Original Research Article

Evaluation of Service Quality in Automotive After-Sales Service

ABSTRACT

This research aims to determine the factors influencing customer satisfaction in automotive after-sales service at Honda Dealers. By utilizing the SERVQUAL approach. The purpose of this research is to examine the influence of the Tangibles dimension on Customer Satisfaction, the influence of the Reliability dimension on Customer Satisfaction, the influence of the Responsiveness dimension on Customer Satisfaction, the influence of the Assurance dimension on Customer Satisfaction, and the influence of the Emphaty dimension on Customer Satisfaction, with a study conducted on Honda dealer customers in the Special Region of Yogyakarta. The approach used in this research is quantitative. The data collection technique involves distributing online questionnaires to 100 respondents using Google Forms, which is then processed using the PLS-SEM statistical analysis tool using SmartPLS version 3.0 software.

Keywords: Service Quality, SERVQUAL, After-Sales Service, Customer Satisfaction.

1. INTRODUCTION

Amidst the intensifying global competition in the current era of globalization, industries must enhance their competitiveness to succeed, particularly in the manufacturing and service sectors. The automotive industry, in particular, is a critical sector experiencing these global challenges. To maintain a competitive edge, it must continually innovate and adapt.

In Indonesia, the automotive industry is vital in supporting the nation's economy. The prevailing belief is that the key to gaining a competitive advantage lies in delivering high-quality service that fosters customer satisfaction. As noted by Tahanisaz et al. [1], customer satisfaction is defined as an individual's perception or feeling towards the service or product they receive based on how well it meets their expectations. Achieving customer satisfaction is a primary goal for companies alongside profit generation. Delivering high-quality products or services minimizes customer complaints and fosters loyalty. This approach not only enhances customer satisfaction but also contributes to increased company revenue.

Service quality, known as SERVQUAL, is critical to interpreting customer satisfaction [2]. In the service industry, after-sales service is one of the most commonly used approaches to evaluate SERVQUAL. According to Durugbo [3], after-sales service refers to the support provided to consumers throughout the product's life cycle after its purchase. This service is essential in ensuring customer needs are met long after the initial sale. Consequently, after-sales service is a key driver of sustained customer satisfaction and loyalty.

After-sales service plays a vital role in delivering good standards of service and quality to build customer trust and loyalty, particularly when purchasing four-wheeled vehicles or cars. It primarily involves repairs and maintenance, which are essential for customer satisfaction. Automotive companies typically provide these services through their network of retailers or dealers. This approach ensures that customers receive consistent and reliable support,

reinforcing their confidence in the brand. Effective after-sales service can significantly influence customer loyalty and future purchase decisions.

Based on data from the ASEAN Automotive Federation, total car sales in the country reached 96,956. Up 16% annually. This figure even contributed around 28% of total four-wheeled vehicle sales in ASEAN, reaching 296,498 units. In more detail, here is a list of car sales in the ASEAN region in August 2022, according to kompas.com (Table 1).

Table 1. List of car sales in the ASEAN region in August 2022

Country	Car Sales List
Indonesia	96,956 units
Thailand	68,208 units
Malaysia	66,208 units
Vietnam	30,846 units
Philippines	30,185 units
Singapore	3,492 units
Myanmar	197 units

Souce: kompas.com (2022).

PT Honda Prospect Motor (HPM) is one of the largest automotive manufacturers in Indonesia. The company commenced production at the Karawang factory in February 2003 and has since garnered a substantial customer following. HPM specializes in the sale and regular maintenance of all Honda vehicles. In addition to product quality, competitive pricing, and spare parts availability, after-sales service is a significant factor influencing customers' decisions to purchase Honda cars. Consequently, PT HPM is dedicated to continually improving customer satisfaction through its comprehensive after-sales service.

To address consumer needs and ensure satisfaction, PT Honda Prospect Motor (HPM) is supported by an extensive network. It includes over 1,750 sales dealer showrooms and 3,770 AHASS workshops staffed by approximately 19,000 trained and experienced technicians. Additionally, there are around 8,400 spare parts distribution points across Indonesia. Collectively, these resources are designed to serve millions of Honda car users throughout the country. This comprehensive support network is crucial for maintaining high customer satisfaction and service quality.

SERVQUAL has been extensively applied to after-sales services globally to enhance customer satisfaction to enhance customer satisfaction. Farooq et al. [2] utilized the SERVQUAL approach to explore customer satisfaction at Malaysia Airlines. Similarly, Baidoo et al. [4] conducted a study in Ghana to assess customer satisfaction at an automotive repair shop in the Cape Coast metropolitan area using SERVQUAL. Baber [5] also applied SERVQUAL in India to examine the gap between service quality expectations and perceptions and their impact on Toyota customer satisfaction. These studies demonstrate the widespread use of SERVQUAL in evaluating and improving customer service across various industries and regions.

After-sales service has become a crucial strategy in the automotive industry. This strategy can be effectively achieved through the application of the SERVQUAL approach. This study aims to determine the factors influencing customer satisfaction in automotive after-sales services at Honda Dealer Yogyakarta by utilizing the SERVQUAL approach. Although SERVQUAL has been widely utilized across various industries, there remains a gap in understanding how its dimensions—physical evidence, reliability, responsiveness, assurance, and empathy—specifically impact customer satisfaction within the context of Honda's after-sales services in Yogyakarta. This research aims to fill this gap by simultaneously analyzing these dimensions to assess their impact on customer satisfaction at the dealership.

2. LITERATURE REVIEW

2.1 Service Quality

The Servqual method is often used to measure service quality. The measurement of service quality in the Servqual model is based on a multi-item scale designed to measure customer expectations and perceptions, as well as the gap between the two in the main dimensions of service quality. Parasuraman et al. [6] define service quality as “a global assessment or attitude regarding the superiority of a service”. Parasuraman et al. [7] refined and summarized it into 5 dimensions:

1) Reliabilityis the ability to provide promised services promptly, accurately and satisfactorily.
2) Responsivenessisthe desire of staff to help customers and provide responsive service.
3) Assurance as the knowledge, competence, politeness and trustworthiness of staff, free from danger, risk or doubt.
4) Empathy is establishing relationships, good communication, personal attention, and understanding customer needs.
5) Tangible, including physical facilities, equipment, employees and means of communication.

2.2 Tangible

Tjiptono[8], physical evidence (tangible) includes physical facilities, equipment, employees, and communication facilities. In other words, the Tangibles dimension is the form of physical facilities the organisation uses to create and perform work. Thus, the tangible dimension is part of improving employee conditions so that they act on time according to consumer desires. The better the tangibles the organisation provides, the better the service provided to consumers [9]. This study's results align with the findings of Firmansyah et al. [10]. The study revealed a positive link between tangibles and customer satisfaction among GoRide passengers in Malang. Tangibles encompass well-kept vehicles, helmets, extra items like masks and raincoats, and the driver’s presentation, including wearing an identity badge and being well-dressed. Physical evidence emerged as a crucial element affecting customer choices. Customers consider the vehicle’s condition and the driver’s appearance important when selecting the services.

H1: Tangibles dimension has a positive and significant effect on customer satisfaction.

2.3 Reliability

Tjiptono [8], reliability is the ability to provide promised services immediately, accurately and satisfactorily. For example, the company fulfils its promise by delivering its services according to the agreed schedule. In this element, marketers are required to provide reliable products/services. Products/services must not experience damage/failure. In other words, the product/service must always be good. Company members must also be honest when solving problems so customers do not feel cheated. In addition, marketers must be faithful to their promises when promising something to customers. Once again, it should be noted that promises are not just promises but must be kept.

H2: The reliability dimension has a positive and significant effect on customer satisfaction.

2.4 Responsiveness

Tjiptono [8], responsiveness is the desire of staff to help consumers and provide responsive service. Responsiveness can mean the response or alertness of employees in helping customers and providing fast service, which includes the alertness of employees in serving customers, the speed of employees in handling transactions, and handling. Another important element in this responsive element is that company members are always ready to help customers. This study's results align with the findings of Mohamad et al. [11], which reveal that although responsiveness can enhance customer satisfaction, companies should have other priorities. While responsiveness was assessed as highly effective, customers in the automotive industry deemed it to be of low significance.

H3: The responsiveness dimension has a positive and significant effect on customer satisfaction.

2.5 Assurance

According to Tjiptono [8], assurance includes the staff's knowledge, ability, politeness, and trustworthiness; it means being free from danger, risk, or doubt. When competition is very competitive, company members must appear more competent, meaning they have knowledge and expertise in their respective fields.

Farooq et al. [2] prove that better personnel service quality will significantly increase customer satisfaction. With empathy, customers will be satisfied with service quality; therefore, empathy greatly influences customer satisfaction. The results of this study align with the findings of Yadav and Joseph [12], who researched after-sales service in India's automobile industry, highlighting the critical role of assurance in driving customer satisfaction.

H4: The assurance dimension has a positive and significant effect on customer satisfaction.

2.6 Empathy

According to Tjiptono [8], empathy is the ease of making relationships, good communication, personal attention, and understanding the needs of consumers. Every company member should be able to manage time so that they are easy to contact, either by phone or in person. Also, try to communicate individually so that the relationship with customers is more intimate. Company members must also understand that customers are sometimes like children who want everything or are sometimes like fussy parents. Understanding customers does not mean that company members feel "defeated" and must "agree" with customer opinions, but at least try to compromise instead of fighting.

H5: The empathy dimension has a positive and significant effect on customer satisfaction.

2.7 Quality of Service

Service quality is one of the main determinants of customer satisfaction. According to Kalaja et al. [13], customers are the main evaluators who play an important role in measuring the quality of services or products. To stay competitive, retain existing customers, and attract new customers, accommodation providers generally improve their service quality and customer satisfaction as a primary strategy [14].

Research has shown that service quality and customer satisfaction are significant influences [15]. It is also in line with the findings of Yadav & Joseph [12], which highlight that automobile service companies need to understand the importance of tangibility, reliability, responsiveness, assurance, and empathy in enhancing customer satisfaction.

2.7 Customer Satisfaction

Customer satisfaction is a feeling of pleasure or disappointment that arises after comparing the performance (results) of a product that is thought of against the expected performance [16]. Meanwhile, according to Sumarwan[17], consumer satisfaction is the impact of comparing customer expectations before purchasing and what consumers get from the product purchased. The purpose of a business is to create satisfied consumers. Creating consumer satisfaction can provide several benefits, including a harmonious relationship between the company and consumers, providing a good basis for repeat purchases, creating consumer loyalty, and forming a word-of-mouth recommendation that benefits the company.

High satisfaction or pleasure creates an emotional bond with the brand or company, not just excessive liking. Consumer perception of the quality of service and overall satisfaction has several indicators/clues that can be seen [18]. Consumers may smile when they talk about goods or services. Consumers may say good things about goods or services. A smile is evidence that someone is satisfied; frowning, on the contrary, reflects disappointment. Thus, conclusions about consumer attitudes and perceptions of goods/services can be drawn by examining the manifestations related to the products/services seen.

2.7 After Sales Service

In addition to product quality, consumers also assess the after-sales service provided by the company to consumers after making a purchase. According to Swastha[19] states, "After-sales service is an important part of the marketing mix, especially concerning products, such as durable consumer goods and industrial goods (machines), and other services". According to Christopher in the book Wirtz et al. [20], "service warranty is a powerful tool to promote and achieve the quality of the company's services". It can be concluded that after-sales service is an activity carried out after consumers purchase to achieve and prove the quality promised by the company.

It is reinforced by research conducted by Balinado [21], which states that after-sales service positively and significantly affects customer satisfaction. Furthermore, research at PT. OscarmasPekanbaru found that after-sales service significantly impacts customer satisfaction [22]. Offering after-sales service is essential in enhancing customer satisfaction.

3. METHODOLOGY

3.1 Measurement

This study employs a quantitative approach to empirically examine the relationships among the variables outlined in the research framework. According to Sugiyono [23], quantitative research is a method based on concrete data from a specific sample or population, where the data are in numerical form and measured using statistical tools to draw conclusions related to the research problem. Hence, an online questionnaire was utilized to collect responses, structured on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.2 Sampling and Data Collection

This study relies on primary data collected through online questionnaires and secondary data sourced from international articles, methodological literature, and reports relevant to the research topic. The research location chosen by the researcher is Honda Dealer customers located in the Special Region of Yogyakarta. In this study, the population is unlimited from the automotive sector of Honda dealers in Yogyakarta. The sample of this study is a portion

of the population of the Yogyakarta Special Region as users of after-sales services at Honda Dealers. Through purposive sampling techniques, non-probability sampling is used to select participants based on certain criteria that align with the research objectives [24]. This study assumes that the population is unknown, so the Lemeshow formula is used. Therefore, the sample that will be taken for the study is 100 respondents from the Yogyakarta Special Region community who are users of after-sales services at Honda Dealers.

3.3 Data Analysis Techniques

The analysis included both descriptive and statistical methods. Descriptive analysis was employed to elucidate the characteristics, occurrences, individuals, or specific situations based on the collected data [25]. Meanwhile, Structural Equation Modeling (SEM) analysis was performed using Smart-PLS version 3.0. Structural Equation Modeling (SEM) analysis aims to test relationships between latent variables and their manifest variables in the measurement model and the relationships among different latent variables in the structural model. It can also identify measurement errors [26]. This analytical technique was chosen because it enables researchers to measure structural issues and variables and simultaneously analyze and test hypothesis models [27]. The modified research model based on Balinado et al. [21] summarises the research hypotheses, as depicted in Figure 1.

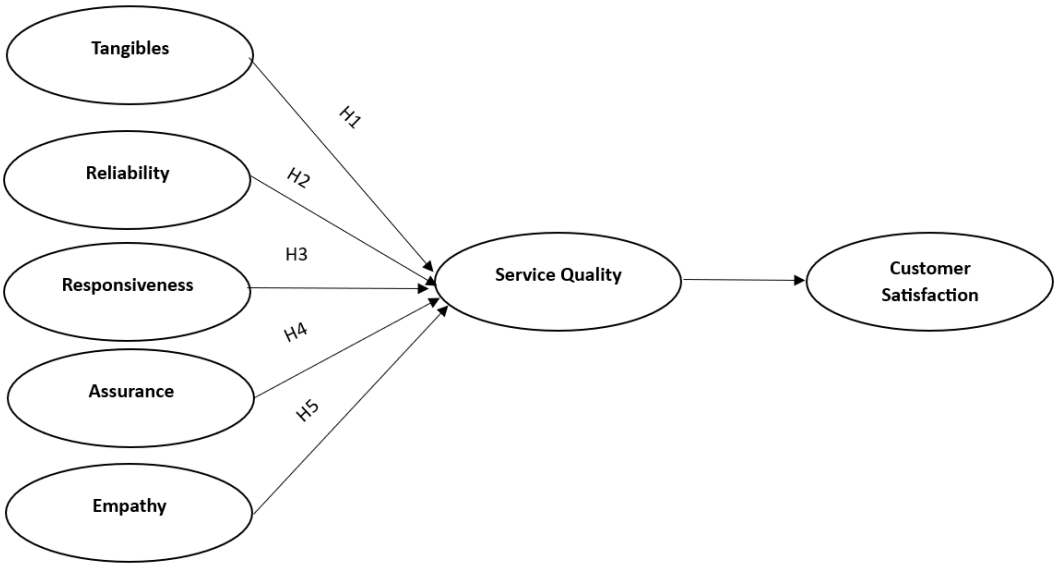

Fig. 1. Framework Model

The research framework is adopted by Balinado et al., (2021).

4. RESULTS AND DISCUSSION

4.1 Respondent Profile

The descriptive analysis section provides an overview of the data on the respondents' characteristics obtained from the questionnaire distribution. The respondent description includes gender, age, and income levels are presented in the following table (Table 2).

Table 2. Respondents' Profile

Category	Frequency	%
Gender		

Male	74	74,0
Female	26	26,0
Age		
< 20 years	2	2,0
>36 years	28	28,0
21-25 years	34	34,0
26-35 years	36	36,0
Salary per Month		
Less than 5 million IDR	20	20,0
5 - 10 million IDR	53	53,0
More than 10 million IDR	27	27,0

Souce: Primary data (2023)

Table 2 reveals that a significant majority of respondents in this study are male (74,0%). Among the respondents, 36,0% fall within the age group of 26-35 years. In terms of income, the majority earn 5-10 million per month, accounting for 53,0% of the respondents.

4.2 Measurement Model Evaluation (Outer Model)

The research model evaluation includes convergent validity, discriminant validity, and measurement reliability. In terms of convergent validity, an indicator is considered valid if it has a positive loading factor value greater than 0.7 and the Average Variance Extracted (AVE) is above 0.5 [27]. Meanwhile, data reliability is assessed using Cronbach's alpha and Composite Reliability. Data is considered reliable if the Composite Reliability and Cronbach's alpha values are recommended to be above 0.7 [27]. The results of convergent validity and reliability measurements are summarized as follows (Table 3).

Table 3. Convergent Validity and Data Reliability

Variable	Item	Loadings	CA	CR	AVE
Tangibles	TG1	0.869	0.950	0.962	0.834
	TG2	0.878			
	TG3	0.947			
	TG4	0.933			
	TG5	0.935			
Reliability	RL1	0.902	0.958	0.966	0.826
	RL2	0.936			
	RL3	0.905			
	RL4	0.907			
	RL5	0.898			
	RL6	0.906			
Responsiveness	RS1	0.913	0.948	0.960	0.827
	RS2	0.915			
	RS3	0.881			
	RS4	0.913			
	RS5	0.925			
Assurance	AS1	0.861	0.924	0.941	0.725
	AS2	0.828			
	AS3	0.826			
	AS4	0.851			
	AS5	0.847			
	AS6	0.894			
Empathy	EM1	0.932	0.954	0.964	0.845
	EM2	0.884			
	EM3	0.923			
	EM4	0.906			
	EM5	0.949			

Souce: Primary data (2023)

Based on Table 3, the measurement model analysis results indicate that the measurements in this study are convergently valid and reliable. It is noted that the loading factor values Produced by each indicator are above 0.7, with the AVE values exceeding 0.5. Consequently, these indicators are deemed valid measurements of latent variables in this manner. Furthermore, Cronbach's Alpha and Composite Reliability values exceed 0.7 for all research variables. These findings suggest that each variable has met the reliability criteria quite well, thus leading to the conclusion that the variables exhibit a high level of reliability.

The validity of the measurement model is also examined from the perspective of discriminant validity. Discriminant validity is assessed through cross-loading values and Fornell-Larcker criteria, which demonstrate the degree of correlation between constructs with their indicators and those of other constructs. The Fornell-Larcker estimation results are observed in the following table (Table 4).

Table 4. Discriminant Validity: Fornell-Larcker

Variable	AS	CS	EM	RL	RS	TG
AS	**0.922**					
CS	0.852	**0.926**				
EM	0.864	0.874	**0.919**			
RL	0.876	0.880	0.830	**0.922**		
RS	0.881	0.910	0.812	0.888	**0.916**	
TG	0.826	0.906	0.802	0.909	0.893	**0.913**

Souce: Primary data (2023)

**Notes: Assurance (AS), Empathy (EM), Reliability (RL), Responsiveness (RS), Tangibles (TG), CustomerSatisfaction (CS)*

Table 4 indicates that the Fornell-Larcker criterion is well satisfied. This result is evident as each square root of the Average Variance Extracted (SQRT AVE) on the diagonal line has a higher value than the values below for each variable. For instance, in the AS variable, the value of 0.922 is higher than the value of 0.064 beneath it. Therefore, based on the Fornell-Larcker test, all variables are considered valid discriminantly.

Subsequently, the Cross-Loading test was conducted to evaluate whether each construct's value for the same construct should be greater than that for others. The table below presents the results of the Cross-Loading estimation (Table 5).

Table 5. Discriminant Validity: Cross-Loading

Item	AS	CS	EM	RL	RS	TG
AS	**0.861**	0.779	0.682	0.737	0.854	0.705
	0.828	0.761	0.720	0.696	0.766	0.653
	0.826	0.792	0.770	0.754	0.696	0.717
	0.851	0.778	0.729	0.741	0.701	0.688
	0.847	0.768	0.740	0.742	0.645	0.692
	0.894	0.829	0.769	0.801	0.834	0.762
CS	0.772	**0.825**	0.733	0.771	0.685	0.737
	0.810	**0.886**	0.728	0.796	0.806	0.800
	0.855	**0.945**	0.818	0.866	0.859	0.850
	0.771	**0.822**	0.722	0.772	0.789	0.728
	0.841	**0.913**	0.835	0.860	0.880	0.860
EM	0.777	0.786	**0.932**	0.763	0.732	0.744
	0.801	0.805	**0.884**	0.742	0.727	0.703
	0.797	0.811	**0.923**	0.777	0.758	0.760
	0.803	0.797	**0.906**	0.757	0.753	0.711
	0.791	0.814	**0.949**	0.772	0.759	0.765
RL	0.808	0.836	0.694	**0.902**	0.809	0.814
	0.807	0.870	0.763	**0.936**	0.827	0.857
	0.762	0.829	0.764	**0.905**	0.770	0.824
	0.788	0.838	0.769	**0.907**	0.857	0.859
	0.823	0.853	0.785	**0.898**	0.823	0.861
	0.789	0.822	0.749	**0.906**	0.753	0.812
RS	0.847	0.894	0.822	0.897	**0.913**	0.901
	0.835	0.871	0.799	0.852	**0.915**	0.869
	0.761	0.773	0.641	0.725	**0.881**	0.714
	0.784	0.816	0.709	0.776	**0.913**	0.779
	0.770	0.802	0.704	0.772	**0.925**	0.782
TG	0.668	0.759	0.658	0.775	0.719	**0.869**
	0.699	0.768	0.679	0.777	0.785	**0.878**
	0.777	0.856	0.773	0.873	0.845	**0.947**
	0.820	0.886	0.774	0.899	0.851	**0.933**
	0.795	0.859	0.767	0.874	0.869	**0.935**

Souce: Primary data (2023)

**Notes: Assurance (AS), Empathy (EM), Reliability (RL), Responsiveness (RS), Tangibles (TG), CustomerSatisfaction (CS)*

Table 5 shows that the cross-loading values for each item are > 0.70, and each item has the highest value when linked to its latent variable compared to other latent variables. This result

indicates that each variable in this study accurately describes its latent variable and proves that the discriminant validity of all items is valid.

4.3 Structural Model Evaluation (Inner Model)

The inner model testing was conducted to evaluate the structural model. First, the determination and Predictive Relevance coefficients were tested by examining the R-square and Q-square of the dependent latent variables, as shown in the following table (Table 6).

Table 6. R-Square dan Q-Square

Variable	R-Square	R-Square Adjusted	Q-Square (=1-SSE/SSO)
Customer Satisfaction	0.932	0.929	0.707

Souce: Primary data (2023)

Table 6 indicates that the R-Square and Q-Square values are well-explained. The R-squared value of customer satisfaction (0.932) shows that its independent variables can explain 93.2% of this variable, and the remaining 6.8% can be explained by other variables not included in this study, and so on. Furthermore, the Predictive Relevance Q-Square value should be greater than zero to be considered good [27]. These results show that the R-Square value meets the criteria and is considered to have predictive relevance.

Finally, hypothesis testing was conducted to explain the relationships between variables in the study. The basis used to test hypotheses directly is the T-statistic value > 1.960, and the p-value < 0.05 (threshold of significance level = 5%) is met [27]. A detailed explanation of the hypothesis testing is presented in Table 7.

Table 7. Hypothesis Testing

Hypothesis		β	T Statistic (| O/STDEV |)	P Value	Conclusion
AS→CS	H1	0.293	3.458	0.001	Supported
EM→CS	H2	0.144	2.524	0.012	Supported
RL→CS	H3	0.211	2.021	0043	Supported
RS →CS	H4	0.187	2.112	0.035	Supported
TG →CS	H5	0.187	2.245	0.025	Supported

Souce: Primary data (2023)

The hypothesis testing results are in Table 7. Meanwhile, five hypotheses are supported. The following provides a more detailed explanation regarding the results of hypothesis testing:

4.3.1 Influence of Tangibles on Customer Satisfaction

The results of the first hypothesis test, namely the Influence of Tangibles on Customer Satisfaction, show a coefficient value of 0.187, p-values of 0.025 <0.05 and t-statistics of 2.245> 1.960. These results indicate that Tangibles Influence Customer Satisfaction. Therefore, H1 is accepted, stating that "Tangibles Have a Positive and Significant Influence on Customer Satisfaction".

The results of this study are supported by previous research conducted by Setiawan [28], entitled "Analysis of the Influence of Service Quality Dimensions on Visitor Satisfaction Levels at Lamongan Marine Tourism" Tangible variables (physical evidence) have a positive and significant influence on customer satisfaction. The results above indicate that tangible

variables (physical evidence) influence customer satisfaction at Honda Dealers in the Special Region of Yogyakarta.

These results align with Parasuraman's opinion [6] that "physical evidence relates to the attractiveness of physical facilities, equipment, and materials used by the company, as well as employee appearance." In other words, if the company can provide good physical evidence, it will respond positively, thereby creating customer satisfaction Tjiptono [8]. It is also in line with research conducted by Alamry [29], which states that tangible has a positive and significant effect on customer satisfaction at the Gramedia Bookstore in Surabaya.

4.3.2 Influence of Reliability on Customer Satisfaction

The results of the second hypothesis test, the Influence of Reliability on Customer Satisfaction, show a coefficient value of 0.211, p-values of 0.043 <0.05 and t-statistics of 2.021> 1.960. These results indicate that Reliability Influences Customer Satisfaction. Therefore, the hypothesis that "Reliability has a Positive and Significant Influence on Customer Satisfaction" is accepted. This finding aligns with Baber [5], who stated that not all customers have good automotive knowledge. Therefore, they value reliable service, which has an impact on satisfaction. In addition, services provided by reliable service providers can indirectly extend the vehicle's life and prevent possible damage.

4.3.3 Influence of Responsiveness on Customer Satisfaction

The results of the third hypothesis test, the Effect of Responsiveness on Customer Satisfaction, show a coefficient value of 0.187, p-values of 0.035 <0.05 and t-statistics of 2.112> 1.960. These results indicate that Responsiveness Affects Customer Satisfaction. Therefore, the hypothesis that "Responsiveness Has a Positive and Significant Effect on Customer Satisfaction" is accepted. It is also in line with research conducted by Koestanto [30], which states that responsiveness positively and significantly affects customer service satisfaction at PT. Bank Jatim Klampis Surabaya Branch.

4.3.4 Influence of Assurance on Customer Satisfaction

The results of the fourth hypothesis test, the Effect of Assurance on Customer Satisfaction, show a coefficient value of 0.293, p-values of 0.001 <0.05 and t-statistics of 3.458> 1.960. These results indicate that Assurance Affects Customer Satisfaction. So, the hypothesis that states that "Assurance has a Positive and Significant Influence on Customer Satisfaction" is accepted. It aligns with a study by Haming [31] that the assurance indicator receives the most customer attention, which strengthens customer satisfaction.

4.3.5 Influence of Empathy on Customer Satisfaction.

The results of the fifth hypothesis test, namely the Influence of Empathy on Customer Satisfaction, show a coefficient value of 0.144, p-values of 0.012 <0.05 and t-statistics of 2.524> 1.960. These results indicate that Empathy Influences Customer Satisfaction. So, the hypothesis that "Empathy Has a Positive and Significant Influence on Customer Satisfaction" is accepted. It also aligns with the findings of Mohamed [32], indicating that the empathy aspect of service quality is among the most crucial indicators of customer satisfaction in the car maintenance and repair industry.

5. CONCLUSION

Service quality is important in customer satisfaction, especially in automotive after-sales service. This study aims to determine the effect of service quality dimensions on customer satisfaction at Honda Dealers in the Special Region of Yogyakarta. The findings reveal a significant relationship between customer satisfaction and the dimensions of tangibles, reliability, responsiveness, assurance and empathy.

The theoretical benefits of this research are expected to expand the researchers' understanding regarding the application of service quality using SERVQUAL within a company. Meanwhile, the practical implications are anticipated to provide broader knowledge and serve as a consideration and input regarding the importance of SERVQUAL analysis for the companies studied. Additionally, empirical evidence is expected to support service quality and customer satisfaction in the business world. It aligns with Balinado et al. [21], as people rely heavily on their vehicles for daily use; they prefer having their cars serviced at trusted places like Honda Dealers instead of unreliable workshops. Service dealers need to provide excellent service to meet customer expectations and build trust. It helps increase customer satisfaction, loyalty, and retention, boosting the company's profits and competitive edge.

This study suggests that the company should regularly train service technicians to improve their skills, enabling faster and more reliable vehicle servicing. Quarterly training sessions and job rotations will enhance technicians' expertise across various tasks. Reliable service ensures customer confidence in their vehicle's condition, while ongoing customer care training helps staff better understand and meet customer needs. By tailoring interactions, service staff can increase customer comfort and satisfaction. Management must remain open to feedback, using it constructively to enhance service quality continually.

Customer reception and vehicle service procedures should be enhanced by increasing staff and offering vehicle pick-up/drop-off services to improve reliability. Responsiveness can be improved by fostering greater empathy and professionalism among staff. Assurance can be strengthened by ensuring consistent and orderly service procedures. Enhancing empathy involves better communication and a more familial service culture. Lastly, maintaining visually appealing dealership environments will improve the tangibles aspect of service quality.

This study's limitations include a small sample size, which may not represent the broader population, and a focus on the SERVQUAL variable, potentially overlooking other factors affecting consumer satisfaction. The exclusive use of questionnaires for data collection could lead to complete or accurate responses, as interviews were not conducted to verify the findings. Future research should consider increasing the sample size, exploring additional variables, and incorporating interviews to improve the validity and comprehensiveness of the results.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

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Appendix

The measurement items used in the questionnaire were adapted from Balinado et al., (2021)(Table 8).

Table 8. Item Scale of the Measurement

Variables	Item	Scale
Tangibles	TG1	I feel accessibility to the service entrance & reception area of Honda dealership is easy
	TG2	I feel the signs and visual messages for customers provided by Honda dealership are understandable
	TG3	I feel the appearance of the service staff is quite neat
	TG4	I feel the facilities (TV, WiFi, furniture, and drinks) provided by Honda dealership are very good
	TG5	I feel the equipment used is sophisticated in Honda service workshop
Reliability	RL1	I found it easy to schedule appointments at the Honda dealership
	RL2	I found the Honda dealership reliable in prioritizing appointments with customers
	RL3	I found the Honda dealership's walk-in customer accommodation reliable
	RL4	I found the Honda dealership's promised service turnaround times to be timely and reliable
	RL5	I found all services discussed by the Honda dealership staff to be carried out accurately
	RL6	I found the Honda dealership to be able to address customers' vehicle issues and requests
Responsiveness	RS1	I feel that the staff/guards at the Honda dealer are very responsive in providing assistance when entering the

	RS2	dealership
	RS3	I feel that the service advisor is very helpful
	RS4	I feel that the Honda dealership service staff responds well to all customer questions
	RS5	I feel that the service advisor's explanation before and after the service is very clear
		I feel that the service staff immediately serves all customers quickly and responsively
Tangibles	TG1	I feel accessibility to the service entrance & reception area of Honda dealership is easy
	TG2	I feel the signs and visual messages for customers provided by Honda dealership are understandable
	TG3	I feel the appearance of the service staff is quite neat
	TG4	I feel the facilities (TV, WiFi, furniture, and drinks) provided by Honda dealership are very good
	TG5	I feel the equipment used is sophisticated in Honda service workshop