

The Effect of E-Service Quality in Taking Container Units on Customer Loyalty Moderated by Customer Satisfaction of Container Modification CV. Kay Alor Sejahtera North Jakarta

Koerniawan Hidajat and Sheila Ananda

Business Administration, Faculty of Economics, Business and Social Sciences, Universitas 17 Agustus 1945 Jakarta, Indonesia

Keywords: *E-Service Quality*, Customer Loyalty, Customer Satisfaction.

Abstract: The level of economic development in Indonesia and international economic trade routes affect the demand for containers in the port of 11 billion TEU, according to UNCTAD data on Container Port Through part Indonesia in 2021. The provision of containers in Indonesia is not only from the logistics trade of goods movement, but also from developing demand for practical provision of commercial offices, mobile offices, mobile counters, mobile shops, villas, residential houses, and supermarkets. CV. Kay Alor Sejahtera container rental business, buying and selling containers for commercial electronic-based customer service. The research objective is to determine and explain the effect of e-service quality on obtaining container units by customers and the ability of strong or weak customer satisfaction to moderate the effect of e-service quality on customer loyalty. The research method is quantitative explanatory research. Data collection is via a questionnaire with a Likert scale. SmartPLS (Partial Least Squares) data analysis. If customers are served their orders quickly through electronic/Internet means, such as WhatsApp, they will be more likely to order container rentals and services for commercial use again. The results showed that e-service quality has a positive effect on customer loyalty. Customer satisfaction also has a positive effect on customer loyalty, especially if complaints are resolved quickly, making customers more loyal. Customer satisfaction has the ability to weaken the e-service quality of taking container units. Slightly satisfied customers are served by using digital/internet services, website applications, or WhatsApp.

1 INTRODUCTION

Indonesia has its own advantages compared to other countries, one of which is located on the international trade route which becomes a crossroads of trade traffic because our country is flanked by two continents and two oceans. Economic growth in Indonesia is also able to influence the demand for containers at the Port of Indonesia. Container as a form of business is not only related to logistics in the *packaging of shipping goods* between islands, between regions, and between countries, but also a business in terms of renting containers of various sizes. It is interesting to know that the reality of the container business is developing into one of the commercial support businesses through traded container units such as *mobile offices, mobile stores, residential houses, and even supermarkets* (Gunawan & Sianto, 2006).

One of the *challenges* in business is maintaining loyal customers. Customer loyalty is the willingness of customers to use the services of a company repeatedly and recommend the company's services to others (Saputra, 2017). Customer experience in buying a product will influence other customers in buying a product, so the company must be able to create products that suit the needs and tastes of customers.

Customer loyalty and satisfaction play an important role in a company, retaining them means improving financial performance and maintaining company survival. The benefit of customer loyalty is the reduced influence of attacks from competitors from similar companies, not only competition in terms of products but also competition in terms of perception (Zai et al., 2022). In addition, loyal customers can encourage the development of the company by providing ideas or suggestions to the company to improve the quality of its products.

CV. Kay Alor Sejahtera has an internet-based electronic service or website by going to a special address <https://kaycontainer.com/> is a *Uniform Resources Locator* (URL) with a special paid domain (.com). Usually this service is used by Kay Alor Sejahtera to connect between the company and customers for ordering container modifications, including picking up container units at the depot and operating container units through admin *customer service* email, *open chat (WhatsApp)*, *Facebook*, *Twitter*, *Instagram*, and *phone number*.

2 LITERATURE REVIEW

2.1 E-Service Quality

E-Service Quality is a service provided on the internet network as an extension of a site's ability to facilitate shopping, purchasing, and distribution activities effectively and efficiently. *E-Service Quality* or also known as *e-servqual* is part of *service quality*. *E-service quality* is an activity carried out by a person or group of people based on material factors through certain systems, procedures, and methods in order to fulfil customer activities and needs (Magdalena & Jaolis, 2018).

Service is the most important thing in an organisation. Every staff member responsible for serving customers must be able and courageous to utilise their competence to serve and satisfy the needs of the customers themselves. Every customer will definitely have a desire, coupled with a different attitude. The fundamental principles in serving customers are creating a positive first impression, friendliness and politeness, demonstrating a good attitude, integrity, and serving with heart (Suparman et al., 2016).

Electronic service quality has four dimensions, namely reliability, web design, security and customer service. In addition, Wolfenbarger and Gilly (2003) in Andrias and Himawani (2019) defined indicators to measure the quality of electronic services, namely:

- i. Reliability, namely: the company's ability to provide adequate and satisfactory service.
- ii. *Website* design: all elements of the consumer experience offered on a company's website, including navigation, information retrieval, request processing, etc. requests, and appropriate personalization.
- iii. Security, namely payment security and consumer information privacy

- iv. Customer service, services used to solve problems responsiveness and the company's willingness to help customer problems (Normanita et al., 2021: 441).

2.2 Container Unit Pickup

Retrieval for containers can be interpreted as unloading and loading containers. The definition of "unloading" is the process of lowering the container unit from the ship, while "loading" is the process of raising the container unit into the ship (Gunawan & Sianto, 2006:79).

Tanaya (2007) conducted a previous study on the "loading and unloading" process, which looked at three factors that were considered influential: ratio, weight, and time. It was found that ratio and weight had the greatest influence, while the start time of the process did not have a significant influence because in Surabaya Container Terminal there is only one type of gank and one type of transport equipment, this study did not look at the factors of ganks and transport equipment (Gunawan & Sianto, 2006: 80).

The collection of this container unit can be carried out not only from the dock to the ship, but also from the container depot (container storage), which is usually done by companies specifically engaged in container rental. The container can be divided into several volumes (quantities).

1. 20 Feet (6.10 meters x 8 feet wide or 2.44 meters x 8 feet 6 inches or 2.59 meters)
2. 40 Feet (12 x 19 meters x 8 feet wide or 2.44 meters x 8.6 feet or 2.59 meters high)

The container volume as described above, specifically for the 20 feet modification can be divided into two: 10 feet (3 meters x 8 feet wide or 2.44 meters x 8 feet 6 inches high or 2.59 meters).

Modified containers are typically utilized in the commercial sector (shops, cafes, product franchises such as teapots, burgers, cakes, etc.). The office sector also employs modified containers, such as constructing offices for toll road project activities, shipbuilding projects, mining projects, etc. The housing sector also utilizes modified containers, usually 20ft to 40ft in size/volume.

Modified containers can be ordered at prices generally range from Rp. 50 million to Rp. 100 million. Modified containers use container base material from depot volumes of 20 feet to 40 feet with a purchase price of around Rp. 17 million (empty 20 feet containers) and for empty 40 feet containers around Rp. 25 million. The buying and selling price of empty and modified container units depends on the rise and fall of the USD for the

purchase of container units, entrepreneurs can modify containers directly from overseas buyers such as Singapore, Denmark, Hong Kong.

2.3 Customer Loyalty

Customer loyalty is someone who has become accustomed to buying the products offered and interacting frequently (making purchases) over a period of time, while remaining loyal to all company offerings. Loyalty shows conditions from a certain duration of time to time and requires that the purchase action occurs no less than twice (Rifa'i, 2019: 51).

Managing customer loyalty starts with understanding how and why loyalty is created, which begins with the buying cycle. The buying cycle moves through product awareness, initial purchase, post-purchase evaluation, and repurchase decision. Paying attention to customer needs is an important step in encouraging customers who make repeat purchases to form deeper loyalty. Indicators of customer loyalty, as stated by Griffin (2019), include:

- A. Repeat Purchases. Repeat purchases can be the result of market dominance by a company that manages to make its product the only alternative available.
- B. Giving Referrals to Others. Loyal customers are very potential to spread or become *word of mouth advertisers* for the company.
- C. Rejection of Competitor Products Customers who are loyal to a particular product or company tend to be attached to the brand or company and will return to buy the same product again at that company even though there are many other alternatives available (Ramanta et al., 2021: 1020).

2.4 Customer Satisfaction

Customer satisfaction is an individual's feeling of pleasure or disappointment resulting from comparing the perceived product or service (or outcome) with the anticipated one (Sumartini and Tias, 2019: 112). As per Lesmana and Ratnasari (2019), customer satisfaction is about the expectations they have and the actual performance they receive. If expectations are high, but the performance is poor, customers are unlikely to achieve satisfaction and instead may feel let down. Conversely, if performance exceeds expectations, satisfaction will increase. According to Fadhli et al. (2021), customer satisfaction has many benefits for the company by achieving a high level of customer satisfaction. These include increasing customer loyalty, preventing customer turnover,

reducing customer sensitivity to price, lowering marketing failure costs, reducing operating costs caused by an increase in the number of customers, boosting advertising effectiveness, and improving the business's reputation. According to Saputra & Sudarsa (2019), indicators of customer satisfaction include:

- a. *Re-Purchase*. Buying back, where the customer will return to the company to find goods or services.
- b. Creating *Word of Mouth*. In this case, customers will say good things about the company to others.
- c. Creates a brand image. Customers will pay less attention to brands and advertisements of competitors' products.
- d. Make a purchase decision for the same company. Buying other products from similar companies.

3 METHODS

3.1 Type of Research, Time and Location

In this study, the type of *explanatory research*, Sugiyono (2017) reveals that it is a research method that is used to analyse the results of the research. It is intended to explain the position of the variables studied and the influence between one variable and another (Ananda, 2020: 149). The research was conducted for 3 months, the research location was at CV. Kay Alor Sejahtera.

3.2 Operational Variables and Concept Model

This research uses the basic theory of:

- 1) Wolfenbarger and Gilli (2003) on *E-Service Quality*;
- 2) Griffin (2019) about Building Customer Loyalty.
- 3) According to Saputra & Sudarsa (2019) about Customer Satisfaction.

Operational Variables based on the basic theory above Table 1.

Table 1: Operational Variables.

Variables	Indicator
1) E-Service Quality (X)	1. Reliability 2. <i>Website Design</i> 3. Security 4. Customer Service
2) Customer Loyalty (Y)	1. Repeat Purchases 2. Provide Referrals to Others 3. Rejection of Competitor Products
3) Customer Satisfaction (Z)	1. <i>Re-Purchase</i> 2. <i>Creating Word of Mouth</i> 3. Creating a Brand Image 4. Creating a Purchase Decision In the Same Company.

Source: Processed by Researchers, 2023.

Table 1 Operational Variables with research hypotheses:

- 3.2.1 H1 = E-Service Quality has the ability to influence Container modification customer loyalty.
- 3.2.2 H2 = Customer satisfaction affects Container modification customer loyalty
- 3.2.3 H3 = customer satisfaction has the ability to moderate the effect of E-Service Quality on container modification customer loyalty.

The hypothesis above explains the concept model of the research variables as in Figure 1 below.

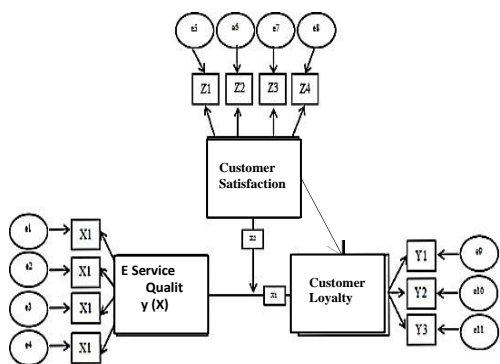


Figure 1: Research Variable Concept Model.

Source: Processed by Researchers, 2023.

3.3 Data Collection Methods

Data collection techniques were carried out within a period of 3 months in this study using two ways, namely:

- a. Questionnaire method, which is a data collection method carried out by giving a set of questionnaires in the form of written statements to the respondents who are answered by the respondents.
- b. Google Form is distributed via *WhatsApp* on CV customers. Kay Alor Sejahtera.

3.4 Population and Sampling

The population used in this study is limited to customers of CV Kay Alor Sejahtera North Jakarta, on the grounds that in order to achieve *universal homogeneity* and generalization of meaning or perception on the ability to influence *E-Service quality* in taking container units CV Kay Alor Sejahtera North. Researchers use *availability sampling*, namely available sampling, researchers utilise available subjects (Alwi, 2012), from a list of 59 available customers who have made transactions with CV Kay Alor Sejahtera North Jakarta at least once in 2023.

3.5 Data Processing

Variance-based *Structural Equation Modelling* (SEM) or *Partial Least Square* (PLS) method involves several research variables with parameter estimation methods. *Bootstrap*. PLS is an analytical method that can be applied to all data scales, does not require many assumptions and the sample size does not have to be large (Jonathan & Anondho, 2018). PLS aims to obtain variable values for prediction purposes (Hoyyi & Santoso, 2017).

3.6 Validity Test

This outer model test uses the help of the PLS Algorithm procedure. The analysis stage on the outer model is measured using validity and reliability testing. Based on the Rule of Thumb Convergent Validity Test, Outer Loading > 0.7. Chin (1995) in Hasanah's (2021) research (Ananda, 2020).

3.7 Reliability Test

Using the Partial Least Square (PLS) method, two methods are utilized, namely Cronbach's alpha with a minimum value of 0.7 and an ideal value of 0.8 / 0.9,

as well as composite reliability. Discriminant validity can be deemed achieved if the AVE value surpasses 0.5 (Djojohadikusumo, 2017).

3.8 Inner Model

Testing the structural model of the inner model test can be seen from the R-squared value in the equation between latent variables. The R-squared value explains how much the exogenous (independent / free) variables in the model are capable of explaining the dependent endogenous variables/bonded). R² has rules for model criteria very strong ≥ 0.70 , strong 0.46 to 0.70, moderate 0.26 to 0.45, weak ≤ 0.25 (Ananda, 2020).

3.9 Hypothesis Test

PLS hypothesis testing relates to a non-parametric bootstrap procedure to test the significance of the coefficients (Hoyyi & Santoso, 2017). The test is carried out with a t-test and if a p-value of 0.05 (5% alpha) is obtained, it is concluded to be significant and vice versa.

4 RESULTS AND DISCUSSION

4.1 Respondent Characteristics

Research respondents based on gender can be seen as Table 2 below.

Table 2: Respondents by Gender.

Gender	Total Percentage	Number of Respondents
Male	64,4	38
Female	35,6	21

Source: Google Form processed by researchers, 2023.

4.2 Respondents Based on Education

The characteristics of respondents based on education can be seen from Table 3 below.

Table 3: Respondents Based on Education.

Education	Total percentage	Number of Respondents
High School	16,9	10
Bachelor	74,6	44
More	8,5	5

Source: Google Form processed by researchers, 2023.

4.3 Respondents by Order

Characteristics of Respondents based on customer orders at CV. Kay Alor Sejahtera can be found as Table 4 below.

Table 4: Characteristics of respondents based on order.

Order	Total Percentage	Number of Companies
1 Time	40	24
More than 2 times	50	30
Never	10	5

Source: Google Form processed by researchers, 2023.

4.4 Respondents Based on Position

The characteristics of respondents based on customer positions at CV Kay Alor Sejahtera can be found in Table 5 below.

Table 5: Characteristics of respondents based on position.

Position	Total	Percentage
Owner/Vice President	2	3,4
Manager/Leader/Director	10	16,9
Operational	6	10,16
Marketing	11	18,6
Staff/Employees	11	18,6
Administration	9	15,25
Tech. Operator/Production/Engineering	5	8,47
Coordinator/Headline	3	5,08
Miscellaneous	2	3,38

Source: Google Form processed by researchers, 2023.

4.5 Research Results

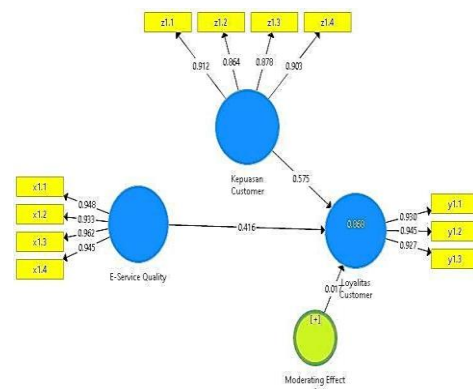


Figure 2: Path Coefficient - Convergent Validity.

Source: SmartPLS 3.3.3.

The results of research tests with PLS (Partial Least Square) show the results of validity, reliability (*Outer Model*) and research hypothesis test results (*Inner Model*). Validity and reliability in the form of *outer loading* test results, *Cronbach alpha*, *composite reliability*, *discriminant validity*, and *average variance extracted (AVE)*. The research hypothesis test uses the T-Statistic Test and R. Square.

4.6 Outer Loading Test

The results of this study can be concluded that *Outer loading E Service Quality, Customer Loyalty, Customer Satisfaction* > 0.7 according to Chin (1995) nothing is eliminated, according to the *rule of thumb*.

4.7 Validity and Reliability Test Results

Table 6: Construct Validity and Reliability.

	CA	rho_A	CR	AVE
ESQ	0,962	0,962	0,972	0,897
CL	0,927	0,927	0,953	0,872
CS	0,912	0,914	0,938	0,792
M	1.000	1.000	1.000	1.000

Source: SmartPLS 3.3.3.

The results of the validity and reliability tests in Table 6 above, *composite reliability* shows > 0.7, then *Cronbach's alpha* value is achieved, and AVE value > 0.5.

4.8 Discriminant Validity Test Results

Table 7: Discriminant Validity Test.

	CL	CS	ESQ
ESQ	0,897	0,897	0,947
CS	0,915	0,890	
CL	0,934		

Source: SmartPLS 3.3.3.

Discriminant Validity shows > 0.7, the conclusion is that *E-Service Quality (ESQ)*, *Customer Satisfaction (CS)*, *Customer Loyalty (CL)* show good validity, the

correlation value between variables with other variables.

4.9 R-Square Test Results

The results of the R-Square test for the Customer Loyalty variable show that it has the ability to influence 0.868 / 86.6% while the remaining 13.4% through other variables is not included in this study. The results of this R Square are very strong criteria.

4.10 Hypothesis Test Results

H1 = *E-Service Quality* has the ability to influence Container modification customer loyalty.

E-Service Quality T Statistic 2.839 > 1.96 T Table, P Value 0.005 < 0.05 significance level 0.05 / 5%. These results indicate that (X) *E-Service Quality* has a positive effect on *Customer Loyalty* (Y). The results of this Hypothesis Test are in accordance with research from Normanita, Koerniawan Hidajat, Yogantari M.V. (2021) that *E-Service Quality* has the ability to indirectly influence *Customer Loyalty* (Hidajat & Yogantari, 2021).

H2 = Customer satisfaction affects Container modification customer loyalty

T Statistic 3.851 > 1.96 T table, P Value 0.000 < 0.05 significance value of 5%.

The results of this hypothesis are in accordance with research from Normanita, Koerniawan Hidajat, Yogantari M.V. (2021) showing customer satisfaction is able to influence consumer loyalty (Hidajat & Yogantari, 2021). H3 = customer satisfaction has the ability to moderate the effect of *E-Service Quality* on container modification customer loyalty.

T Statistics 0.393 < 1.96, P Value 0.695 > 0.05 significance value of 5%. This hypothesis shows that customer satisfaction has a weak ability to directly moderate the effect of *E-Service Quality* on customer loyalty. This is due to, amongst other things, slow response to customer complaints, detailed neatness of workmanship that is not in accordance with the customer, and technical constraints on land delivery of containers by lorry. This hypothesis is similar to research from Normanita, Koerniawan Hidajat, Yogantari M.V. (2021), that loyalty does not have the ability to indirectly mediate *E-Service Quality* on customer satisfaction (Hidajat & Yogantari, 2021).

5 CONCLUSIONS AND SUGGESTIONS

Respondents from this study were 59 respondents who met the criteria of having placed an order at CV. Kay Alor Sejahtera. The conclusions of this study are based on the results of hypothesis testing conducted using SmartPLS, allowing for the drawing of conclusions. As follows:

1. *E-Service Quality* has a positive effect on customer loyalty, if customers are served orders quickly based on electronics / internet such as *whatsapp*, customers will try to re-order back container rental and container services for commercial purposes.
2. Customer satisfaction has a positive effect on customer loyalty if served quickly for complaints, the more loyal.
3. Customer satisfaction has a weak ability to directly moderate the effect of e-service quality on the retrieval of container units. Customers are slightly satisfied with using digital services/internet website application on WhatsApp for customer loyalty. This is caused by, among others, slow response to customer complaints, lack of attention to neatness in workmanship according to customer preferences, and technical constraints on land delivery of containers by trucks.

Suggestions from researchers that can be considered for further research, namely: The number of respondents obtained must be above that in this study. The more the number of respondents obtained, the better the research results will be obtained, the results of this research can be used as a material consideration for both business entities and the people of Indonesia, Further research is expected to be able to get more previous research journals for research variables.

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