

# The Effect of Service Quality, Facilities and Trust on Customer Satisfaction at DHL GLOBAL FORWARDING INDONESIA (DGFI)

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**Abstract:-** Customer satisfaction is an obligation that must be given by a company engaged in services. Currently, researchers feel challenged to find out what factors affect customer satisfaction, especially in the customs process of marine import cargo. Therefore, researchers want to know from three research factors with a total research sample of 30 customers. Data was collected through questionnaires on question sheets with a tested Likert scale model. The data analysis method used in this study is the path analysis method. The results of the first study, it was concluded that the quality of service has a direct effect on customer satisfaction. Facilities have a direct effect on customer satisfaction. Trust has a direct effect on customer satisfaction.

**Keywords:-** Quality of Service, Facilities, Trust and Customer Satisfaction.

## I. INTRODUCTION

DHL Global Forwarding Indonesia (DGFI) is one of the international service companies located in Soekarno Hatta area, Tangerang. DHL Global Forwarding Indonesia (DGFI) has nine branches, including Bandung, Surabaya, Semarang, Balikpapan, Makassar, Bali, Medan, Batam, and Sorong. With its expertise as a cargo shipping service company, both by sea, air, and land transportation. DHL Global Forwarding Indonesia (DGFI) company was established first in Germany which has 3 (three) types of companies engaged in services but has their respective delivery capacity, over time and driven by the existing market share in Indonesia, therefore one of the three categories established a branch in Indonesia, precisely in the Soekarno Hatta area, Tangerang.

DJBC (Directorate General of Indonesian Customs and Excise) is a ministry-run organization tasked with overseeing the movement of products in and out of the Indonesian customs area. Its role is very important for the Unitary State of the Republic of Indonesia, especially in the field of customs. Customs and Excise is the only organization in charge of certain goods that meet the requirements stipulated in the Law of the Republic of Indonesia on Customs. Import activities are included in economic activities in Indonesia ([Http://Www.Bphn.Go.Id/](http://www.bphn.go.id/), 2006).

As a service company that carries out the export-import process, it faces various challenges in retaining customers, especially with the increasing number of service companies that can carry out the process. The greater the customer demand, the greater the opportunity for the service company to improve its service performance to be able to compete and maintain business continuity, and to succeed and retain consumers, the company must understand customer desires and consistently respond to various complaints to achieve the goals desired by customers. Increased client happiness is one thing that organizations can achieve.

On this occasion, researchers used variables of service quality, facilities and trust as latent variables in examining factors that affect customer satisfaction provided by DHL Global Forwarding Indonesia (DGFI).

Especially now with the current world conditions, namely COVID-19 (Corona Virus Disease - 2019) which has occurred, especially in Indonesia, approximately a year from the beginning of March 2020, where customers expect all goods that have been sent from the sending country to arrive at the Indonesian customs area (destination country) appropriately without hampering the business efforts of customers. This is one of the challenges for customs service management companies, especially DHL Global Forwarding Indonesia (DGFI) companies by continuing to provide services to customers without violating the rules set by the government.

A company's service plan that attracts customer engagement must be considered in order to become one of the leading companies and compete effectively. To be able to answer customer satisfaction, it is necessary to study the quality of service, facilities, and trust provided by DHL Global Forwarding Indonesia (DGFI) companies that can affect customer satisfaction.

## II. LITERATURE REVIEW

### ➤ Import Process

In Law Number 17 of 2006 Article 1 states everything related to the management of goods entering or leaving the customs area, such as various obligations and import duties, referred to as the customs process. The customs area is also defined as land, sea, and air space above the boundaries of the Unitary State of the Republic of Indonesia, as well as

certain places. The Directorate General of Customs and Excise manages customs areas that have certain boundaries at sea ports, air terminals, and other places designated for the movement of goods. The Customs Area is a department within the Directorate General of Customs and Excise (DGCA) responsible for customs obligations in accordance with the provisions of this Law. Import is the act of bringing goods into the customs area. According to Article 2, products brought into the customs area are classified as imported goods and are subject to import duties. Article 3 paragraphs 1 to 4 states that (1) for imported products, all goods entering the customs area are inspected. (2) Document inspection and physical inspection of goods included in customs inspection as referred to in paragraph (1), (3) Customs inspection as referred to in paragraph (2) shall be carried out on a case-by-case basis (4) Provisions regarding customs inspection procedures as referred to in paragraph (1) shall be supplemented by or based on ministerial regulations that have been determined and determined to be obeyed during the import process ([Http://www.Bphn.Go.Id/](http://www.bphn.go.id/), 2006).

In the Regulation of the Minister of Trade No. 48 of 2015, what is meant by Product is any item, whether substantial or immaterial, regardless of whether portable or sturdy, whether consumable or not additional, and can be exchanged, used, used, or used by clients or business entertainers. Import is the movement of the entry of products into the territory of Indonesian tradition. A trader is an individual or business entity or business element, if as a legal substance it is a halal element, which imports. Importer Identification Number or API is a number that identifies a company as an importer. Article 7 states (1) Importers must have an Import license for goods that are restricted from import, (2) when imported goods enter the customs area, importers who do not have the required import licenses are subject to API freezing sanctions and other sanctions in accordance with applicable laws and regulations. (3) In the event that the imported goods do not have a permit as referred to in paragraph (1), the importer must re-export (Ministry of Trade, 2015).

And the following is a description of the flow of entry of imported goods from abroad at the Port through the Customs Service System in the Import Field.



Fig 1. Customs Service System

➤ *Customer Behavior*

The term "customer behavior" refers to two main perspectives: (1) human thinking and action in order to find solutions to their needs and desires, and (2) fields of study or disciplines that focus on the consumption process that customers go through to meet their needs and desires.

Customer behavior is very important to learn where if understood correctly then the company's ability to evaluate customer behavior makes it easier for the company to generate customer pleasure. In addition, customer behavior is very useful and one of them is to develop strategies and marketing mixes.

➤ *Customer Satisfaction*

Satisfaction refers to a person's feelings of pleasure or disappointment as a result of comparing his or her perception of the performance (or results) of a product with his expectations. Customer satisfaction refers to a post-purchase review in which the chosen alternative meets or exceeds expectations, whereas dissatisfaction refers to results that fall short of expectations. Customer expectations are compared to the performance/results they obtain, resulting in satisfaction or dissatisfaction. Customer satisfaction is influenced by service quality and price, according to several experts and previous research (Gofur, 2019). The magnitude of one's feelings as a result of the comparison between reality and expectations obtained from a product or service is known as customer satisfaction. Consumers feel unhappy if the performance of the product falls short of their expectations. Customers are satisfied or very happy if performance meets or exceeds expectations. Customers often expect something, be it goods or services, to be received and enjoyed with good or satisfactory service (Ratnasari, 2015).

Sweden pioneered the measurement of the National Customer Satisfaction Index in 1989 with the *Swedish Customer Satisfaction Barometer* (SCSB) program. Since then, a number of other countries, including the United States (American Customer Satisfaction Index = ACSI) since 1994, Norway (Norway Customer Satisfaction Barometer = NCSB) since 1996, and Indonesia (Indonesia Customer Satisfaction Index = ICSI) since 1999, have followed Sweden's lead. National Customer Day has been celebrated on September 4 since 2003.

➤ *Quality of Service*

Quality should be based on client needs and end with client insight, where the client's impression of administrative quality provides a general assessment of administrative prowess (Simamora & Supriono, 2017). In the service industry, customers will feel satisfied if they get good service or as expected. Service can be defined as a process or direct activity provided by one party (producer) to another party (consumer) with the aim of service recipients feeling satisfied with the product or service obtained.

➤ *Facilities*

Facilities can be said to be physical resources that must be owned before services can be provided to clients, or can be interpreted as goods that make it easier for customers to receive the services provided. Facilities will affect company efficiency; the formation of company profits and the survival of shipping service companies (*containership*) cover a large geographical area, because it is between countries and continents, so supporting facilities are needed to support the quality of services provided in order to meet the expectations of service users. Due to the rapid growth of technology, delivery service providers are driven to improve the services they provide to consumers in order to compete on a world scale.

The company uses facilities as a supporting aspect in an effort to increase customer happiness. The facilities of a company can be seen as a concern to make it easier for customers to receive what they need. The concept that must be understood by the company before offering services, the company must provide more supporting facilities for the services to be offered. Facilities are physical resources that must be owned by a widow provider company before a service is offered to customers (Fandy, 2014).

Facilities are supporting factors that help the company's efforts to sell its goods or services. In general, facilities are simply objects that were on-site at the time the service was provided to the client. The purpose of giving such items is to make the client feel comfortable.

➤ *Belief*

Trust comes from the belief that the person participating in the transaction will provide constant quality, honesty, accountability, frivolity, and a good heart. This confidence will foster a close bond between the parties participating in the transaction (Ratnasari, 2015).

Business trust to leave colleagues in the development of more customer loyalty is referred to as trust (Wicaksono, 2015). Trust depends on several relational and interorganizational factors, including ability, trustworthiness, authenticity, and organizational virtue (Wicaksono, 2015) one of the meetings related to trade interactions is positive about the dependence and honesty of the other party. The key factors that consistently influence these markers are spatial design, perception, actual arrangement, shadows, lighting, and images or signs to indicate direction or place, clarify or suggest a reason.

➤ *Customer Satisfaction Measurement*

Customer satisfaction should be measured to assess the performance of a company. This is because this process can help businesses analyze their performance and create customer satisfaction strategies. The main premise underlying the importance of measuring customers is to do the best possible job in the most critical areas for customers. Customer satisfaction can be measured using various methodologies and procedures in theory. For all necessary aspects Information regarding customer satisfaction is important because it allows the company to assess its

effectiveness in satisfying its customer demands, as well as identify areas where the company can improve to satisfy its customers.

➤ *Hypothesis*

This study tried to answer the following questions:

- How much does the quality of service at DHL Global Forwarding Indonesia (DGFI) directly affect customer satisfaction?
- How much does DHL Global Forwarding Indonesia (DGFI) have a direct effect on customer satisfaction?
- How much trust in DHL Global Forwarding Indonesia (DGFI) has a direct effect on customer satisfaction?
- How much direct influence does the service quality of DHL Global Forwarding Indonesia (DGFI) have on the facilities of DHL Global Forwarding Indonesia?
- How much direct influence does the DHL Global Forwarding Indonesia (DGFI) company have on trust?
- How much influence does DHL Global Forwarding Indonesia (DGFI) have on customer satisfaction through facilities?
- How much influence does the facility have on DHL Global Forwarding Indonesia (DGFI) company on customer satisfaction through trust?

**III. METHOD**

In conducting this research, the author took the object of research, namely customers who use special customs services for sea imports at the DHL Global Forwarding Indonesia (DGFI) company, where the time of this research was carried out from September 2020 to July 2021.

**IV. RESULTS AND DISCUSSION**

➤ *Data Description*

The data used is processed from respondents' responses and will be used to summarize or provide an overview of the data on the variables used. Customer satisfaction was a dependent variable in this study, while Service Quality, Facilities, and Trust were independent factors.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
KualitasPelayanan	30	27.00	40.00	33.5000	4.40024
Fasilitas	30	23.00	35.00	28.4333	3.86571
Kepercayaan	30	27.00	40.00	34.0000	3.68595
KepuasanPelanggan	30	28.00	40.00	33.7000	3.97536
Valid N (listwise)	30				

Table 1. Processed Data for Description Data

➤ *Data Normality Test*

The data was tested for normality using the Kolmogorov-Smirnov One Sample Test to determine whether the data was normal or not. If the data is normal, parametric statistics are used for data analysis and hypothesis testing. The Kolmogorov-Smirnov One Sample Test is used to determine if the data is normal. Criterion: If the probability of significance > 0.05 then the data is normal. If the probability of significance > 0.05 then the data is normal. The results of the normality test will be explained as follows :

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		30
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.28159190
Most Extreme Differences	Absolute	.135
	Positive	.135
	Negative	-.079
Test Statistic		.135
Asymp. Sig. (2-tailed)		.171 <sup>c</sup>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Fig 2. Processed Data for Normality Test

So, it can be concluded that data on service quality, facilities, trust, and customer satisfaction have been distributed normally. Because of the fulfillment of the normality test requirements, it can proceed to the next analysis, namely path analysis.

➤ *Homogeneity Test Variance*

Before comparing two or more groups, we should perform a variance homogeneity test (variance) to ensure that the difference is not due to a fundamental difference (inhomogeneity of the groups being compared). The Harley Test, Cohran Test, Levene Test, and Bartlett Test are some of the formulas that can be used to test the homogeneity of variance. In this thesis the Levene Test will be used and the results are as follows :

Variabel	Sig.
Kualitas Pelayanan	0,183
Fasilitas	0,121
Kepercayaan	0,395

Table 2. Processed Data for Homogeneity Test Variance

The table shows that the Quality of Service variable (X1) has a significance value of 0.183, the Facility variable (X2) has a significance value of 0.121, and the Trust variable (X3) has a significance value of 0.395. Since all significant values are more than 0.05, the variance of each variable (Quality of Service, Facilities, and Trust) comes from the same population (homogeneous). As a result, the requirements for the data homogeneity test have been met.

➤ *Linearity Test*

The purpose of the linearity test is to see if two variables have a linear influence or not. Dependent and independent variables must have a linear relationship with good data. In correlation analysis or linear regression, this test is usually used as a prerequisite. This test uses the Linearity Test on SPSS with a significance threshold of > 0.05. If the divergence of the linearity is greater than 0.05, two variables are considered to have a linear impact. The linearity test findings are listed below.

Jalur	Sig. (deviation from linearity)
Kualitas Pelayanan * Kepuasan Pelanggan	0,303
Fasilitas * Kepuasan Pelanggan	0,296
Kepercayaan * Kepuasan Pelanggan	0,262

Table 3. Processed Data for Linearity Test

The results of linearity testing show that there is a relationship in each variable that is linear. So, the data linearity requirement is met.

➤ *Multicollinearity Test*

The multicollinearity test assumes multicollinearity when the independent variables have a high correlation with each other, and it is easy to see why this test is used when using multiple linear regression, that is, when the pairwise correlation between independent variables is more than 0.80. The regression coefficient on the independent variable X cannot be calculated if there is complete collinearity, and the error standard is infinite.

Coefficients <sup>a</sup>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Kualitas Pelayanan	.265	3.777
	Fasilitas	.220	4.537
	Kepercayaan	.491	2.038
a. Dependent Variable: Kepuasan Pelanggan			

Table 4. Processed Data for Multicollinearity Test

The table shows that all tolerance values > 0.10 and VIF values of 10 are present. Thus, it can be stated that the influence of service quality, facilities, and trust on customer satisfaction is not multicollinary. Thus, the assumption of data multicollinearity is satisfied.

➤ *Autocorrelation Test*

The purpose of this autocorrelation test is to see if there is a relationship between confounding errors in period t and errors in period t1 in linear regression models (earlier). The Durbin-Watson test is one of many methods for determining autocorrelation. This Durbin-Watson test has a fundamental flaw: the statistical distribution itself is unknown. Durbin-Watson, on the other hand, has tabulated du and dl values for significance thresholds of 5% and 1%, referred to as Durbin-Watson tables. The Durbin-Watson autocorrelation test is used to make decisions; If the values of  $D_U < D < 4 - D_U$  are zero, then no autocorrelation occurs. The dU and dL values obtained from the Durbin Watson table with n = 30 and k = 3 so that dL = 1.214 and dU = 1.650 are obtained.

d	dL	dU	4-dL	4-dU
1,879	1,214	1,650	2,786	2,350

Table 5. Processed Data for Autocorrelation Test

The value of d is found between dU and 4-dU (1,650<1,879<2,350) based on the calculation results. This shows that the effect of service quality, facilities, and trust on customer happiness has no autocorrelation. As a result, the autocorrelation criteria for the data have been met.

➤ *Heteroscedasticity Test*

According to Ghozali:2013 The heteroscedasticity test determines whether there is a variance inequality between the residuals of one observation and the residuals of another observation in the regression model. The residual variance from one observer to the next is called homoscedasticity if constant, and heteroscedasticity if variable. Because these data include data of varying sizes, the appropriate regression model is homoscedasticity regression model or without heteroscedasticity. The Glacier test, Park test, Spearman test, and glancing graphs are some of the formulas that can be used for heteroscedasticity tests. The following are the results of the glacier test for heteroscedasticity.

Variabel	Sig.	Kesimpulan
Kualitas Pelayanan (X1)	0,832	Tidak terjadi heteroskedastisitas
Fasilitas (X2)	0,152	Tidak terjadi heteroskedastisitas
Kepercayaan (X3)	0,169	Tidak terjadi heteroskedastisitas

Table 6. Processed Data for Heteroscedasticity Test

All signs. between the Service Quality variable (X1) with absolute residual 0.832 > 0.05, the Facility variable (X2) with absolute residual 0.152 > 0.05, and the confidence variable with absolute residual 0.169 > 0.05 can be shown based on the results of the heteroscedasticity test. As a result, there is no heteroscedasticity in the impact of Service Quality, Facilities, and Trust on Customer Satisfaction. As a result, the condition of heteroscedasticity of the data is met.

➤ *Path Analysis*

Path analysis is a component of a linear regression model that can be used to investigate the impact of one variable on another. Path analysis is used in this work as statistical analysis. The influence of exogenous variables on endogenous variables can be both direct and indirect influences in path analysis, or in other words path analysis considers direct and indirect influences. Unlike traditional regression models, the influence of the independent variable on the dependent variable is only direct.

**V. CONCLUSION**

- Based on the analysis of the results that have been stated in Chapter IV, it produces the following findings: The quality of service provided by DGFI to customers during the cargo process, especially sea imports, has a direct effect on customer satisfaction which is measured from indicators of physical appearance (tangible), reability (reability), responsiveness (responsiviness), assurance (assurance), and politeness (countesy). This result is obtained from data processing that has been obtained from answers from respondents. For the magnitude of the influence has been proven by testing in Chapter V, the value of the route coefficient for the hypothesized causal model is  $\beta_{YX1} = 0.313$ , with t count = 2.544 and significance value 0.017.
- Facilities owned by DGFI have a direct effect on equipment availability, geographic area, and payment indicators. This result is obtained from data processing that has been obtained from answers from respondents. For the magnitude of the influence has been proven by testing in Chapter V, the value of the path coefficient for the hypothesized causal model is  $\beta_{YX2} = 0.416$ , with t count 3.091 and significance value 0.005.
- The trust given by DGFI company to customers is one of the important factors in achieving customer satisfaction. The trust given by the DGFI company has a direct effect on customer satisfaction which has been processed data obtained from respondents' answers related to trust indicators, namely price, product quality, service quality, expectations, costs and convenience, and interest in visiting again. For the magnitude of the effect has been proven by testing in Chapter V, the value of the route coefficient for the hypothesized causal model is  $\beta_{YX3} = 0.309$ , with t count = 3.427 and significance value 0.002.
- The results of other studies are in accordance with the fourth hypothesis where facilities affect service quality. For the magnitude of the influence has been proven by testing in Chapter IV, the value of the route coefficient for the hypothesized causal model is  $\beta_{X1X2} = 0.856$ , with t count = 8.781 and significance value 0.000.
- The results of other studies are in accordance with the fifth hypothesis where Trust affects facilities. For the magnitude of the influence has been proven by testing in Chapter IV, the value of the path coefficient for the hypothesized causal model is 0.711, with t count = 5.358 and significance value 0.000.
- The results of other studies are in accordance with the sixth hypothesis where Service Quality does not directly affect Customer Satisfaction through Facility mediation.
- Other research results are in accordance with the seventh hypothesis where Facilities have an indirect effect on Customer Satisfaction through Trust mediation.

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