

A Model of Service Marketing in Port Services: Empirical Study in PT Pelabuhan Indonesia II (Persero), Tanjung Priok Branch

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Port of Tanjung Priok is one of the ports in Indonesia which has the potential to be developed into an international seaport with the level of activity and the capacity of loading and unloading. This study aims to understand the key variables that determine the service quality of the port, so as to achieve customer satisfaction and loyalty. By using Structural Equation Modeling, this study analyzes the effects of various dimensions of service quality to customer satisfaction, and the relationships formed between perceived value and customer loyalty of the port service industry in Indonesia. The sampling method used was stratified random sampling with a total of 406 respondents. The results show positive relationships between the variables. This implies that service quality is an important aspect to focus on in order for Port of Tanjung Priok to achieve customer satisfaction and loyalty.

Keywords: service marketing, service quality, perceived value, customer loyalty, port industry

Pelabuhan Tanjung Priok merupakan salah satu pelabuhan di Indonesia yang memiliki potensi untuk dikembangkan menjadi pelabuhan internasional dengan tingkat aktivitas dan kapasitas bongkar muat. Penelitian ini bertujuan untuk memahami variabel kunci yang menentukan kualitas pelayanan pelabuhan, sehingga mencapai kepuasan dan loyalitas pelanggan. Dengan menggunakan Structural Equation Modeling, penelitian ini menganalisis pengaruh berbagai dimensi kualitas pelayanan terhadap kepuasan pelanggan, serta hubungan yang terbentuk antara perceived value dan loyalitas pelanggan dari industri jasa pelabuhan di Indonesia. Metode sampling yang digunakan adalah stratified random sampling dengan total responden sebanyak 406 orang. Hasil penelitian menunjukkan hubungan yang positif antara variabel. Hal ini menandakan bahwa kualitas pelayanan merupakan aspek penting agar Pelabuhan Tanjung Priok dapat mencapai kepuasan dan loyalitas pelanggan.

Kata kunci : pemasaran jasa, kualitas jasa, perceived value, loyalitas pelanggan, industri pelabuhan

Introduction

Currently ports around the world are faced with many changes in global trade. Maritime transportation has become a key component of global trade. The presence of satisfactory port would be needed to support the mobility of goods around the world. As a consequence, these changes will create competition between ports. Thus, it is important for each port to provide a wide range of facilities to accommodate the needs of global trade.

Ports can be categorized as services because it has some of activities and functions that do not produce physical products, including security,

traffic flow, maintaining the safety of sailing, and intra or inter displacement. Therefore, to assessment of the port performance should be based on aspects of service quality.

PT Pelabuhan Indonesia II (Persero) (PT Pelindo II) Tanjung Priok Branch which is the object of this research is expected to provide good services to its customers. Services are often considered a complicated consumption activity. The term service has a lot of meanings and scope. According to Zeithaml, Bitner, and Gremler (2009) service is an act, process, and performance.

According to Kotler (2000) the quality of services should start from the needs of the customer and ends with customer satisfaction

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and a positive perception of service quality. Consumers should provide an assessment of the quality of services received as they are the ones who buy and consume the services. Thus to evaluate the quality of port services, the measurement and assessment needs to be done by the customers or users of the port services.

Wu et al. (2011) conducted a study on the transportation industry by using a case study of Taiwan high-speed rail, in which the team researched the structural relationship between service quality, perceived value, corporate image, customer satisfaction, and behavioral intentions. Zins (2001) explains that companies should not only pursue satisfaction, but also look at re-purchase, in other words loyalty. Fornell (1992) found that loyalty is influenced by a combination of factors of customer satisfaction, switching barriers and voice.

Customer loyalty is crucial to driving in increased quantity and frequency of repurchase, increased cross-sales and the generation of more positive word-of-mouth. Loyal customers are not always satisfied, but satisfied customers tend to be loyal. Without loyal customers, companies cannot ensure its long-term profitability. Therefore, this research focuses on customer loyalty, not just behavioral intentions.

Perception of port services would be affected by various factors that occur in the process of customer services at the port, which were related to infrastructure availability, efficiency, and reliability of the harbor. So this study aims to model service marketing by integrating ten determinants of service quality which are accessibility, reliability, functionality, information availability, tangibles, responsiveness, knowledge, service recovery, trust, and empathy. Furthermore, this research investigates and examines the relationships between the four variables: service quality, customer satisfaction, perceived value and customer loyalty.

Research related to the marketing of services of a company will provide in-depth information about the product and services, markets, competition, up to the strategy that can be taken to win the competition. If a company uses a comprehensive research library, then the company can make decisions with greater clarity and confidence. By having research for marketing decisions, companies can optimize the choice of strategy and minimize the risk of failure.

This research is becoming increasingly important given the object of this study is the port. This service industry plays a vital role for the economy of a country. This field is one of the strategic areas that house the lives of many people.

Literature Review

Port Service Quality

According Kolanović et al. (2011), service quality can be defined from two aspects, namely the organization-based and customer-based aspects. From the aspect of organization-based, service quality is a basic need that is characterized by price. Meanwhile, from the aspect of customer-based, service quality is a set of attributes (dimensions of quality of service parameters that are most important and can be measured by a set of attributes) to evaluate whether certain services are already meeting the needs of its customers. From the aspect-based organization, the services provided must be in accordance with customer needs, but on the condition that the cost of quality is also taken into account, including warranties or guarantees, and the consequences of adverse production services. Service quality was analyzed aspects related to the customer based on the level of customer satisfaction obtained from the services provided. This assessment is obtained by comparing the perceived quality with the level of expected quality.

The first factor identified was accessibility, which prioritizes the distance from the main road or highway as the most important factors shaping it. Port reliability is closely related to the suitability of the time required by a ship to transport or unload the contract agreed at the beginning. The third factor (port functionality) focuses on the ability of a port of a port to have a complete and correct information related to containers is available at any time. Port information availability as a fourth factor prioritizes the availability of information on the internet. Meanwhile, port flexibility is related to the operation of such procedures clearly outlined port. Questions to be an indicator of flexibility port is similar to the third and fourth factors. Therefore, in this study the variable port flexibility is excluded.

Service Quality and Customer Satisfaction

Shanaki et al. (2012), examined the relationship between service quality and customer satisfaction with case studies Shahid Rajayi Port in Iran. In his research, Shanaki et al. (2012) studied three groups of customers facing a harbor, i.e. the investor company, owner of the commodity, and the shipping company.

Another study conducted by Caldeirinha et al. (2013) also measured customer satisfaction on some consumer groups. The research focused on shipper/ logistic chain operator satisfaction, ship-owners satisfaction, as well as the Shipping agent's and freight forwarder's satisfaction. In addition, measurements were also carried out on satisfaction with productivity. Pallis and Vitsounis (2009) research results also confirmed that the different categories of port users consider and prioritize the factors differently in determining satisfaction. So in this research, measurement and testing models will also be conducted on more than one port consumer group, namely the cargo owners and shipping companies.

Shanaki et al. (2012) identified six variables related to port service quality, namely tangibles, responsiveness, knowledge, trust, accessibility, and service recovery. The research conducted by Shanaki et al. (2012) actually refers to previous research in the field of services marketing performed by Parasuraman, Berry, and Zeithaml (1988). In that study, revealed that there are five main dimensions of service quality, i.e. reliability, responsiveness, assurance, empathy, and tangibles. This research will also contribute to measure the effect of empathy towards service quality. However, measurements of these variables are taken from research Pantouvakis (2010) that also measure the effect of the five dimensions, but are specific in the port industry.

Besides that, knowledge, trust and service recovery are also identified as important variables. Shanaki et al. (2012) defines knowledge as the ability of employees and the way they communicate; trust as the ability of the port to build trust of customers; and service recovery as the cooperation of employees to solve any problems that emerge.

Service Quality, Perceived Value, Customer Satisfaction, and Customer Loyalty

Wu et al. (2011) conducted a study on the transportation industry by using a case study of high-speed rail in Taiwan. In his research, he saw the influence of service quality, perceived value, corporate image and customer satisfaction to behavioral intentions. There are some similarities between the characteristics of the case studies raised Wu et al. (2011) with case studies in this research, including focus on marketing services and industry also appointed as a case study, namely the transportation services industry.

Chen (2008) also found that perceived value has a positive effect on satisfaction and perceived value and satisfaction to have an influence on behavioral intentions. However, Wu et al. (2011) found that perceived value not only has a direct effect on customer satisfaction, but also a moderating effect on the influence of service quality on customer satisfaction. Thus, this study also examines the moderating effect on perceived value. Perceived value is consumers' overall assessment of the utility based on perception of what is received and what is given (Parasuraman, Berry, & Zeithaml, 1988). People are going to assess the products or services on the basis of their perceptions of price, quality, and value, rather than on the basis of objective attributes (such as actual prices or actual quality).

However, according to Chaudhuri and Holbrook (2001), behavioral intention is only one aspect of loyalty. Chaudhuri and Holbrook (2001) explained that behavioural loyalty consists of the purchase of the product over and over, while attitudinal loyalty includes a dispositional level of commitment, in the form of some unique value associated with these products. Oliver (1999) defines loyalty as a commitment to purchase or reclaim the goods or services are preferable, thereby causing repeated purchases on goods or services that are the same despite situational influences and marketing efforts helped to have the potential to result in changes in behavior. This definition also emphasizes two different aspects of loyalty as well described in previous studies on behavior and attitude (Jacoby & Chesnut, 1978).

Zins (2001) explained that the company should not only pursue satisfaction, but also look at consumer behavior in re-purchasing. In other words look loyalty, Fornell (1992) considered that loyalty is influenced by a combination of factors of customer satisfaction, switching barriers and voice. Loyal customers are not always satisfied, but satisfied customers tend to be loyal. There is a broad consensus that satisfaction is an antecedent of loyalty (Gures et al., 2014; Karatepe & Ekiz, 2004; Nadiri et al., 2008). Satisfaction itself is a comparison between the results of the various transactions carried out with previous expectations (Forgas et al., 2010). If these experiences resulted in low levels of satisfaction, then it will have a negative impact on the level of loyalty.

In addition to the satisfaction, of course, there are other things that affect customer retention. Switching cost, or the price to pay when customers have to move a product or brand, comprising a number of factors that also produces retention. All costs (financial, psychological, learning products, and others) associated with leaving one supplier to support others belong to the switching barriers. According to TARP (1979), complaints handling carried out by the company can change the customers who complained to loyal customers. Therefore, Fornell (1992) also incorporate voice, the complaints expressed by the customer. If the relationship between voice and loyalty is positive, it indicates that complaint handling done by the company is working well and is quite significant for the company because it can turn complaining customers into loyal customers.

According to Oliver (1997), loyalty is the highest level of commitment, which implies a transition from positive assumption to the commitment to buy back as a stage prior to action to make the purchase.

It can be concluded that the loyalty variable will be more comprehensive in the attitudes and behavior of consumers when they are satisfied or dissatisfied with a particular product, in this case port services.

Thus, based on the results of a study of previous studies as described above, and then built a conceptual framework as follows:

- H1: Accessibility has a positive effect on service quality
- H2: Reliability has a positive effect on service

quality

- H3 : Functionality has a positive effect on service quality
- H4 : Information Availability has a positive effect on service quality
- H5 : Tangibles has a positive effect on service quality
- H6 : Responsiveness has a positive effect on service quality
- H7 : Knowledge has a positive effect on service quality
- H8: Service recovery has a positive effect on service quality
- H9: Trust has a positive effect on service quality
- H10: Empathy has a positive effect on service quality
- H11: Service quality has a positive influence on customer satisfaction.
- H12: Service quality has a positive effect on perceived value.
- H13: Perceived value has a positive influence on customer satisfaction.
- H14: Perceived value has a moderating effect on the influence of service quality on customer satisfaction.
- H15: Customer satisfaction has a positive influence on customer loyalty

Conceptual Model

Based on the hypotheses development above, the conceptual model of this study can be seen in Figure 1.

Methods

Validity and Reliability Testing

Validity test is related to whether a variable measures what should be measured. A variable is said to be valid if it is able to measure what is desired. Validity test is done by correlating the score of each item with the total score. The correlation technique used is the Pearson Product Moment, where the instrument is said to be valid if the correlation (r) is greater than (r) table. In this study, a validation test is performed using SPSS version 22.0 and using a sample size of 30.

Reliability test indicates the extent to which a measuring tool can provide relatively similar

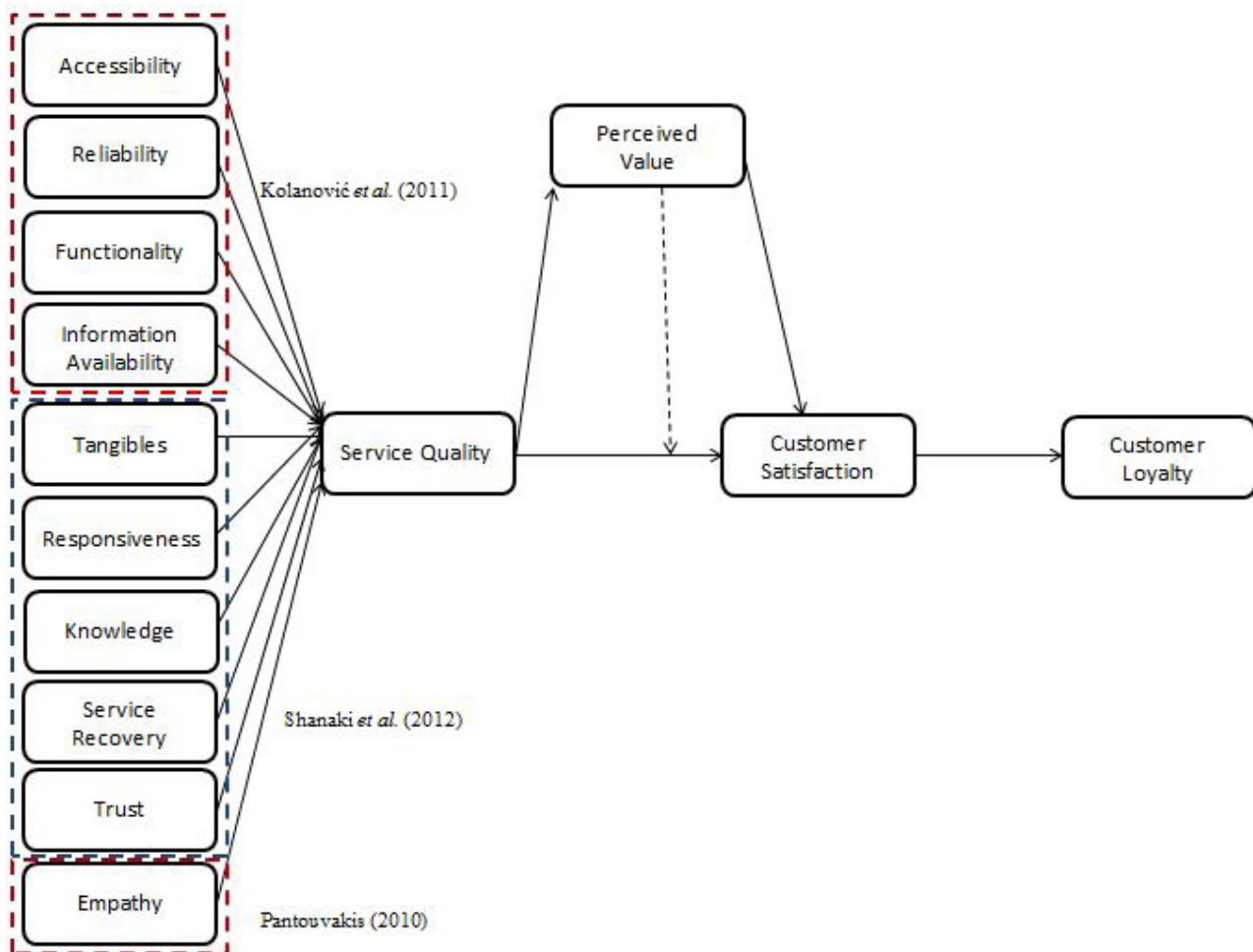


Figure 1. Research Model

results when measurements were taken again on the same object. The minimum reliability value of dimensional forming latent variable that can be accepted over 0.60. If the value of Cronbach's Alpha is more than 0.60 means the already reliable. Table 1 on test validity and reliability of the questionnaire shows that all indicators can be concluded as valid and reliable.

Sample

The population in this study is all who have experienced the services of the Port of Tanjung Priok, which consist of cargo owners and shipping companies. Both groups will be referred to as customers in this study. The sampling technique used was stratified random sampling. The first stage of this technique is to develop categories or quotas of the elements of the population studied. To develop these categories, the researchers must list the relevant characteristics and determine the distribution of the characteristics in the population. In this study, two groups of customers have been

identified, namely cargo owners and shipping companies.

Subsequently, the sampling is carried out at random so that each member of the population has an equal chance to be selected. Randomization is done by dividing up the list of companies that are customers of Port Tanjung Priok by size. Then from each group, a number of companies is randomly selected based on the number of the company in the list.

After obtaining the list of companies to enter the sample, the next step is to contact a representative from each company to ask his or her willingness to become a respondent. In this research, there are criteria that will be used to select respondents in the sample, which is the manager and have the authority and the experience to carry out an assessment of the services rendered by PT Pelindo II Tanjung Priok Branch.

The sample size in this study is 406 respondents, with 209 cargo owners and 118 shipping companies. Furthermore, both groups of customers are classified again based on their

Table 1. Validity and Reliability Results

Variable	Indicator	r count	r table	Validity	Cronbach's Alpha
Port accessibility	PACCSS1	0.797	0.361	Valid	0.876
	PACCSS2	0.855	0.361	Valid	
	PACCSS3	0.874	0.361	Valid	
	PACCSS4	0.888	0.361	Valid	
Port reliability	PREL1	0.668	0.361	Valid	0.743
	PREL2	0.687	0.361	Valid	
	PREL3	0.436	0.361	Valid	
	PREL4	0.512	0.361	Valid	
	PREL5	0.541	0.361	Valid	
	PREL6	0.551	0.361	Valid	
	PREL7	0.784	0.361	Valid	
	PREL8	0.689	0.361	Valid	
Port functionality	PFUNC1	0.470	0.361	Valid	0.68
	PFUNC2	0.600	0.361	Valid	
	PFUNC3	0.662	0.361	Valid	
	PFUNC4	0.561	0.361	Valid	
	PFUNC5	0.578	0.361	Valid	
	PFUNC6	0.598	0.361	Valid	
	PFUNC7	0.659	0.361	Valid	
Port information availability	PIA1	0.877	0.361	Valid	0.91
	PIA2	0.924	0.361	Valid	
	PIA3	0.960	0.361	Valid	
Port tangibles	PTAG1	0.859	0.361	Valid	0.862
	PTAG2	0.732	0.361	Valid	
	PTAG3	0.685	0.361	Valid	
	PTAG4	0.769	0.361	Valid	
	PTAG5	0.776	0.361	Valid	
	PTAG6	0.819	0.361	Valid	
Port responsiveness	PRESP1	0.709	0.361	Valid	0.783
	PRESP2	0.661	0.361	Valid	
	PRESP3	0.570	0.361	Valid	
	PRESP4	0.552	0.361	Valid	
	PRESP5	0.707	0.361	Valid	
	PRESP6	0.560	0.361	Valid	
	PRESP7	0.548	0.361	Valid	
	PRESP8	0.748	0.361	Valid	

size, whether large, medium or small. The sample as a whole consists of 12 large cargo owners, 68 medium sized cargo owners, as well as 129 small cargo owners. In addition, there are 22 large shipping companies, 57 medium shipping companies, and 118 small shipping companies.

Variables and Measurement Scale

In this study, the variables that are investigated include exogenous latent variables which consist of accessibility, reliability, functionality, information availability,

tangibles, responsiveness, knowledge, service recovery, assurance, empathy. There are also endogenous latent variables which consist of service quality, customer satisfaction, perceived value, customer loyalty.

The variables above were measured with a number of questions as indicators of each variable. The data was collected using a Likert Scale with a scale between 1 to 5, where 1 = strongly disagree and 5 = strongly agree.

Data Analysis

The analyses used in this study include Descriptive Statistics and Structural Equation Modeling (SEM). However before conducting the analysis, the data has been tested for its validity and reliability to ensure that the questionnaires distributed can be used to obtain the required data. Descriptive analysis aims to get an overview of respondent characteristics (the profile and behavior of respondents). Processing is done by using a frequency analysis of the answers given by the respondents. Meanwhile, SEM is used to validate the model that has been built, as well as see the relationships between the variables observed. In this study there is a moderating variable, namely perceived value which in the hypothesis moderates the effect of service quality on customer satisfaction. This study used an interaction models approach because the moderating variable and moderated variables are continuous (not discrete or categorical).

Results and Discussion

Respondent Profile

The study included 406 respondents who represent a wide range of companies who are active users of port services from PT Pelindo II at the Port of Tanjung Priok, including cargo owners and shipping companies. Overall, the number of questionnaires filled out by respondents consisted of 22 large shipping companies, 57 medium shipping companies, and 118 small shipping companies. In addition, there are also 12 large cargo owners, 68 medium cargo owners, as well as 129 small cargo owners. Based on the results of the validity and reliability testing, the questionnaire used can be qualified as valid and reliable for all the questions in the questionnaire.

Test of Model Fit

In this study, the data analysis technique used was Structural Equation Modeling (SEM), which was operated using the program Linear Structural Relationship (LISREL) version 8.7. The advantage of using SEM in management research its ability to confirm the dimensions of concepts or factors that are commonly used in management, as well as its ability to measure the effect of the relationships that theoretically exist (Ferdinand, 2002).

In this study, nine indicators that belong to the Goodness of Fit Indices (GOF Indices) are used to determine the match of the theoretical model with the empirical data obtained by using the questionnaires. The results for the GOF Indices can be seen in Table 2.

Table 2 summarizes the results of the GOF in which all indicators show that the model is fit. Almost all indicators have good fit or in other words have a good match between the theoretical model built and the data obtained from this research. There is only one indicator has marginal fit, the Root Mean Square Error of Approximation (RMSEA) yet it still meets the minimum requirements to be accepted. Therefore the indicators in Table 1 can be considered adequate so that it can conclude that the overall model is a good match (Wijanto, 2008). In other words, data obtained from the questionnaires have been able to answer the theoretical model. After ensuring compatibility of research data with the theoretical model, the next step is to see the results of relationship testing between the variables in this study.

Hypothesis Test

The structural model and loading factors of the data that has been processed is shown in Figure 2. Table 2 summarizes the results of structural testing that can explain the hypothesis test results set forth in the study. Based on these test results, it was found that there are nine factors that affect the service quality, namely port accessibility, port reliability, port functionality, port information availability, port tangibles, port responsiveness, port trust, port knowledge and port empathy. Among the nine factors, the factors which have the greatest influence are port reliability, port functionality,

Table 2. Results of Goodness-of-Fit Tests

Goodness-of-Fit Criteria	Cut-off-Value	Result	Fit
Root Mean Square Residual (RMR)	≤ 0.05 or ≤ 0.1	0.038	Good Fit
Root Mean Square Error of Approximation (RMSEA)	≤ 0.08	0.088	Marginal Fit
Goodness of Fit (GFI)	≥ 0.90	0.98	Good Fit
Adjusted Goodness of Fit Index (AGFI)	≥ 0.90	0.97	Good Fit
CFI (Comparative Fit Index)	≥ 0.90	0.98	Good Fit
Normed Fit Index (NFI)	≥ 0.90	0.98	Good Fit
Non-Normed Fit Index (NNFI)	≥ 0.90	0.98	Good Fit
Incremental Fit Index (IFI)	≥ 0.90	0.98	Good Fit
Relative Fit Index (RFI)	≥ 0.90	0.97	Good Fit

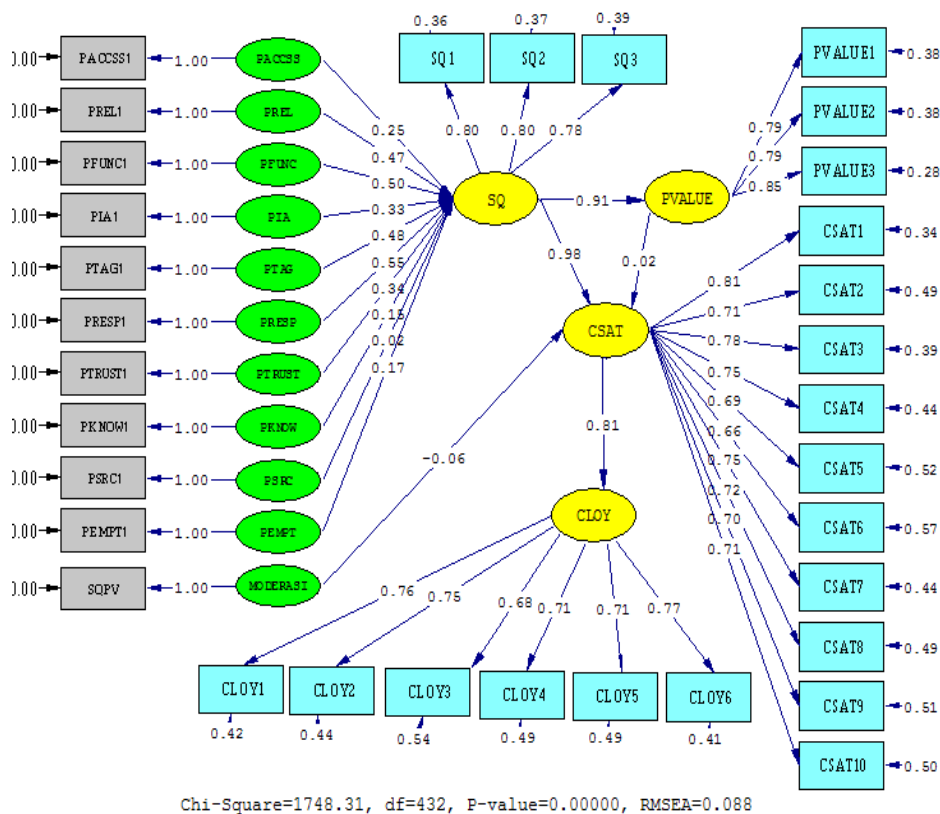


Figure 2. Standardized Loading Factors

port tangibles and port responsiveness, as can be seen from the value of the standardized loading factors.

Port accessibility has a positive impact on the port service quality ($\gamma_{11} = 0.25$; $p < 0.01$). This indicates that the port has good connections with highways, railways, hinterland (the area around the city). In addition, processes in customs and inspection procedures are clear and uncomplicated, in accordance with the wishes of the customers.

Port reliability has a positive and significant impact on the port service quality ($\gamma_{12} = 0.47$;

$p < 0.01$). This shows that the port can provide a reliable, error free service, and all operations are carried out in accordance with the specifications detailed in the contract between the company and the customers.

The t-test results also proves that the port functionality has a positive influence on port service quality ($\gamma_{13} = 0.50$; $p < 0.01$). This indicates that the port service in Port of Tanjung Priok is conducted for 24 hours per day, 7 days per week, and the service is supported with complete and accurate information.

Table 3. Results of Hypothesis Test

Path			Standardized loading factor	t-value
PACCS	→ SQ	γ_{11}	0.25	11.64**
PREL	→ SQ	γ_{12}	0.47	18.04**
PFUNC	→ SQ	γ_{13}	0.50	15.49**
PIA	→ SQ	γ_{14}	0.33	13.49**
PTAG	→ SQ	γ_{15}	0.48	18.43**
PRESP	→ SQ	γ_{16}	0.55	17.78**
PTRUST	→ SQ	γ_{17}	0.34	6.48**
PKNOW	→ SQ	γ_{18}	0.15	2.47*
PSRC	→ SQ	γ_{19}	0.02	0.27
PEMPT	→ SQ	γ_{10}	0.17	3.03**
SQ	→ PVALUE	β_1	0.91	37.92**
SQ	→ CSAT	β_2	0.98	7.12**
PVALUE	→ CSAT	β_3	0.02	0.12
MODERASI	→ CSAT	β_4	-0.06	-3.21**
CSAT	→ CLOY	β_5	0.81	41.63**

Notes : *significant at 95% confidence level; **significant at 99% confidence level

Referring to Tabel 3, port tangibles proved as one of the significant factors that influence port service quality ($\gamma_{15} = 0.48$; $p < 0.01$). This indicates that the port facilities are up-to-date and modern. In addition, port personnel are dressed accordingly so as to make a professional impression. Port responsiveness has a positive and significant effect on port service quality ($\gamma_{16} = 0.55$; $p < 0.01$). This shows that the personnel at the port are very attentive to the needs of the customers. They are agile, able to deal with customer problems, and willing to provide assistance to customers.

The test results also proves that port service recovery does not have a significant effect on port service quality ($\gamma_{19} = 0.02$; $p > 0.05$) because the personnel at the port can work with customers with good and no port personnel which leads to disputes with customers, in contrast many port personnel provide assistance to customers.

Perceived value is does not significantly affect customer satisfaction ($\beta_3 = 0.02$; $p > 0.05$), thus H12 is rejected. This shows that customers do not have problems with value or tariffs as long as the services are performed well and lead to customer satisfaction. Meanwhile, perceived value has a negative

moderating effect on the relationship of service quality and customer satisfaction ($\beta_4 = -0.06$; $p < 0.01$), thus H14 is accepted. This means perceived value weakens the influence of service quality on customer satisfaction. In other words, perceived value also has the effect or contribution to customer satisfaction although the effect is not direct. This negative moderating effect may be due to the high logistics costs that are still perceived by customers, especially compared to other ports in neighboring countries. Thus although there is no direct effect, this perceived value indirectly decreases the customer satisfaction from the service quality experienced by the customers of the port. This is the reason we found that interesting phenomena in our findings. Thus these results suggest that customer satisfaction can be improved by focusing on service quality

Furthermore, customer satisfaction has a positive and significant influence on customer loyalty ($\beta_5 = 0.81$; $p < 0.01$). This means customer satisfaction will determine their loyalty. Therefore it becomes very important to strive for customer satisfaction so that in future they will reuse the services of PT Pelindo II at the Port of Tanjung Priok.

Conclusion

Customer loyalty on port services is influenced by customer satisfaction, while customer satisfaction is influenced by the service quality of the port. The factors that influence service quality are accessibility, reliability, functionality, information availability, tangibles, responsiveness, knowledge, trust, and empathy. Service recovery is not shown to have an influence on service quality perceived by port users.

Meanwhile, service quality also had an influence on perceived value. However, perceived value is not proven to have a significant direct effect on customer satisfaction. Perceived value is shown to have a moderating effect which weakens the influence of service quality on customer satisfaction. This indicates that the perceived value is still a consideration of port customers, although it does not directly affect their satisfaction.

From the hypothesis test results, there are some things that should be a concern of PT Pelindo II regarding its port services. First, the company must be more aware that service quality plays a very important role to obtain customer satisfaction. Once the customer is satisfied by the service port services provided by the company, they tend to be loyal to the company. Therefore, maintaining the quality of service is absolutely essential for the company mainly, especially related to the functionality and responsiveness of the port.

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Moreover, in order to improve the quality of port services, the company can raise the tariff applied to the customer. That is because customers are not too worried about the tariff they have to pay as long as they obtain a satisfactory service. However, PT Pelindo II must continue to improve its services so that perceived value no longer has a negative moderating effect, but otherwise strengthen the role of customer perceptions in order to be more satisfied with the services provided. This is becoming increasingly important in an era in which the company is required to be more competitive. Moreover, there are already some research found that logistics costs in Indonesia is still very high. To overcome this, PT Pelindo II needs to work together with all stakeholders, including the government, in order to be able to lower the cost of logistics, especially through marine transportation in Indonesia.

Results of this study also add to empirical study on the integration of a number of variables that affect the quality of service and its influence on perceived value and customer satisfaction. Subsequently, this research examines the influence of customer satisfaction on customer loyalty on the port.

Based on the findings in this study, some suggestions are proposed for further research and studied considering that in some other studies this aspect also affects service quality. Additionally, comparative studies can be done to discover whether the moderating effect also applies to other ports in Indonesia.

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