



Customer Satisfaction: Between Expectation and Reality of Service Quality in Container Depot, Surabaya

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ABSTRACT

Improving service quality is a must for any company to cope with the high market demand. It is also a concern for shipping services companies. Quality is the benchmark for innovation among freight transportation business service providers to gain customer satisfaction. This research was conducted at a shipping service company that has several subsidiaries. One of which manages container depots in the Surabaya area. The change in the Depot concept caused Depot services to change, and customers felt a different impact. The effect of these changes made customers complain about the services provided by the Depot. This study aimed to determine the difference between expectations and reality of the services provided to determine the customer satisfaction of Container Depot in Surabaya using the SERVQUAL method. The sample is 70 customers of the 228 population. The research results showed that all attributes had negative gap values, which means that the customer was dissatisfied. The research gap is that this research was limited to SERVQUAL application in the niche sector of container depot services within the shipping industry. This creates a gap in understanding the unique challenges and service quality expectations. Therefore, the Depot must improve its service quality for each attribute and give more concern to the highest negative gap value (empathy, reliability, responsiveness, tangibility, and assurance). The implication of the research revealed that the depot must adapt their service quality to align with customer expectations and prioritize service improvement through staff training, enhancing communication with customers, and streamlining operational processes.

Keywords: *Service quality, customer satisfaction, container depot, expectation, reality.*

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1. INTRODUCTION

The high market demand for shipping services causes shipping companies to continuously improve the quality of their services. This has had an effect on the increasing presence of expedition companies and shipping services and has led to the rapid growth of the cargo industry in Indonesia. The benchmark for innovation among freight transportation business service providers is quality. This is the concern to create customer satisfaction with the services provided. Therefore, the management tries to make strategies to preserve customers' satisfaction with the services provided by service providers. Companies that carry out production and service activities must be able to change customer demands for the use of the products they produce to develop and improve their business continuity. Understanding what makes customers happy through market research of customers is needed to understand what customers need and what is trending in society. The brainstorming system is also a way to understand the customer's needs. This research was conducted at a shipping service company. The phenomenon that occurred in this research subject is the complaints coming from the customers who used this company's services. Figure 1 represents customers' complaints in 2022.

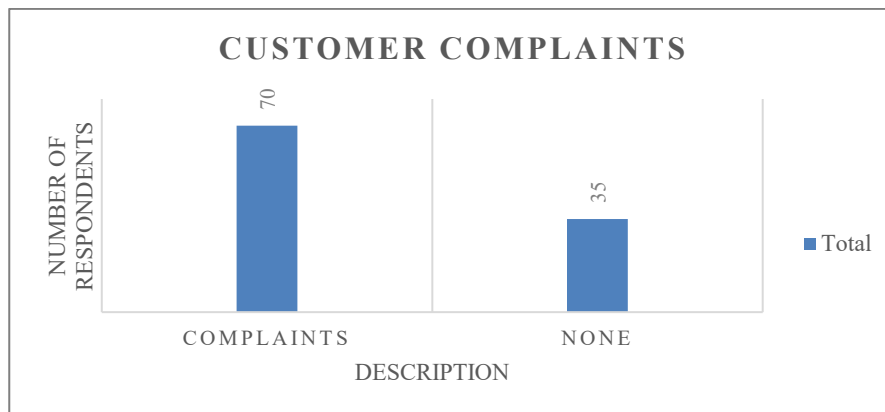


Figure 1. Customers Complaints

The company's Depot concept, which was previously only for stacking/storing containers, was changed in October 2021 to be a more customer-centric concept. The concept was implemented to make it easier for the customers to manage their goods in one place. After the concept changes, the company distributed questionnaires to find out the customer's assessment. The results obtained were that 70 respondents out of 105 respondents who filled in the questionnaire expressed their complaint about the services provided by the Depot.

The method commonly used to analyze service quality is the SERVQUAL. This method compares the customer's reality and expectations of the services provided by a company (Sulistyowati, 2018). Changes in the concept of the Depot have caused complaints about the services provided. This study aims to determine the difference between expectations and reality of the services provided to determine customer satisfaction at the Container Depot in Surabaya.

The urgency of the research is to address the consequences of operational changes in the depot that are needed to investigate the root causes of this dissatisfaction to preserve customer loyalty. Parasuraman et al. (1988) stated service quality gaps often emerge during significant operational changes, making immediate investigation essential to avoid long-term negative impacts. Besides, to ensure the depot's transformation success, addressing customer complaints and aligning services with expectations is imperative. Kotter (1996) emphasized that stakeholder satisfaction is a cornerstone for successful implementation of new concepts. This research is aimed at broadening the implications for the shipping industry in practice. This research contributed to the knowledge on service improvement strategies in the logistics and shipping industry. This is aligned with findings from Mentzer et al. (2001) and Langley & Infosy (2020) regarding the importance of customer satisfaction in supply chain services.

2. LITERATURE REVIEW

Customer Satisfaction and Service Quality

Various forms of activities carried out by the company to meet customer expectations are quality. Customer satisfaction (Zineldin, 2000) is an overall customer's viewpoint or opinion towards a service provider, or an emotional response to the comparison between what is accepted and what is expected. In this context, service is defined as a service provided by the service owner in the form of convenience, speed of relationship, competence, and friendliness with the aim of satisfying customers through attitude (Wulandari, 2019). Service quality refers to any activity or action provided to customers, which is basically intangible and can provide customer satisfaction if customer needs are met in accordance with their expectations (Ramadhini, 2022). Service quality is related to efforts to meet customer needs and desires and communicate these needs and desires accurately so as to create a balanced alignment with customer expectations (Sulistyowati, 2018).

Satisfaction Satisfaction is the extent to which someone feels happy or disappointed by comparing the perceived performance (or results) of a product with their expectations (Kotler & Keller, 2009). According to Tjiptono, quoted by Mahendra (2020), satisfaction comes from the Latin "satis," which means "good enough" or "adequate," and "facio," which means "doing" or "making," wherein, in simple terms, satisfaction can be explained as an effort to achieve something or do something adequate. Customer satisfaction can be measured by how service providers provide high-quality products or services based on customer

needs (Sulistyowati, 2018). Studies in the logistics and transportation sector, such as Mentzer et al. (2001), highlight the importance of aligning service quality with customer needs to maintain competitiveness. In container depot operations, service quality determines customer loyalty, operational efficiency, and business sustainability. Research on service changes in logistics, such as by Grönroos (1990), highlights the importance of managing "moments of truth"—critical interactions that shape customer perceptions of service quality. Li, S., & Yang (2020) emphasized that improving service quality leads not only to increased satisfaction but also to stronger customer retention and loyalty.

Grounding Theory

Expectation Confirmation Theory by Oliver, cited by Rohman & Yulianti (2016), is used as the foundation theory in this study. This theory provides an explanation of the relationship between customer satisfaction and service expectations received and the discrepancies that arise as a result of differences between customer expectations about service quality and what they feel about service. This theory states that if customer expectations are combined with perceived performance, customer satisfaction after service will increase. Disconfirmation, positive or negative, between expectations and performance produces this effect. Positive disconfirmation occurs if the product or service meets post-service expectations, and it will result in satisfaction. While negative disconfirmation occurs if the product or service does not meet expectations, and it will cause customers to be dissatisfied (Oliver, 1980).

Cognitive Dissonance Theory, which means that there is a difference or mismatch between product or service performance and expectations, is related to Expectation Confirmation Theory (Tjiptono, 2011). Something must be done when there is dissonance. Dissonance occurs when there is a difference between attitudes or behaviors (Rohman & Yulianti, 2016).

3. METHOD

Type and Source of Data

1. Type and Source of Data

This research used quantitative data from the research subject that is the container depot in Surabaya. There were 2 sources of data used. The first is primary data, which is direct data collected from respondents of the employee in Surabaya's container depot through questionnaires that fulfill variable indicators. Secondary data is data obtained indirectly or through intermediary media. The data used was a recap of customer data of the container depot in Surabaya in 2022 and the results of the company questionnaire in 2022. The sample in the study consisted of 70 customers obtained through calculations using the Slovin formula with an error tolerance limit of 10% of the total population of 228 customers.

Data Collection Technique

This study used a questionnaire as a data collection technique. According to Sugiyono, quoted by Ramadhini (2022), a questionnaire is a data collection technique where respondents are given a number of questions or written statements to answer.

Data Quality Test

1. Validity Test

The validity test is a test that determines whether a measuring instrument is valid or not (Janna, 2021). One of the most common SPSS testing techniques used to test validity is the Pearson Bivariate correlation, or Pearson Product Moment. The value is matched with the product moment at a significant level of 5%; if it is greater than 5%, then the item is valid (Dewi, 2018). Furthermore, to determine the value, it must be determined in the following way:

$$df = (N - 2)$$

Description:

N = number of respondents

2. Reliability Test

The reliability of a measuring instrument is how much the measuring instrument is trusted. Therefore, the consistency of the measuring instrument can be tested through a reliability test, which determines whether the measuring instrument remains consistent during repeated measurements. A measuring instrument is considered reliable if it always produces the same results even though it is measured repeatedly (Janna, 2021). Cronbach's alpha is a type of reliability test commonly used in questionnaires and research. According to Arikunto, cited by Janna (2021), Cronbach's alpha is used to evaluate the reliability of instruments with scores below 1. The Cronbach's alpha value is accepted if the calculation is greater than . According to Guilford, cited by Dewi (2018), there are five categories of reliability coefficients:

$0.80 < r_{tt} \leq 1.00$ very high reliability

- a. $0.60 < r_{tt} \leq 0.80$ high reliability
- b. $0.40 < r_{tt} \leq 0.60$ medium reliability
- c. $0.20 < r_{tt} \leq 0.40$ low reliability
- d. $-1.00 < r_{tt} \leq 0.20$ very low reliability (not reliable)

SERVQUAL

The SERVQUAL method developed by Parasuraman et al. (1985) is a service quality model that is usually used as a reference in management and marketing research. Measurement of service quality in the SERVQUAL model is based on a multi-item scale designed to measure customer expectations and perceptions and the difference between the two on the five main dimensions of service quality (SERVQUAL) (Sulistyowati, 2018). The dimensions used include (Zeithaml et al., 1988):

1. Tangible: the appearance of physical facilities, equipment, employee appearance, and means of communication of the company.
2. Reliability: the ability to provide the promised service accurately, on time, and satisfactorily.
3. Responsiveness: the ability and readiness of employees to help customers and provide responsive services.
4. Assurance: employee behavior that can increase customer trust in the company and give customers a sense of security. In addition, it guarantees that employees are always friendly and have the necessary knowledge and skills. This dimension is divided into 4 sub-dimensions, namely, competence, courtesy, credibility, and security.
5. Empathy: Easy rapport, good communication, and the ability to understand client needs. This dimension is divided into three sub-dimensions, namely, access, communication, and understanding/knowing the customer.

The value of attributes that affect customer satisfaction, which is the difference between the value of customer perceptions and the value of customer expectations, is compared with the largest negative value in the quality value measurement method. The purpose of this method is to determine the attribute values of the most significant dimensions that impact customers. If the gap value is positive, the level of customer perception is greater than expected, which means that the customer is very satisfied with the service of the service industry. If the Gap value is zero, it means that the customer is dissatisfied or disappointed with the service. If the gap value is negative, it means that the customer is dissatisfied or disappointed with the service (Sulistyowati, 2018).

The SERVQUAL method developed by Parasuraman et al. (1985) has five gap models that can cause producers to be unable to provide their goods or services to customers. The following are included:

1. Gap 1 is the difference between customer expectations and management perceptions.
2. Gap 2 is the difference regarding service quality specifications.
3. Gap 3 is the difference in service delivery.
4. Gap 4 is the difference between service delivery and communication of expectations.
5. Gap 5 is the difference between customer perceptions and their expectations.

The calculations carried out in the SERVQUAL method to determine Gap 5, or the gap between customer expectations and perceptions, are as follows (Nababan, 2018):

1. Calculating the average perception:

$$\underline{QX_{IV}} = \frac{\sum_{i=1}^n QX_{iv}}{n}$$

Description:

$\underline{QX_{IV}}$ = the average score of each answer of the i-th
respondent on the v-th indicator on the
Perception variable (P)

QX_{iv} = the score of each answer of the i-th respondent
on the vth indicator on the Perception variable
(P) v-th indicator on the Perception variable (P)

n = total respondents

2. Calculating the average expectation:

$$\underline{QY}_{IV} = \frac{\sum_{i=1}^n QY_{iv}}{n}$$

Description:

\underline{QY}_{IV} = the average score of each answer of the i-th
respondent on the v-th indicator on the
Expectation variable (I)

QY_{iv} = the score of each answer of the i-th respondent
on the vth indicator on the Expectation variable
(I) v-th indicator on the Expectation variable (I)

n = total respondents

3. Calculating the SERVQUAL score:

$$SQ = P - I$$

Description:

SQ = Quality of Service

P = Perceived Service

I = Customer Expectation

The research framework used is as follows:

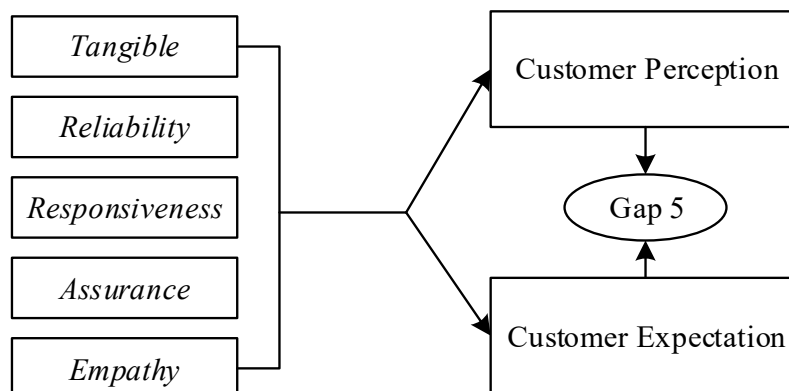


Figure 2. Research Framework

Gap 5, or SERVQUAL, scores are used to determine whether customers are satisfied or not with the services mentioned in each dimension. The tool used in this SERVQUAL analysis was SPSS version 22 for statistical tests such as reliability, validity, and factor analysis..

4. RESULTS AND DISCUSSION

4.1 RESULTS

Validity Test

Based on calculations using the df formula, the r_{table} used is 0.2272. There are two validity tests, on the attributes of customer expectations and customer perceptions. The following results are obtained:

Table 1 | Expectation Level Attribute Validity Test

Number	Dimension	Statement Code	r_{count}	r_{table} (Pearson Correlation)	Description
1	Tangible	T_1	0.858	0.2272	Valid
2		T_2	0.878	0.2272	Valid
3		T_3	0.845	0.2272	Valid
4	Reliability	R_1	0.827	0.2272	Valid
5		R_2	0.821	0.2272	Valid
6		R_3	0.799	0.2272	Valid
7	Responsiveness	RS_1	0.799	0.2272	Valid
8		RS_2	0.778	0.2272	Valid
9		A_1	0.730	0.2272	Valid
10	Assurance	A_2	0.863	0.2272	Valid
11		A_3	0.807	0.2272	Valid
12		A_4	0.791	0.2272	Valid
13	Empathy	E_1	0.731	0.2272	Valid
14		E_2	0.835	0.2272	Valid
15		E_3	0.880	0.2272	Valid
16		E_4	0.833	0.2272	Valid

Source: Data Processed (2024)

Table 1 showed that a calculated r_{count} is greater than the r_{table} (0.2272). This showed that all items are valid and suitable for use in measuring customer expectations and perception variables.

Table 2 | Perception Level Attributes Validity Test

Number	Dimension	Statement Code	r_{count}	r_{table} (Pearson Correlation)	Description
1	Tangible	T_1	0.653	0.2272	Valid
2		T_2	0.716	0.2272	Valid
3		T_3	0.689	0.2272	Valid
4	Reliability	R_1	0.852	0.2272	Valid
5		R_2	0.833	0.2272	Valid
6		R_3	0.852	0.2272	Valid
7	Responsiveness	RS_1	0.794	0.2272	Valid
8		RS_2	0.800	0.2272	Valid
9		A_1	0.807	0.2272	Valid
10	Assurance	A_2	0.723	0.2272	Valid
11		A_3	0.613	0.2272	Valid
12		A_4	0.712	0.2272	Valid
13	Empathy	E_1	0.767	0.2272	Valid
14		E_2	0.810	0.2272	Valid
15		E_3	0.836	0.2272	Valid
16		E_4	0.795	0.2272	Valid

Source: Data Processed (2024)

Table 2 showed that all items in the customer perception attribute have a calculated r_{count} greater than the r_{table} of 0.2272. This indicated that each item has a positive and significant correlation to the total score of its variables. Thus, all items can be considered valid and suitable for use in measuring customer perceptions.

Reliability Test

In this research, the Cronbach's alpha value must be more than 0.6 in order to be considered reliable, and the data is processed using the SPSS version 22 program. There are two reliability tests, namely for the level of customer expectations and the level of customer perceptions. The following results are obtained:

Table 3 | Expectation Level Reliability Test

Cronbach's Alpha	N of Items	Description
0.966	16	Reliable

Source: Data Processed (2024)

The results of the reliability test indicate that the measurement instrument for the customer expectation attribute has adequate internal consistency, with a Cronbach's alpha value exceeding 0.6. Therefore, data from this instrument can be used for the next stage of analysis in the study.

Table 4. Perception Level Reliability Test

Cronbach's Alpha	N of Items	Description
0.953	16	Reliable

Source: Data Processed (2024)

Table 4 showed that all items in the customer perception attribute showed a Cronbach's alpha value greater than 0.6, indicating that the instrument has adequate internal consistency.

Calculation of Gap 5 (SERVQUAL Score)

The next step is to calculate Gap 5, namely the gap between customer expectations and customer perceptions, starting by calculating the average perception value for each variable. Then the average expectation value for each variable. The last step is to calculate the SERVQUAL score.

Table 5| SERVQUAL Score Calculation Results

Dimension	Attributes	Average Perception	Average Expectation	SERVQUAL Score
Tangible	T_1	4.147	4.800	-0.653
	T_2	4.013	4.747	-0.733
	T_3	3.920	4.827	-0.907
Reliability	R_1	3.747	4.840	-1.093
	R_2	3.747	4.853	-1.107
	R_3	3.880	4.840	-0.960
Responsiveness	RS_1	3.733	4.840	-1.107
	RS_2	3.733	4.827	-1.093
Assurance	A_1	3.907	4.787	-0.880
	A_2	4.053	4.827	-0.773
	A_3	4.133	4.813	-0.680
	A_4	4.053	4.787	-0.733
Emphaty	E_1	3.773	4.733	-0.960
	E_2	3.880	4.853	-0.973
	E_3	3.707	4.880	-1.173
	E_4	3.827	4.827	-1.000

Source: Data Processed (2024)

According to the calculation results, there is a gap between customer perception and expectations as indicated by negative values on all variables or attributes. This means that Depo's performance still does not meet customer expectations.

4.2 DISCUSSION

Depot performance still does not meet customer expectations, as shown in Table 5, where each variable or attribute shows a negative value in the gap between customer perceptions and expectations. According to Expectation Confirmation Theory, when service performance matches customer expectations, customer satisfaction will increase or positive disconfirmation will occur, whereas when service performance does not match customer expectations, customer satisfaction will decrease or negative disconfirmation will occur. The results of this research showed that there was a negative gap or negative disconfirmation between customer expectations and performance that causes customers to be dissatisfied. If the gap value is negative, then the customer is dissatisfied with the service provided by the service provider (Sulistiyowati, 2018). Satisfaction is the extent to which a person feels happy or disappointed by comparing the perceived performance (or results) of a product with their expectations (Keller, 2009). Cao (2017) emphasized that there is a strong relationship between expectations, performance, and disconfirmation, which ultimately affects user satisfaction. In this context, a negative gap value indicates that customers feel dissatisfied because the service received does not match their expectations. In the case of this research subject, customers feel dissatisfied since the reality of the service they acquired doesn't match with their expectations, and therefore they feel unhappy or disappointed.

The occurrence of negative disconfirmation in the container depot service in Surabaya, which is engaged in the service sector, indicated an operational failure in meeting customer expectations. (Bhattacharjee and Sanford, 2020) strengthen this framework by showing that disconfirmation, both positive and negative, has a significant influence on

user satisfaction, especially in the context of services and information technology. In the context of logistics services and container depots, negative disconfirmation is the main signal of service inconsistency with customer expectations. This makes it clear that customers not only judge quality based on actual experience but also on the extent to which the experience confirmed their initial expectations. If customers experience negative disconfirmation consistently, there will be a decrease in trust and loyalty to the service provider. This is certainly not expected by the container depot in Surabaya. A similar approach to evaluating customer satisfaction with logistics services, especially in the container depot sector, was carried out by Singh, R. K., & Kumar (2020). He developed a model combining the SERVQUAL approach and the Fuzzy Analytical Hierarchy Process (Fuzzy AHP) method and showed that operational quality, such as service speed, clarity of administrative and information processes, and the use of information technology that supports transparency and efficiency, has a significant influence on the gap between customer perceptions and expectations. This finding strengthens the understanding that negative service quality gaps often occur not only because of low service performance but also because of failure to meet customer expectations regarding the technical and systemic aspects of depot services; for example, customers do not get speed of service, ease of process, or adequate information. This makes customer perceptions of service quality poor, even though the service may be physically available. This described the conditions that also occurred at the container depot in Surabaya, which was the research subject.

(Sari, K, et al., 2023), who highlighted the importance of the dimensions of reliability and tangibles in increasing customer satisfaction in the e-commerce sector. The results of this study are in line with these findings, where the attributes R2 (reliability) and T3 (tangibles) showed significant negative gap values. This indicated that customers feel that the service they receive has not met their expectations in terms of reliability and physical aspects of the service. A study conducted by Syahrullah et al. (2018) found that customer expectations (students) of the services of the Purwokerto Institute of Telecommunications Technology are still below customer expectations, so that organizations must concentrate on improving the attributes that have the largest negative gap. Another study conducted by Sahita et al. (2021) found that service improvements must be made by the company on tangible aspects that have the largest negative gap value. The results of research by Yanottama et al. (2020) showed that Cafe XYZ must improve its service quality because the overall gap value still shows a negative value. The study by Kim and Lee (2022) emphasized the critical role of digital tools and communication in enhancing service quality and customer satisfaction in the post-pandemic world. Hess & Klein (2003) discussed the service recovery paradox and its potential to increase customer satisfaction. This research result was contrary to the research result of Silolongan (2024), which found the variables quality of interaction, quality of physical environment, and quality of results have a relationship with customer satisfaction at the New Makassar Container Terminal.

The research result from this research subject showed the highest gap value is attribute E3, with a value of -1.173, which indicates that the depot has not tried to listen well to customer opinions and complaints. The lowest gap value occurs at attribute T1, with a value of -0.653, which indicates that customers feel almost quite satisfied with the Depot's performance, but the negative value indicates that the Depot must improve the services provided by this attribute. The Depot is advised to improve service quality at each attribute that has the highest gap value, namely tangible with a gap of T3 -0.907, reliability with a gap of R2 -1.107, responsiveness with a gap of RS1 -1.107, assurance with a gap of A1 -0.880, and empathy with a gap of E3 -1.173.

The highest gap of the research subjects in the tangible attribute T3, -0.907, is in line with the research of Putra and Wibowo (2021), which found that the tangible dimension has a significant influence on the perception of service quality in the context of terminals and logistics depots. Although the service process runs smoothly, poorly maintained physical facilities can cause negative perceptions from customers. This study emphasizes that improvements in tangible aspects can contribute significantly to increasing customer satisfaction. By ensuring that physical facilities are well maintained, service providers can increase customers' positive perceptions of the quality of service provided.

The highest negative gap in the reliability dimension (R2: -1.107) in this research subject indicates that customers feel that the service provided is not in accordance with what was promised, both in terms of time and accuracy of information. This is in line with the findings of research by Sari, N., & Mulyadi (2020), which highlights that failure to fulfill delivery time promises and inaccuracies in shipping documents can lead to significant customer dissatisfaction. Timeliness and accuracy of information are crucial factors in container depot operations, as delays or errors in information can disrupt the supply chain and incur additional costs for customers.

The negative gap in the Responsiveness attribute RS1 (-1.107) in this study subject indicates that customers feel that depot staff are less responsive to their needs. Long waiting times and slow staff responses can widen the gap between customer expectations and perceptions of service quality. This finding is in line with Nguyen, T. H., & Nguyen (2021), who highlighted that responsiveness, which reflects the willingness and ability of staff to help customers and provide services quickly, is one of the main determinants in shaping perceptions of service quality. Delays in responding to customer requests or complaints can lead to significant dissatisfaction.

The negative gap in the Assurance A1 attribute (-0.880) in the results of this study indicates that customers feel less confident in the competence and reliability of depot staff. Lack of adequate explanation of service procedures and the inability of staff to provide a sense of security can increase the gap between customer expectations and perceptions

of service quality. Yuliana, S., & Anggraini (2018) found that the lack of security felt by customers is often caused by the inability of staff to explain service procedures clearly and convincingly. When staff cannot provide accurate information or demonstrate competence in handling customer questions and concerns, this can reduce the level of customer trust in the services provided.

The results of the study with the highest gap in the empathy attribute E3 (-1.173) were also found by Hidayat, R., & Budiwan (2019), who highlighted that the company's failure to provide an effective mechanism to listen to and respond to customer input and complaints can increase the gap in perception between expectations and the reality of the service received. The lack of customer voice mechanisms causes an increase in the gap in perception. Therefore, it is important for depots to increase the empathy dimension in their services, for example, by providing responsive communication channels and training for staff to be more sensitive to customer needs.

To get the comprehension recommendation, a deep interview was held with the depot manager and field supervisors. It is known that the depot has changed its concept to become a Container Logistic Center, namely the concept of a one-stop service container depot, which serves all customer needs, such as standard container management, reefer plug, container repair, container cleaning, repositioning, and other services. This concept is expected to make it easier for customers to manage their cargo needs in one place with services in one location. The Depot has also experienced changes in its services, previously only serving domestic trips and now also serving exports and imports. In addition, the Depot's service system has also changed, from being done manually to being fully automated, which resulted in changes in the number of employees and rolling of employees. Unfortunately, this effort to upgrade service quality to the customer did not meet the expectation yet. This is according to the response of the customer by filling out the questionnaire that is distributed.

This research is in line with the findings of previous research, which state that the attribute with the highest negative gap value should get improvement, and this research proposes recommendations for improvement to each dimension that has a high negative gap value. There are several things that can be done by Container Depot to improve its service quality. Improvement recommendations were made through interviews and discussions with the Container Depot at the Depot office. Since each dimension of service quality has a negative value, the attribute with the highest gap value is recommended to be improved. The following are the results of the recommendations that have been determined:

Table 6 | Recommendation for Improvement on Service Quality

Attribute Code	Statement Attribute	Number	Improvement Recommendations	Timeline
E_3	The staff at the Container Depot has made an effort to listen to suggestions and complaints from customers.	1	Provide training for employees.	Every 1 year 1 time
		2	Evaluate employee assessments.	Every 6 months 1 time
		3	Conducting customer visits.	Every 6 months 1 time
		1	Reducing human function in service.	August 2022 - August 2023
		2	Provide system-based services in the form of Auto Gate.	August 2022 - August 2023
R_2	The Container Depot employees provide satisfactory service.	3	Development of the Auto Gate system to be even better.	May 2023 - August 2023
		4	Provide education related to the flow of the Auto Gate-based service system to security and other employees.	May 2023 - August 2023
		1	Oriented to online system-based services (website).	August 2022 - August 2023
		2	Provide information related to the customer service system to customers.	Every 6 months once
RS_1	Depot Petikemas employees are capable and ready to assist customers.	3	Provide supervision of the course of customer service in the field and on the system dashboard.	Every operational period
		4	Make improvements in terms of systems and human resources.	May 2023 - August 2023
		1	Provide clear information to customers on the function of the barcode provided on the information board.	July 2023
T_3	Service providers' means of communication are complete and easily accessible.	2	Provide a means of communication via Whatsapp group, email, and website through the barcode provided on the customer waiting room information board.	July 2023
		1	Adjusting the service flow to the new system.	May 2023 - August 2023
A_1	The employees of the Container Depot have the knowledge and skills that support them in carrying out their services.	2	Provide training and development for employees (related to service knowledge).	Every 1 month 1 time
		3	Improving the network for the system.	May 2023 - July 2023
		4	Prepare the system and employees better.	May 2023 - August 2023
		5	Adding manpower to the service flow if needed.	When there is a queue

Source: Data Processed (2024)

Resolving the problem of attribute E3, the Depot said that field employees should be trained in responding to customer suggestions and complaints. The Depot has conducted this training once a year. Employees must have the ability to solve problems with a cool head and find solutions to customer complaints. The next solution is for the Depot to conduct a more accurate assessment of each worker's level of empathy every six months. The next solution is to conduct visits to customers who are considered "premium customers" based on their order volume. These visits are conducted once every six months to assess the depot's service quality through direct opinions from customers and whether it meets the customers' needs and expectations. From these visits, Depot can evaluate the services they provide to customers.

Reducing human functions and creating a system that functions as an auto gate that can be controlled via the web is a potential solution to R2's attributes. As stated by the Depot, the system has been in operation since August 2022 but is still in a continuous stage of experimentation and development, which is expected to be completed by August 2023. During the trial, the system faced some challenges when working with new shipping companies and acquiring new customers, which resulted in a huge volume of customers. Before accepting new customers and clients, the future solution of this system had to be prepared. In addition to preparing the system well, employees must also know the operation of the system. Therefore, from May 2023 until the trial period was completed in August 2023, employees were provided with system training.

As a result of interviews and discussions with the Depot, the RS1 attribute was finalized with an online (website)-oriented system. This system includes an Auto Gate that can help the depot improve its service speed. The system started operating in August 2022 and is expected to end its trial period in August 2023. When customers visit the depot, they should also be informed of the service flow or system. Monitoring systems should be in place throughout the operation so that when customers exceed the service time, it can be handled, and the system can add notification features if customers exceed the service time. Employees are informed and trained on any updates to the system to ensure smooth service. To improve the ability and readiness to assist customers, the Depot conducted system and human resource improvements from May 2023 to August 2023. The Depot said during the interview that in May 2023, a new shipping line cooperated with the Depot, which resulted in an increase in customer volume. However, the Depot's systems were not ready to cope with this increase, which led to system errors. At the time of the interview, the depot said that the number of queues at the entrance had reduced as a result of the evaluation and improvement of the queuing system.

Improvements for attribute T3: the depot has provided complete communication services, but these services have not been well communicated to customers. The depot has created a barcode that will be linked to a WhatsApp group for customers and has also provided an e-mail, a number that can be contacted regarding services, and a website to convey customer complaints and needs. In conclusion, the Depot must provide clearer information about the means of communication they have for customers, one of which is by assigning admin employees or employees who are directly dealing with customers to inform them of the means of communication that can be used by customers.

The solution for attribute A1, during the interview with the Depot, showed that although employees have knowledge and expertise in their respective fields, they have to readjust their work because there are new services and systems. In addition, as the system is still in the experimental stage, it cannot handle more customers. The depot had to improve the system, working closely with the company's IT team, to resolve the system issues. In addition, frequent network problems can cause service delays and make customers think that employees do not understand their jobs. Network improvements should also be made so that services continue and customers do not have to wait too long. Depots should prepare their systems and staff for the future before increasing service volume. In addition, if necessary, the Depot can add more manpower to speed up the service flow in the field.

5. CONCLUSION

The results of the analysis of the service quality of the Container Depot in Surabaya using the SERVQUAL method showed that there was a gap between customer perceptions of performance and customer expectations, which results in negative values for each questionnaire attribute. This showed that the Depot still failed to meet customer expectations. Attribute T1, "The heavy equipment (reach stacker, side loader, and forklift) owned by the container depot worked well and was reliable," had the lowest gap value, -0.653. Attribute E3, "Container Depot employees have made efforts to listen to suggestions and complaints from customers," had the largest gap value, with a value of -1.173. To provide suggestions for improvement, this study used the attributes with the largest gap values in each dimension based on SERVQUAL calculations, starting from tangible with gap T3 -0.907, reliability with gap R2 -1.107, responsiveness with gap RS1 -1.107, assurance with gap A1 -0.880, and empathy with gap E3 -1.173. According to the largest gap value on attribute E3, it is recommended that field employees be given training in responding to suggestions and complaints from customers. Furthermore, employee assessments must be evaluated. Then conduct customer visits every 6 months.

6. LIMITATION AND IMPLICATION

6.1 Limitation

This study has several limitations that should be acknowledged to provide a comprehensive understanding of the research findings. First, the sample size was limited to 70 respondents out of a population of 228 customers. Although sufficient for statistical analysis, this sample may not fully represent the entire diversity of the customer base, particularly in terms of varying levels of engagement with the Container Depot services. As a result, the generalizability of the results to other customers or similar service contexts beyond the Surabaya area may be limited. Second, the use of the SERVQUAL method, while widely accepted for service quality assessment, inherently focuses on predefined dimensions (empathy, reliability, responsiveness, tangibles, and assurance) and may not entirely capture context-specific variables unique to the container depot or shipping industry. There is a potential that other critical aspects influencing customer satisfaction were not adequately explored. Additionally, time and resource constraints limited the scope of data collection and analysis. The study relied solely on customer perspectives at a single point in time and did not include data that could reflect evolving customer perceptions or long-term service quality trends. Moreover, limited funding and manpower restricted the ability to conduct broader comparative studies across different depot locations or service models.

6.1 Implication

The implications of this study are highly practical beyond the academic theory. The results provide actionable insights for service providers in container depots and other logistics-related sectors. Improving service quality, especially in dimensions like empathy, reliability, and responsiveness, can directly enhance customer satisfaction, operational efficiency, and business competitiveness. This is relevant in high-demand markets such as Surabaya, where customer experience significantly influences service selection and loyalty. Furthermore, this research opens opportunities for future studies. It encourages scholars to investigate other methodologies or to integrate qualitative approaches that capture deeper customer insights. Comparative research across different locations or service types within the shipping industry would also broaden the understanding. Additionally, future studies could explore the impact of digital transformation, automation, and employee training programs on service quality in container depots.

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Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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