which is generally called price. According to Tjiptono (2007: 178) Price can be interpreted as the amount of money (monetary unit) and other aspects (nonmonetary) that contain certain utility required to get a service. Price has some meaning which is essentially the same.

"Price is the amount of money which is needed to get some combination of goods and services" (Basu Swastha, 2007: 147).

Price can be a factor which influences customer's decision to purchase service or product, since marketers usually modify their prices to influence customers. Customers' understanding of prices has an important effect on pricing policy. Customers have expectations of as the basis for decision making, price-quality relationships. Customers may have expectations that higher prices reflect better quality.

According to the research result conducted by Satit, et al.(2012) price is one of marketing mix elements that is the most affecting customer buying decision , travel agents can retain existing customers by offering attractive and competitive price.

#### Service Quality

Service quality is more complex to define, to describe, and to measure service quality when compared with quality of goods. According to Wyckof as quoted Tjiptono (2007: 260), the quality of service is the excellence level and control over of the level of excellence expected to meet customers' desires. In other words, there are two main factors affecting quality of services, namely the expected service and the perceived service. A service company has to maintain not only the quality of services being offered to be better than competitors' quality but also better than that imagined by the customers. If the quality of services received by customers is better, then they are willingly to try again or to repurchase.

Services are assumed to be qualified if they meet customer's needs and wants. It is also important to maintain the quality, because the best quality is one of the keys to the success of the company to keep their customers , where best services quality will encourage buying decisions. Due to the higher quality of service received by customers, the higher the level of purchase decisions will be.

#### Brand Image

American marketing association in Alma (2007: 148) defines brand as "a name, a term, a symbol or a design, or combination among them, which is intended to identify the goods or services of a seller or group of sellers and to distinguish them from the goods and services of their competitors".

Hasan (2013: 210) states that brand image is a series of tangible and intangible nature, such as ideas, beliefs, values, interests, and features that make it unique. Visually and collectively, a brand image must represent all the internal and external characteristics that can affect how a brand is perceived by the customers.

Kang and James (2004) demonstrated that functional and technical quality of a service influences perception of service quality, but these influences are strongly moderated by image of the service provider. Customers who have a positive image of a brand will be more likely to buy the product or service (Setiadi, 2013: 182)

Companies are increasingly dependent on the brand as an instrument to compete, therefore it can provide meaning and reason for relationship between company and customer. A high level of brand awareness and positive image is believed to increase the probability of a product to be chosen and to reduce susceptibility toward competitive strength.

#### Purchase Decision

Kotler (2007: 201) explains that purchase decisions is the way individuals, groups or organizations where to choose, to buy, to use and to utilize goods, services, ideas and experiences in order to satisfy the needs of desire. Berkowitz (in Tjiptono 2012: 82) state that purchase decisions are the stages passed by buyers in determining the choice of products and services to be purchased. Basically, the purchase decision is an action or customers' behavior whether or not to make a purchase or transaction. The number of customers in making decisions to be one determinant if the companies can achieve their goals . Customers are often encounter

with multiple selections to use a product or a service. This causes customers to consider carefully before making a purchase decision. According to Tjiptono (2007: 43) customer decisions is classified into three stages, namely pre-purchasing, consumption, and after-sale evaluation. The pre-purchase stage includes all activities that occurred before purchasing or using the services. Consumption stage is the stage of customer decision process where the customer buys or uses services or products. While the stage of after-sales evaluation is stage of customer decision-making process when the customers determine whether they made the right purchase decision. When customers take the right purchasing decisions they will make repurchasing, because customers do not want to experience a complicated decision process for each purchase.

## Research Method

### Population

Population is the subject of the research. According to Sugiyono (2015;61) population is generalization region that consist of objects or subjects that have certain qualities and characteristics defined by the researcher to learn and to draw conclusion. The population of this research is 125 customers of Korean Marine Transport co, Ltd. Semarang Branch.

### Sample

Sample is a part of total and characteristic owned by the population ( Sugiyono, 2015;52). Th researcher used Slovin formula to determine the sample for this research, based on the result of Slovin formula, total samples are 56 respondents. Those respondents represent the entire population.

### Types of Data

The type of data in this research is in form of qualitative and quantitative data. “Quantitative data are numeric data” (Situmorang et al, 2010;2). The quantitative data used in this research are the result of questionnaire distributed to respondents.

“Qualitative data is ordinal data” (Situmorang et al, 2010:2). In this research the qualitative data are organization structural, company profile and vision mission of the company.

### Data Source

There are two data sources in this research, primary data and secondary data . The primary data which are collected to support this research is from questionnaire. The secondary data which are collected to support this research are the volume of sale of KMTC Line year 2014-2016 and the volume of port throughput in Tanjung Emas port in 2016.

### Data Collecting Method

The data collecting method in this research as follow ;

- a. Questionnaire  
The data of this research are obtained directly from the questionnaires that filled by the respondents who are the customers of KMTC Line.
- b. Literature Review  
This literature review aims to add, to expand the knowledge, and to complete the data according with the problem of the research.
- c. Interview  
Interview is data collecting method that directly obtained from subject of the research (Sugiyono, 2015 : 310 ). The result of interview is noted by researcher as research data.
- d. Observation  
This research also collects data by doing direct observation at Korean Marine Transport Co., Ltd.

### Research Variable and Definition of Operational Variable

- a. Independent variable ( X )  
Independent variable is variable that affects the dependent variable (Sugiyono 2015;4). Independent variables in this research are Price (X1), Service quality (X2), and Brand image (X3).
1. Price

Price can be interpreted as the amount of money (monetary unit) and other aspects (nonmonetary) that contain certain utility required to get a service. There are indicator of price Staton (2011): a) The affordability of price; b) Price suitability with quality; c) Price suitability with benefits.

2. Service Quality

Quality of service is the level of excellence which expected and control over the level of excellence to meet customer needs. There are indicator of service quality Tjiptono (2007):

- a. Reliability
- b. Responsiveness;
- c. Assurance;
- d. Empathy;
- e. Tangible

3. Brand Image, Brand image is a “totality” of a brand formed in the consumer’s perception. .

There are indicator of brand image Hoffler and Keller (2002) :

- a) Professional impression;
- b) Modern impression;
- c) Serving all segment;
- d) Concern to customers.

b. Dependent Variable ( Y )

Dependent variable is known as an outcome variable or consequent or variable which is affected by independent variable (Sugiyono. 2015;4). Dependent variable in this research is the purchasing decision (Y).

Purchase decision is an action or customers behavior so whether or not to make a purchase or transaction, the number of customers who make decision to be a determinant of whether or not the company’s objectives achieved. There are indicator of purchase decision Kotler (2007) : a) Stability of product or service; b) Habitual in purchasing; c) Give recommendations to others; d) Repurchase.

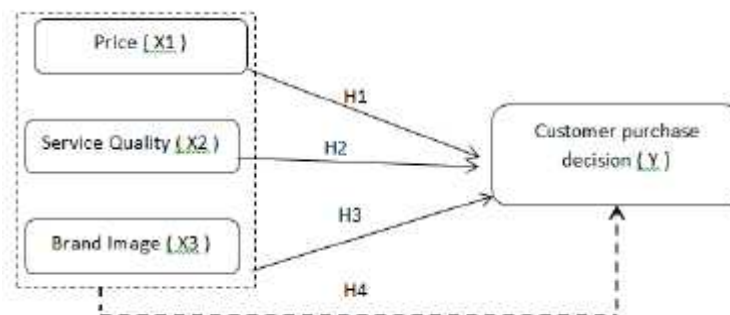
**Result and Discussion**

Result

Theoretical Framework

Tjiptono (2008: 104) states that product attributes are product elements that customers considered to be important and these attributes serve as the basis for decision making. Stanton in Alma (2011:139) Product Attributes is something inherent in the product itself, in which is included the price, brands, services. Based on the description above, then the theoretical framework can be described at Figure 1.

Figure 1. Theoretical Framework



There are several statistical tools that used in this research which are validity and reliability, classical assumption test, coefficient determination, F-test, t-test, and multiple regression analysis. Software SPSS 20 is used to speed up the data processing.

Validity Test

Validity test is used to measure the authentic and validity of an each question. The decided criteria are:

1. Item is valid if  $\text{sig} < 0,05$  or  $r \text{ count (Corrected Item – Total Correlation)} > r \text{ table (0,263)}$
2. Item is invalid if  $\text{sig} > 0,05$  or  $r \text{ count (Corrected Item – Total Correlation)} < r \text{ table (0,263)}$

Table 1 : The Result of Validity Test

The Result of Validity Test Price (X1)					The Result of Validity Test Brand Image (X3)				
Number	$r_{\text{cal}}$	$r_{\text{table}}$	Sig	Criteria	Number	$r_{\text{cal}}$	$r_{\text{table}}$	Sig	Criteria
1	0,790	0,263	0,000	Valid	1	0,690	0,253	0,000	Valid
2	0,742	0,263	0,000	Valid	2	0,730	0,253	0,000	Valid
3	0,750	0,263	0,000	Valid	3	0,727	0,253	0,000	Valid
4	0,854	0,263	0,000	Valid	4	0,723	0,253	0,000	Valid
5	0,880	0,263	0,000	Valid	5	0,792	0,253	0,000	Valid

The Result of Validity Test Service Quality (X2)					The Result of Validity Test Purchase Decision (Y)				
Number	$r_{\text{cal}}$	$r_{\text{table}}$	Sig	Criteria	Number	$r_{\text{cal}}$	$r_{\text{table}}$	Sig	Criteria
1	0,747	0,263	0,000	Valid	1	0,713	0,253	0,000	Valid
2	0,636	0,263	0,000	Valid	2	0,668	0,253	0,000	Valid
3	0,817	0,263	0,000	Valid	3	0,821	0,253	0,000	Valid
4	0,798	0,263	0,000	Valid	4	0,787	0,253	0,000	Valid
5	0,725	0,263	0,000	Valid	5	0,739	0,253	0,000	Valid

Source: The processed primary data, 2017

The table 1 shows that all items forming variables is valid, it means that all indicators are able to construct the variables.

**Reliability Test**

Test Reliability is used to indicate the measurement result relatively consistent if the

measuring tool is used repeatedly. The test uses theory of Cronbach Alpha. According to Ghazali (2011 :46) a construct or variable is reliable if the value of Cronbach Alpha is > 0,70.

Table 2 : The Result of Reliability Test

Variable	Cronbach's Alpha	Criteria
(X1)	0.807	Reliable
(X2)	0.829	Reliable
(X3)	0.801	Reliable
(Y)	0.815	Reliable

Source: The processed primary data, 2017

The table 2 shows that the value of Cronbach's Alpha instrument for all variables of this research is more than 0.70, it can be concluded that the instrument in this research is reliable to use.

**Classic Assumption Test**

**Normality Test**

Normality test is used to test whether the regression model has a normal distribution or

not. A good regression models has a residual value that is normally distributed. Basis for decision making can based on Sig (Asymptotic Significance) in Kolmogorov-Smirnov Test.

1. If  $\text{Sig} > 0,05$  then the distribution of population is normal.
2. If  $\text{Sig} < 0,05$  then the distribution of population is not normal.

Table 3 : Normality Test using Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		56
Normal Parameters <sup>a,b</sup>	Mean	.0E-7
	Std. Deviation	.18102971
	Absolute	.104
Most Extreme Differences	Positive	.104
	Negative	-.065
Kolmogorov-Smirnov Z		.775
Asymp. Sig. (2-tailed)		.585

Source: The processed primary data, 2017

The table 3 shows that there is 0,585 significant number of Kolmogorov Smirnov test and it is more than 0,05. It can be concluded that the model of regression in this research distributed normally so that it is can be used to predict the purchase decision

through variable price, service quality and brand image.

Multicollinearity Test

Multicollinearity test is aimed to test a correlation between independent variable in the regression model of the research.

Table 4 : VIF and Tolerance

Coefficients<sup>a</sup>

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
X1	.892	1,121
X2	.993	1,007
X3	.897	1,114

Source: The processed primary data, 2017

Based on the table 4 The VIF for all independent variable are under 10 so that the regression model is not detected multicollinearity. As a result multicollinearity

test, the regression model is not detected as multicollienarity

Heteroscedasticity Test

Heteroscedasticity test aims to test whether the regression occur inequality residual variance from one to another observation. In this research, researcher also uses Glejser to test heterocedasticity. The basic decisions of Glejser test are:

1. If sig. < = 0.05, then there is heteroscedasticity
2. If sig. > = 0.05, then there is no heteroscedasticity

Table 5 : Glejser Test

Model	Coefficients <sup>a</sup>			T	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	,234	,226		1,035	,305
1 X1	-,106	,058	-,257	-1,622	,074
X2	,058	,081	,096	,717	,477
X3	-,008	,065	-,018	-,130	,897

a. Dependent Variable: ABSOLUTERESIDU

Source: The processed primary data, 2017

The table 5 show that all independent variables have a sig > 0.05. So it can be concluded that the regression model does not contain heteroscedasticity.

**Linearity Test**

Linearity test aims to determine whether the two variables have a significant linear

relationship or not. The good data should have a linear relationship between the predictor variable (X) with the dependent variable (Y). The way to test linearity is below:

if sig. > 0.05 thus there is linear relationship between the variables x and y variable.

Table 6 : Linearity Test

Variable	Sig.	Mark
Price	0,088	Linier
Service Quality	0,090	Linier
Brand Image	0,786	Lnier

Source: The processed primary data, 2017

The table 6 shows all independent variables have Sig. > 0,05 , which means the relation between independent variables and dependent variable are linear.

**Coefficient Determination**

Coefficient of adjusted R squared is used to find out the amount of price, service quality, brand image to represent purchase decision at Korean Marine Transport Co. Ltd.



Table 7 : Result of Adjusted R-Squared Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,790 <sup>a</sup>	,623	,602	,18618

a. Predictors: (Constant), X3, X2, X1

Source: The processed primary data, 2017

According to result of SPSS it is found that Adjusted R<sup>2</sup> is 0,602, it means the influence of price, service quality and brand image toward purchase decision variable is 60,2 %. Whereas, the amount of other factors is 39.8 %.

Hypothesis test

t-Test

t test is used to determine the value of coefficients of multiple linear regression partially between independent variable (price, service quality, brand image) on dependent variable (purchase decision).

Table 8 : Result of t Test

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,353	,350		-3,869	,000
	X1	,299	,090	,299	3,323	,002
	X2	,591	,125	,403	4,724	,000
	X3	,569	,101	,508	5,655	,000

a. Dependent Variable: Y

Source: The processed primary data, 2017

1. Hypothesis formula X<sub>1</sub>  
sig 0,002 < 0,050 so that price has significant influence to purchase decision of customers' KMTC.
2. Hypothesis formula X<sub>2</sub>  
Sig 0,000 < 0,05 so that service quality has significant influence to purchase decision of customers' KMTC.
3. Hypothesis formula X<sub>3</sub>

sig 0,000 < 0,050 so that brand image has significant influence to purchase decision of customers' KMTC.

F-Test

Ftest is conducted to determine simultaneously the influence of independent variables (price, service quality, and brand image ) to dependent variable ( purchase decision).

Table 9 : Result of F Test

ANOVA<sup>a</sup>

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2,985	3	,995	28,703	,000 <sup>b</sup>
Residual	1,802	52	,035		
Total	4,787	55			

a. Dependent Variable: Y

b. Predictors: (Constant), X3, X2, X1

Source: The processed primary data, 2017

Result of SPSS calculation shows that the sig value is 0,000. It less than 0,05. It can be concluded that price, service quality, and brand image have significant influence towards purchase decision simultaneously.

**Multiple Regression Analysis**

Multiple regression analysis enables the researcher to determine the influence of more than one independent variable on one dependent variable (Gaurav, 2010;2).

Table 10 : Multiple Regression Calculation

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-1,353	,350		-3,869	,000
1 X1	,299	,090	,299	3,323	,002
X2	,591	,125	,403	4,724	,000
X3	,569	,101	,508	5,655	,000

a. Dependent Variable: Y

Source: The processed primary data, 2017

The equation of multiple regressions is based on table 10:

$$Y(\text{purchase decision}) = -1,353 + 0.299 X1(\text{price}) + 0.591 X2(\text{service quality}) + 0.569 X3(\text{brand image})$$

The explanation:

- a. The Constanta, It means that if price (X1), service quality (X2) and brand image (X3) are 0 , the purchase decision (Y) is very low or minimum.
- b. Price (X1) positively influences the purchase decision (Y).

- c. Service quality (X2) positively influences the purchase decision (Y).
- d. Brand image (X3) positively influences the purchase decision (Y)

**Conclusion**

The result and discussion of this research was clearly achieved the purchase decision (Y) . objectives and contribute to the following conclusion:

- 1. Price, service quality, and brand image partially and simultaneously influence on

- purchase decision of customers of Korean Marine Transport Co.,Ltd. It was proved by t test and F test.
2. Based on multiple regression analysis obtained that all of independent variable have positive influence on purchase decision of customers of Korean Marine Transport Co., Ltd. it also shows that service quality is the most dominant factor impacted purchase decision of customers of Korean Marine Transport Co., Ltd, followed by brand image and price.
  3. In accordance with adjusted  $R^2$  can be elaborated the magnitude of contribution of price, service quality and brand image on purchase decision of customers of Korean Marine Transport Co. Ltd is 60,2.
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