



Analysis Of The Effect Of Service Quality And Price On Customer Satisfaction At The Astaka Motor Workshop In Sendangmulyo, Semarang

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ABSTRACT

This study examines whether service quality and price perception influence customer satisfaction at Astaka Motor Workshop in Sendangmulyo, Semarang. The research used a quantitative explanatory design with a cross-sectional survey. Data were collected from 70 usable questionnaires using a five-point Likert scale. The instrument showed strong internal consistency (Cronbach's alpha = 0.941), and the items were valid based on the item-total correlation test. Classical assumption tests supported the regression model: the residuals were normally distributed ($p = .930$), the relationships were linear (deviation from linearity $p = .054$ and $.213$), and no heteroscedasticity was detected ($p = .817$ and $.547$). Multiple regression showed that service quality had a positive and significant effect on customer satisfaction ($\beta = 0.613$, $t = 5.418$, $p < .001$), and price also had a positive and significant effect ($\beta = 0.287$, $t = 2.535$, $p = .014$). The model was significant overall ($F = 102.898$, $p < .001$) and explained 74.7% of the variance in customer satisfaction (Adjusted $R^2 = 0.747$). The findings indicate that customer satisfaction in motorcycle repair services is strengthened when workshop staff provide responsive, reliable, and empathetic service, while pricing remains fair, transparent, and aligned with the value received.

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1. Introduction

The motorcycle repair business in Indonesia operates in a highly competitive environment. Motorcycles are not only a common means of transportation, but also a daily necessity for students, employees, entrepreneurs, and families. As the number of motorcycles increases, the demand for repair and maintenance services rises as well. In such a market, workshops are no longer evaluated only by technical repair outcomes. Customers also judge how they are treated, how quickly their complaints are

handled, whether the estimated completion time is respected, and whether the price is communicated clearly before work begins.

Service quality is therefore a strategic variable in service businesses. Parasuraman, Zeithaml, and Berry conceptualized service quality as the gap between customer expectations and perceived performance, and their SERVQUAL framework remains one of the most influential models for measuring service quality in service settings. The model emphasizes tangibles, reliability, responsiveness, assurance, and empathy, all of which are highly relevant in a motorcycle workshop where customers interact directly with staff and mechanics.

Price is another decisive factor. Customers rarely evaluate price in isolation. They usually compare the amount paid with the benefits received, the quality of the repair results, the clarity of the billing process, and the overall convenience of the service experience. When price is perceived as fair, transparent, and compatible with the delivered value, it strengthens satisfaction. When price feels hidden, excessive, or inconsistent with the service received, satisfaction declines even if the technical repair itself is acceptable.

The present study was motivated by practical observations at Astaka Motor Workshop. Some customers reported positive experiences because of friendly service and fast handling, while others complained about long waiting times and unclear cost explanations. The situation suggests that satisfaction is shaped by more than one variable and that service quality and price may work together in explaining customer responses. This manuscript therefore aims to test the effect of service quality and price on customer satisfaction in a local motorcycle workshop context.

The study contributes in two ways. First, it adds evidence from a small service business in an Indonesian urban setting where workshop competition is increasingly intense. Second, it translates survey findings into practical guidance for workshop managers who need a clear strategy for improving customer experience without ignoring cost considerations.

2. Literature Review and Hypothesis Development

2.1 Service Quality

Service quality is commonly viewed as a comparison between what customers expect and what they perceive after consuming a service. The SERVQUAL model remains central because it captures both the human and physical dimensions of service delivery. Tangibles refer to visible facilities and equipment; reliability refers to the ability to deliver promised service accurately; responsiveness reflects willingness to help customers quickly; assurance concerns competence and trust; and empathy represents individualized attention. In a workshop setting, these dimensions influence whether customers believe that the workshop is professional, responsible, and worthy of repeat visits.

The literature consistently links service quality with positive post-purchase outcomes. High service quality tends to increase satisfaction, encourage repeat patronage, and stimulate word-of-mouth recommendations. Accordingly, the first hypothesis is proposed: service quality has a positive effect on customer satisfaction.

2.2 Price Perception

Price is not merely a numerical charge. In service marketing, price also communicates quality, fairness, and value. Zeithaml described price, quality, and value as related constructs in consumers' minds: people judge value by weighing what they give up against what they receive. A fair and understandable price can improve customer confidence, while a confusing or unexpected price can reduce trust. In workshop services, price perception becomes especially important because the final bill may include labor, spare parts, and additional services that customers need to understand clearly.

The second hypothesis is therefore proposed: price has a positive effect on customer satisfaction.

2.3 Customer Satisfaction

Customer satisfaction is usually defined as the result of a comparison between expectations and actual performance. Oliver's expectancy-disconfirmation perspective explains that satisfaction arises when perceived performance meets or exceeds expectations. Satisfaction has important consequences because satisfied customers are more likely to return, recommend a service to others, and show tolerance when minor problems occur. In a workshop environment, satisfaction is not only a final outcome but also a bridge toward loyalty and stable revenue.

2.4 Previous Empirical Evidence

Empirical studies in service industries repeatedly show that service quality and price perception are associated with customer satisfaction. Research in workshop, retail, food service, and digital service

settings reports that customers respond positively when staff are reliable, responsive, and transparent about prices. Recent studies also highlight that service quality often has the stronger effect, while price still matters because it frames the perceived value of the service package.

Study	Context	Main finding	Relevance
Ashari et al. (2023)	Food service	Service quality and price perception increased satisfaction and loyalty through satisfaction mediation.	Supports dual-path logic.
Linata & Defrizal (2024)	Motor workshop	Service quality and price significantly affected customer satisfaction.	Closest empirical comparison.
Livia & Hendratmoko (2024)	Motor workshop	Service quality and price perception improved satisfaction and loyalty.	Shows workshop relevance.
Silalahi et al. (2024)	Service industry	Service quality, experience, and satisfaction predicted loyalty.	Supports satisfaction as a bridge.
Suhardi et al. (2022)	Service business	Price, service quality, and facilities affected satisfaction.	Supports price and service effects.

Taken together, the literature supports the expectation that both service quality and price perception matter in customer evaluations. Because Astaka Motor Workshop operates in a local, relationship-based market, these variables are likely to be especially salient.

2.5 Hypotheses

H1: Service quality has a positive and significant effect on customer satisfaction.

H2: Price has a positive and significant effect on customer satisfaction.

H3: Service quality and price jointly have a positive and significant effect on customer satisfaction.

3. Method

3.1 Research Design

This study used a quantitative explanatory approach with a cross-sectional survey design. The design was appropriate because the study aimed to test causal relationships between service quality, price, and customer satisfaction using numerical data.

3.2 Population and Sample

The population consisted of customers of Astaka Motor Workshop in Sendangmulyo, Semarang, who had used the workshop at least twice within the previous six months. Based on workshop records, the population was approximately 250 customers. The sample was selected purposively using three criteria: respondents had used the service at least twice, were willing to complete the questionnaire honestly and completely, and were at least 17 years old. Although the initial Slovin calculation produced 72 respondents, the final analysis used 70 usable questionnaires because those were the complete responses available for statistical processing.

3.3 Measurement of Variables

Variable	Indicators	Number of items	Scale
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Service quality (X1)	Tangibles, reliability, responsiveness, assurance, empathy	10	Likert 1-5
Price perception (X2)	Affordability, fairness, competitiveness, transparency, value for money	5	Likert 1-5
Customer satisfaction (Y)	Expectation confirmation, overall satisfaction, repurchase intention, recommendation, positive feeling	5	Likert 1-5

All questionnaire items were adapted from the thesis instrument and translated into publication-ready English while maintaining the original conceptual structure.

3.4 Data Analysis

The data were analyzed using descriptive statistics, item validity testing, reliability testing, classical assumption tests, and multiple linear regression. The regression model was estimated as $Y = a + b_1X_1 + b_2X_2 + e$, where Y represents customer satisfaction, X1 represents service quality, and X2 represents price perception. The significance level used in hypothesis testing was 0.05.

4. Results

4.1 Respondent Profile

The respondent profile shows that the sample was dominated by male customers (64.29%), followed by female customers (34.29%). The largest age group was 21-30 years (58.57%), indicating that the workshop mainly serves economically active customers who use motorcycles for daily mobility. In terms of occupation, private employees formed the largest group (42.86%), followed by students (20.00%) and entrepreneurs (14.29%). Commonly serviced motorcycles included Beat, Vario, and Scoopy, which are typical commuter models.

Characteristic	Dominant category	Share
Gender	Male	64.29%
Age	21-30 years	58.57%
Occupation	Private employee	42.86%
Vehicle type	Beat / Vario / Scoopy	Top categories

4.2 Descriptive Statistics

The mean score for service quality was 32.57 out of a possible 50, or 3.26 per item. Price perception scored 16.06 out of 25, or 3.21 per item. Customer satisfaction scored 16.37 out of 25, or 3.27 per item. All three variables fall into a moderately positive category, which means that respondents generally viewed the workshop favorably but still saw room for improvement.

Variable	Items	Mean score	Mean/item	Category
Service quality (X1)	10	32.57	3.26	Moderate
Price (X2)	5	16.06	3.21	Moderate
Customer satisfaction (Y)	5	16.37	3.27	Moderate

4.3 Validity, Reliability, and Assumption Tests

The questionnaire performed well. Every item met the validity criterion, and Cronbach's alpha reached 0.941, indicating excellent internal consistency. The classical assumption tests also supported the model. The Kolmogorov-Smirnov test suggested normal residuals ($p = .930$). Linearity was satisfied

because the deviation-from-linearity values were greater than 0.05 for both relationships (service quality $p = .054$; price $p = .213$). Heteroscedasticity was not detected because the significance values for service quality ($p = .817$) and price ($p = .547$) were above the conventional threshold.

Test	Key result	Interpretation
Validity	All items valid	Questionnaire items were appropriate
Reliability	Cronbach's alpha = 0.941	Excellent internal consistency
Normality	$p = .930$	Residuals were normally distributed
Linearity	$p = .054$ and $.213$	Linear relationships were acceptable
Heteroscedasticity	$p = .817$ and $.547$	No heteroscedasticity

4.4 Regression Results and Hypothesis Testing

Multiple regression produced the equation $Y = 1.203 + 0.315X_1 + 0.306X_2$. The coefficient for service quality was positive and significant ($t = 5.418$, $p < .001$), and the coefficient for price was also positive and significant ($t = 2.535$, $p = .014$). The overall model was significant ($F = 102.898$, $p < .001$), and the explanatory power was high ($R^2 = 0.754$; Adjusted $R^2 = 0.747$). These results indicate that service quality and price jointly explain a substantial portion of the variation in customer satisfaction.

Variable	B	Std. Error	Beta	t	Sig.
Constant	1.203	1.095	-	1.099	.276
Service quality (X1)	0.315	0.058	0.613	5.418	<.001
Price (X2)	0.306	0.121	0.287	2.535	.014
Test	Statistic		Decision	Meaning	
t-test X1	$t = 5.418$, $p < .001$		H1 accepted	Service quality positively affects satisfaction	
t-test X2	$t = 2.535$, $p = .014$		H2 accepted	Price positively affects satisfaction	
F-test	$F = 102.898$, $p < .001$		H3 accepted	Both variables jointly affect satisfaction	
Model fit	$R^2 = 0.754$; Adj. $R^2 = 0.747$		Strong	The model explains 74.7% of variance	

5. Discussion

5.1 Service Quality and Customer Satisfaction

The first major finding is that service quality has the strongest effect on customer satisfaction. This result is theoretically consistent with SERVQUAL and with the idea that service encounters are a core part of value creation in service businesses. At Astaka Motor Workshop, customers are not evaluating a standardized product alone; they are also evaluating staff behavior, clarity of communication, speed of response, and the physical appearance of the workshop. When those elements are well managed, the workshop creates a more trustworthy and comfortable experience.

The dominance of service quality is also practical. Motorcycle customers often have tight schedules and expect repairs to be handled efficiently. If the workshop explains the progress of service clearly, completes work on time, and handles complaints politely, satisfaction increases even before the customer evaluates the final mechanical outcome. This helps explain why service quality generated a higher standardized effect than price in the regression model.

5.2 Price and Customer Satisfaction

The second major finding is that price positively affects satisfaction. Customers were more satisfied when they considered the workshop price affordable, fair, competitive, and transparent. This finding is

consistent with price-value theory: customers respond positively when the monetary sacrifice appears proportional to the benefits obtained. In the workshop context, price is not evaluated only by its absolute level but also by how clearly it is explained and how well it matches the perceived repair quality.

Price transparency appears especially important. Many service complaints are not caused by the price itself but by surprises in the billing process. When customers receive a clear estimate before work begins and understand the components of labor and parts cost, the price feels fairer. This reduces uncertainty and strengthens the feeling that the workshop respects the customer.

5.3 Combined Effect of Service Quality and Price

The combined effect of service quality and price was very strong, as shown by the high F statistic and the adjusted R-squared value. This means that customers do not build satisfaction from one factor alone. They combine service experience and price judgment into a single overall evaluation. A workshop may offer a reasonable price, but if the service is slow or careless, satisfaction will remain limited. Likewise, excellent service is more persuasive when the customer also feels that the price is justified.

The result confirms that service quality and price should be managed as complementary strategic tools. Astaka Motor Workshop can improve satisfaction more effectively by coordinating both dimensions simultaneously rather than treating them as separate issues.

5.4 Practical Implications

Several practical implications follow from the findings. First, the workshop should keep improving responsiveness by giving timely updates on repair progress. Second, staff and mechanics should receive periodic customer-service training so that communication remains polite, clear, and professional. Third, the workshop should standardize price estimates so customers know expected costs before work begins. Fourth, the physical environment of the workshop and waiting area should remain clean and orderly because tangibles support the perception of quality.

If these actions are implemented consistently, the workshop can strengthen satisfaction, increase repeat visits, and encourage positive word of mouth. In a local service market, these outcomes are often more valuable than short-term promotional campaigns because they build trust over time.

6. Conclusion

This study demonstrates that service quality and price both have positive and significant effects on customer satisfaction at Astaka Motor Workshop in Sendangmulyo, Semarang. Service quality is the dominant predictor, but price also plays an important role in shaping the customer's final evaluation. The regression model is strong and explains 74.7% of the variance in customer satisfaction.

The practical message is straightforward: the workshop should prioritize responsive, reliable, empathetic, and transparent service while keeping prices fair and clearly communicated. When both dimensions are managed together, customers are more likely to feel satisfied, return for future services, and recommend the workshop to others.

6.1 Limitations and Future Research

The study is limited to one workshop and two explanatory variables. Future research should include additional predictors such as location, trust, perceived value, service facilities, promotional activity, and brand image. A broader sample across multiple workshops would also improve generalizability. Longitudinal designs may be useful for observing how satisfaction changes after service improvements are introduced.

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