

THE EFFECT OF PORT SERVICE QUALITY ON LOADING AND UNLOADING CUSTOMER SATISFACTION AT PT TERMINAL TELUK LAMONG

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Abstrac: This study discusses the quality of services provided by PT. Teluk Lamong Terminal. The purpose of this study is to test and analyze customer satisfaction at PT Terminal Teluk Lamong. This study uses quantitative research methods by using purposive sampling as a sample determinant because the company only has 25 companies as service users and researchers get data directly from PT. Teluk Lamong Terminal. The analytical test tool used by researchers is Smart PLS 3 with SEM (Structural Equation Modeling) analysis method. The conclusion of the study is that it provides an understanding of how companies can retain and attract new customers through quality services, creating added value for their business. Limitations in this study may not provide a very detailed insight into the practical steps or actions taken by PT Terminal Teluk Lamong to improve service quality and improve customer satisfaction levels. Identifying its concrete solutions may require further research or more in-depth analysis.

Keywords: *service quality, customer satisfaction, structural equation modeling analysis, quantitative method*

1. Introduction

PT Terminal Teluk Lamong always strives to improve services to customers, including manual services, direct interaction with goods, and the development of application systems that are always tailored to current needs and developments, PT Terminal Teluk Lamong aims to create an environmentally friendly port. The gas emission level of electric loading and unloading equipment used by PT Terminal Teluk Lamong is lower than loading and unloading equipment with diesel fuel at conventional ports. (Perawati, D, 2017). All of this is done by helping to achieve company goals and supported by efficient employee development programs.

PT Terminal Teluk Lamong aims to improve connectivity and port infrastructure capacity in the region. With modern facilities, advanced technology, and strategic location, PT Terminal Teluk Lamong has become one of the main elements in supporting trade and export-import activities in Indonesia. Regarding the excellent quality of customer service, this is clearly seen through the results of a preliminary survey conducted by researchers through the Customer Suggestion Box (KSP) on several customers of PT Terminal Teluk Lamong, namely from Shipping Agents, Loading and Unloading Companies (PBM) and Marine Freight Forwarding (EMKL) which are directly related to PT Terminal Teluk Lamong, and the most prominent result of the Customer Suggestion Box (KSP) is the application of an online administration system that very fast, which is used by efficient operators (IT) allows the creation of payment notes so that the process of work activities can be carried out immediately and can be done quickly because employee human resources are very fast and active. The readiness of the dock and the equipment needed to handle the loading and unloading of goods from and to ships is very adequate in terms of port facilities. Since 2021–2022, PT Terminal Teluk Lamong has experienced a very satisfactory increase in service and an increase in the number of customers.

PT Terminal Teluk Lamong, as a company that is strongly committed to improving service to customers, also makes innovation and sustainability as key pillars in its operational strategy. PT Terminal Teluk Lamong still has human resources that are less sensitive to its performance to maximize service quality for customer satisfaction, therefore PT Terminal Teluk Lamong efforts to support employee development have become the core of our success. As we deliver effective training programs, we ensure that our staff remain at the forefront of the ever-changing logistics industry. We always strive to boast our knowledgeable, motivated and highly committed employees, as they are the ones who form the core of our service excellence. With a solid team like this, PT Terminal Teluk Lamong continues to strive to improve service standards and maintain its reputation as one of the main elements in Indonesia's 54 local economy. We focus on achieving operational efficiency, utilizing the latest technology, and continuous investment in human capital development to ensure the sustainability of our company's success.

Data on loading and unloading facilities of PT Terminal Teluk Lamong

No.	Business Field
1	Container Handling/Ship Operations
2	Reefer Container Handling
3	Handling Malicious Containers
4	Uncotainerized Goods Handling
5	Weighbridge for Verified Gross Weight (VGM) Bridge for Verified Gross Weight (VGM)
6	Container Cargo Station Area
7	Dry Bulk Unloading Handling
8	Clean Water Service
9	Warehouse and Landfill Services
10	Distribution and Consolidation of Goods
11	Distribution of electricity from land to ships

Source teluklamong.co.id

Based on the data above, it can be seen how the condition of the supporting facilities for loading and unloading activities of PT Terminal Teluk Lamong is in adequate condition, this has an impact on the speed of the loading and unloading process and received a positive response from a number of customers. The following is data on the number of customers and details of the flow of goods based on the type of packaging obtained from PT Terminal Teluk Lamong.

By seeing the potential for increased productivity seen in the loading and unloading process at ports, the high level of customer satisfaction, and the rapid advancement of IT application systems every year, the author feels interested in conducting more in-depth research on the quality of services provided to service users and shipping goods. The purpose of this study is to evaluate the assessment of each service user on the services provided by PT Terminal Teluk Lamong.

By referring to the information that has been submitted about this background, the author is interested in conducting a research entitled "The Effect of Service Quality on Loading and Unloading Customer Service at PT Terminal Teluk Lamong".

2. Literature Review

A. Quality of Service

To survive and maintain customer trust, companies must provide the best quality of service. If customer satisfaction is achieved, the relationship between the business and the customer will be better, the customer will become more loyal and give recommendations verbally that are beneficial to the company (Fernandes Ferry, 20: 21). In addition, service quality has components that can affect customers, including technical quality, which reflects the quality actually received by consumers, and functional quality, which describes how the consumer experience receives technical results. Service quality can be explained as the degree of difference between reality and customer expectations of the service they receive. Dynamic conditions related to products, services, labor, processes, and environments that meet or even exceed expectations are referred to as quality (Tjiptono, 2000: 4) in (Wahab, 2002). The definition of service according to Supranto (2011) in (Aan Rahman, 2019) is an aspect of performance that is intangible, quickly lost, more can be felt than owned, and allows customers to participate more in the process of consuming these services. The quality of service can be judged by comparing customers' perception of the actual service they receive and in line with their expectations. According to Tjiptono and Chandra (2011) in (Budi et al., 2016). Service quality is the set of activities, benefits, and satisfaction levels provided for sale by comparing how customers view the service they receive with their expectations of the company's service attributes. Service quality is a form of consumer assessment of the level of service received (perceived service) with the level of expected service (Pavianti, Hayati, & Fitlya in Utami Yulihapsari et al., 2023). The concept of service quality includes assessment factors that reflect customer perceptions of five specific dimensions of service performance. Service quality theoretically, is the behavior of producers in order to meet consumer needs and desires in order to achieve consumer satisfaction (Tjiptono, 2018 in Komarrudin et al., 2023). Customers feel the quality of service whether provided or sold by a company then customers will feel satisfied (Fadillah Soraya Batubara et al., 2022).

Parasuraman et al in (Masruro & Sinollah.) concluded that five dimensions of ServQual (Quality of Service) are used to measure service quality: (1) Tangible (direct evidence), this refers to a company's ability to clearly demonstrate its existence to external parties, such as customers or consumers. In the context of service, this direct evidence can be in the form of physical aspects, equipment, facilities, or anything that can be seen, touched, or felt by customers to assess the quality of service provided. (2) The appearance and condition of the company's physical facilities, as well as the situation of the school environment, are clear examples of direct evidence that shows the quality of services provided by the company. Customers can judge the quality of service based on appearance and physical condition, such as cleanliness, tidiness, sophistication of equipment, and the physical environment where the service is provided. This creates a strong initial impression and can have a great influence on the customer's perception of the services provided. (3) Reliability is the ability to precisely and consistently deliver services in accordance with the promises that have been given to customers quickly and satisfactorily. (4) Performance must meet customer expectations, which include adherence to schedules, providing consistent service to all customers, demonstrating empathy, and standing out in a level of precision. (5) Responsiveness refers to the ability of port

employees to provide direct and accurate assistance and service to customers by providing transparent information. Leaving customers to wait without a clear explanation will create a negative perception of service quality.

Some aspects or qualities that must be considered in the quality of the service industry, such as: (1) The accuracy of service quality related to processing time and waiting time; (2) Accuracy in service quality relates to the reliability or trust of service quality; (3) courtesy and friendliness in providing quality service, especially in the context of Service Quality Image in the field of services, is highly dependent on the behavior of company employees who interact directly with external customers; (4) Receiving messages and handling customer complaints is the responsibility; (5) Completeness includes aspects within the scope of Service Quality and the availability of supporting facilities and additional Service Quality elements; (6) Ease of obtaining Quality Service related to the availability of various outlets, the number of officers serving such as cashiers, administrative personnel, etc., as well as the completeness of supporting facilities such as computers for data processing; (7) Variations of Service Quality models related to innovation that create new patterns in Service Quality; (8) Flexibility, handling special requests, and other aspects are the quality of personal service (Vincent Gaspersz) in (Ardane, 2017).

B. Customer Satisfaction

Customers or consumers who often visit the same place to buy goods or services can be indicated to be satisfied with the goods or services provided by the company. When the expected desire or desire is achieved, there is a more pronounced feeling. Satisfaction is pleasant satisfaction, which means meeting customer expectations in a satisfactory way (Oliver, 2010) in (Gultom et al., 2020). Fitness level depends on the difference between perceived performance and customer expectations. Customer expectations can be shaped by previous experience, recommendations from those closest to you, and efforts to find information from marketers and competitors. Satisfied customers tend to be more loyal, less sensitive to price changes, and leave good positive comments about the company. Various researchers have made several definitions of customer satisfaction, among others according to Lovelock in (Hendyanta et al., 2021.) Conveying customer satisfaction is an emotional response after a purchase that can include various feelings such as anger, dissatisfaction, irritation, excitement, or pleasure. Meanwhile according to Kotler & Keller (2016) in (D. Pranitasari, A. Sidqi et al., 2021) after comparing product performance with their expectations, customer satisfaction can mean feeling happy if the product exceeds expectations or feeling disappointed if the product does not meet their expectations.

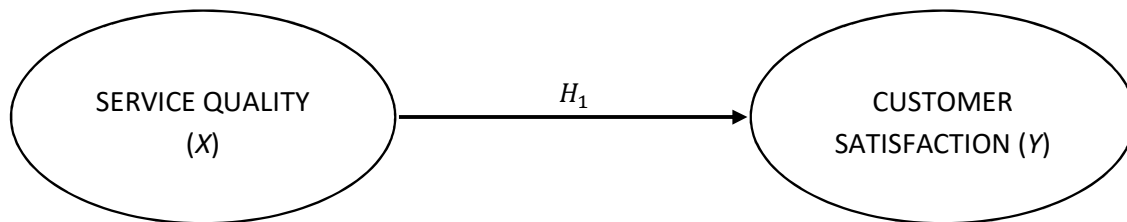
Tjiptono (1996: 159) in (Eric Ferdinan, 2011) said that there are two sources of customer dissatisfaction: Internal and external factors are aspects that affect customer satisfaction. Internal factors can be controlled by the company, such as disrespectful employee behavior, low flexibility of working time, or errors in recording transactions. External factors, on the other hand, are aspects that are beyond the company's control, such as weather conditions, damage to public infrastructure, levels of criminal activity, and customer-personal issues that can affect the customer experience. According to Lupiyoadi (2013) in (Hastuti, 2018), to assess customer satisfaction, companies need to consider five main factors. The first factor is product quality, which means customers will feel satisfied if the results of their evaluation show that the product they use has an adequate level of quality. The second factor is service quality, especially in the service industry, where customer satisfaction often depends on the good service they receive. The third factor is the emotional dimension, where buyers feel proud and believe that others will be amazed if they buy a product with a particular brand. This often results in higher levels of satisfaction, not just because of the quality of the product,

but because of the social value or sense of self-worth that shoppers gain by owning a brand. The fourth factor is price, where products that have high quality are not always accompanied by high prices. The fifth factor is cost, customers are more likely to be very satisfied with their services not having to spend more money or wait longer to get goods or services. Indicators to measure customer satisfaction are; (1) Conformity of expectations, (2) Interest in visiting again, and (3) Willingness to recommend (Indrasari in Apriliani et al., 2023).

HYPOTESIS

Ho. There is no effect of service quality on customer satisfaction.

Ha. There is an influence of service quality on customer satisfaction.



3. Research Methods

This study applies Quantitative research methods by using purposive as a sample determinant by using 25 service user companies and obtaining data directly from PT Terminal Teluk Lamong.

After that, researchers use the Partial Least Square (PLS) approach in the form of a structural equation model (SEM) to analyze the data that has been collected. PLS is a method in SEM that focuses on components or variants. SEM is a field of statistical analysis that allows testing a number of complex connections simultaneously. Therefore, the structural equation model (SEM) refers to the SEM model used.

4. Results and Discussion

Related to this study, an overview of the results of research data analysis is presented. The purpose of this data analysis is to understand the level of service quality (variable X) and the level of customer satisfaction (variable Y). Data collection was carried out through the distribution of questionnaires to 25 respondents who were customers of PT Terminal Teluk Lamong, selected based on samples that had been determined in this study. This sample is selected using the purposive sampling method, with the company's customers as the target sample population.

4.1 Outer Model

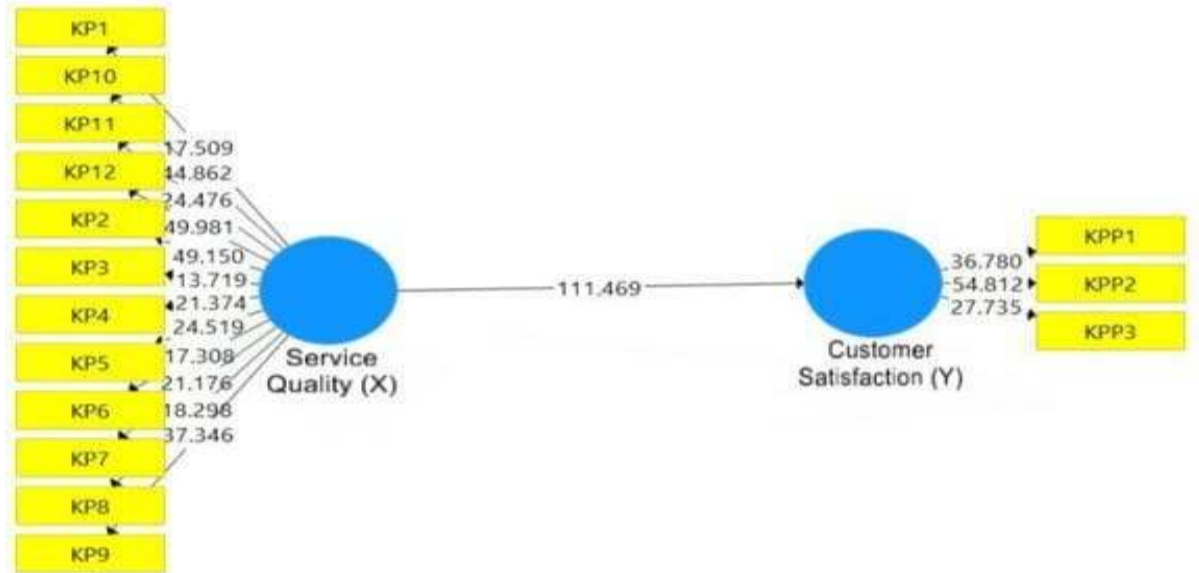


Figure 4.1 Outer Model

Source: Processed by researchers using Smart PLS 3

Validity indicators (Outer Model)

Variable	Indicator	Load (>0,70)	AVE(>0,5)
Service Quality	X.1	0.913	0.705
	X.2	0.951	
	X.3	0.900	
	X.4	0.920	
	X.5	0.902	
	X.6	0.906	
	X.7	0.924	
	X.8	0.895	
	X.9	0.940	
	X.10	0.939	
	X.11	0.915	
	X.12	0.945	

Satisfaction	Y.1	0.956	0.813
	Y.2	0.957	
	Y.3	0.939	

Source : Research data processed using SmartPLS 3.

External load and Convergent Validity (AVE) indicators

Outer loading or loading factors are used to test *convergent validity*. If the *outer loading factor* > 0.7 , then the indicator is considered to meet *the convergent validity in the good category*. The following is the *outer loading* value of each indicator on the research variable.

From the information listed in the table above, it can be seen that most of the indicators in the research variable have an *outer loading* value of > 0.7 . The *above outer loading* values are sufficient to meet *convergent validity requirements*.

Based on the data presented in the table above, *an outer loading value of 0.7 – 0.8* is considered sufficient to satisfy *the convergent validity* requirements. The data show that all indicators can be considered valid and suitable for use in research, and can be further analyzed.

4.2. Inside Model

Coefficient of determination (R^2)

The coefficient of determination is used to measure the degree of accuracy in predictions. In general, the value of R^2 is 0.75, the prediction is considered to have a high degree of accuracy, the value of R^2 0.50 indicates a moderate level of accuracy, and when the value of R^2 is 0.25 the prediction is considered to have a degree of accuracy (Joseph F Hair et al., 2017, p. 211). The results of the value of the coefficient of determination can be seen in the following table.

Variabel	R-Square
Customer Satisfaction (Y)	0.949

Data table 4.2

Source: Processed by researchers using Smart PLS 3

The goodness of fit can be seen from the value of *Q-Square*. The *Q-Square* value has a similar meaning to the *coefficient of determination (R-Square)* in regression analysis, where the higher the *Q-Square value*, the model can be considered the better or more in accordance with the data. Here are the results of calculating the *Q-Square value* as follows:

$$\begin{aligned}
 Q\text{-Square} &= 1 - (1 - R^2) \\
 &= 1 - (1 - 0,949)
 \end{aligned}$$

$$= 1 - 0,051$$

$$= 0,949$$

From the calculation results above, a Q-Square value of 0.949 is obtained. This value shows that most of the diversity in the research data can be explained by the research model, which is 94.9%. Meanwhile, only about 0.51% of the rest is explained by other factors that are beyond the scope of this research model. Therefore, the results of this study show that this research model has a good level of *goodness of fit*.

Based on the data obtained in table 4.2 above, it can be seen that the *R-Square* value for the customer satisfaction variable is 0.949. The results of this value show that about 94.9% of customer satisfaction levels can be explained by service quality. Then, the R-Square value obtained for the customer satisfaction variable is 0.949. The results of obtaining this value explain that about 94.9% of the employee's performance level can be explained by the quality of service and the level of customer satisfaction. And less 5.1% to get good results in service quality where the results outside this study such as supporting tools for loading and unloading success, the way human resources communicate with good customers that provide good value for this company and the response of each human resource in handling customer goods well and in accordance with company SOPs.

4.3 Uji Hypothesis

Based on data processing that has been carried out, coefficient analysis in structural models is used to test hypothesis by analyzing coefficients in structural models, able to identify which relationships have a significant impact. If the $p\text{-value} < \alpha$ (0.05) then the relationship is considered significant, while if the $p\text{-value} > \alpha$ (0.05) then the relationship is considered insignificant (Joseph F Hair et al., 2017). In this study, the following are the results of the hypothesis test obtained in this study through the inner *model*:

Table T-Statistics and P-Values 1

Hypotesis	Influence	T Statistics	P Value	Result
H1	Quality of service for customer satisfaction	111.469	0.000	Accepted

Source: Processed by researchers using Smart PLS 3

Based on the data listed in the table above, it can be concluded that the hypothesis proposed in this study is acceptable because it is proven to have an influential P-Value value of < 0.05 . Therefore, it can be stated that the independent variable has a positive and significant influence on the dependent variable.

Previous Research Results

The first research conducted by Siti Okthary (2019) the purpose of the study was to determine "THE EFFECT OF PORT SERVICE QUALITY ON LOADING AND UNLOADING CUSTOMER SATISFACTION AT PT. PELABUHAN INDONESIA I (PERSERO) BELAWAN BRANCH" The results contained in the results of Tangible research (Physical

Evidence) have a positive and significant effect on loading and unloading customer satisfaction which has a calculated value (2.247) > ttable (1.66) with a significance level of (0.027 < 0.05). Reliability has a positive and significant effect on loading and unloading customer satisfaction which has a calculated value (3.096) > table (1.66) with a significance level of (0.003 > 0.05). Responsiveness has a positive and significant effect on loading and unloading customer satisfaction which has a calculated value (2.474) > table (1.66) with a significance level of (0.016 < 0.05). Assurance has a positive and significant effect on loading and unloading customer satisfaction which has a calculated value (3.602) > table (1.66) with a significance level of (0.001 < 0.05). And Empathy has a positive and significant effect on loading and unloading customer satisfaction which has a calculated value (9.787) > ttable (1.66) with a significance level of (0.000 < 0.05). And simultaneously the quality of service has a positive and significant effect on loading and unloading satisfaction. Based on test F shows that Tangible (Physical Evidence), Reliability, Responsiveness (Responsiveness), Assurance (Assurance) and Empathy (Empathy) together have a significant effect on Customer Satisfaction loading and unloading at PT. Pelabuhan Indonesia I (Persero) Belawan Branch which has a value of Fhitung > Ftabel (63.241 > 2.33). The value of the coefficient of determination can be seen from the Adjusted R Square of 0.789 means that 78.9% of customer satisfaction variables can be explained by quality service. While the difference of 21.1% is influenced or explained by other variables that are not included in this study.

5. Conclusion

On the variable of service quality that has a positive effect on customer satisfaction, it can be concluded that service quality has a positive influence. This is supported by the results of the hypothesis test which shows that the values of T-Statistics and P-Values are very significant, so that H_0 is rejected and H_a is accepted. Thus, the hypothesis that there is a positive influence between service quality and customer satisfaction is acceptable. Of the service quality variables, the statement that gets the highest score lies in the statement "employees are able to convince users of the security provided" In addition, the statement "Interested in reusing PT Terminal Teluk Lamong" which gets the highest score on the customer satisfaction variable, the results show that customers are satisfied with the services provided and have the potential to become loyal customers. This is a positive indicator for PT Terminal Teluk Lamong that investment in service quality and ensuring customer satisfaction has a positive impact in retaining existing customers and attracting new customers. All these studies provide a strong framework for the company's efforts to continuously improve service quality and meet customer expectations to maintain existing quality and continue to grow in order to continue to provide good value from customers. This research provides valuable insights into PT Terminal Teluk Lamong efforts in understanding and meeting customer expectations. By combining these results, companies have a solid foundation to maintain and improve the quality of their services and ensure that customer satisfaction remains a top priority. In addition, the study provides an understanding of how companies can retain and attract new customers through quality services, creating added value for their business.

In this study, the results that have been tested from 2 variables, namely the quality of service to customer satisfaction, get significant and positive results because the two variables support each other, the quality of service greatly affects customer satisfaction. that the quality of service is very good for customers in handling loading and unloading quickly and safely, maintaining the quality of loading and unloading equipment and keeping customers' goods safe so that The quality of loading and unloading activities gets positive results from customers so

as to provide more trust from customers and satisfaction with loading and unloading services at PT Teluk Lamong

6. Implications

Based on the results of research conducted by the authors, practical and theoretical implications can be put forward as follows:

6.1. Theoretical Implications

Service quality affects customer satisfaction, especially in maintaining good relationships with customers. This is a sure thing for a company, because maintaining good relationships with customers can encourage them to return to use the company's services. In addition, quality assurance of goods or services provided by the company or is an important consideration for customers in deciding to continue using the company's services. By maintaining good relations and always providing good guarantees, it will improve the quality of service to the company and customer satisfaction will also increase as seen from the intensity of customers using the services offered by the company.

6.2. Practical Implications

PT. Lamong Bay Terminal has the opportunity to improve their service quality, retain existing customers, and also attract new customers by understanding the importance of good relationships with customers as well as providing service quality assurance. This will help the company to remain competitive in the loading and unloading industry and achieve a competitive advantage in the face of growing market challenges. The results of this research are expected to contribute thoughts, input and information that can be used for companies to be taken into consideration in implementing strategies related to customer satisfaction.

7. Research Limitations

Limited Generalization: The findings of this study are based on a limited sample in the context of the Teluk Lamong Terminal port. Therefore, generalizing these findings to a broader context or different industries may be limited Limited Research Time: The study was conducted within a period of three weeks for data collection. This short duration of time may not reflect changes or fluctuations in user perception over time. There are a number of other factors that can affect customer satisfaction, such as timeliness and product quality, but these factors are not the focus of this study. This research may not provide a very detailed insight into the practical steps or actions taken by PT Terminal Teluk Lamong to improve service quality and improve customer satisfaction levels. Identifying its concrete solutions may require further research or more in-depth analysis.

Reference

- Akuntansi, J., Pranitasari, D., & Sidqi, A. N. (2021). *Analisis kepuasan pelanggan elektronik Shopee menggunakan kualitas layanan elektronik dan metode Cartesian*. 18(02), 12–31.
- Apriliani, S., Ricardianto, P., Amonalisa Silalahi, S., Handayani, S., & Tatiana, Y. (2023). Users Satisfaction of Public Transport Terminal Services in South Bangka. *Jurnal Manajemen Transportasi & Logistik (JMTRANSLOG)*, 10(01). <https://journal.itltrisakti.ac.id/index.php/jmtranslog>

- Ardane, N., & Unud, F. P. (2017). *FAKTOR-FAKTOR YANG MEMPENGARUHI KUALITAS PELAYANAN DI SCOOT FAST CRUISES DI BALI Ni Made Sofia Wijaya*. 5(1), 18–23.
- Ariska, A. M., Irawati, N., & Muhazir, A. (2022). Penerapan Electronic Customer Relationship Management (E-CRM) dalam Penjualan Bakery Berbasis Web. *JURNAL MEDIA INFORMATIKA BUDIDARMA*, 6(2), 1090. <https://doi.org/10.30865/mib.v6i2.4002>
- Budi, Amerika Serikat, Jakarta, L., Budi, Amerika Serikat, & Jakarta, L. (2016). PENGARUH KUALITAS PRODUK, *BRAND IMAGE*, DAN KUALITAS PELAYANAN TERHADAP KEPUTUSAN PEMBELIAN PRODUK DADONE DI JAKARTA Agus Sriyanto. 5(2), 163–175.
- Ekonomi, F., & Diponegoro, U. (2011). *MENUJU KEPUASAN PELANGGAN (Belajar di PT. Pelindo III Cab. Tg. Emas Semarang)*.
- Fadillah Soraya Batubara, U., Ricardianto, P., Pahala, Y., Malisan, J., Institut Transportasi dan Logistik Trisakti, bcd, IPN No, J., Besar Selatan, C., & Timur, J. (2022). Loyalitas dan Kepuasan Pelanggan Kapal pada Perusahaan Peti Kemas di Indonesia Customers' Loyalty and Satisfaction of Container's Company in Indonesia. *Jurnal Manajemen Transportasi & Logistik (JMTRANSLOG)*, 09(02). <https://journal.itltrisakti.ac.id/index.php/jmtranslog>
- Gultom, D. K., Arif, M., & Fahmi, M. (2020). *Penentuan kepuasan pelanggan terhadap loyalitas pelanggan melalui kepercayaan*. 3(September), 171–180.
- Hastuti, Y. (2018). *Pengaruh Kualitas Produk terhadap Kepuasan Pelanggan*. 9(1), 21–30.
- II, B. A. B., & Teoritis, K. (2021). *PENGARUH KUALITAS LAYANAN DAN DISKON HARGA TERHADAP KEPUASAN PELANGGAN DI REDDOORZ NEAR MIKIE HOLIDAY*. 8–29.
- Januarny, T. D., & Harimurti, C. (2021). PENGARUH TATA LETAK GUDANG TERHADAP KELANCARAN PRODUKTIVITAS BONGKAR MUAT DI PT. NCT. Dalam *Jurnal Logistik Indonesia* (Vol. 5, Issue 1). <http://ojs.stiami.ac.id>
- Joseph F Rambut, J., Hult, G. T. M., Ringle, CM, & Sarstedt, M. (2017a). Primer pada pemodelan persamaan struktural kuadrat terkecil parsial (PLS-SEM). Dalam *Sage* (Edi Kedua). SAGE Publikasi, Inc
- Joseph F Hair, Jr., Hult, G. T. M., Ringle, CM, & Sarstedt, M. (2017b). Primer pada pemodelan persamaan struktural kuadrat terkecil parsial (PLS-SEM). Dalam *Sage* (Edi Kedua). SAGE Publikasi, Inc
- Masruro, & Dan, S. (n.d.). *DALAM MEMBENTUK KEPUASAN PELANGGAN SEHINGGA TERCIPTA LOYALITAS PELANGGAN (Studi Kasus di Toko Mayang Collection cabang Kepanjen)*. 45–64.
- Nurzanah, W. (2020). ANALISIS WAKTU TUNGGU BONGKAR MUAT KAPAL DENGAN FASILITAS CRANE DI PELABUHAN GABION BELAWAN. Dalam Cetak) *Buletin Teknik Utama* (Vol. 15, Edisi 2). Daring.

- Pengetahuan, J. I., & Komputer, D. A. N. T. (2019). *PENGARUH PELAYANAN TERHADAP KEPUASAN PELANGGAN DI PT. 4(2)*, 257–264.
- Perawati Putri Aksa Nabila Dedeng Wahyu Edi STMT Trisakti STMT Trisakti STMT Trisakti, D. (n.d.). *FAKTOR PENGHAMBAT KONSEP GREEN PORT DI PT TERMINAL TELUK LAMONG PELABUHAN SURABAYA*.
- Pengiriman, T., Regresi, A., Disederhanakan, L., Korelasi, P., & Kunci, K. (n.d.). *Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pengguna Jasa Bongkar Muat PT. Temas Shipping (Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pengguna Jasa Bongkar Muat PT. Temas Shipping) Hendyanta Reishigano Megaputra, Program Studi Manajemen Pelabuhan Beni Agus Setiono, Program Diploma Perkapalan, Universitas Hang Tuah*
- Wahab, W. (2002). *Pengaruh kualitas layanan terhadap kepuasan nasabah industri perbankan syariah di kota Pekanbaru*.
- Kwong, K., & Wong, K. (2015). Teknik pemodelan persamaan struktural kuadrat terkecil parsial (PLS-SEM) menggunakan SmartPLS.
<http://www.researchgate.net/publication/268449353>
- Okthary, S. (2019). *PENGARUH KUALITAS PELAYANAN PELABUHAN TERHADAP KEPUASAN PELANGGAN BONGKAR MUAT DI PT. PELABUHAN INDONESIA I (PERSERO) CABANG BELAWAN*
- Utami Yulihapsari, I., Simarmata, J., Pahala, Y., & Keke, Y. (2023). *Kualitas Pelayanan, Harga, Promosi dan Citra Merek : Pengaruhnya terhadap Keputusan Pembelian Jasa Pengiriman PT. Jalur Nugraha Ekakurir (JNE)*. *Attractive : Innovative Education Journal*, 5(1).
<https://www.attractivejournal.com/index.php/aj/>