





# The Influence of Product Quality and Price on the Purchase Decision of Car Spare Parts in Retail Stores

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**Abstract:** This study aims to examine the influence of product quality and price on purchasing decisions at Obama Motor, an automotive parts retailer in Pringsewu. The research problem focuses on how product quality and price affect consumer purchasing decisions. A quantitative approach was used with a sample of 44 respondents selected randomly. Data were collected through surveys, and multiple regression analysis was applied. The results showed that both product quality ( $\beta$  = 0.344) and price ( $\beta$  = 0.435) significantly affect purchasing decisions. The conclusion of this study is that maintaining high product quality and competitive pricing is essential to improve customer satisfaction and loyalty in the automotive market.

**Keywords:** Automotive Industry, Consumer Behavior, Product Quality, Price, Purchasing Decision.

## Introduction

Transportation is vital in modern society due to the increasing demand for mobility. Despite the availability of various transportation methods, including both public and private vehicles, the rapid growth in the number of vehicles has not been accompanied by proportional infrastructure development. This imbalance leads to frequent traffic congestion, especially in urban areas, which disrupts efficient mobility. At the same time, the rapid advancements in Indonesia's economy and technology have heightened competition across various sectors, including the automotive industry (Rimac, 2024). In this dynamic environment, businesses must continually adapt to market shifts and changing consumer behaviors to remain competitive.

The automotive sector in Indonesia presents a wide array of products designed to meet the specific preferences and demands of consumers. Purchasing decisions are largely influenced by how consumers perceive product quality and price. According to Kotler and Armstrong (2012), product quality encompasses aspects such as durability, reliability, ease of operation, and maintenance, all of which contribute to overall customer satisfaction. Products that meet or exceed customer expectations are typically favored in the market. In

addition, price plays a significant role in shaping purchasing decisions. Tjiptono (2011) notes that price acts as an indicator of the value and benefits derived from a product. Affordable yet high-quality products tend to attract more customers, especially in competitive markets like automotive spare parts, where counterfeit goods present a challenge (Javanmardan, 2024). These observations are consistent with broader studies on risk management in small businesses, including cooperatives, as emphasized by Handayani et al. (2024), who stress the importance of trust and service diversification for ensuring stability, operational efficiency, and customer loyalty, which significantly influence satisfaction and loyalty.

Obama Motor, a prominent retailer in Pringsewu, specializes in high-quality automotive spare parts and offers additional services, such as regular maintenance, backed by experienced mechanics and modern facilities. However, the growing competition, particularly due to counterfeit products, makes factors such as product quality and pricing crucial in shaping consumer purchasing choices. While many studies have examined these factors on a broad scale, there is limited research focusing on their impact in specific areas like Pringsewu (Waanders, 2020). This study fills this gap by investigating how product quality and price influence consumer purchasing decisions at Obama Motor. The research aims to provide practical insights and recommendations to help businesses enhance their marketing strategies and sustain their competitive edge in the automotive spare parts market (Corrales, 2023).

## Research Method

This section outlines the research approach, population, sampling methods, data collection techniques, and analysis procedures, alongside considerations of ethical standards, validity, reliability, and trustworthiness to ensure the integrity of the research.

# Research Design

The study employs a quantitative approach focused on hypothesis testing, aiming to examine and analyze results through mathematical and statistical methods. As described by Sugiyono (2019), quantitative research is rooted in positivism and seeks to describe and test hypotheses formulated by the researcher (Siregar, 2020). The research design follows a structured and objective approach, aligning to obtain reliable data.

# Population, Sample, and Sampling Techniques

The population consists of individuals from Pringsewu, Lampung, specifically targeting consumer purchasing behavior. Due to constraints of time, resources, and finances, the sample is drawn from a subset of this population. A random sampling technique is used to select 44 respondents, ensuring a diverse sample that can be generalized to the broader population. Criteria for inclusion and exclusion are based on characteristics that directly relate to the research topic (Septiyo, 2023).

# Sample Selection Process

- 1. Inclusion Criteria: Consumers who have made purchases from local retailers in Pringsewu during the study period (October to December 2024).
- 2. Exclusion Criteria: Individuals who do not meet the purchase behavior criteria or those unavailable during the survey.
- 3. Sampling Method: Random sampling, ensuring diversity and the ability to generalize the findings to a larger population.

## **Intervention Procedure**

As this study is non-experimental, no intervention is applied. Data collection will take place through surveys administered during a fixed period (October to December 2024), with no repeated interventions (Bekema, 2024).

## Instrument

The primary data collection tools are a closed-ended questionnaire and observational techniques. The questionnaire includes Likert scale items designed to measure respondents' opinions and behaviors regarding product quality, price, and purchasing decisions.

- Instrument Validity: Validity is assessed using the Product Moment Coefficient of Correlation (Sudarmanto, 2005). Items are considered valid if the calculated value exceeds the table value at a significance level of  $\alpha = 0.05$ .
- Reliability: Reliability is evaluated using Cronbach's Alpha, with a threshold value greater than 0.60 indicating acceptable reliability.

## **Data Sources**

- Primary Data: Directly collected from respondents through the distribution of questionnaires.
- Secondary Data: Gathered from literature, including books, journals, and business-related documents, which provide context and support for the study.

## **Data Collection Techniques**

1. Questionnaires: Closed-ended questions utilizing a 1-5 Likert scale to capture structured responses regarding participants' attitudes and opinions.

# Likert Scale:

- 5 Strongly Agree
- 4 Agree
- 3 Neutral
- 2 Disagree
- 1 Strongly Disagree
- 2. Observation: Direct observation of consumer behavior provides supplementary qualitative insights to support survey data.

## Data Analysis

# 1. Classical Assumption Tests

Before multiple linear regression analysis, the following classical assumption tests are conducted:

- Normality Test: Assesses whether the data follows a normal distribution. A p-value greater than 0.05 indicates normality.
- Multicollinearity Test: Ensures no correlation between independent variables. A Variance Inflation Factor (VIF) above 10 suggests multicollinearity.
- Heteroscedasticity Test: Checks for constant variance of residuals across observations, using a scatterplot between residuals and predicted values.

# 2. Multiple Linear Regression Analysis

The relationship between product quality (X1), price (X2), and purchase decision (Y) is examined using multiple linear regression. The regression equation is as follows:

Y=a+b1X1+b2X2 +e

Y = Purchase Decision (Dependent Variable)

a= Constant

*b*1= Coefficient for Product Quality (X1)

*b*2= Coefficient for Price (X2)

e = Error Term

## **Result and Discussion**

This section presents an in-depth analysis of the research findings, highlighting the influence of product quality and price on purchasing decisions at Toko Obama Motor Pringsewu. The following discussion interprets the data, compares it with existing literature, and offers insights into potential improvements (Zheng, 2024).

# Research Findings

1. Demographic Characteristics: The sample consisted of 44 respondents who had previously purchased or used products from Toko Obama Motor Pringsewu. The age distribution of the respondents revealed that the largest group (43%) was between 20 to 30 years old, followed by those in the 31 to 40-year-old age range (39%), and the smallest group was in the 41 to 50-year-old category (18%). This suggests that the store's customer base is predominantly younger adults, which could be attributed to the demand for vehicle maintenance services among individuals in this age group, as well as their higher disposable income levels. The gender distribution showed a marked male dominance (82%), with only 18% of respondents being female. This imbalance likely reflects the general trend of greater male interest in automotive services, such as vehicle repair and maintenance. Furthermore, the employment status of respondents indicated that a large proportion (48%) were laborers, followed by private sector employees (20%). This points to the fact that Toko Obama Motor Pringsewu attracts a

- diverse clientele, with a significant number of workers seeking affordable and reliable automotive services.
- 2. Product Quality and Price Evaluation: Respondents provided feedback on their satisfaction with the product quality and prices at Toko Obama Motor Pringsewu. The results indicate that the majority of customers were generally satisfied with the product quality, with most ratings being classified as "Good." However, there was one instance where the product quality was rated "Very Poor," suggesting that there are certain areas where improvements could be made. This minor negative feedback implies that while the store's products are generally perceived as good, there is room for enhancement in specific aspects of product offerings. Regarding the price, respondents mostly rated it positively, with one instance of a "Very Good" rating. This suggests that Toko Obama Motor Pringsewu's pricing strategy meets customer expectations, offering competitive and reasonable prices for the products and services provided (Stańczyk, 2019).
- 3. Purchase Decision: When evaluating the factors influencing purchasing decisions, the majority of respondents indicated that both product quality and price played a significant role in their decision-making process. The "Good" rating for purchase decisions was predominant, with a few respondents giving a "Very Good" rating. This reinforces the idea that both product quality and price have a substantial impact on consumer purchasing behavior at Toko Obama Motor Pringsewu.

# Statistical Analysis

- 1. Validity and Reliability Testing: The validity tests confirmed that all the survey questions related to product quality, price, and purchase decision were valid, as the correlation coefficients exceeded the critical threshold of 0.297. Furthermore, the reliability of the data was supported by Cronbach's alpha values above 0.6 for all variables, indicating that the measures used in the study were consistent and dependable (see Table 4.11). These findings provide confidence in the robustness of the data for analysis and interpretation (Richert, 2024).
- 2. Assumption Testing: The assumption tests, including normality, multicollinearity, and heteroscedasticity tests, were conducted to ensure the appropriateness of regression analysis. The normality tests confirmed that the data followed a normal distribution, which is crucial for performing regression analysis. Additionally, the absence of multicollinearity and heteroscedasticity violations further confirmed the reliability of the regression model.
- 3. Regression Analysis: The multiple regression analysis showed that both product quality ( $\beta$  = 0.344) and price ( $\beta$  = 0.435) had a positive and significant relationship with the purchase decision. This suggests that improvements in either product quality or price are likely to enhance the likelihood of customers making a purchase. These findings underscore the importance of these two factors in influencing purchasing decisions.
- 4. Hypothesis Testing: The t-test results indicated that both product quality (t = 2.746, p = 0.009) and price (t = 2.093, p = 0.043) had statistically significant effects on purchase decisions, as the p-values were below 0.05. This indicates that both factors are critical

determinants in the decision-making process. The F-test further supported the significance of the regression model, with an F-value of 33.063 (p < 0.05), which indicates that the model explains a significant portion of the variance in purchasing decisions.

## Discussion

The results of this study are in alignment with previous research concerning the impact of product quality and price on consumer purchase behavior. For instance, Haque (2020) found that product quality significantly influences purchasing decisions, a conclusion that is also reflected in this study's findings. Similarly, Arianto and Albani (2018) emphasized the role of price in consumer decision-making, which this study also supports. These findings highlight the critical role that both product quality and price play in shaping consumer purchasing behavior (Yusuf, 2022).

The findings also suggest that Toko Obama Motor Pringsewu is generally meeting customer expectations in terms of both product quality and pricing. However, there remains potential for improvement, particularly concerning product quality, where one aspect received a "Very Poor" rating. Addressing such issues could enhance customer satisfaction and increase the likelihood of future purchases. Furthermore, the favorable pricing strategy, which resonates well with customers, provides a competitive edge in the market, but continuous evaluation and adaptation of pricing strategies in response to market conditions and customer feedback will be essential for maintaining this advantage (Prokopenko, 2019).

As seen from the analysis, product quality, and pricing are integral to the decision-making process, suggesting that Toko Obama Motor Pringsewu should prioritize maintaining high standards of product quality while keeping prices competitive. By addressing areas of product quality that received lower ratings, the store could further enhance its reputation and customer loyalty. Overall, improving both product quality and pricing strategies will likely have a positive impact on the store's long-term success.

**Table 1.** Product Quality (X1)

Variable	R (Table)	R(Count)	Information
X1.1	0.297	0.369	Valid
X1.2	0.297	0.682	Valid
X1.3	0.297	0.449	Valid
X1.4	0.297	0.478	Valid
X1.5	0.297	0.565	Valid
X1.6	0.297	0.470	Valid
X1.7	0.297	0.330	Valid
X1.8	0.297	0.464	Valid
<b>X</b> 1.9	0.297	0.381	Valid
X1.10	0.297	0.484	Valid
X1.11	0.297	0.459	Valid
X1.12	0.297	0.396	Valid
X1.13	0.297	0.473	Valid
X1.14	0.297	0.682	Valid
X1.15	0.297	0.437	Valid
X1.16	0.297	0.515	Valid

Source: Processed Data, 2025

The table above shows that the X1 variable consists of 16 statements, with the R values (R Count) for each statement exceeding the critical R-value of 0.297. The R values range from 0.330 to 0.682, all of which are greater than the table value. Therefore, it can be concluded that all statements in the X1 variable are valid and statistically significant, as the R values for each statement surpass the critical threshold, indicating that all indicators of the X1 variable are valid (Kozinov, 2022).

**Table 2.** Price (X2)

Variable	R (Table)	R(Count)	Information
X2.1	0.297	0.341	Valid
X2.2	0.297	0.592	Valid
X2.3	0.297	0.429	Valid
X2.4	0.297	0.585	Valid
X2.5	0.297	0.553	Valid
X2.6	0.297	0.562	Valid
X2.7	0.297	0.560	Valid
X2.8	0.297	0.572	Valid

Source: Processed Data, 2025

The table above shows that the X2 variable consists of 8 statements, with the R values (R Count) for each statement exceeding the critical R-value of 0.297. The R values range from 0.341 to 0.592, all of which are greater than the table value. Therefore, it can be concluded that all statements in the X2 variable are valid and statistically significant, as the R values for each statement surpass the critical threshold, indicating that all indicators of the X2 variable are valid.

**Table 3.** Purchase Decision (Y)

Variable	R (Table)	R(Count)	Information
Y.1	0.297	0.475	Valid
Y.2	0.297	0.450	Valid
Y.3	0.297	0.524	Valid
Y.4	0.297	0.482	Valid
Y.5	0.297	0.568	Valid
Y.6	0.297	0.484	Valid
Y.7	0.297	0.483	Valid
Y.8	0.297	0.543	Valid
Y.9	0.297	0.447	Valid
Y.10	0.297	0.544	Valid

Source: Processed Data, 2025

The table above shows that the Y variable consists of 10 statements, with the R values (R Count) for each statement exceeding the critical R-value of 0.297. The R values range from 0.447 to 0.568, all of which are greater than the table value. Therefore, it can be concluded that all statements in the Y variable are valid and statistically significant, as the R values for each statement surpass the critical threshold, indicating that all indicators of the Y variable are valid.

Variable Condition Information Cronbach's Alpha Product 0.756 > 0.60 Reliabel Quality Price 0.716 > 0.60 Reliabel > 0.60 Purchase 0.698 Reliabel Decision

Table 4. Reliability Test Results

Source: Processed Data, 2025

## **Tables Review**

# 1) Product Quality (X1):

The Cronbach's alpha for the product quality variable was 0.756, indicating high reliability. The validity tests demonstrated that all product quality items exceeded the minimum required correlation (r > 0.297), supporting the validity of the product quality measure.

## 2) Price (X2):

With a Cronbach's alpha of 0.716, the price variable also exhibited reliability. All items related to price were valid, with correlation coefficients above 0.297, reinforcing the significance of price in influencing purchase decisions.

# 3) Purchase Decision (Y):

The Cronbach's alpha for the purchase decision variable was 0.698, demonstrating reliability. Additionally, all items in this category were valid, with correlation coefficients greater than 0.297, confirming the importance of the purchase decision in the consumer behavior model.

Unstandardize

One-Sample Kolmogorov-Smirnov Test

			d Residual
N			44
Normal Parameters <sup>a,b</sup>	Mean		.0000000
	Std. Deviation		2.62335267
Most Extreme Differences	Absolute		.111
	Positive		.111
	Negative		076
Test Statistic			.111
Asymp. Sig. (2-tailed)°			.200 <sup>d</sup>
Monte Carlo Sig. (2-tailed) <sup>e</sup>	Sig.		.177
	99% Confidence Interval	Lower Bound	.167
		Upper Bound	.187

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.
- e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 112562564.

Figure 1. Normality Test Results

The figure above shows that the statistical test results show the number 0.111 and the significance value is 0.200, where the condition for being declared normal must be that the significance value is above or greater than 0.05 and the conclusion is drawn that the results of this normality test can be declared normal.

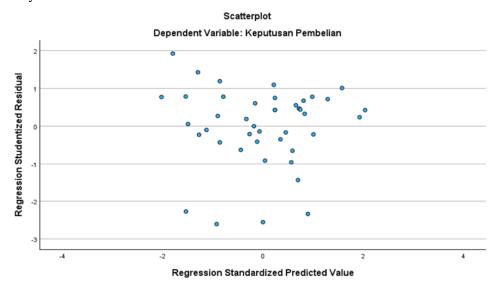


Figure 2. Heteroscedasticity Test Results

The diagram above shows that the points are spread randomly above and below and do not form any pattern, so the conclusion is drawn that there is no indication of variable values containing elements of Heteroscedasticity.

## Conclusion

The conclusion of this study indicates that product quality and price significantly influence consumer purchase decisions at Obama Motor Store in Pringsewu. Based on the t-test results, product quality was found to have a significant impact on purchase decisions, with higher product quality leading to greater consumer purchasing decisions. In addition, price also significantly affects purchase decisions, with competitive pricing enhancing consumer purchasing behavior. The F-test results show that product quality and price simultaneously influence purchase decisions, with an R² value of 0.734, indicating that these two factors explain 73.4% of the purchase decisions. Meanwhile, other factors such as promotions, brand, or customer service may also affect purchase decisions, which should be considered in future research. Further experiments could explore other factors influencing purchase decisions and how the interaction of these factors can be strengthened in the context of a constantly evolving market.

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