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ANALYSIS OF SERVICE QUALITY ON SHARED SERVICE CENTER PT PELABUHAN INDONESIA IV (PERSERO)

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Abstract

Shared Service Center (SSC) is a strategy that implements a consolidation model of the company's back office processing functions to increase business efficiency and effectiveness. This strategy is widely applied by international class companies. Having a vision to become an integrated, highly competitive, and international port management company, is the main motivation for Pelindo IV to apply the SSC model to the company's back office function in 2018. Since SSC was implemented, the company has not evaluated service quality. Therefore, this study aims to measure and analyze service attributes based on the relationship between the level of customer satisfaction and the level of fulfillment of SSC Pelindo IV with customer needs through Servqual (Service Quality) analysis. The results of this study indicate that on average, the Gap Score is -0.7575, meaning that customers have high expectations of SSC Pelindo IV, but in fact the quality of services provided is not in accordance with customer expectations. Therefore, several recommendations are given to improve the quality of SSC services so that customers are satisfied.

Keywords: Shared Service Center, Servqual, Quality of service, Customer Satisfaction

INTRODUCTION

In his direction, the Ministry of SOEs (State-Owned Enterprises) always reminds SOEs to increase competitiveness and become world-class standard companies. In order to increase business efficiency and effectiveness, the strategy adopted by many companies in the world is through the Shared Service Center or commonly abbreviated as SSC, which is a consolidation model for functions processed by the company's back office (supporting processes such as Human Resources, Finance, and General Affairs) so that companies are more focus on strategic functions and its core business (Basoeki, 2018).

PT Pelabuhan Indonesia IV (Persero) or what is commonly called Pelindo IV is one of the SOEs engaged in port services. The vision of this SOEs is to become an integrated, highly competitive, and international port management company. The company's vision is supported by several missions, one of which is to provide port and non-port services that are integrated with customer satisfaction and loyalty orientation. In line with this, in 2018, the SSC

implementation strategy was also implemented by Pelindo IV which was supported by applying SAP (System, Application, and Processing).

The attractiveness of this SSC concept lies in several of its main benefits including reduced costs, improved service quality, streamlined processes, best practice sharing, knowledge transfer, increased productivity, better economies of scale, leveraged technology, better span of control, better alignment. is greater with business requirements, and Schulman's (1999) earnings increase. This is supported by the results of research by Riska Nurmarlia (2015) which concluded that companies implementing SSC have succeeded in achieving savings and efficiency through relocation and elimination of duplication with the help of SAP technology. According to Sterling (2020), SAP is an application that can integrate various needs and various relationships in company and business operations.

The implementation of SSC Pelindo IV still has several obstacles and obstacles. So that there are still bills that have not been completed each month and the processing time for billing documents is getting longer each month. This is illustrated in Table 1.1. This of course affects the quality of service, customer satisfaction and service performance of SSC which is not yet in line with customer expectations, both internal and external customers.

Table 1. Monthly Recapitulation of Troubled Vendor Billing Documents and the Time to Process Billing Documents at SSC 2019

Period	Amount of Unresolved Non-Performing Bills within the Month of Delivery	Average Number of Days Documents Processed Until to Cashier
January	60 Bills	2 days
February	15 Bills	2 days
March	46 Bills	2 days
April	16 Bills	2 days
May	48 Bills	2 days
June	21 Bills	2 days
July	43 Bills	3 days
August	33 Bill	4 days
September	34 Bills	3 days
October	21 Bills	3 days
November	13 Bills	3 days
December	60 Bills	3 days
Average	34 Bills	3 days

Source: PT Pelindo IV's SSC Google Form 2019, Data Processed

In a study conducted by Martina Daviddson (2005) entitled "Shared Service Centers, A Successful Solution For Swedish Companies" concluded that the main objective of implementing SSC is cost savings. Then, from the results of this study, Martina suggested that further research can discuss in terms of customer aspects, because customer satisfaction is very important for the survival of SSC. In line with this research, the problems that occur in the service billing process for SSC Pelindo IV customers, it is necessary to carry out an analysis to measure the level of customer satisfaction with SSC Pelindo IV services. Based on this, companies need to evaluate and improve the quality of SSC services to maintain customer satisfaction.

There are several methods used to measure the level of customer satisfaction. One of the methods used to measure service quality is Servqual. The origin of the word Servqual is Service Quality, which means service quality. Servqual is a method that can be used in measuring service quality based on the Gap Model developed by Parasuraman, Zeithmal

(1985). Service quality is the difference between the service perceived or perceived by consumers (perceptions) and the ideal service desired or requested (expectations) by consumers (Fandy, 2008).

LITERATURE REVIEW

Quality of Service

According to Fandy and Chandra (1996), quality is a dynamic condition related to products, services, human resources, processes and the environment that meet or exceed expectations. Then, quality can also be defined as the totality of the characteristics of the service or product offered in order to satisfy predetermined needs. So that quality is often interpreted as customer satisfaction with needs (Gaspersz, 1997). The definition of quality is also put forward by Juran (1989) which defines quality as a suitability for use (Fitness for use) and implies that a product or service must be able to meet what is expected by its users. Juran also introduced The Juran Trilogy which consists of:

1. Quality Planning

   Quality planning is planning that includes the development of products, systems and processes needed to meet or exceed consumer expectations.

2. Quality Control

   Quality control includes the following steps:

   a. Assess the actual performance of quality

   b. Compare performance against goals

   c. Acting on the difference between performance and goals

3. Quality Improvement

   Quality improvement must be carried out on an ongoing basis. The steps that can be taken are as follows:

   Based on the above definition, service quality is something that is more flexible, so that any changes that occur can affect service quality. This of course requires a strategy in making changes and improving service quality such as conducting surveys or reviews from customers for the services received.

Shared Services Center (SSC)

Shared Service Center (SSC) is a consolidation of several functions, activities, services, and resources into one independent unit (Schulman, DS, Dunleavy, JR, Harmer, MJ and Lusk, 1999). Based on the definition of SSC, the main function of SSC is as the center of the service unit. So that this field of course requires automation and integration of all parts of the company's business processes. Therefore, SSC requires support from an ERP (Enterprise Resource Planning) system in its automation and integration processes such as Systems Applications and Products in Data Processing (SAP) applications. In the Shared Services model, there is a unit that acts as a service provider (provider), and another unit as a customer (client / customer). The service provider unit and customer unit are bound by a contract that guarantees the level of service that can be expected (Service Level Agreement) and the customer unit will be charged a fee for the use of the service (Burns, Timothy J. and Yeaton 2008).

Service Quality (Servqual)

In 1988, Parasuraman, Zeithmal and Berry published an article entitled "SERVQUAL: Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality" in the Journal of Retailing. The article suggests an approach by defining and measuring both the performance (perceived performance = P) of services received by customers and services expected by customers (customer expectation = E). The key to maximizing quality is by maximizing the difference between the two measurement results (PE), or maximizing the advantages of the service received by the customer compared to the service expected by the customer (Zeithalm, et, al., 1990). Parasuraman, et al. Use five main dimensions in measuring service quality, namely:

1. Direct or tangible evidence which includes the appearance of physical facilities such as buildings and front office rooms, availability of parking lots, cleanliness, tidiness and comfort of rooms, completeness of communication equipment and employee appearance.
2. Reliability is the ability to provide services in accordance with the promises offered. This is related to the company's ability to provide accurate and consistent services that have been promised.
3. Responsiveness is the ability of employees to help customers, respond to requests, and provide fast and precise service. For example, the alertness of employees in serving customers, the speed of employees in handling transactions and handling customer complaints.
4. Assurance (assurance), namely the knowledge and friendliness of employees and their ability to generate trust or confidence, politeness and trustworthiness.The assessment of service quality using the Servqual method includes calculating the differences between the values given by customers for each pair of statements relating to expectations and perception.
5. Emphaty (empathy), which is the individual attention the company gives to customers such as the ease of contacting the company, the ability of employees to communicate with customers and the company's efforts to understand the wants and needs of its customers.

The Servqual instrument is useful in gap analysis. This is because usually services or services are intangible, gaps in communication and understanding between employees and customers will have a serious impact on perceptions of service quality. The five gaps that usually occur and affect service quality are:

1. Gap 1 (Gap-1) is the gap between customer expectations and company management perceptions. This discrepancy occurs as a result of company management misunderstanding what the expectations of the company's customers are.
2. Gap 2 (Gap-2) is the gap between perceptions of company management and service quality specifications. This discrepancy occurs due to the misinterpretation of company management's perceptions of the company's customers' expectations into service quality specifications. Management may be right in understanding customer requirements, but incorrect in setting specific standards of performance.
3. Gap 3 (Gap-3) is the gap between service quality specifications and service delivery to customers. This gap is caused by the inability of human resources to meet service quality standards.
4. Gap 4 (Gap-4) is the gap in service delivery to customers and external communication. This discrepancy occurs because the company turns out to be able to fulfill its promises which are communicated externally through various forms of promotion.

4

5. Gap 5 (Gap-5) is the gap between customer expectations and the reality of the service received. This gap occurs as a result of not meeting customer expectations.

Among the five gaps above, the fifth gap is the most important and key. The way to eliminate this gap is to eliminate the first gap to the fourth gap.
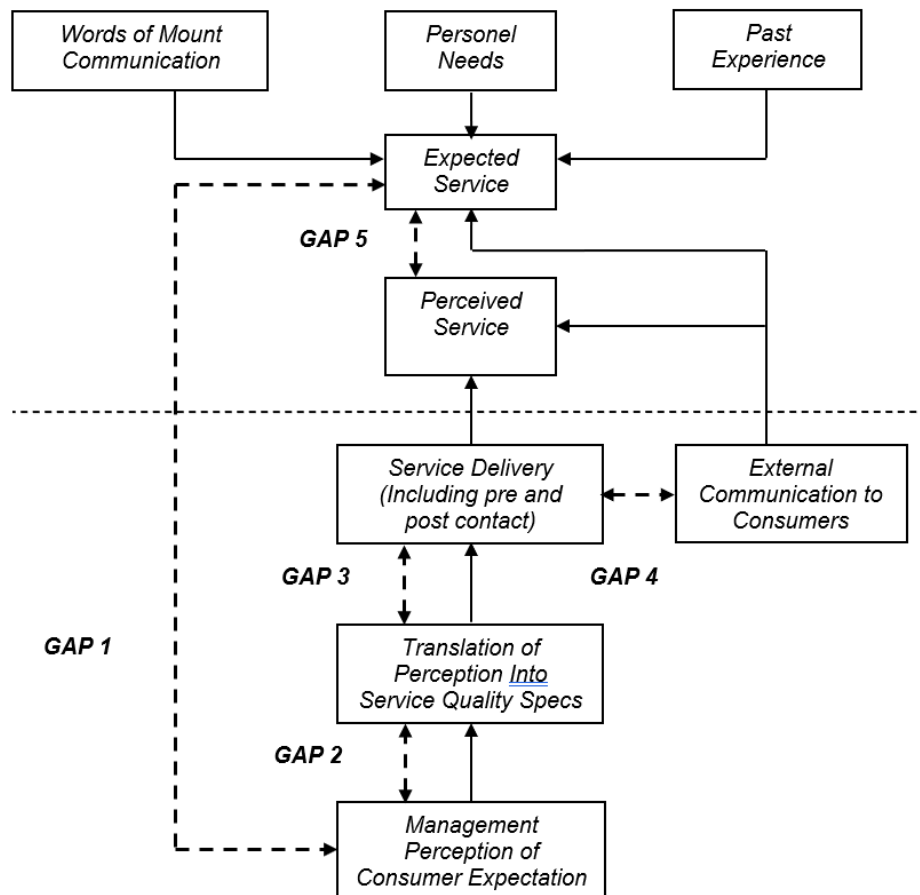
Figure 1: Servqual Conceptual Model
Source: Parasuraman, Berry Zeithamal (1990)

Conceptual Model

This research refers to the theory of The Juran Trilogy which focuses on improving the quality of company services. The process of measuring service quality is carried out by evaluating or comparing the company's service performance with a set of predetermined standards. Therefore, this study uses Sevqual as an instrument to measure the value of the gap between customer expectations and perceptions. The value of the gap is the difference between what is perceived to the quality of service that has been received and consumer expectations of service quality. If the result of the gap value is positive (+) indicates that the party providing the service has been able to provide service quality in accordance with consumer expectations. However, if there is a negative (-) gap value, it means that the service provider is still unable to provide the service as expected. After knowing the quality of services provided by the company, then planning is carried out to control the service, as well as finding opportunities for improvement that can improve service quality and customer satisfaction.
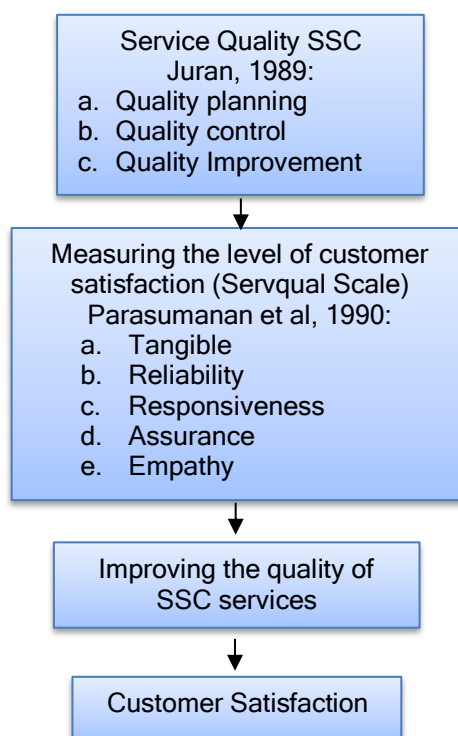
Figure 2: The Conceptual Model

RESEARCH METHODS

Research Location and Design

The research was conducted at the sub-directorate of finance SSC Head Office of PT Pelabuhan Indonesia IV (Persero), which is located in Makassar City, South Sulawesi Province from January to April 2021. This research is a research that uses a descriptive quantitative approach using an explorative study design. In this research, a case study was conducted on the quality of SSC Pelindo IV services. In this study, the SSC Sub-Division Pelindo IV as the service provider and branch offices, business units, and other directorates at the head office as internal customers, third parties procuring goods and services, and Pelindo IV service users as external customers. Interviewing, and filling out questionnaires.

Population or Sample

Population is a generalization area consisting of subjects or objects that have certain qualities and characters that are determined by researchers to study and draw conclusions (Sugiyono, 2011). In this study the population consisted of employees, third parties procuring goods and services, and users of PT Pelindo IV's port services. Where this population data is obtained from the number of vendor and customer accounts in the SAP SSC Pelindo IV application of 7,425 accounts, consisting of 2,800 vendor accounts (third party accounts for goods and services procurement, as well as employee accounts) and customer accounts (port service users) of 4,625. account.

While the sample is part of the number and characteristics to be investigated and can represent the entire population. The technique that is often used to measure a sample is the Slovin technique. Sample measurement using the Slovin technique is used to obtain a

6

representative sample size so that the research results can be generalized and the calculation does not require a sample size (Sugiyono, 2011). The Slovin formula used is as follows:

$$n = \frac{N}{1+N(e)2}$$

Information:

n = sample size or number of respondents

N = Population size

E = The percentage of inaccuracy due to tolerable errors in sampling is 10%

So the samples in this study are:

$$n = \frac{7.425}{1+7.425(0,1)2} = 98,67 \sim 100$$

Table 2. Distribution of the Questionnaire

| No. | Office Network | Number of Office Units | Distribution of the Questionnaire per Office | | Total Questionnaire |
			Internal Customers	External Customers	
1	Subsidiary	3	1	0	3
2	Representative office	1	1	0	1
3	Headquarters	1	4	4	8
4	Container Terminal	2	3	3	12
5	Branch office	16	2	2	64
6	Port Service Unit	3	2	2	12
	TOTAL	25	10	10	100

Source: Pelindo IV 2019 Annual Report, Results of 2021 Researchers' Observations

Method of Collecting Data

The data collection technique in this research is that the researcher makes observations on the research object in order to complete the data needed in this study. Then the researcher will ask a number of questions to the respondent related to the variables in this study in accordance with the questions that have been made previously in the form of a questionnaire related to measuring service quality (Servqual). The number of questionnaires distributed and processed was 100 (one hundred) questionnaires. Data collection in this study consisted of several stages, namely, editing, coding, data entry, and data cleaning

Data Analysis Method

This research uses Service Quality (Servqual) analysis method. The questionnaire contains Servqual measurement data which includes service expectations or expectations in the research object. Based on the theory put forward by Zeithalm, et, al. (1990), to obtain a Servqual Score or Gap Score in this study, it is calculated using the formula:

Gap Score = Perception Value - Expectation

Furthermore, a descriptive analysis is carried out which is a descriptive analysis of the results of research on the quality of PT Pelindo IV's SSC service which is supported by the theory and processing of respondents' responses to the questionnaires that have been filled in.

EMPIRICAL RESULTS

Descriptive statistics

The research was conducted at the Shared Service Center of PT Pelindo IV (Persero) from January to April 2021. Collecting data through questionnaires via google form as many as 100 SSC service users. Based on the results of questionnaire data processing, the Gap Score obtained for each indicator in the Servqual dimension is summarized in Table 3 below.

Table 3. Gap Score Service Attributes

No.	Statement	Expectation Value	Perceived Value	Gap Score
1	2	3	4	5 = 4 - 3
	TANGIBLE			
P1	Easy access to applications and systems (operational systems, non-operational systems, and SAP applications)	4.72	3.87	-0.85
P2	Completeness of supporting tools (computers, printers, and scanners)	4.74	4.19	-0.55
P3	Availability of instructions for completing billing documents	4.76	4.08	-0.68
P4	Availability of a stable internet network	4.94	3.71	-1.23
	RELIABILITY			
P5	Accuracy in data analysis and processing.	4.88	3.94	-0.94
P6	The accuracy of the information displayed in the application and support system of the SSC unit	4.87	3.98	-0.89
P7	Timeliness in carrying out vendor bill payments	4.68	3.84	-0.84
P8	The accuracy of SSC staff in providing the required services.	4.78	4.12	-0.66
P9	The flow and process of service is clear and easy	4.74	3.99	-0.75
	COMPREHENSION			
P10	Readiness in responding to customer inquiries	4.85	4.08	-0.77
P11	The speed of employees in processing data and bills	4.72	3.77	-0.95
P12	Handling customer complaints.	4.72	4.14	-0.58
	GUARANTEE			
P13	Certainty of payment time	4.84	3.87	-0.97
P14	Trust of SSC Pelindo IV customers	4.79	4,2	-0.59
P15	The attitude of SSC Pelindo IV service providers	4.77	4.12	-0.65
P16	The existence of a Service Level Agreement (guaranteed level of service that can be expected).	4.86	3.86	-1
	EMPATHY			
P17	The ability of SSC Pelindo IV staff to understand customer needs.	4.72	4.13	-0.59
P18	Good and effective communication between SSC Pelindo IV staff and customers	4.81	4.21	-0.60
P19	Services provided to all customers are the same regardless of social status and position.	4.82	4.21	-0.61
P20	The language used in the service is easy to understand.	4.82	4.37	-0.45
	Average Gap Score			-0.7575

Source: Primary Data Processed

Prerequisite Evaluation

Validity Test

Reliability test is a test or measurement free of random error variance. The existence of random errors can reduce the level of reliability of the measurement results. A questionnaire is said to be reliable or reliable if a person's answer to a statement is consistent or stable over time. SPSS provides facilities to measure reliability with the Cronbach Alpha statistical test (Ghozali, 2001). If the Cronbach Alpha value is> 0.60, the questionnaire is declared reliable or consistent, on the other hand, if the Cronbach Alpha value is <0.60, the questionnaire is declared unreliable or inconsistent. Based on Table 4, namely the results of processed data regarding reliability testing for service quality with 20 statement indicator items that are included in the test, it has a Cronbach's alpha value above 0.60,

Table 4. Test the Validity of Expectations and Perceptions of Pelindo IV SSC Service Users

Item	Indicator (Statement)	Cronbach's Alpha		Information
		Hope	Perception	
P1	Easy access to applications and systems (operational systems, non-operational systems, and SAP applications)	0.935	0.921	Reliable
P2	Completeness of supporting tools (computers, printers, and scanners)	0.94	0.924	Reliable
P3	Availability of instructions for completing billing documents	0.937	0.919	Reliable
P4	Availability of a stable internet network	0.947	0.922	Reliable
P5	Accuracy in data analysis and processing.	0.94	0.919	Reliable
P6	The accuracy of the information displayed in the application and support system of the SSC unit	0.936	0.917	Reliable
P7	Timeliness in carrying out vendor bill payments	0.935	0.921	Reliable
P8	The accuracy of SSC staff in providing the required services.	0.935	0.916	Reliable
P9	The flow and process of service is clear and easy	0.934	0.914	Reliable
P10	Readiness in responding to customer inquiries	0.934	0.918	Reliable
P11	The speed of employees in processing data and bills	0.94	0.917	Reliable
P12	Handling customer complaints.	0.936	0.919	Reliable
P13	Certainty of payment time	0.934	0.923	Reliable
P14	Trust of SSC Pelindo IV customers	0.934	0.915	Reliable
P15	The attitude of SSC Pelindo IV service providers	0.935	0.915	Reliable
P16	The existence of a Service Level Agreement (guaranteed level of service that can be expected).	0.936	0.919	Reliable
P17	The ability of SSC Pelindo IV staff to understand customer needs.	0.934	0.914	Reliable
P18	Good and effective communication between SSC Pelindo IV staff and customers	0.934	0.916	Reliable
P19	Services provided to all customers are the same regardless of social status and position.	0.936	0.923	Reliable
P20	The language used in the service is easy to understand.	0.935	0.919	Reliable

Source: Primary Data Processed

Reliability Test

Test reliability is a test or measurement free of random error variance. The existence of random errors can reduce the level of reliability of the measurement results. A questionnaire is said to be reliable or reliable if a person's answer to a statement is consistent or stable over time. SPSS provides facilities to measure reliability with the Cronbach Alpha statistical test (Ghozali, 2001). If the Cronbach Alpha value is> 0.60, the questionnaire is declared reliable or consistent, on the other hand, if the Cronbach Alpha value is <0.60, the questionnaire is declared unreliable or inconsistent. Based on Table 5, namely the results of processed data regarding reliability testing for service quality with 20 statement indicator items that are included in the test, it has a Cronbach's alpha value above 0.60,

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P2	Completeness of supporting tools (computers, printers, and scanners)	0.94	0.924	Reliable
P3	Availability of instructions for completing billing documents	0.937	0.919	Reliable
P4	Availability of a stable internet network	0.947	0.922	Reliable
P5	Accuracy in data analysis and processing.	0.94	0.919	Reliable
P6	The accuracy of the information displayed in the application and support system of the SSC unit	0.936	0.917	Reliable
P7	Timeliness in carrying out vendor bill payments	0.935	0.921	Reliable
P8	The accuracy of SSC staff in providing the required services.	0.935	0.916	Reliable
P9	The flow and process of service is clear and easy	0.934	0.914	Reliable
P10	Readiness in responding to customer inquiries	0.934	0.918	Reliable
P11	The speed of employees in processing data and bills	0.94	0.917	Reliable
P12	Handling customer complaints.	0.936	0.919	Reliable
P13	Certainty of payment time	0.934	0.923	Reliable
P14	Trust of SSC Pelindo IV customers	0.934	0.915	Reliable
P15	The attitude of SSC Pelindo IV service providers	0.935	0.915	Reliable
P16	The existence of a Service Level Agreement (guaranteed level of service that can be expected).	0.936	0.919	Reliable
P17	The ability of SSC Pelindo IV staff to understand customer needs.	0.934	0.914	Reliable
P18	Good and effective communication between SSC Pelindo IV staff and customers	0.934	0.916	Reliable
P19	Services provided to all customers are the same regardless of social status and position.	0.936	0.923	Reliable
P20	The language used in the service is easy to understand.	0.935	0.919	Reliable

Source: Primary Data Processed

DISCUSSION

Based on Table 3, it shows that all indicators obtain Gap Score with negative values. So that all of these indicators require improvement and improvement of service quality. Service improvement and improvement priorities are carried out according to the lowest gap value in each dimension or variable, as follows:

1. Direct Evidence Dimensions

   In the dimension of direct evidence, the indicator that needs immediate improvement based on the Gap Score of -1.23 is the availability of a stable internet network. Then followed by other indicators, namely easy access to applications and systems, availability of instructions for completing billing documents, and completeness of supporting equipment (computers, printers, and scanners).

2. Reliability Dimensions

   In the dimension of indicator reliability that needs improvement based on the Gap Score of -0.94 is the accuracy in the analysis and data processing. Then followed by other indicators, namely the accuracy of the information displayed in the application and support system of the SSC unit, the punctuality of paying vendor bills, clear and easy service flow and processes, and the accuracy of SSC staff in providing the required services.

3. Capture Power Dimension

   In the perception dimension, the indicator that needs improvement based on the Gap Score of -0.95 is the speed of the employees in processing data and billing. Then followed by other indicators, namely readiness in responding to customer inquiries and handling customer complaints.

4. Guarantee Dimensions

   In the dimension of guarantee, the indicator that needs to be improved based on the Gap Score of -1 is the existence of a Service Level Agreement (guaranteed level of service that can be expected). Then followed by other indicators, namely the certainty of payment time, the attitude of SSC Pelindo IV service providers, and the trust of SSC Pelindo IV customers.

5. Dimensions of Empathy (Emphaty)

   In the dimension of empathy, the indicators that need to be improved based on the Gap Score of -0.61 are that the services provided to all customers are the same regardless of social status and position. Then followed by other indicators, namely good and effective communication between SSC Pelindo IV staff and customers, the ability of SSC Pelindo IV staff to understand customer needs and finally the language used in the service is easy to understand.

   Based on the results of the Gap Score assessment, the efforts that can be made by the company in each Servqual dimension are:

1. In the Direct Evidence dimension, companies need to provide appropriate supporting tools, update the quality of internet services, and provide SSC pre-service instructions for all company units.

2. In the reliability dimension, companies need to carry out regular training to add skills and proficiency in carrying out services, as well as upgrade support systems that can be used by customers in monitoring the bill payment process.

3. In the Capability dimension, companies need to evaluate customer complaints and provide customer service to follow up on customer complaints.

4. In the guarantee dimension, companies need to provide a Service Level Agreement as a guarantee of the level of service that customers can expect as well as periodically evaluate service quality.

5. In the dimension of empathy, companies need to conduct training to improve communication skills in conveying information to customers

CONCLUSION

Based on the discussion of the research results in the previous chapter, the conclusions of this study are:

1. Servqual analysis of 20 indicators in all dimensions obtained a negative value Gap Score. The average Gap Score of all indicators is -0.7575.

2. In the Direct Evidence dimension, the indicator with the largest Gap Score is the availability of a stable internet network of -1.23. Then in the dimension of reliability, the indicator with the largest Gap Score is the accuracy in the analysis and data processing of -0.94. Then in the Capability dimension, the indicator with the largest Gap Score is the speed of the employees in processing data and the bill is -0.95. Furthermore, in the guarantee dimension, the indicator with the largest Gap Score is the existence of a Service Level Agreement (guaranteed service level that can be expected) of -1. And finally in the dimension of empathy, the indicator with the largest Gap Score is the same service provided to all customers regardless of social status and position of -0.61.

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