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Operation Service Delivery System Design In Automotive Reparation Business UD. Wirnaya Artha Motor

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ABSTRACT: Service design is important to be able to achieve customer satisfaction.. To be able to design this, a house of quality is used that connects the desires of the customer and the company's ability to respond, in addition to know the company's position in competition. The study population was all customers of UD. Wirnaya Artha Motor. 95 people used as samples through purposive sampling. The analytical tool used is the House of Quality. The results of this study indicate that UD. Wirnaya Artha Motor has not been able to meet the desires or needs of customers properly seen from the gap between the level of importance with the level of company performance. There are 19 service indicators that become customer requirements and 19 technical requirements, position UD. Wirnaya Artha Motor is superior to its competitors, but there are still improvements that need to be done to improve customer satisfaction.

Keywords - Service design, QFD, House of Quality.

I. INTRODUCTION

Service is an important aspect of determining the success of an organization engaged in services, the better the services provided, the higher the likelihood that the organization will continue(Sutawidjaya & Asmarani, 2018). Services have characteristics such as intangibility, heterogeneity, and simultaneous which make the design process complex and variations in services become inevitable(Ray & Chawla, 2016). Another important aspect of the service is how services can be delivered well by the company to consumers(Arshad & Su, 2015). With the development of the era, the company also has awareness about how important the quality services are applied. Quality services will affect customer satisfaction (Suryopratomo, 2019). Customer satisfaction depends on their perception of service quality from individual attributes (Rashid & Pandit, 2018).

To be able to produce a service that is in accordance with customer expectations, QFD or Quality Function Deployment is used (Hartanti & Hariastuti, 2015). To integrate customer and company priorities into the service delivery process design, QFD is used as a tool, which combines customer expectations and environmental strategies in service design activities.(Pakdil & Kurtulmuşoğlu, 2016). Quality function deployment (QFD) is a structured method used in the process of product planning and development to determine the specifications of the needs and desires of consumers and evaluate a product to meet the needs and desires of consumers (Trifiyanto & Susilowati, 2018).

QFD is a systematic tool used to improve quality. QFD is used to examine the gap between the expected quality of service and that actually felt by respondents. Quality function deployment techniques (QFD) transform customer demands into service techniques, reduce design waiting times and provide improved services to meet customer demands (Chen, 2016).

One of the QFD tools is the House of Quality (HOQ). HOQ is used by teams in various fields to translate customer requirements, market research results and benches (Kasan & Yohanes, 2017). The use of QFD methods with the house of quality tool has been done by several researchers before to connect between customer desires with products or services. Research conducted Kelesbayev *et al.*, (2016), Gillis & Cudney (2015), Heba (2017)shows that the design of service quality in the company under study still needs improvement, this can be seen from the results of research in the form of a list of qualities that need to be improved. Motorcycle repair service with growth in the use of motorized vehicles has bright prospects. The right and clear system design will be a competitive advantage for the company. One of the companies used as research subjects is UD. Wirnaya Artha Motor. Complaints due to long waiting times, queuing systems that are not clear, frequent errors in maintenance make customers often move to other similar companies. To overcome this, good service design is needed and can be systemized with blueprint to minimize waiting times, errors in maintenance, and increase customer satisfaction

II. LITERATURE REVIEW

QFD translates what customers need into what the organization produces. QFD allows organizations to prioritize customer needs, find innovative responses to those needs and improve processes to achieve maximum effectiveness. Yunanda (2014)shows the advantages of the QFD method are: 1) Providing a standard format for translating consumer needs into technical requirements, so as to meet consumer needs. 2) Helping the design team focus on the design process carried out on the facts, not on intuition. 3) During the design process, decision making is 'recorded' in the matrices so that it can be reviewed and modified in the future. The purpose of QFD itself is to not only meet as many customer expectations as possible, but also try to exceed customer expectations as a way to compete with competitors. While emphasizing that QFD brings efficiency to companies that have misinterpretations and the need to change can be minimized. A better understanding of customer needs, improved communication quality, and faster decision making are achieved(Gandara *et al.*, 2019).

The main tool of QFD is the matrix, where results are achieved through the use of interdepartmental or functional teams by gathering, interpreting, documenting and prioritizing customer needs. The starting point of QFD is the customer as well as the wants and needs of the customer. In QFD this is called the voice of the customer. The job of the QFD team is to hear the voice of the customer. The QFD process starts with the customer's voice and then continues through 4 main activities namely: 1) Product Planning 2) Product Design 3) Process Planning 4) Process Planning Control(Bajčetić *et al.*, 2018).

The form most often used to describe the structure of Quality Function Deployment (QFD) is a matrix called the House of Quality (HOQ). HOQ can be defined as a product planning matrix that describes customer needs, company targets and company product evaluations of competitors. The House of Quality matrix consists mainly of customer requirements ('Whats') in the matrix row, technical solutions ('Hows') in the matrix column, numerical weighted correlation matrix in the middle, and above the house is the inter-technical correlation with the form of a triangular matrix in roof-shaped top. The division of rows and columns makes a systematic comparison and using a planning matrix provides a competitive analysis of performance design (Quarcoo, 2018)

III. METHODS

The research design used is a descriptive form with a quantitative approach. Based on the formulation of the problems that have been described, this study seeks to describe the design of operational service delivery systems at UD. Wirnaya Artha Motor with a house of quality approach.

Variables are objects of research or something that is a point of attention in a study. The variables used in this study are 1) Quality of service, with dimensions: Reliability, Responsiveness, Assurance, Empathy and Tangibles 2) Technical Response Qualitative data used in this study are data obtained through observing the conditions / conditions of service reparations and service systems UD. Wirnaya Artha Motor. The instruments used were open questionnaire and closed questionnaire. This study uses the ServQual method followed by QFD. The population in this study is consumers of UD. Wirnaya Artha Motor. This study uses 19 indicators so that the number of samples involved is 95 respondents. Samples were selected using the Purposive Sampling method. The data was obtained using several methods, namely Questionnaire and Observation

IV. RESULTS AND DISCUSSION

Profile of respondents observed in this study were age, sex, and level of education last. The number of respondents in this study were 95 people. Respondents who gave responses to the questionnaire from this study had fulfilled the criteria set out in the criteria of the research respondents, namely educated high school / vocational high school, had already visited or served at least 2 times, and had served in competing companies.

The most important indicator according to consumers in the reliability dimension is UD. Wirnaya Artha Motor provides a reliable service with an average score of 4.54. The indicator that has the lowest average in this dimension is UD. Wirnaya Artha Motor provides timely services with an average score of 4.46. The indicator that has the highest average is the UD indicator. Wirnaya Artha Motor responds and provides solutions to customer complaints with an average of 4.45. The indicator that has the lowest average in this dimension is the availability of technician provides advice and guidance to customers with an average of 4.39. The indicator that has the highest average is the guarantee of UD. Wirnya Artha Motor if the goods or services provided are not in accordance with the wishes of consumers with an average of 4.49 and the indicator that has the lowest average is the Consumer gets a guarantee of security when his vehicle is serviced at UD. Wirnya Artha Motor with an average value of 4.42

The indicator that has the lowest average is the indicator that obtains an average value of 4.39, this value is included in the very important group but compared to the average value of other indicators this indicator gets a smaller value, the indicator is Availability of technician s giving advice and guidance to customers in the responsiveness dimension, The appearance of the clean workshop is attractive and Technician have a neat and

clean appearance in tangible dimensions. This means that the customer considers the availability of technician giving advice and guidance to customers, the appearance of the workshop and the appearance of a clean and attractive technician are not as important as other indicators to apply. The indicator that has the highest average is the indicator that obtains an average value of 4.55, which is classified as a very important group, but more important than the other indicators. The indicator that obtains the highest average is the Technician serving and appreciating each customer on the empathy dimension, which means that the customer considers that the most important thing that needs to be done in performing service is to serve and respect every customer who comes.

The indicator with the highest average level of performance in the reliability dimension is UD. Wirnaya Artha Motor provides a reliable service with an average of 4.34. The indicator with the lowest average is UD. Wirnaya Artha Motor provides timely services with an average of 4.06. The indicator that has the highest performance in terms of responsiveness or responsiveness is UD. Wirnaya Artha Motor responds and provides solutions to customer complaints with an average of 4.59. The indicator with the lowest average is the availability of technician giving advice and guidance to customers with an average value of 4.22.

The indicator on the guarantee dimension that has the highest average level of performance is the guarantee of UD. Wirnya Motor Artha if the goods or services provided are not in accordance with the wishes of consumers with an average of 4.20. The indicator that has the lowest average is UD. Wirnya Artha Motor provides timely guarantees in service with an average of 3.33. Dimension of empathy or empathy, the indicator that has the highest average level of performance is the technician serving with an attitude of courtesy with an average of 4.38. The indicator with the lowest average level of performance is that technician serve non-discriminatively with an average of 3.91. The indicator that has the highest average level of performance on tangible dimensions is the physical appearance of the facility according to the type of service provided with an average of 4.22. The indicator with the lowest average is that technician have a neat and clean appearance with an average of 3.42.

The indicator that has the lowest average is the indicator that obtains an average value of 3.33, the indicator is UD. Wirnya Artha Motor provides timely guarantees in service, namely on the guarantee dimension. This means the customer feels that UD. Wirnaya Artha Motor has not been able to meet consumer expectations in terms of ensuring timely service. The indicator that has the highest average is the indicator that obtains an average value of 4.59, namely UD. Wirnaya Artha Motor responds and provides solutions to customer complaints on the responsiveness dimension) which means the customer considers that in UD. Wirnaya Artha Motor responded and provided solutions to customer complaints very well. The gap between the expectation level which has an average value of 4.47 and the performance of the company which is valued at 3.37, which means that the services expected and deemed important by customers have not been able to be met properly.

The level of consumer interest in services has an average value of 4.39 of 3 indicators (very important); 4.42 as many as 1 indicator (very important); 4.44 as many as 2 indicators (very important); 4.45 as many as 1 indicator (very important); 4.46 as many as 3 indicators (very important); 4.47 as many as 1 indicator (very important); 4.48 as many as 1 indicator (very important); 4.51 as many as 1 indicator (very important); 4.52 as many as 1 indicator (very important); 4.53 as many as 1 indicator (very important); 4.54 as many as 2 indicators (very important); 4.55 as many as 1 indicator (very important). The data was obtained from the results of filling the questionnaire level of importance distributed to 95 respondents, then processed and taken an average of respondents' answers. The assurance dimension occupies the highest average level of importance at 4.582, while the dimension with the smallest average is the responsiveness dimension of 4.428.

The company's performance in meeting customer needs is having an average of 3.33 of 1 indicator (neutral); 3,42 as many as 1 indicator (agree); 3,46 as many as 1 indicator (agree); 3,91 as many as 1 indicator (agree); 3.94 as many as 1 indicator (agree); 3.96 as many as 1 indicator (agree); 4.06 as many as 1 indicator (agree); 4,11 as many as 1 indicator (agree); 4,20 as many as 1 indicator (agree); 4,21 as many as 2 indicators (strongly agree); 4.22 as many as 2 indicators (strongly agree); 4.33 as many as 1 indicator (strongly agree); 4.34 as many as 1 indicator (strongly agree); 4.35 as many as 1 indicator (strongly agree); 4.38 as many as 1 indicator (strongly agree); 4.59 as many as 1 indicator (strongly agree). The dimension with the highest average is the responsiveness dimension with an average of 4.3614, while the dimension with the lowest average is the tangible dimension of 3.7658.

126 relationships between CR and TR, with 99 very strong relationships symbolized by "●", 24 moderate relationships symbolized by "o", and 3 low relationships symbolized by "▼". The standard measure of a technician has character and integrity in working is to have a technician character who is brave to try, wants to learn, is honest, and works hard, and has integrity to work. The standard size of complete service equipment is that there is a minimum of 1 large impact air, 2 small impact air for commerce. 3 sets of keys, 1 set of filter openers, cutters, screwdrivers. Pliers, 2 crocodile jacks, 4 jet stands, 1 nitrogen wind conventer, 1 automatic tire opener, 1 compress for 100 psi pressure, 1 compressor for 200 psi pressure, 1 compressor for 1000 psi pressure, 2 sets of four-wheel vehicle lifts, 3 set of hydraulic openers, 1 set of injector cleaner, 1 set of trigger trigger

injection, and 2 solder. Standard sizes of complete parts ranging from the best quality to medium are all brands of motorcycle parts, outer tires and tires in all brands, oil of all brands, batteries of all brands, and variations of motorbike equipment. A standard measure of training for new technician to guarantee the quality of on-the-job training service that is trained and supervised directly for 6 months or until understanding.

The standard size of the heavy service (for example unloading the machine) is given a warranty in accordance with the terms and conditions that apply is a minimum warranty of 2 weeks from the time the service is performed includes overhead, overhouling, and engine down. The standard measure of a re-check on a vehicle that has been serviced is a re-check by the owner / technician after service. The standard measure of new customers who are welcomed with courtesy and friendliness is the application of 3S, namely smiles, greetings, and greetings. The standard size of the customer is given an explanation if there is a mistake in estimating the time and price of the item before it is agreed to be serviced, the customer can consult his complaints, price estimates, and spare parts used.

The standard measure of customers can do a free consultation about the problems of the vehicle is oral information about prices and service times and proof of red notes, changes will be notified to consumers before service is applied. The standard measure of discounts and discounts is a special price given to customers who have been subscribed for one year and also discounts for customers who shop and do services above Rp 200,000. A standard measure of access to the workshop owner in the event of an emergency outside working hours is a 24-hour access to the workshop owner. The standard measure of being able to be called for emergency service is within 24 hours and the area is 5 km.

The standard measure of having technical knowledge about two-wheeled vehicles is a minimum of 2 years experience in the automotive field. The standard measure of cleanliness and comfort of the reception area is a special waiting room, complete with air conditioning and TV. The standard measure of vehicle cleanliness after being serviced is minimally wiped clean. The standard size of a clear queue system is that customers get a queue number. The standard size of an adequate number of technicians in service is a minimum of 5 people. A standard measure of good communication skills from technicians and owners is that the customer understands what is meant at least. Standard measures of equipment and machine safety for servicing are non-corroded and damaged.

Table 1. Assessment towards Competitors

No	Customer Requirement	UD. Wirnaya	UD. Wahyu
		Artha Motor	Motor
1	Doing work according to the promised time	G	G
2	Doing service without errors	G	F
3	Providing timely services	F	G
4	Provide services that can be trusted	G	F
5	Having skills in responding to customer needs	G	G
6	The availability of technician provides advice and	G	G
	instructions to customers		
7	Respond and provide solutions to customer complaints	G	G
8	Provide timely guarantees in service	F	G
9	Provide a guarantee of cost certainty in service	G	G
10	Consumers get a guarantee of security when the vehicle is serviced	G	F
11	There is a guarantee of warranty if the goods or services provided are not in accordance with the wishes of the consumer	G	F
12	The technician serves with a friendly attitude	G	G
13	The technician serves with manners	G	G
14	Technician serving non-discriminatory	F	G
15	The technician serves and values each customer	G	G
16	Have up to date equipment and machinery	G	F
17	The appearance of the workshop is clean and attractive	F	F
18	Technician have a neat and clean look	F	F
19	the facilities provided are sufficient	G	G

UD. Wirnaya Artha Motor received a Good rating (G) of 14 indicators and a moderate rating (F) of 5 indicators, while its competitors received a Good rating (G) of 12 indicators and a rating of Medium (F) of 7

indicators. It can be seen that UD. Wirnaya Artha Motor received a Good rating (G) more than its competitors in the automotive repair service business or workshop.

U.D Wirnaya Artha Motor and its competitors, UD. Wahyu Motor, both of whom have the character of technicians who dare to try, want to learn, are honest, and work hard, and have integrity with work. UD. Wirnaya Artha Motor has 1 large size air impact, 2 small size air impact, 4 sets of keys, 1 set of filter openers, cutters, screwdrivers, pliers, 2 crocodile jacks, 4 jet stands, 1 nitrogen converter, 1 automatic tire opener, 1 compressor pressure 100psi, 1 compressor pressure 200psi, 1 compressor size 1000 psi, 2 sets of four-wheeled vehicle lifts, 1 set of injector cleaner, 1 set of triggers injection monitors, 2 solder. Its competitors UD. Wahyu Motor no jet stand, no compressor pressure 1000 psi, no set injector cleaner, no nitrogen wind conventer. UD. Wirnaya Artha Motor and its competitors have parts for all motorcycle brands, outside tires and tires in all brands, oil of all brands, batteries of all brands, and complete range of motorbike equipment.

UD. Wirnaya Artha Motor and its competitors conduct training on the job training which is trained and supervised directly until understanding. UD. Wirnaya Artha Motor and its competitors provide a minimum guarantee of 2 weeks since the service is performed including overhead, overhouling, and engine downtime. UD. Wirnaya Artha Motor and its competitors in the service there is a double check by the owner / technician after the service. UD. Wirnaya Artha Motor and its competitors implemented 3S, namely smiles, greetings, and greetings. UD. Wirnaya Artha Motor and its competitors provide consultation that is before it is agreed to be serviced, customers can consult their complaints, price estimates, and spare parts used. UD. Wirnaya Artha Motor and its competitors provide oral information about prices and service times and proof of red notes, changes will be notified to consumers before service is applied.

UD. Wirnaya Artha Motor provides discounts for customers who have subscribed for more than 1 year and a discount if the transaction is above Rp 100,000, while its competitors give discounts for customers who have subscribed for more than 1 year. UD. Wirnaya Artha Motor can provide 24-hour access to customers but is uncertain, while its competitors do not provide 24-hour access to its customers. UD. Wirnaya Artha Motor provides access to emergency services during working hours and from 6 pm to 12 pm including Pekutatan and Selemadeg, while competitors only serve during business hours. UD. Wirnaya Artha Motor and its competitors are recruiting technician and the conditions can be without experience

UD. Wirnaya Artha Motor and its competitors do not have special waiting rooms, complete with AC and TV. UD. Wirnaya Artha Motor and its competitors wiped the vehicle clean after being serviced. UD. Wirnaya Artha Motor and its competitors do not have a queue number given to customers. UD. Wirnaya Artha Motor has 5 technician, while its competitors have 2 technician. UD. Wirnaya Artha Motor and its competitors have good communication skills, at least the customer understands what is intended. UD. Wirnaya Artha Motor and its competitors have tools and machines that are not rusted and damaged. UD. Wirnaya Artha when compared to its competitors, then UD. Wirnaya Artha Motor has more equipment and machines, more technicians, gives discounts if transacting above Rp 100,000, and can be called for emergency service outside working hours ie above 6 pm but is limited to 12 pm, and the scope of areas around Pekutatan and West Selemadeg Districts.

Services provided by UD. Wirnaya Arta Motor has not been able to meet the desires of consumers or in other words not yet optimal seen from the gap between the interests of consumers with the level of workshop performance seen from the table the average level of interest is 4.47 while the average level of performance is 4.09 which shows that company performance has not been able to meet consumer desires. The average used in the importance level analysis is to find out which service quality dimensions are considered most important by consumers with more accurate values because each dimension of the variable consists of many attributes or indicators. The empathy dimension gets the highest average of importance so it needs to get more attention from the company. Calculating the average dimensions of performance is to find out which dimensions need to be improved so that they can meet the desires of consumers. The dimension that has the lowest level of performance is the assurance dimension so it needs to be improved, so consumers can feel guaranteed to do service at the company.

UD. Wirnaya Artha Motor does the work according to the time promised to have a strong relationship with technicians having character and integrity in work, while also having a strong relationship with the training of new technician to guarantee service quality, customers are given an explanation if there is an error in the estimated time and price of goods, have technical knowledge about two-wheeled vehicles, an adequate number of technicians in servicing, as well as the safety of equipment and machinery for servicing.

UD. Wirnaya Artha Motor does service without error has a strong relationship with technicians having character and integrity in work, complete service tools, complete parts ranging from the best quality to medium, there is training for new technician to guarantee service quality, for heavy service (for example unloading machines) are guaranteed in accordance with applicable terms and conditions, re-checking vehicles that have been serviced, have technical knowledge about two-wheeled vehicles, good communication skills from technicians and owners, and security of equipment and machinery for service. UD. Wirnaya Artha Motor

provides timely services, has a strong relationship with technicians with character and integrity in work, complete service tools, complete parts ranging from the best quality to intermediate, re-checking on vehicles that have been serviced, having technical knowledge about vehicles - two-wheeled vehicles, as well as safety of equipment and machinery for service.

UD. Wirnaya Artha Motor provides services that can be trusted to have a strong relationship with technicians having character and integrity in work, complete service tools, complete parts ranging from the best quality to medium, there is training for new technician to guarantee service quality, for heavy service (for example unloading the engine) is given a warranty in accordance with applicable terms and conditions, there is a re-checking of vehicles that are finished in service, new customers are welcomed politely and friendly, customers are given an explanation if there is an error in estimating the time and price of goods, customers can do a free consultation regarding the problems of the vehicle, access to the workshop owner in the event of an emergency outside working hours, can be called in to perform emergency services, have technical knowledge of two-wheeled vehicles, vehicle cleanliness after completion of service, there is a clear queue system, number of technicians adequate service, good communication skills of technicians and owners, and security of equipment and machinery for service

UD. Wirnaya Artha Motor has the skills in responding to customer needs, has a strong relationship with technicians, has character and integrity in working, complete service tools, complete parts ranging from the best quality to medium, there is training for new technician to guarantee service quality, checking back on vehicles that have been serviced, can be called in for emergency service, as well as good communication skills from technicians and owners. Availability of technician provides advice and instructions to customers having a strong relationship with customers given an explanation if there is an error in estimating the time and price of goods, customers can do a free consultation about the problems of their vehicles, giving discounts and discounts, have technical knowledge about two-wheeled vehicles , and good communication skills from technicians and owners

UD. Wirnaya Artha Motor responds and provides solutions to customer complaints has a strong relationship with technicians having character and integrity in work, complete service tools, complete parts ranging from the best quality to medium, customers are given an explanation if an error occurs in the estimated time and price of goods, customers can do a free consultation about the problems of the vehicle, have technical knowledge about two-wheeled vehicles, as well as good communication skills from technicians and owners. UD. Wirnya Artha Motor provides a timely guarantee in service having a strong relationship with technicians having character and integrity in work, complete service tools, complete parts ranging from the best quality to medium, there is training for new technician to guarantee service quality, adequate number of technicians in service, good communication skills of technicians and owners, as well as safety of equipment and machinery for service.

UD. Wirnya Artha Motor provides a guarantee of cost certainty in service having a strong relationship with UD. Wirnya Artha Motor provides a timely guarantee in service having a strong relationship with technicians having character and integrity in work, complete service tools, complete parts ranging from the best quality to medium, customers are given an explanation if there is an error in the estimated time and price of goods, customers can conduct free consultations regarding problems from the vehicle, as well as good communication skills from technicians and owners. Consumers get a guarantee of security when the vehicle is serviced at UD. Wirnya Artha Motor has a strong relationship the technician has the character and integrity in working, complete service tools, complete parts ranging from the best quality to medium, there is training for new technician to guarantee service quality, for heavy service (for example dismantling the machine) given a warranty according with the terms and conditions applicable, the customer is given an explanation if there is an error in estimating the time and price of the goods, can be called to perform emergency services, have technical knowledge about two-wheeled vehicles, good communication skills of technicians and owners, as well as the safety of equipment and machinery for service

There is a guarantee from UD. Wirnya Artha Motor, if the goods or services provided are not in accordance with the wishes of the consumer having a strong relationship the technician has the character and integrity in working, the customer is given an explanation if there is an error in estimating the time and price of the goods, the customer can do a free consultation regarding the problems of his vehicle, and communication skills from both technicians and owners. Technician serving with a friendly attitude have a strong relationship with technicians having character and integrity in work, customers are given an explanation if there is an error in estimating the time and price of goods, customers can do free consultations about problems from their vehicles, as well as good communication skills from technicians having character and integrity in work, customers are given an explanation if there is an error in estimating the time and price of goods, customers can do free consultations about problems from their vehicles, as well as good communication skills from technicians and owners

Technician serving non-discriminatively have a strong relationship with technicians having character and integrity in work, customers are given an explanation if there is an error in estimating the time and price of goods, customers can do free consultations about problems from their vehicles, as well as good communication skills from technicians and owners. Technician serve and respect each customer, Technician serving non-discriminately have a strong relationship with technicians who have character and integrity in work, customers are given an explanation if there is an error in estimating the time and price of goods, customers can do free consultations about the problems of their vehicles, and communication skills both from the technician and the owner

UD. Wirnaya Artha Motor has up to date equipment and machinery that has a strong relationship with technicians having character and integrity at work, complete service tools, as well as security of equipment and machines for servicing. The appearance of the UD workshop. Wirnaya Artha Motor is interesting to have a strong relationship with customers given an explanation in the event of an error in the estimated time and price of goods, customers can do a free consultation about the problems of their vehicles, as well as the cleanliness and comfort of the waiting room. Technician has a neat and clean appearance and has a strong relationship with the customer given an explanation if there is an error in estimating the time and price of the goods, the customer can do a free consultation about the problems of his vehicle

UD. Wirnaya Artha Motor performs work according to the promised time of having a moderate relationship with complete service tools, complete parts ranging from the best quality to medium,, for heavy service (eg dismantling the machine) given a warranty in accordance with the terms and conditions, and communication skills from both the technician and the owner. UD. Wirnaya Artha Motor does service without error having a moderate relationship with new customers who are welcomed politely and friendly, customers can do a free consultation about the problems of their vehicles, vehicle cleanliness after completion of service, there is a clear queue system, and an adequate number of technicians in conducting service. UD. Wirnaya Artha Motor provides timely services having a moderate relationship with the training of new technician to guarantee service quality, new customers who are welcomed are polite and friendly, customers can make free consultations about problems from their vehicles, as well as good communication skills from technicians and owner.

UD. Wirnaya Artha Motor provides services that can be trusted to have a moderate relationship with the cleanliness and comfort of the waiting room. UD. Wirnaya Artha Motor has the skills in responding to customer needs and has a moderate relationship with the customer, providing free consultations on problems with their vehicles, as well as offering discounts and discounts. Consumers get a guarantee of security when the vehicle is serviced at UD. Wirnya Artha Motor has a moderate relationship with checking back on vehicles that have been serviced, new customers are welcomed politely and kindly, customers can do free consultations about problems with their vehicles, offer discounts and discounts, access to the workshop owner if conditions occur emergency outside working hours, and an adequate number of technicians in service. Technician have a neat and clean appearance and have a moderate relationship with technicians with character and integrity at work. The facilities provided have a moderate relationship with having technical knowledge

Low relationship between CR and TR which is symbolized by "▼" there are as many as 3 relationships, namely: 1) UD. Wirnaya Artha Motor did the work according to the promised time of having a low relationship by checking back on vehicles that were finished in service and new customers who were welcomed were polite and friendly. 2) UD. Wirnaya Artha Motor provides timely services having a moderate relationship with an adequate number of technicians in servicing. 3) While the remainder there is no relationship between CR and TR. To be able to meet the desires of consumers or CR then translated with TR, but TR itself requires standards so that it can support companies in meeting the desires of consumers. The TR standard can be seen in table 4.23 and it can be seen that UD. Wirnaya Artha Motor has a TR that is close to a predetermined standard when compared to its competitors. Things that need to be improved by UD. Wirnaya Artha Motor is in the section of access to workshop owners in the event of an emergency outside working hours, can be called upon to perform emergency services, cleanliness and comfort of the waiting room, has a clear queue system. Technical correlation shows interactions between engineering characteristics. The form of technical correlation is in the form of a matrix that resembles a roof, so it is often called a Roof Matrix. This correlation is important to be identified so that companies know what characteristics are priorities without having to ignore the other technical characteristics that support it.

Technicians have the character and integrity to work have a very high relationship with the training of new technician to guarantee service quality, re-checking of vehicles that have been serviced, new customers are welcomed politely and friendly, customers are given an explanation if there is a time estimation error, and the price of goods, having technical knowledge about two-wheeled vehicles, vehicle cleanliness after being serviced, adequate number of technicians in service, and good communication skills from technicians and owners. Complete service tools have a very high relationship with the training of new technician to guarantee

service quality, have technical knowledge about two-wheeled vehicles, and the safety of equipment and machinery for service

Complete parts ranging from the best quality to medium have a very high relationship with heavy service (for example dismantling the machine) given a warranty in accordance with the terms and conditions, the customer is given an explanation if there is an error in the estimated time and price of the goods, customers can do a free consultation regarding the problem from the vehicle, as well as giving discounts and discounts. Training for new technician to ensure service quality has a strong relationship with checking back on vehicles that have been serviced, new customers are welcomed politely and friendly, customers are given an explanation if there is an error in estimating the time and price of goods, customers can do a free consultation regarding the problems of the vehicle, having technical knowledge about two-wheeled vehicles, cleanliness of the vehicle after completion of service, as well as good communication skills from technicians and owners.

For heavy service (for example dismantling the engine) is given a warranty in accordance with the terms and conditions that apply has a very high relationship with the re-checking of vehicles that have been serviced, the customer is given an explanation if there is an error in the estimated time and price of the goods, customers can do a free consultation regarding problems from the vehicle, giving discounts and discounts, having technical knowledge about two-wheeled vehicles, good communication skills of technicians and owners, as well as the safety of equipment and machinery for service. The existence of a double check on vehicles that are finished in service has a very high relationship with the customer given an explanation if there is an error in estimating the time and price of goods, the customer can do a free consultation about the problems of his vehicle, have technical knowledge about two-wheeled vehicles, vehicle cleanliness after completion in service, as well as the safety of equipment and machinery for service.

New customers who are welcomed are politely and kindly have a very high relationship with customers can do a free consultation about the problems of the vehicle, as well as good communication skills from technicians and owners. Customers are given an explanation if there is an error in estimating the time and price of goods has a very high relationship with the customer can do a free consultation about the problems of the vehicle, giving discounts and discounts, as well as good communication skills from technicians and owners. Customers can do a free consultation about the problems of their vehicles having a very high relationship with having technical knowledge about two-wheeled vehicles, adequate number of technicians in service, good communication skills of technicians and owners, as well as security of equipment and machinery for service. Discounted prices and discounts have a very high relationship with good communication skills from technicians and owners. Access to the workshop owner in the event of an emergency outside working hours has a very high relationship with an adequate number of technicians in servicing, as well as good communication skills from the technician and the owner.

Can be called to perform emergency service has a very high relationship with having technical knowledge about two-wheeled vehicles, adequate number of technicians in service, as well as good communication skills from technicians and owners. Having technical knowledge about two-wheeled vehicles has a very high relationship with vehicle cleanliness after finishing in service, as well as good communication skills from technicians and owners. The cleanliness and comfort of the waiting room has a very high relationship with the good communication skills of the technician and the owner. Vehicle cleaning after completion of service has a very high relationship with the safety of equipment and machinery for servicing. There is a queue system that clearly has a very high relationship with good communication skills of technicians and owners.

Technicians have the character and integrity in working to have a medium relationship with complete service tools, complete parts ranging from the best quality to medium, customers can do free consultations about problems from their vehicles, access to the workshop owner in case of emergencies outside working hours, and can be called for emergency service. Complete service equipment has a medium relationship with complete parts ranging from the best quality to medium, can be called to perform emergency service, as well as adequate number of technicians in performing services. Complete parts ranging from the best quality to medium have a medium relationship with good communication skills of technicians and owners, as well as safety of equipment and machinery for service. For heavy service (for example, dismantling the engine) is given a warranty in accordance with the terms and conditions that apply have a medium relationship with vehicle cleanliness after completion of service.

Having technical knowledge about two-wheeled vehicles has a medium relationship with an adequate number of technicians in servicing, as well as the safety of equipment and machinery for servicing. An adequate number of technicians in service has a medium relationship with good communication skills of technicians and owners, as well as the safety of equipment and machinery for service. Good communication skills of technicians and owners have a medium relationship with the safety of equipment and machinery for service. The rest there is no correlation between TR.

When compared with its competitors UD. Wirnaya Artha Motor gets 5 indicators that are assessed with F or moderate, namely providing timely services, providing timely guarantees in service, technician serving non-discriminatory (discriminating), the appearance of clean and attractive workshops, and technician have a neat appearance and clean, and the remaining 14 indicators get a value of G or good. The competitors are UD. Wahyu Motor received an F rating of 7 indicators, namely performing services without errors, providing reliable services, consumers getting guarantees of security when the vehicle is serviced, guaranteeing the warranty if the goods or services provided are not in accordance with the wishes of consumers, having equipment and machines that are up to date, the appearance of the workshop is clean and attractive, and technician have a neat and clean appearance, while the rest are rated G or good. The results of this study are expected to be used to enrich references and knowledge related to Quality Function Deployment, House of Quality, and services in automotive repair shops or workshops. Services from UD. Wirnaya Artha Motor is not optimal because the level of performance is lower than the level of interest desired by consumers, even though UD. Wirnaya Artha Motor is superior to its competitors, but in service and technical matters UD. Wirnaya Artha Motor needs to make improvements. In addition, the results of this study practically can be one of the references for other researchers who want to examine the services and QFD. The scope of this study is limited so results cannot be generalized to consumers who serve under 2 times. Research is only done in a certain time point (cross section), while the environment and needs are dynamic, so this research is important to be done again in the future by adding other variables that are not included in the model that can also influence purchasing decisions.

V. CONCLUSION

UD. Wirnaya Artha Motor has not been able to meet the desires or needs of consumers so that its performance needs to be improved. The most important indicator according to the consumer is the technician serving and appreciating each customer and the indicator that is not too important according to the consumer is the availability of the technician giving advice and instructions to the customer, the appearance of the UD workshop. Wirnaya Artha Motor is clean attractive and technician have a neat and clean look. Indicators that have not been able to be met properly by the company's performance according to customers are UD. Wirnya Artha Motor provides timely guarantees in service, while indicators that can be met properly by company performance are UD. Wirnaya Artha Motor responds and provides solutions to customer complaints.

Evaluation of competitors shows that UD. Wirnaya is superior to its competitors. UD. Wirnaya Artha Motor performs services without errors and has up to date equipment and machinery. UD. Wirnaya Artha Motor should improve its performance in providing indicators that deliver services on time, can provide timely service guarantees to consumers, and serve by not being discriminatory, because these indicators are of less value than its competitors, besides UD. Wirnaya Artha Motor also pay attention to the appearance of the workshop and its technician to be clean and attractive so that it can increase customer satisfaction.

Evaluation of the standard technical requirements measure shows that UD. Wirnaya Artha Motor is superior to its competitors, especially in terms of equipment completeness, number of technicians, giving discounts or promos to customers, and access to services in an emergency. In addition it was shown that UD. Wirnaya Artha Motor has not implemented recruitment based on experience and only provides training to new technician without providing training or routine training to other technician, there is no special waiting room for comfortable customers, a waiting room owned by UD. Wirnaya Artha Motor is directly at the place of service, there is no queue number given to the customer so often the customer queue is not clear.

Based on research results obtained by UD. Wirnaya Artha Motor is expected not to discriminate against its customers, provide certainty in guarantee of service time, pay attention to the appearance and cleanliness of the workshop and its technician , provide a special waiting room for customers that are made comfortably, make a queue number so that the queue becomes clear if there is a flood of customers, UD. Wirnaya Artha Motor must also pay attention to its technician , not only new technician who are given training but it is better that training is carried out routinely and applied to all technician because technology continues to change as well as in the automotive world. UD. Wirnaya Artha Motor can arrange SOPs in carrying out its services so that the services performed can be as efficient as possible and avoid mistakes, and can provide certainty in service time.

Computerized to make it easier to record goods, prices, and inventories, in addition to making it easier to record customers. Contacting customers a month after service to leave the vehicle so the customer feels cared for is included in the empathy dimension and recruits the chief technician or mechanic to supervise and check during and after the service is performed. Develop a blueprint that can be used as a reference in servicing services. Future studies will be better if adding other variables besides the dimensions of service quality.

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