

Study of Customer Satisfaction Index on The Reliability of Motor Services Using the ServQual Method In The Educational Environment : Case Study At Stap One Workshop

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Abstract

Bengkel Stap One has never measured the customer satisfaction index and the measurement of the quality of motorcycle service services, as well as measuring the gap between expectations and customer perceptions. The research method used is the ServQual Method with Gap Analysis. The results of the study for the measurement of the Customer Satisfaction Index (CSI) 74.81% fall into category 2, which shows that the customer is quite satisfied. Gap measurement results for all dimensions of -1.17 and a level of conformity of 96.51% indicate that the dimensions of reliability, assurance, tangible, empathy, responsiveness are still not in accordance with customer expectations with customer perceptions seen from the 5 dimensions of service quality. The lowest dimension is the tangible dimension with a gap of -5.70 and a suitability level of 78%. Therefore, the quality of service on the tangible dimension provided by the customer must be able to increase customer satisfaction, such as cleaning garbage and finding tools. Validity test with Gap Analysis with the results of the Pearson product moment validity test = valid. Reliability test by calculating Cronbach's Alpha with a reliability test result of 0.81 = quite high reliability.

Keywords: *Service Quality, Customer Satisfaction Index, Reliability, and Environmental workshop*



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INTRODUCTION

Currently, globalization has reached various aspects of life, as a result of which the competition is getting sharper. The business world as a part of it also experienced the same thing, companies that previously competed only at the national level now have to compete with companies from all over the world. To face the current global competition, schools as educational institutions build facilities in the form of workshops. Currently starting to try to provide services with technology management and competitive prices through efficient work rationalization. Schools that have workshops, in addition to practical learning facilities. It can also be used for Teaching Factory, namely the learning concept in industry-based vocational schools, which refers to standards and procedures that apply in the industrial world and is carried out in a real atmosphere like the one in the workshop. And it is intended that students experience learning with the same standards and atmosphere as in official workshops. Since June 2021 Tanjung Priok 1 Vocational School, in collaboration with PT. Pertamina Lubricants provides oil sales and oil changes at the Stap One Workshop. Services can be in the form of motor tune-ups, oil changes and brake linings. Vocational students are given training every year to be able to service, change oil and repair light motorcycles. The general public motorcycle users, who come to the Stap One workshop can carry out routine services on a regular basis.

The workshop also has customers from students, teachers and the surrounding community. Satisfying service to customers takes place when customers get good results from their

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needs. Satisfied customers are expected to remain loyal and introduce Stap One Workshop services to others. One of the efforts towards improving customer service and efficiency is to implement service quality improvement and by using the ServQual method. The advantage of using this method lies in its ability to capture the subjectivity that occurs in data collection taken through questionnaires and its ability to be able to identify variables that must be considered to always be improved based on the potential value of customer satisfaction. So that the workshop can find out what facilities are considered important and influence customer satisfaction with services at the Stap One Workshop. In this case the quality improvement that is carried out is not only the quality of the service produced, but technology in all aspects such as the technology of the tools used. Technology management is based on the overall participation of all workshop members, from the top management to the lowest levels, to always control and improve technology in all fields for the betterment of the workshop, students and customer satisfaction.

Efforts to meet consumer desires are the key to success in winning the competition between trades, and every consumer wants maximum service from each company to provide. Maximum service obtained by consumers will be able to improve the welfare between consumers and the company. The emergence of consumer welfare and comfort can provide several benefits for the company, including harmonious relations between the company and consumers, the creation of consumer loyalty, and can form consumer recommendations by word of mouth that can benefit the company. Building welfare and comfort for consumers is not easy and cannot simply be achieved, but requires a long process, one of which is through the quality of service provided to consumers in order to convince consumers to be loyal to the products or services we offer. Consumers who feel like the company's services will convey positive experiences to others, they are even willing to recommend the company's place to others. On the other hand, if consumers do not like the services of the company, they will tell their bad experiences to others which can lead to negative attitudes and judgments from that person. To provide quality service to their customers, service entrepreneurs must provide the best service to them, which is primarily concerned with product quality.

With good food service quality, consumers will feel attracted and come again to enjoy the dish. Many employers consider service quality to be trivial. They only provide good service quality, when they just started operating, but over time the quality of service provided has gotten worse. This of course will make consumers feel dissatisfied and cause the company to be abandoned by consumers. The Stap One workshop is included in the service category which consists of goods (products) and services (services). Workshop service is a form of service business involving reliability, assurance, tangibles, empathy, responsiveness. Workshops must consider customer satisfaction in addition to achieving profits. The thing that needs to be considered in providing services is hearing the voice of customers, with this means that companies must interact with consumers directly with the aim of obtaining feedback in the form of consumer responses about facilities and infrastructure related to services provided as controls and a measure of success to achieve satisfaction. consumer. Competition between similar businesses is growing, marked by the high consumption level of the community towards the need for vehicles. In an effort to maintain business and customers, the level of service quality must be considered and consistent.

Based on initial observations, questionnaires have been filled out to consumers stating that they often come to the workshop with needs including motorcycle service, oil changes. The consumers said they came to the workshop frequently because they felt the space provided was comfortable, the prices at the workshop were suitable for the pockets of the students. Consumers must be given good service, if consumers are not given good service then what will happen is that the consumer will leave and do not want to come back and go to a competitor's workshop to become

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a customer of a competitor's workshop. Seeing the background above, the researcher is interested in revealing through the Study of the Customer Satisfaction Index on the Reliability of Motorcycle Service Services in an Educational Environment with the ServQual Method Case Study at the Stap One Workshop.

LITERATURE REVIEW

2.1. Service Reliability

Service is the key to success in various business activities that are service providers. The role of the service will be greater and will determine if the service activity competes in an effort to win market share or customers. One way to make the sale of services superior to competitors is to provide quality and quality services that meet the level of customer interest. The level of customer interest in the services they receive can be formed based on the experience and advice they get. The customer selects the service provider based on the rank of importance. After customers enjoy the service they tend to compare it with what they expected. If the service they enjoy is far below the service they expect, customers will lose interest in the service provider. Conversely, if the services they enjoy are in line with expectations, they will tend to reuse the service product.

According to (Kotler and Keller, 2008), service is any action or activity that can be offered by one party to another, which is essentially intangible and does not result in the ownership of anything. The production of services may or may not be related to physical products. According to (Tjiptono, 2012) service can be viewed as a system consisting of two main components, namely service operations which are often invisible or unknown to customers and service quality which is usually visible or known to customers. According to Gronross (Ratminto and Atik, 2005), the definition of service is (1) Service is an activity or series of activities that are invisible (cannot be touched) that occur as a result of interactions between consumers and employees or other things provided as providers. services to solve customer problems. And (2) From these definitions service or service is an activity or activity that is offered to consumers but the form of the product offered is not visible while what happens is the interaction between services and consumers.

2.1.1. Nature and classification of services (Services)

According to (Kotler and Keller, 2008), services have 4 different properties that greatly affect the design of marketing programs, namely (a) Intangibility (intangible): unlike physical products, services cannot be seen, felt, touched, heard, or smelled before the service is purchased, (b) Inseparability (inseparability): when goods are made are included in inventory, distributed through various intermediaries, and consumed later, services are generally produced and consumed at the same time, (c) Variability (varied): the quality of services depends on who provide it, when and where, and to whom, services vary widely., and (d) Perishability (can be destroyed): services cannot be stored, so a service cannot be stored and planned for use in the future. Services are not durable, cannot be used on another day and cannot be stocked as inventory.

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2.1.2. Service Characteristics

According to (Zamke, Ratminto and Atik, 2005), some of the characteristics possessed by services are that consumers have memories or receive services, which cannot be sold or given to others, the purpose of providing services is unique, every customer and every contact is unique, something that is considered special c. A service occurs at a certain time, this cannot be stored in a warehouse or sent goods, for example, consumers carry out quality control by comparing the expectations and perceptions they get, if an error occurs, the only way an employee can do this is by apologizing and Employee morale is very decisive for the smooth delivery of services.

2.2. Service quality

According to the American Society for Quality Control (Lupiyoadi, 2001), quality is the overall characteristics and characteristics of a product/service in terms of its ability to meet the needs that have been determined to be latent. The concept of service quality is basically relative, that is, it depends on the perspective used to determine the characteristics of the specification. Basically there are three service quality orientations that should be consistent with each other, namely: customer perception, product or service, and process. For tangible goods, these three orientations can be clearly distinguished even the product is the process itself (Lupiyoadi, 2001). According to (Goetsh and Davis, and Tjiptono, 2001), states that service quality is a dynamic condition associated with products, services, humans, nature and the environment that meet or exceed expectations. Quality has elements, namely quality includes efforts to meet needs, quality includes products, services, people and the environment and quality is an ever-changing condition. So it is concluded that service quality is the key to achieving success, whether or not the quality of service of goods or services depends on the ability of producers to consistently meet consumer expectations. Satisfied consumers will indirectly create loyalty, and encourage word of mouth recommendations, and can even improve the company's image in the eyes of consumers. Therefore, the quality of service must be the main focus of the company's attention.

2.2.1. Service Quality Dimensions (RATER)

Quality of service is one person's actions to other parties through the presentation of products or services in accordance with the tastes, expectations and needs of consumers. Companies can provide services that are in accordance with the wishes of consumers, so the quality of the company's service is good. This good service will encourage consumers to make repeat purchases at the company. Parasuraman (2001) suggests the concept of service quality related to satisfaction is determined by five elements commonly known as service quality "RATER" (Reliability, Assurance, Tangible, Empathy and Responsiveness). The essence of the concept of service quality is to show all forms of actualization of service activities that satisfy people who receive services in accordance with reliability, fostering assurance, showing tangible evidence that can be seen, according to the concern (empathy) of people who provide services in accordance with responsiveness (responsiveness) carry out the service tasks provided consistently to satisfy those who receive services. Based on the essence of the service quality concept "RATER", most work organizations make this concept a reference in implementing service actualization in their work

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organizations, in solving various forms of gaps in the various services provided by employees in meeting the demands of community service.

The actualization of the "RATER" concept is also applied in the implementation of the quality of service for employees, both government and non-government employees, in improving their work performance. More details can be described regarding the forms of service quality application by applying the concept of "RATER" proposed by Parasuraman (2001). A policy to assist and provide fast and appropriate services to customers, with clear information delivery. Leaving consumers waiting for negative perceptions of service quality. According to Tjiptono (2012) regarding the willingness and ability of service providers to help customers and respond to their requests immediately. Every employee in providing forms of service prioritizes aspects of service that greatly influence the behavior of people who receive services, so that responsiveness skills are needed from employees to serve the community in accordance with the level of absorption, understanding, incompatibility of various forms of service that they do not know. This requires wise, detailed explanations, fostering, directing and persuading to address all forms of work procedures and mechanisms that apply within an organization so that services receive a positive response (Parasuraman, 2001). An organization is very aware of the importance of service quality responsiveness to the services provided. Everyone who receives services really needs an explanation of the services provided so that the services are clear and understandable. To realize and realize this, the quality of responsiveness services has an important role in fulfilling various explanations in service activities to the community. If responsiveness services are given well for wise explanations, detailed explanations, coaching explanations, directive explanations and those that are persuasive, if this is clearly understood by the individual who gets the service, then responsiveness service is considered successful and becomes form of success.

Service quality or service quality is defined as the level of mismatch between customer expectations and customer perceptions. Quality is assessed by RATER, namely Reliability, Assurance, Tangible, Empathy, Responsiveness. Customer satisfaction is the main thing regarding satisfaction and service quality. In this case the customer plays an important role in measuring the level of satisfaction with the services provided by the repair shop to assess the quality of service. The effect of quality on customer service is to help customers on service quality. If the consumer has no previous experience with a repair shop, then his perception of the service quality of the repair shop will be based on his expectations. The next interaction (service encounter) with the repair shop will cause the customer to enter the expectation process and perceptions of service quality, each additional interaction with the workshop will strengthen or vice versa even change the customer's perception of service quality and the revised perception of service quality modifies the customer's buying interest in the repair shop in the future.

2.2.2. Customer Satisfaction Index (Customer Satisfaction Index).

Customer Satisfaction Index (CSI) is a measurement of customer satisfaction on the performance of a product or service based on customer opinions in obtaining services from public service providers by comparing expectations and performance. Customer Satisfaction

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Measurement basically compares the performance of a product or service with customer expectations, the higher the customer's expectations are met, the higher the level of customer satisfaction. Measurement of customer satisfaction through surveys can be done in various ways including (Kotler 2008): Directly Reported Satisfaction: Measurements are carried out directly through questions related to customer satisfaction indicators, then customers are asked to provide responses, namely Very Dissatisfied, Dissatisfied, Less Satisfied, Satisfied, Very Satisfied. Derived Dissatisfaction: Measurement is done by asking questions regarding customer expectations. Problem Analysis Factor: Customers who are respondents are asked to disclose the problems they face related to the company's offerings and suggestions for improvement based on the analysis of the 4M+1I factors, namely Human, Method, Machine, Material and Environment. Important Performance Analysis: known as Gap Analysis is used to measure how big the gap is between the level of interest (customer expectations) and reality (service quality). According to Webster's 1928 Dictionary in Lupiyoadi (2006) a customer is someone who has come to a place several times. same for buying an item or equipment. Customers are people whose activities are buying and using a product, both goods and services, continuously. Customers are people who relate directly or indirectly to business companies.

2.3. ServQual method

The ServQual / Service Quality method is a method used to measure service quality from the attributes of each dimension, so that the gap value will be obtained which is the difference between consumer perceptions of services that have been received and expectations of services received. The measurement method is by measuring service quality from the attributes of each dimension, so that the gap value will be obtained which is the difference between consumer perceptions of the services received and consumer expectations of the services received. Gap analysis is a method used to measure service quality from the attributes of each dimension, so that the gap value will be obtained which is the difference between consumer perceptions of services that have been received and expectations of those received. The measurement of this method is by measuring the quality of service from the attributes of each dimension, so that the gap value will be obtained which is the difference between consumer perceptions of the services received and consumer expectations of the services to be received. This method was developed in the 1980s by Zeithaml, Parasuraman & Berry to measure the quality of service outcomes. With this questionnaire, we can find out how big the gap is between customer perceptions and customer expectations of a service company. The ServQual questionnaire can be modified (customized) to suit the service industry such as workshops and so on. Consumer expectations for service are very important and this must be understood by every company. Efforts to implement consumer expectations are indeed a formidable task for the company. So not infrequently in the service there are often complaints and criticisms from customers because they are considered lacking in the expected service. Service perception is the performance resulting from company employees who provide services both goods and services to customers. To determine the score in the ServQual method itself is calculated by the following formula:

$$WF \text{ (Weight Factor)} = (MIS / MIS) \times 100 \quad (1)$$

$$WS \text{ (Weight Score)} = WF \times MSS \quad (2)$$

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$$WT \text{ (Total Weight)} = WS \quad (3)$$

$$CSI \text{ (Customer Satisfaction Index)} = WT / \text{Max Value Likert Scale} \quad (4)$$

$$GAP = \text{(Average Perception Score)} - \text{(Average Expected Value)} \quad (5)$$

2.4. Motorcycle Service at Stap One Workshop

The development of automotive technology has led to the development of service technology as well as the provision of parts and spare parts. The year 2022 is the beginning of the revival of the Indonesian automotive industry from the corona pandemic crisis. Customer satisfaction of motorcycle service services can be analyzed from human factors, methods, materials, machines and the environment in the workshop. Examples are seen from the cleanliness of the garbage, serviceability, tools used, tool search and the appearance of the workshop. Business in workshop services is a business that many people are interested in. Opening services such as a workshop business is an activity that can be said to be large and complex. There are many things that must be considered in managing a large business so that management in the service business sector is able to overcome the difficulties that exist in its management, both through services and the physical appearance of the building. The function of the workshop is as a place for maintenance, repair, and replacement of system components of a machine or other equipment. In the workshop business, there are buying and selling transactions between sellers and buyers, including those transactions are the products and services offered. This transaction will not go well if the employee who will serve is selected correctly. Employees must be educated, trained and taught how to communicate well. The Stap One workshop does not have branches and has good service, from welcoming, ordering, to payment. Visitors who come are greeted in a friendly manner and when visitors come, the employees are responsive and friendly. Consultation on problems experienced by customers is well served

Stap One workshops are workshops within the Tanjung Priok 1 Vocational School that have street vendor mechanics from class XII Vocational High School students who have been given skills by the teacher and PT. Pertamina Lubricants in the form of: Oil change: Checking oil or changing oil is a mandatory thing that you have to do every month so that the engine runs properly and is free from disturbances. Oil functions as a lubricant that coats metal parts to prevent direct contact with air or water. In addition, oil can also protect the engine from rusting easily. The type of oil used should not be arbitrary. Therefore, it is recommended that you first consult with a mechanic regarding the right type of oil for the type of motorbike. Routine tune-up service: Tune-up service must also be carried out regularly every month. This tune-up service includes checking tire pressure, checking condition or chain tension, cleaning the carburetor and radiator, checking the ECU, cents and horn, and cleaning the air filter. If during the tune-up service it turns out that something needs to be repaired or replaced, generally the mechanic will ask before doing it. Replacement of spare parts: Spare parts have different ages depending on how the motorbike is used. For example, the age of the brake pads is influenced by how they are used. Brake pads are divided into two types, namely front disc brake pads and rear drum brake pads. At the time of service the mechanic will tell you whether the brake pads need to be replaced or not. Spare parts

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that have a long life are batteries. But there are some parts that don't last long, for example, rollers and V-belts.

RESEARCH METHOD

Descriptive quantitative research method is research data in the form of numbers and analysis using statistics. The place of research was carried out at the Stap One Workshop, which is located at Jalan Mangga no.3, Lagoa, Koja, North Jakarta. The time of the study was carried out from January 2022 to July 2022. The population in this study were all customers of the Stap One Workshop with an average of every weekly to reach 120 people. Part of the number and characteristics possessed by the population. Samples taken from the population must be truly representative (representative). This study uses the formula proposed by (Riduwan and Kuncoro, 2007) to calculate the minimum number of samples are:

$$n = \frac{N}{N.e^2+1} \quad (6)$$

Description: n = Number of samples and N = Number of population

The research variable is the object of research, service quality is the service provided by the Stap One Workshop to visitors as measured by five dimensions of service factors, namely RATER. The technique of collecting is a questionnaire (questionnaire) and interviews or interviews. The instruments used questionnaires and interviews, but most of them used questionnaires as their instruments. This questionnaire uses a Likert Scale, namely the Likert scale model used, namely Very Satisfied (score 5), Satisfied (score 4), Unsatisfied (score 3), Dissatisfied (score 2) and Very Dissatisfied (score 1).

3.1. Calculation of the value of expectations and customer perceptions and CSI.

From the results of the questionnaire, it is continued to calculate the value of expectations and customer perceptions and CSI. Value Expectations and Customer Perceptions is a descriptive analysis for data on each variable for all research data, using Ms. Excel obtained using Ms. Excel is processed in the following way:

- a. Making data tables: The data obtained produces interval-scale data, then explained in tabular form for each variable and sub-variable using Ms. Excel, namely with the formula: WF (Weight Factor) = $(MIS / \sum MIS) \times 100$ and WS (Weight Score) = $WF \times MSS$.
- b. Calculating CSI score: CSI score is obtained using Ms. Excel, namely with the formula: WT (Total Weight) = $\sum WS$. CSI (Customer Satisfaction Index) = $WT / \text{Max Value of Likert Scale}$, CSI criteria from Likert scale with criteria Satisfied, Fairly Satisfied, Less Satisfied, Dissatisfied, Very Dissatisfied, as in table 1.

Table 1. Customer Satisfaction Index

Index Value	Criteria CSI
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81 – 100	Quite satisfie
66 – 80,99	Quite satisfied
51 – 65,99	Less satisfied
35 – 50,99	Not satisfied
0 – 34,99	Very Dissatisfied

(Sugiyono, 2013)

3.2. Gap Analysis

Gap value can be calculated using Ms. Excel with the formula is $Gap = (Average\ Perception\ Value) - (Average\ Expected\ Value)$. After getting a score, a ranking or sequence is made with the following Gap provisions: (1) If the gap is Positive (Perception > Expectation): The service is said to be satisfactory and surprise., (2) If the gap is zero (Perception = Expectation), the service is said to be satisfactory and of high quality. . and (3). If the gap is negative (Perception < Expectations) and the service is said to be of poor quality and unsatisfactory.

3.3. Service Reliability. Pearson Product Moment Validity
Validity test is used to measure whether or not a questionnaire is valid, it is said to be of quality if it has proven its validity and reliability. The validity test uses the principle of correlating the score of the questionnaire item with the total score of the respondents' answers using SPSS 25 software for windows, it can be seen in table 2

Table 2. Instrument Validity

Product Moment	Instrument Validities
$r_{count} > r_{table}$	Valid
$r_{count} < r_{table}$	In Valid

(Sugiyono, 2013)

The validity test in this study was conducted on 100 respondents who visited the Stap One Workshop. The test results of the instrument are said to be valid on each statement item if $r_{count} > r_{table}$, r_{table} with 100 respondents so that it is said to be valid if $r_{count} > 0.165$. See attachment table 1. how to find r_{table} : $df = (N-2) = 100-2 = 98$ look at $N = 98$.

3.3. Instrument Reliability

Reliability Test to see the consistency of the questionnaire when done repeatedly and carried out together on all questionnaire items or groups. Based on the results of the instrument trials conducted on 100 respondents with the SPSS program, it produced a reliability value which can be seen in table 3. The results show that the reliability level of the instrument is so that the questionnaire is feasible or not for research use.

Table 3. Instrument Reliability

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The magnitude of the value of	Instrument Reliability
0,00 - 0,199	Very Low Reliability
0,20 - 0,399	Low Reliability
0,40 - 0,599	Adequate Reliability
0,60 - 0,799	High Reliability
0,80 - 1,000	Very High Reliability

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FINDINGS AND DISCUSSION

4.1. Customer Satisfaction Index (Customer Satisfaction Index)

Based on the population are: teachers = 50 people, employees = 25 people, foundations = 25 people, students = 500 people, local residents = 500 people and the minimum number of samples is: $n = 100$. Customer questionnaire is a way to find out the results of research by presenting data that is easy to understand so that conclusions can be drawn. This study consists of one variable, namely service quality and with 5 indicators (reliability, responsiveness, assurance, attention and physical evidence). The data obtained from the research instrument in the form of a questionnaire with a Likert scale given to Stap One Workshop customers. Presentation of data in this study in the form of tables and figures. From the results of the customer questionnaire at the Stap One Workshop, data were obtained from 100 customers with an instrument in the form of a questionnaire. The number of statements on the service quality variable is 10 items consisting of positive statements with an answer scale of Very Satisfied, Satisfied, Less Satisfied, Dissatisfied and Very Dissatisfied. Customer Satisfaction Index (CSI) is $WT / \text{Max Likert Scale} = \text{CSI} = 74,81$

4.2 Gap Measurement

Gap calculation is based on (Perception Value) - (Average Expected Value), the results are shown in Table 4. from the table shows

Table 4. Gap Analysis

Pernyataan	Rata skor harapan	Rata skor persepsi	Gap	Kesesuaian (%)
Reliability				
Kerapihan Kerja	8,12	9,99	1,87	123
Kemampuan Servis	12,86	10,41	-2,45	81
Rata Rata	10,49	10,2	-0,29	97
Assurance				
Tampilan Bengkel	13,03	9,88	-3,15	76
Komunikasi terjalin Baik	7,83	9,63	1,8	123
Rata Rata	10,43	9,755	-0,675	94
Tangible				
Kebersihan Sampah	12,49	9,96	-2,53	80
Pencarian Alat Alat	13,03	9,86	-3,17	76
Rata Rata	12,76	9,91	-2,85	78
Empathy				
Penampilan Pegawai	8,39	10,29	1,9	123
Tempat Ruang Tunggu	7,97	9,81	1,84	123
Rata Rata	8,18	10,05	1,87	123
Responsiveness				
Ketersediaan Oli	8,25	10,12	1,87	123
Alat yang Digunakan	13,91	10,1	-3,81	73
Rata Rata	11,08	10,11	-0,97	91
Rata Rata Total	10,59	10,01	-0,58	96,51

Based on Table 4. Shows that if the gap is positive (Perception > Expectations) indicates the service is said to be satisfactory and a surprise. If the zero gap (Perception = Expectation) indicates the service is said to be satisfactory and of good quality. And if the negative gap (Perception < Expectation) indicates the service is said to be of poor quality and unsatisfactory.

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4.3 Measuring service quality on the RATER dimension

Based on the table above, the 5 RATER dimensions yield an average Gap value of -1.17 and a conformity level of 96.51% indicating that the 5 dimensions of the Stap One Workshop (reliability, assurance, tangible, empathy, responsiveness) are still not in line with customer expectations. The dimension that has the lowest gap occurs in the Tangible dimension with a gap of -5.70 and a suitability level of 78%. Therefore the quality of service on the Tangible dimension provided by the Stap One Workshop to customers must be able to increase customer satisfaction, such as cleaning garbage and searching for tools. Conversely, the dimension that has the highest gap occurs in the Empathy dimension with a gap of 3.74 and a conformity level of 123%. Therefore, the quality of service on the Empathy dimension provided by the Stap One Workshop to customers must maintain customer satisfaction, such as the appearance of employees and waiting room locations. Pearson Product Moment Validity Test Results. The value of r is calculated in Figure 2 (Pearson correlation) r is calculated $> 0.165 = \text{valid}$ (See Validity Test Results) with several questions X.2 = Questions about the tools used, X.3 = Questions for Searching Tools, X.4 = Questions for Workshop Views, X.6 = Garbage Cleanliness Question and X.7 = Serviceability Question. Looking at the significance value (sig), if the sig value $< 0.05 = \text{valid}$, if the sig value $> 0.05 = \text{invalid}$. Then the results of the Pearson product moment validity test have a sig value $< 0.05 = \text{valid}$. And the Reliability Test, Calculating Cronbach's Alpha is 80.9%. Based on the criteria of Reliability α , that the reliability is very high reliability. And the Cartesian diagram is shown in the image below

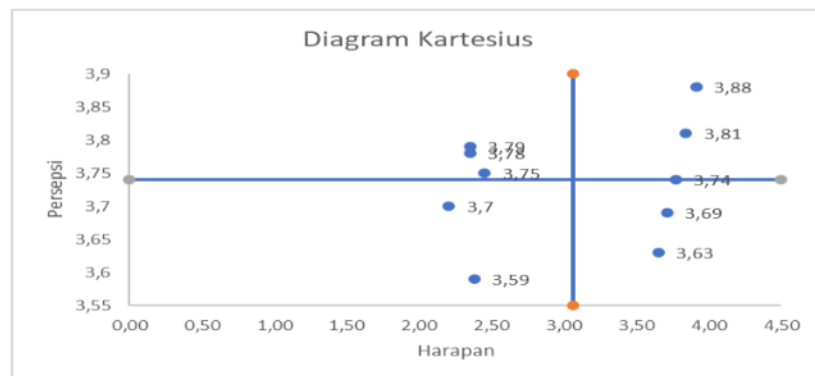


Figure 1. Cartesian diagram

Quadrant A (3,4 and 7): Looking for Tools, Garbage Cleaning, Workshop View, Quadrant B (2 and 6): Serviceability, Tools used, Quadrant C (5 and 9): Availability of Oil, Appearance of Employees. And Quadrant D (1, 8 and 10): Work Tidiness, Good Communication, Waiting room area., Then the results of the Cartesian Diagram Service quality in quadrants A and B is a priority to achieve customer satisfaction then continues with quadrants C and D.

CONCLUSION AND FURTHER RESEARCH

Based on the results of research on Service Quality at Stap One Workshops, the conclusions are as follows:

**Study of Customer Satisfaction Index on The Reliability of Motor Services Using the ServQual Method In
The Educational Environment : Case Study At Stap One Workshop**

Jenni Ria Rajagukguk, Boggi Aryo Wibowo.

1. The results of a survey of 100 Stap One Workshop customers using the Customer Satisfaction Index (CSI) measurement fall into category 2, indicating that the customer is quite satisfied.
2. The results of measuring the gaps from the Cartesian diagram show the results of measuring the gaps in quadrants A and B on the tangible dimension to be a priority to achieve customer satisfaction, then continue with other dimensions in quadrants C and D to achieve customer satisfaction. The lowest gap results on the tangible dimension. Therefore the quality of service on the tangible dimension provided by the Stap One Workshop must be able to increase customer satisfaction, such as cleaning waste and searching for tools. On the other hand, the dimension that has the highest average gap is the empathy dimension. Service quality on the Empathy dimension provided by the Stap One Workshop to customers must maintain customer satisfaction such as work tidiness and waiting room locations.
3. The results of the measurement of service quality show that the 5 dimensions of RATER in the Stap One Workshop (reliability, assurance, tangible, empathy, responsiveness) still do not meet customer expectations.

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