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## The Determining Factors of Sales Increase in Freight Forwarding Consolidation Goods in Jakarta, Indonesia

Aftah Mawariza Pratama<sup>1</sup>, Atong Soekirman<sup>2</sup>, Prasadja Ricardianto<sup>3\*</sup>, Sofwan Farisyi<sup>4</sup>, Librita Arifiani<sup>5</sup>, Indang Noerkajati<sup>6</sup>

<sup>1</sup> Trisakti Institute of Transportation and Logistics, Jakarta, Indonesia, [aftahmawriza02@gmail.com](mailto:aftahmawriza02@gmail.com)

<sup>2</sup> Trisakti Institute of Transportation and Logistics, Jakarta, Indonesia, [a.soekirman@gmail.com](mailto:a.soekirman@gmail.com)

<sup>3</sup> Trisakti Institute of Transportation and Logistics, Jakarta, Indonesia, [ricardianto@gmail.com](mailto:ricardianto@gmail.com)

<sup>4</sup> Trisakti Institute of Transportation and Logistics, Jakarta, Indonesia, [sofwan.farisyi@lecturer.itltrisakti.ac.id](mailto:sofwan.farisyi@lecturer.itltrisakti.ac.id)

<sup>5</sup> Trisakti Institute of Transportation and Logistics, Jakarta, Indonesia, [task.librita777@gmail.com](mailto:task.librita777@gmail.com)

<sup>6</sup> Trisakti Institute of Transportation and Logistics, Jakarta, Indonesia, [noerkajatiindang@gmail.com](mailto:noerkajatiindang@gmail.com)

\*Corresponding Author: [ricardianto@gmail.com](mailto:ricardianto@gmail.com)<sup>3</sup>

**Abstract:** The main problems in this research were the expensive import shipment service by Non-Vessel Operating Common Carrier (NVOCC) and the poor import cargo service especially in the European and American countries. Meanwhile, this study aims to analyze the main variables such as custom clearance services, trucking services, NVOCC services that affect customer loyalty and customer satisfaction in Freight Forwarding companies. This research used Structural Equation Modelling-SmartPLS3 with the sample as many as 100 customers consisting of forwarders and cargo importers. In general, novelty in research is a new understanding of the factors that affect customer loyalty, especially in the transportation of goods, can also be considered something new. The results of the research data collection, the company needs to maintain and improve the quality of service through marketing strategies with appropriate direct selling statements carried out by the marketing of the Hyper Mega Shipping Company by inviting meetings at the customer's company. This study discusses nineteen hypotheses consisting of six exogenous variables at the port on customer satisfaction and loyalty. The key findings of this study, there are still weaknesses in the process of shipping imported goods, especially in updating the delivery of goods.

**Keywords:** custom clearance service, customer satisfaction, customer loyalty, import cargo service, non-vessel operating common carrier.

### INTRODUCTION

Hyper Mega Shipping is an Indonesian national Freight Forwarding company. It becomes the sample of case study in this research. In 2022 its cargo volume reached 2.564,892 cubic. Its cargo volume continued to increase but it decreased in October 2022 at the volume of 2.143,125 cubic and in the next months it gradually increased again. The empirical gaps that exist are the

cubication decrease occurred due to post-pandemic factors and also marketing efforts which were not maximally performed. moreover lack of empirical studies examining specific effects dari import cargo service, custom clearance service, and Non – Vessel Operating Common Carrier (NVOCC) on the increase in sales in the context of freight forwarding in Jakarta and the lack of empirical data on how customer satisfaction and customer loyalty affect the increase in sales in this sector (Bowersox et al., 2020). The decrease was related to the marketing development in the internal company due to the unavailability of online service for price. It was also related to no market expansion that resulted in the decreased sales performance. Some other main problems can be identified as follows; (1) Poor import cargo service, especially in the European and American countries, (2) Trade of goods and services among countries occurs because of the need for goods and services that cannot be fulfilled domestically, (3) Warehouse rental should reach a full capacity to satisfy customers, (4) Custom clearance service is quite overwhelmed by the big volume of import cargo delivery, (5) Inadequate trucking fleet sometimes makes the use of service from third parties, (6) Relatively expensive service of NVOCC in the import shipment especially Full Container Load compared to the competitors, and (7) The human resources have not really understand the flow of export and import, specifically in the Freight Forwarding company.

The existence of an empirical gap is followed by a knowledge gap which is conveyed by Parasuraman et al., (1998) in his theory states that there is a lack of understanding of the specific factors that most influence purchasing decisions and customer loyalty in the context of consolidation of goods and there has been no research investigating the relationship between the services offered, especially freight forwarding companies, and the level of customer satisfaction and loyalty in Jakarta in detail. Meanwhile, the existing theoretical gap by Kotler & Keller, (2016) states the lack of literature explaining the mechanism of how each service (import cargo service, custom clearance service, and NVOCC directly and indirectly affects customer satisfaction and customer loyalty, and the absence of a clear model that integrates the variables import cargo service, custom clearance service, NVOCC, customer satisfaction, and customer loyalty in the context of freight forwarding in Jakarta, Indonesia. In addition to empirical, theoretical and knowledge gaps, the evidence gap states a lack of evidence showing a causal relationship between service quality and NVOCC and increased sales in a specific context in Jakarta. In terms of methodological gaps from Creswell & Creswell, (2017), which states that many studies may use a quantitative approach without exploring qualitative perspectives from customers and industry players, limitations in longitudinal research designs that can show changes in customer satisfaction and customer loyalty over time in the context of freight forwarding in Jakarta.

Some previous studies have been done concerning the variable being examined. Cargo delivery in the export and import activities and the availability of truck fleet in the logistic activities give direct contributions to export and import (Fitriani et al., 2023). Especially in truck fleet, previous performance evaluations often focus on financial performance (Dadsena et al., 2023). In addition, Tang et al., (2024) explain that cargo trucking optimization is much related to the truck assignment which interacts with the sequential service of customer order. Strategic and sensitivity analyses are carried out by J. Zhang et al., (2024), to design the integrated system of truck delivery and drone. Concerning other variables, NVOCC and freight forwarder are the most well-known important intermediation today (Z. Zhang, 2021). In General, concerning the problem found in custom clearance, Gupta et al., (2023) explain that the most related to custom clearance is wrong classification; customs office does not deliver the consignment to the buyer/importer, the documentation provided by exporter is not sufficient, the problem involving the regulations of import or packing in the consignee's country. In spite of very few identified factors, it needs policies on the process of custom clearance to enable the on time service of import cargo declaration (Herusantoso & Saputra,

2020). The stimulus from this paper is that previous researches provide several opinions about the six independent variables examined, namely import cargo service, warehouse rental, custom clearance service, trucking service, NVOCC service, and human resources. This research tries to bridge the gap. The aim is to know and analyze the direct and indirect influences of the improvement of the six independent variables on customer loyalty as the dependent variable in a national freight forwarding company mediated by customer satisfaction as the intervening variable.

To support this research, there are those who make a research gap after describing the gaps above supported by the results of relevant and related research on the variables studied. In general, Rajesh et al., (2023) state that strategies to build and maintain customer loyalty are a major focus for freight forwarding companies. Through almost the same analysis tool, using the SEM PLS analysis tool, Olfabri, (2024) stated that there is a relationship between customer satisfaction and loyalty that has not been proven to be significant and does not have a statistically positive influence on international cargo activities. Research by Karina et al., (2024), in the field of logistics, explained that satisfaction, especially horticultural businesses, does not have a positive effect on the loyalty of delivery services. He added that customer satisfaction must be obtained through a consistent relationship with its customer loyalty. Another study, Christian et al., (2021) explained that customer satisfaction is one of the main variables in customer loyalty, but customers who are quite satisfied can still move to other service providers.

### **Import Cargo Service, Customer Satisfaction, and Customer Loyalty**

Kotler et al., (2022) state that satisfaction is theoretically a person's feeling of happiness or disappointment that comes from comparing his impression of the performance or result of a product and his expectation. In several previous relevant researches, the influence among variables is described as one of the empirical and methodological gaps in this research. It starts from the gap in the variable of import cargo service, namely customer satisfaction. In the results of previous researches related to the influence of import cargo service on customer satisfaction, Lermatan et al., (2023), and Hirata, (2019) state that import cargo service correlates with customer satisfaction in shipping activities. The optimum process of import cargo handling to make a design improvement is carried out by describing the map of future conditions that results in a more optimum process flow (Sholihah et al., 2022).

The dependent variable of this research is customer loyalty. According to Chao et al., (2023), in their study related to loyalty state that business players should make efforts in order that the number of their loyal customers will continue to increase. Concerning some previous phenomena of import cargo service and customer loyalty, Lermatan et al., (2023), state that the import cargo service in the sea transportation mode significantly influences customer loyalty. This research uses import cargo service to increase customer satisfaction and customer loyalty. Therefore, Hypothesis 1 (H<sub>1</sub>) and Hypothesis 7 (H<sub>7</sub>) are formulated as follows:

**H<sub>1</sub>:** Import cargo service directly influences customer satisfaction.

**H<sub>7</sub>:** Import cargo service directly influences customer loyalty.

### **Warehouse Rental, Customer Satisfaction and Customer Loyalty**

Theoretically, a warehouse according to Frazelle, (2020), is they aspect of modern supply chain and it plays an important role in the success or failure of a company today. A perfect design of warehouse, based on the study by Baglio et al., (2022), will be able to help the third-party logistics industry identify the appropriate features of warehouse to improve its performance and provide a guidance for real estate companies to design the warehouse that fulfills the needs. As a previous phenomenon, Xi et al., (2022) state that the process of fast taking warehouse order directly influences customer satisfaction. This research uses warehouse

rental to increase customer satisfaction and customer loyalty. Therefore, Hypothesis 2 (H<sub>2</sub>) and Hypothesis 8 (H<sub>8</sub>) are formulated as follows:

**H<sub>2</sub>:** Warehouse rental directly influences customer satisfaction.

**H<sub>8</sub>:** Warehouse rental directly influences customer loyalty.

### **Custom Clearance Service, Customer Satisfaction and Customer Loyalty**

Custom Clearance is an administration procedure for the cargo from overseas that will be received through a custom process. Theoretically, custom has a very important position in port logistic and, if the custom has a high efficiency, the cargo can pass through the port quickly (You, 2022). To facilitate export, export companies usually choose to arrange sea transportation and the customs clearance of their cargo through an expedition company. A previous research related to custom clearance states there is a significant influence on customer satisfaction (Hanik et al., 2024). Whereas, no previous researches found discussing the correlation between custom clearance service and customer loyalty, these hypotheses must still be tested. This research uses custom clearance to increase customer satisfaction and customer loyalty. Therefore, Hypothesis 3 (H<sub>3</sub>) and Hypothesis 9 (H<sub>9</sub>) are formulated as follows:

**H<sub>3</sub>:** Custom clearance service directly influences customer satisfaction.

**H<sub>9</sub>:** Custom clearance service directly influences customer loyalty.

### **Trucking Service, Customer Satisfaction and Customer Loyalty**

Based on the finding by Ekowati & Rumecko, (2023), trucking service contributes positively to customer satisfaction. In addition, according to De Guzman & Mendoza, (2023), trucking service can reveal the important factors that contribute to industrial efficiency and customer satisfaction. Research by Wirajaya et al., (2023), also explains that trucking service is closely related to customer loyalty. This research uses trucking service to increase customer satisfaction and customer loyalty. Then, Hypothesis 4 (H<sub>4</sub>) and Hypothesis 10 (H<sub>10</sub>) respectively concerning Customer Satisfaction and Customer Loyalty are formulated as follows:

**H<sub>4</sub>:** Trucking service directly influences customer satisfaction.

**H<sub>10</sub>:** Trucking service directly influences customer loyalty.

### **Non-Vessel Operating Common Carrier (NVOCC) Service, Customer Satisfaction and Customer Loyalty**

The term NVOCC (Non-Vessel Operating Common Carrier) in China was initially Freight Forwarder (Z. Zhang, 2021). It initially only received the cargo from cargo owners, arranged its transportation on behalf of cargo owners and got some commission. NVOCC companies often pay the cost of transport for several small and medium cargo senders first in order to get more customers (Geng et al., 2020). Even though the fifth and eleventh hypotheses were not actually found to be relevant in previous studies, these two hypotheses must still be tested. Therefore, Hypothesis 5 (H<sub>5</sub>) and Hypothesis 11 (H<sub>11</sub>) are formulated as follows:

**H<sub>5</sub>:** NVOCC service directly influences customer satisfaction.

**H<sub>11</sub>:** NVOCC service directly influences customer loyalty.

### **Human Resources, Customer Satisfaction, and Customer Loyalty**

Theoretically, Human Resources in general are one of the competitive advantage sources and the main variable to achieve successfully the goals and have a strategic function in the organization activities (Hapsari et al., 2021; Ricardianto, 2018; Tiftik & Yakupoğlu, 2023). Human Resources Planning also predicts the future need for employees, compares the recent need for manpower, and determines the recruitment system (Dahinine et al., 2023; Ivancevich et al., 2018). According to Al-Maaitah, (2024), human resources recently developing to become

Human Capital are the main organizational resources that can create a profitable performance of supply chain. Human Resources Strategy is needed to improve the competitive advantage of a company through the effectiveness of Human Resources Management and to be sustainable in the long term (Qureshi et al., 2023; Salih et al., 2023), no exception for freight forwarding business today. In general, human resources strongly influence customer loyalty (Marcos & Medina, 2023). However, in the result of another research, Sriviboon, (2022), states that Human Resources do not influence customer loyalty. This research uses Human Resources to increase customer satisfaction and customer loyalty. Therefore, Hypothesis 6 (H<sub>6</sub>) and Hypothesis 12 (H<sub>12</sub>) are formulated as follows:

**H<sub>6</sub>:** Human resources directly influences customer satisfaction.

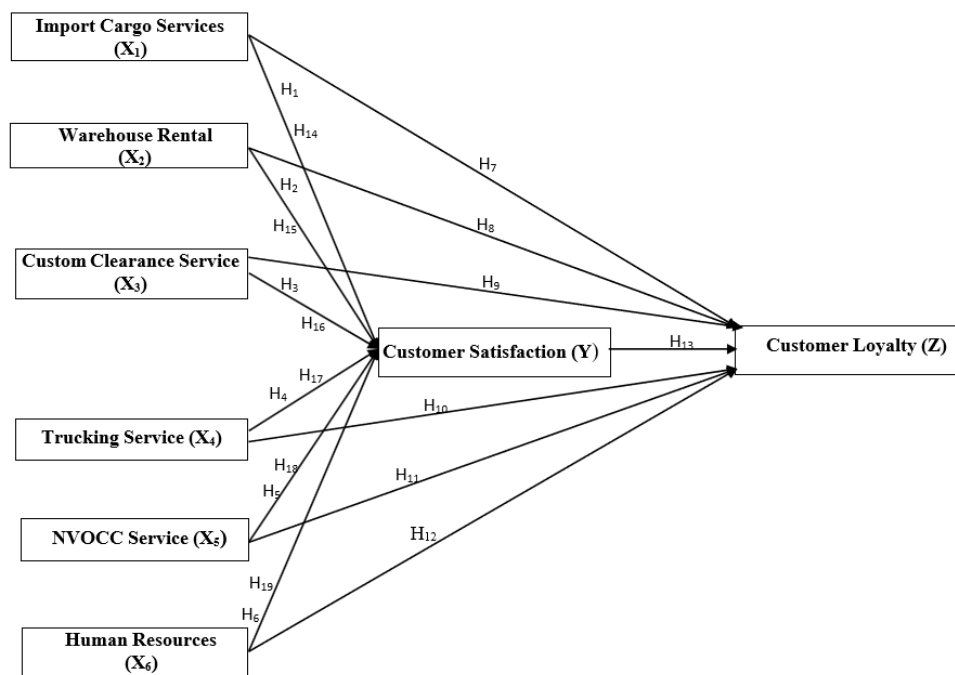
**H<sub>12</sub>:** Human resources directly influences customer loyalty.

### Customer Satisfaction and Customer Loyalty

Theoretically, basically satisfaction in work is positive emotional reaction of an individual's attitude towards work (Nugroho et al., 2020). In general, several studies explain that customer satisfaction influences customer loyalty (Nurjannah et al., 2022; Ricardianto et al., 2024; Sriwidadi & Prabowo, 2023; Surya, 2019). Based on Putra & Nusraningrum, (2022) research, achieving good service quality is a system will increase customer satisfaction and also the benefits received by the company will increase. As a previous phenomenon in the sea transportation mode, especially in cargo service business, Lermatan et al., (2023), Andy & Dahlan, (2023), Lookman, (2022), and Akil & Ungan, (2022), state that customer satisfaction significantly influences customer loyalty. This research uses customer satisfaction to increase customer loyalty. Therefore, Hypothesis 13 (H<sub>13</sub>) is formulated as follows:

**H<sub>13</sub>:** Customer satisfaction directly influences customer loyalty.

Regarding the abovementioned problems, this research aims at knowing and analyzing the influence of several variables such as import cargo service, warehouse rental, custom clearance service, trucking service, NVOCC service, and human resources on customer loyalty through customer satisfaction as the mediating variable in the Hyper Mega Shipping in the year of 2022-2023



**Figure 1. Conceptual Research Model**

## METHOD

This research uses eight variables, namely import cargo service, warehouse rental, custom clearance service, trucking service, NVOCC service, and human resources as exogenous variables and customer satisfaction as intervening variable. Whereas the endogenous variable is customer loyalty. This research uses Structural Equation Modeling (SEM) – SmartPLS model with the data population of importers in Jakarta who need Freight Forwarding service. The selection of sample uses non probability sampling with the number of samples as many as 100 customers of forwarders and cargo importers. The units of analysis that fills in the questionnaire are company managers, purchasing staff, export-import staff, and logistic staff. The instrument testing in this research includes validity test and reliability test. Several stages of this research are planned through the measurement of outer model, namely convergent validity, discriminant validity, composite reliability, and convergent validity or Average Variance Extracted.

## RESULTS AND DISCUSSION

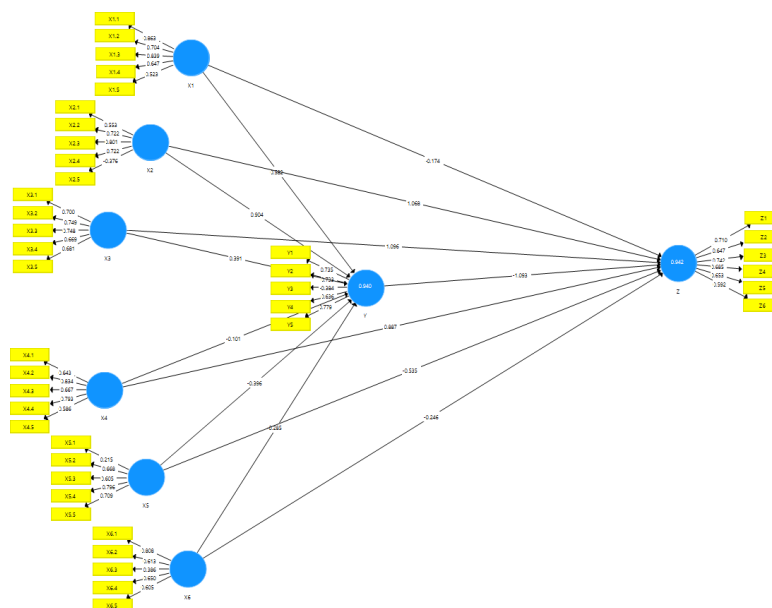
### Results of Convergent Validity Test and Reliability Test

Based on the calculation, all the constructs show the value of AVE bigger than 0.50, that is with the smallest value of 0.704 for the variable of customs clearance service and the biggest value of 0.826 for the variable of LCL warehouse rental. From Table 1, it is known that all the variables in this research are reliable because they have the value of composite reliability > 0.7 with value range of 0.749 – 0.993.

**Table 1. Composite Reliability and Cronbach's Alpha**

Variable	Cronbach's Alpha	Composite Reliability
Import cargo service	0.780	0.844
Warehouse Rental	0.772	0.771
Custom Clearance Service	0.753	0.835
Trucking Service	0.750	0.834
NVOCC Service	0.888	0.749
Human Resources	0.624	0.756
Customer Satisfaction	0.787	0.993
Customer Loyalty	0.760	0.832

### Structural Model (Inner Model) Testing



**Figure 2. Structural Model**

Table 2 shows the value of  $R_{\text{Square}}$  for the variable of customer satisfaction (Y) obtained as 0.940 and residual value of 0.060 thus the influence of exogenous variable constructs X1, X2, X3, X4, X5, X6 on Z is not strong, where the theory from Chin, (1998) gives the criteria of strong  $R_{\text{Square}}$  with the value of 0.67, 0.33 and 0.19. The value of Customer Loyalty (Z) is obtained as 0.942, thus the influence of exogenous variable constructs X1, X2, X3, X4, X5, X6, Z on Y is not strong.

**Table 2 Results of R-Square Test**

Variable	R-Square	R-SquareAdjusted
Customer Satisfaction	0.940	0.936
Customer Loyalty	0.942	0.938

## Discussion

### Results of Hypothesis Testing on Direct Influence

#### H<sub>1</sub>: Import Cargo Service and Customer Satisfaction

Based on the results of hypothesis testing it can be known that import cargo service positively and significantly influences customer satisfaction, with the value of  $t_{\text{-statistic}} 3.625 > 1.660$  and the original value of sample 0.582. Based on those results it can be interpreted that import cargo service positively and significantly influences customer satisfaction, meaning that the first hypothesis is accepted. The conclusion is that import cargo service positively and significantly influences customer satisfaction. In the use of import cargo service, the best service should be provided for the cargo importers to make them satisfied so that their trust will be maintained. If the service is good, then the company will get profit from the shipment. In this research, the services delivered by the company has been good so that the importers are quite satisfied. In general, the result of the first hypothesis testing is in line with the result of study related to cargo activity in transportation. The result of this research is in line with the previous one by Lermatan et al., (2023), and Hirata, (2019) mentioning the existence of correlation between import cargo service and customer satisfaction in shipping activities. In addition, the result of the first hypothesis testing supports the result of study by Kusumo et al., (2021), and Giao et al., (2020) stating that import cargo service related to container and LCL positively influences customer satisfaction. Finally, based on those several previous researches, it is concluded that the variable of import cargo service in this research positively and significantly influences the variable of customer satisfaction.

#### H<sub>2</sub>: Warehouse Rental and Customer Satisfaction

Based on the result of hypothesis testing, it can be known that warehouse rental positively and significantly influences customer satisfaction, with the value of  $t_{\text{-statistic}} 12.971 > 1.660$  and the original value of sample 0.904. Based on the result of that hypothesis testing it can be interpreted that warehouse rental at port positively and significantly influences customer satisfaction, meaning that the second hypothesis is accepted. The result of this research supports the finding of previous research by Xi et al., (2022) stating that in the logistic operation process of e-commerce, the speed of warehouse order taking directly influences and increases customer satisfaction. Finally, based on that previous research, the variable of warehouse rental in this research positively and significantly influences the variable of customer satisfaction.

#### H<sub>3</sub>: Custom Clearance Service and Customer Satisfaction

Based on the result of hypothesis testing it can be known that custom clearance service positively and significantly influences customer satisfaction, with the value of  $t_{\text{-statistic}} 5.456 > 1.660$  and the original value of sample 0.391. Based on that result it can be interpreted that custom clearance service positively and significantly influences customer satisfaction, meaning

that the third hypothesis is accepted. The conclusion is that custom clearance service positively and significantly influences customer satisfaction. This research supports the previous research that there is a significant influence of custom clearance service on customer satisfaction (Hanik et al., 2024). Finally, based on the result of previous research, the variable of custom clearance service in this research positively and significantly influences the variable of customer satisfaction.

#### **H<sub>4</sub>: Trucking Service and Customer Satisfaction**

Based on the result of hypothesis testing it can be known that trucking service positively and significantly influences customer satisfaction, with the value of  $t_{\text{-statistic}} 0.953 < 1.660$  or it can be seen from the  $p\text{-value}$  which is  $0.341 > 0.05$  and the original value of sample which is  $-0.101$ . Based on that testing result it can be interpreted that trucking service positively and significantly influences customer satisfaction, meaning that the fourth hypothesis is accepted. Based on the result of this fourth hypothesis testing, in line with the finding by Ekowati & Rumecko, (2023), that trucking service gives positive contribution to customer satisfaction. This research also supports the finding by De Guzman & Mendoza, (2023), that the analysis of the operational efficiency of trucking service can reveal the important factors which contribute to industrial efficiency and customer satisfaction. Finally, based on the results of those previous researches it can be said that the variable of trucking service in this research positively and significantly influences the variable of customer satisfaction.

#### **H<sub>5</sub>: NVOCC Service and Customer Satisfaction**

Based on the result of hypothesis testing it can be known that NVOCC service positively and significantly influences customer satisfaction, with the value of  $t_{\text{-statistic}} 4.758 > 1.660$  and the original value of sample  $-0.396$ . Based on that result it can be interpreted that NVOCC service positively and significantly influences customer satisfaction, meaning that the fifth hypothesis is accepted. Finally, based on the result of those previous researches it can be said that the variable of NVOCC service significantly influences customer satisfaction in positive direction.

#### **H<sub>6</sub>: Human Resources and Customer Satisfaction**

Based on the result of hypothesis testing it can be known that human resources significantly influences customer satisfaction in positive direction. This can be seen from the value of  $t_{\text{-statistic}}$  which is  $3.519 > 1.660$  and the original value of sample which is  $-0.285$ . Based on that testing result it can be interpreted that human resources positively and significantly influences customer satisfaction, meaning that the sixth hypothesis is accepted. The conclusion is that human resources positively and significantly influences customer satisfaction. The result of this hypothesis supports the research by Rahman et al., (2023) that human resources influences customer satisfaction. Finally, based on the results of those previous researches it can be said that the variable of human resources positively and significantly influences customer satisfaction.

#### **H<sub>7</sub>: Import Cargo Service and Customer Loyalty**

Based on the result of hypothesis testing there is a positive and significant impact of import cargo service on the customer loyalty in Hyper Mega Shipping. This is in line with the resulted value of path coefficient which is  $-0.810$ . The positive influence can be seen from the value of  $t_{\text{-statistic}}$  which is  $3.826 > 1.660$ . The conclusion is that import cargo service positively and significantly influences customer loyalty. Based on that testing result it can be interpreted that import cargo service positively and significantly influences customer loyalty, thus the seventh hypothesis is accepted. Increased customer loyalty can be reached through service

quality improvement, reasonable tariff setting and high satisfaction on the service. To increase customer loyalty, Hyper Mega has provided good services with operational service standby for 24 hours. The result of this research is line with the previous research by Lermatan et al., (2023), stating that import cargo service in sea transportation mode significantly influences customer loyalty. Finally, based on the result of this previous research it can be said that the variable of import cargo service in this research positively and significantly influences the variable of customer loyalty.

#### **H<sub>8</sub>: Warehouse Rental and Customer Loyalty**

Based on the result of hypothesis testing there is a negative and insignificant impact of warehouse rental on customer loyalty in the Hyper Mega Shipping, and in line with the resulted value of path coefficient which is 0.080. The negative influence can be seen from the value of  $t_{\text{-statistic}}$  which is  $1.108 < 1.660$  or it can be seen from the  $p_{\text{value}}$  which is  $0.268 > 0.005$ . Thus, it is concluded that warehouse rental at the port negatively and insignificantly influences customer loyalty. This research is not in line with the result of research by Rozhko et al., (2023), that transportation and warehousing in an integrated area will attract the interest of customers, especially for a brand having an excellent position in the web of global Internet. However, this research is not related to warehouse rental. No previous research related to warehouse rental and customer loyalty is found since these two variables are not directly related each other. Finally, based on the result of that previous research, it can be said that the variable of warehouse rental negatively and insignificantly influences customer loyalty.

#### **H<sub>9</sub>: Custom Clearance Service and Customer Loyalty**

Based on the result of hypothesis testing it can be known that custom clearance service positively and significantly influences customer loyalty, with the resulted value of  $t_{\text{-statistic}}$   $9.330 > 1.660$  and the original value of sample  $0.669$ . Based on that result it can be interpreted that custom clearance service positively and significantly influences customer loyalty, meaning that the ninth hypothesis is accepted. Although no previous researches found discussing the correlation between custom clearance service and customer loyalty, but based on the result of this ninth hypothesis testing, custom clearance service still positively and significantly influences customer loyalty.

#### **H<sub>10</sub>: Trucking Service and Customer Loyalty**

Based on the result of hypothesis testing, there is a positive and significant impact of trucking service on customer loyalty in the Hyper Mega Shipping. This is in line with the value of path coefficients which is 0.997. The positive influence can be seen from the resulted value of  $t_{\text{-statistic}}$  which is  $5.195 > 1.660$ . The conclusion is that trucking service positively and significantly influences customer loyalty. The result of this research supports the research by Wirajaya et al., (2023), that loyal customers have made a purchase contract or truck rental as their business solution. Finally, based on the result of that previous research, the variable of import cargo service in this research positively and significantly influences the variable of customer loyalty.

#### **H<sub>11</sub>: NVOCC Service and Customer Loyalty**

Based on the result of hypothesis testing it can be known that NVOCC service insignificantly influences customer loyalty in a negative direction. This can be seen from the resulted value of  $t_{\text{-statistic}}$  which is  $0.661 < 1.660$  or it can be seen from the resulted  $p_{\text{-value}}$  which is  $0.509 > 0.05$  and the original value of sample which is  $-0.102$ . Based on that result it can be interpreted that NVOCC service negatively and insignificantly influences customer loyalty, meaning that the eleventh hypothesis is rejected. Based on the testing of research result, there

is a negative and insignificant influence of NVOCC service on customer satisfaction in the Hyper Mega Shipping. The conclusion is that NVOCC service negatively and insignificantly influences customer satisfaction. The result of this eleventh hypothesis is not found in some previous researches related to NVOCC. Although no previous researches found discussing the correlation between NVOCC and customer loyalty, but based on the result of this eleventh hypothesis testing, NVOCC service still negatively and insignificantly influences customer loyalty.

#### **H<sub>12</sub>: Human Resources and Customer Loyalty**

Based on the result of hypothesis testing, human resources insignificantly influences customer loyalty in the negative direction. This can be seen from the resulted value of  $t_{\text{statistic}}$  which is  $0.596 < 1.660$  and the original value of sample which is  $0.066$ . Based on that result it can be interpreted that human resources positively and significantly influences customer loyalty, meaning that the twelfth hypothesis is accepted. The conclusion is that human resources positively and significantly influence customer loyalty. Based on the result of this twelfth hypothesis testing, it turns out that this research does not support the research finding by Sriviboon, (2022), saying that human resources influences customer loyalty. Finally, based on the result of that previous research, it can be concluded that the variable of human resources influences the variable of customer loyalty, but based on the result of this twelfth hypothesis testing, human resources still negatively and insignificantly influence customer loyalty.

#### **H<sub>13</sub>: Customer Satisfaction and Customer Loyalty**

Based on the result of hypothesis testing, it can be said that customer satisfaction positively and significantly influences customer loyalty, with the resulted value of  $t_{\text{statistic}}$   $7.527 < 1.660$  and the original value of sample which is  $-1.093$ . Based on that result it can be interpreted that customer satisfaction positively and significantly influences customer loyalty, meaning that the thirteenth hypothesis is accepted. The conclusion is that customer satisfaction positively and significantly influences customer loyalty. This is proven by the result of t-test obtaining the value of  $t_{\text{statistics}}$   $10.235$  which is accepted at the significance of 5%. Loyal customers generally will continue buying the brand although they face many alternative brands of competitors' products which offer more excellent service characteristics. If many customers of an outdoor product brand enter in this category, it means the outdoor product brand has a strong brand power. In general, the result of this hypothesis testing supports the results of studies by Thamrin & Harwani, (2022), related to the cargo activities in the transportation mode, explaining that customer satisfaction influences customer loyalty.

The result of this thirteenth hypothesis is also in line with the results of previous studies on sea transportation modes especially in the business of cargo service by Lermatan et al., (2023), Andy & Dahlan, (2023), Lookman, (2022), Akıl & Urgan, (2022) and Hafez et al., (2021), Balci et al., (2019) and significantly influences customer loyalty. Based on that result it can be interpreted that customer satisfaction positively and significantly influences customer loyalty, meaning that the thirteenth hypothesis is accepted. Finally, based on the result of some previous researches, it can be said that the variable of customer satisfaction positively and significantly influences customer loyalty.

#### **H<sub>14</sub>: Import Cargo Service and Customer Loyalty Through Customer Satisfaction**

The fourteenth hypothesis, import cargo service influences customer loyalty through customer satisfaction results in the value  $t_{\text{statistic}}$   $4.032 > 1.660$ . Thus, the indirect influence of the variable of customer satisfaction as the intervening variable can be accepted. Based on the calculation, the value of VAF in this research is 42,5% meaning that the variable of customer satisfaction mediates in partial the collaboration between import cargo service and customer

loyalty. It needs an optimum level of import cargo service seen from the side of import cargo delivery in the Hyper Mega Shipping in order to obtain the customer loyalty from importers. The result of this fourteenth is in line with the findings by Lermatan et al., (2023), Sarifah et al., (2023), and Hamidin & Hendrayati, (2022), stating that the result of good services in the activity of import cargo service influences customer loyalty mediated by customer satisfaction. Finally, based on the results of some previous researches, import cargo service influences customer loyalty through customer satisfaction.

#### **H<sub>15</sub>: Warehouse Rental and Customer Loyalty Through Customer Satisfaction**

The fifteenth hypothesis testing, LCL warehouse rental at the port on customer loyalty through customer satisfaction results in the value of  $t_{\text{statistic}} 6.208 > 1.660$ . Then, it can be said to be significant. The result of the fifteenth hypothesis testing is significant, then customer satisfaction becomes the partial mediation in the indirect correlation with loyalty. Therefore, the fifteenth hypothesis is accepted. Based on calculation, the value of VAF in this research is 7% meaning that the variable of LCL warehouse rental in the port gives partial influence to customer loyalty through customer satisfaction. It needs an optimum level of LCL warehouse rental at the port from the perspective of import cargo delivery service in the Hyper Mega Shipping to get customer loyalty from importers.

#### **H<sub>16</sub>: Custom Clearance Service and Customer Loyalty Through Customer Satisfaction**

The sixteenth hypothesis testing, custom clearance service on customer loyalty through customer satisfaction results in the value of  $t_{\text{statistic}} 5.016 > 1.660$ . Then, it can be interpreted as significant. The result of the sixteenth hypothesis testing is significant, therefore customer satisfaction becomes the mediation in the indirect correlation with loyalty. It means the sixteenth hypothesis is accepted. Based on the calculation, the value of VAF in this research is 11.5% meaning that the variable of custom clearance service in the port simultaneously gives a significant influence to customer loyalty through customer satisfaction. It needs an optimum level of custom clearance service from the perspective of import cargo delivery service in the Hyper Mega Shipping to get customer loyalty from importers.

#### **H<sub>17</sub>: Trucking Service and Customer Loyalty Through Customer Satisfaction**

The result of the seventeenth hypothesis testing with the original value of sample 0.110 indicates a negative number with the value of  $t_{\text{statistic}} 1.001 < 1.660$  and  $p_{\text{value}} 0.000 < 0.05$ . Then, the model of indirect impact of the variable of customer satisfaction as the intervening variable is rejected. This become a suggestion for the Hyper Mega Shipping to maintain and retain the truck condition so as to eliminate the obstacles during the delivery.

#### **H<sub>18</sub>: NVOCC Service and Customer Loyalty Through Customer Satisfaction**

The eighteenth hypothesis testing, NVOCC service on customer loyalty through customer satisfaction results in the value of  $t_{\text{statistic}} 4.494 > 1.660$ . Therefore, it can be interpreted as significant. Based on the result of the eighteenth hypothesis testing which is significant, customer satisfaction becomes mediation in the indirect correlation between NVOCC service and customer loyalty. It means the eighteenth hypothesis is accepted. Based on calculation, the value of VAF in this research is 8.4% which means that the variable of trucking service mediates partially the correlation between NVOCC service and customer loyalty through customer satisfaction. It needs an optimum level of NVOCC service from the perspective of import cargo delivery service in the Hyper Mega Shipping to get customer loyalty from importers.

#### **H<sub>19</sub>: Human Resources and Customer Loyalty Through Customer Satisfaction**

Based on the result of the nineteenth hypothesis testing, human resources influence customer loyalty through customer satisfaction with the value of  $t_{\text{statistic}} 3.498 > 1.660$ . Therefore, this hypothesis can be interpreted as significant. Customer satisfaction becomes the intervening variable in its indirect correlation with customer loyalty. It means the nineteenth hypothesis is accepted. Based on the calculation, the value of VAF in this research is 6.1% which means that the variable of customer satisfaction mediates partially the correlation between human resources and customer loyalty. It needs an optimum level of human resources from the perspective of import cargo delivery service in the Hyper Mega Shipping to get customer loyalty from importers. the result of this nineteenth hypothesis testing supports the previous research that the variable of customer satisfaction mediates partially the correlation between human resources and customer loyalty (Rane et al., 2023). Finally, based on the results of those previous researches, the variable of human resources influences customer loyalty through customer satisfaction.

## CONCLUSION

Related to the import cargo service provided by the company, it must really deliver the best service from the perspective of communication or the understanding of cargo delivery flow to the customer, so that they do not feel disappointed with the service provided by the company in term of warehouse rental, the company must keep paying attention to facilities and infrastructure that build the company's excellences. Concerning custom clearance service, what should be paid attention is the personnel in custom clearance department; the company should hire those who understand the flow of custom clearance. Concerning trucking service, the company's driver should know the application of cargo tracking, so that he can give first aid to the cargo. In the NVOCC service, the company should apply the price of origin charges, such as Ocean Freight, to be more competitive than the competitors. Concerning human resources, the company must be able to recruit competent human resources as well as to organize trainings related to the activities of freight forwarding company. Customer satisfaction must be really paid attention in terms of the quality of service the company provided. The company must improve the service quality so that customers feel satisfied and it has a positive impact on customer loyalty.

In general, novelty in research is a new understanding of the factors that affect customer loyalty, especially in the transportation of goods, can also be considered something new. Based on the previous discussion, by looking at the 19 hypotheses with the findings of three hypotheses, no previous research was found, namely in the fifth, ninth and eleventh hypotheses. In particular, in the simultaneous testing of the hypothesis, in the 15th, 16th, 17th, and 18th hypotheses, no previous research results were found. Overall, this study with six exogenous variables, one intervening variable and one endogenous variable, based on observation, no previous studies were found to be relevant. So, in these hypotheses, empirically it can be stated as a novelty of research, especially in freight transportation services.

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