

The Influence of Product Quality of Rice on Customer Satisfaction through Price: Case Study in Lahomea Village, Maliana Post-Administrative, Municipality Bobonaro

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ABSTRACT

This research aimed to find out and analyze the product quality of rice and its effect on consumer satisfaction through price. A quantitative correlation method was used to analyze the data for this study. The population in this research is 6.293 people, and the sampling method used by the researcher to take the sample is purposive sampling with a formula of Slovin for 100 people. Methods used to collect data include observation, questionnaire, and literature study. The result shows that the product's quality has a positive and significant influence on the price, the Price variable has a positive and significant influence on the consumer satisfaction variable, and the quality of the product has a positive and significant influence on the consumer satisfaction. Price is considered a mediation variable that positively and significantly influences the product quality variable for consumer satisfaction in the village of Lahomea. Maliana Administrative Post, Bobonaro Municipality.

KEYWORDS: consumer satisfaction, product quality, price, quantitative method

I. INTRODUCTION

Local rice products are vital for communities, meeting consumer needs while ensuring food security. Rice is a primary food source in Timor-Leste, providing essential nutrition. People prefer rice due to its nutritional benefits compared to other staple foods, and it is often free from chemical additives. High-quality rice can be stored for extended periods, making it a staple for societies prioritizing it. The population usually prefers rice because of its nutritional value. Additionally, rice serves as animal fodder and is free from chemicals. Farmers must maintain fodder quality, as some varieties have nutritional and medicinal benefits.

When conducting business in the market, vendors consider the demands of their customers. As a result, they sell high-quality rice goods at a standard price to ensure that customers are happy with their purchases of ground rice products. Because they are nutrient-dense and nutritious, local rice products are crucial for communities to consume.

Because the product is based on the climate or weather, the grade of rice that market vendors sell cannot satisfy all of the community's needs. Farmers who harvest rice products may not sell all of them in the market because they store them as food stock and save them for their warehouses and businesses the next year when they harvest fresh rice products.

Food items of high quality and quantity may minimize food imports from other nations while increasing domestic economic growth, beginning with local goods and progressing to national processes based on the development that our local farmers are preparing to compete on a national scale. Meanwhile, realizing and developing need the attention of the sovereign state. Although the Government of Timor-Leste consistently allows public funds to purchase imported rice from neighboring Asian nations, particularly Thailand and Vietnam. According to data from the National Statistical Media, Directorate of Social Economy, the vast majority of Timorese people consume imported rice. According to data, East Timor's population of 1.3 million eats 131 thousand tons of rice per year. Meanwhile, domestic production in 2022 was just 86 thousand. With inadequate output, Timor Leste continues to import 135 thousand tons of rice to meet local demand.

According to (Imanudin, 2021), product quality refers to a product that may be supplied to the market to entice people to acquire, use, or consume it and answer to their demands. Product quality serves as a mirror for customers, attracting them to purchase and utilize high-quality items that meet their demands. Product quality is also a factor that creates or fulfills customer demands to promote product quality based on consumer preferences. When deciding to buy a product, the customer will consider the product's quality to the consumer's needs after purchasing it. Product quality is the first aspect that has a significant impact on pricing and user satisfaction since excellent quality leads to increased quantity based on available products.

Price is an essential component in business; the price is established or maintained based on the consumer's economic situation so that the consumer can purchase the goods. Price is essential because price decisions affect an organization's or vendor's profit/income while dealing in the market. Consumers acquire products mostly because of price rises or decreases. Price is an important factor in determining the success of a product in the marketplace. Price is the amount of money required to get a combination of products and utilize it to purchase other items. Price is an acknowledgment of the product's worth, and this aspect has passed via the flexible branded mix. Price plays a crucial part in the decision-making process, namely in the role of price allocation, which helps customers obtain decent items depending on their purchasing power. Price impacts consumer satisfaction and is an essential component in seller activity (Napitulu, 2019).

Price is a crucial component of market activity since it directly affects the revenue that sellers make from selling a product in the marketplace, claims Bali (2022). To ensure the growth of a sales organization that is in the industry of attracting and keeping customers, customer happiness becomes crucial. According to Sumartini Tias, as mentioned by Safira et al. (2022), a business should be able to offer customers greater value in terms of supplier quality if it hopes to grow and win their contentment. Consumer satisfaction, according to Rafsanjani and Sutopo

(quoted by Pakpahan et al., 2019), is the degree to which consumers believe that a product or service meets their expectations.

According to Napitupulu (2019), consumer satisfaction is a significant factor in boosting business performance in the market. Consumer pleasure can boost their desire to purchase the goods, resulting in an optimal level of satisfaction from the seller who does business in the market. Satisfaction is a measure of how positive or negative the consumer's expectations of consuming the product have been thus far. Consumer loyalty is a metric for determining how to quantify these products and encourage customers to continue purchasing them.

Based on the aforementioned theory, the author's observation is that the quality of rice goods is an important variable to grow since the quality of the product is also a mirror when we sell it, and the price defines quality. When there are multiple types of rice products, we will assign a different price to each rice, such as Nakroma rice at \$1.00 per kilo, Sihera white rice at \$1.00, and Sihera red rice at 1.25 cents. Meklan rice is a high-priced rice in the Municipality of Bobonaro. Rice prices fall when it is in season, but when it is not in season, they rise.

Consumers are dissatisfied with Sihera red rice and Meklan rice because the rice is sold in the market at a high price, but consumers continue to consume the food because the two foods have good nutrition and can help people with diabetes because doctors forbid the consumption of white food. However, many communities are questioning. Sometimes sellers sell rice that is old or from five years ago because the rice that has recently been collected is kept as stock for the following year when a new product is released. Customers are unhappy with some vendors that sell colored rice since it has less or different nutrition.

II. LITERATURE REVIEW

A. Product Quality

Product quality becomes a tool that can be used in the market to meet the needs of consumers based on each product offered for sale to consumers with high quality and standards. Companies or enterprises are constantly striving to satisfy their customers with their existing products by offering and developing new ones. When buyers select a product, they are thinking about the benefits they can obtain from it.

According to Learns and Nainggolan (2021), product quality is an important component that influences each consumer's purchasing decision. The quality of the goods will improve, and people will be more interested in shopping. According to Lesmana and Ayu 2019, as quoted by (Nababan & Alamanda, 2022), product quality is a dynamic condition relating to the quality of items consumed by humans and the breadth of services. According to Kotler and Keller (quoted by Aquino and Alam, 2023), product quality is a product's ability to accomplish its function, including period, usability, precision, ease of operation and maintenance, and other value aspects.

According to Rumastari (2019), product quality is a condition associated to products, human resources, and the environment that satisfies consumer needs. Furthermore, Azhari et al., (2023) claimed that the product is that which

can improve its function, which includes sustainability, relativity, stability, changes in operation, and product maintenance, as well as other items supplied to consumers.

Products that consumers want to finish following consumer needs and want producers to pay attention to each product offered in the market to manufacture a product can be classified in a variety of ways, depending on the product's duration of use or shape. As a result, it is possible to conclude that the product's quality is equivalent to its ability to meet all of the consumer's demands and desires. According to (Saputra, 2020), the dimensions of product quality include the following:

- i. Performance is a key aspect of corporate operations and goods.
- ii. Durability: A product's lifespan is determined by the number of uses before it requires replacement or damage.
- iii. Conformance to specifications: meet design and operational requirements and follow established standards. Examples include quality control and design operational qualities, as well as product performance conformity. This is a "promise" that must be fulfilled in order to improve the product's quality dimension.
- iv. Features are additional behaviors that enhance the basic benefits of a product. Consumer features and options enhance or improve the quality of a product, allowing it to compete in the market.

B. Price

Saputra (2020) defines price as a monetary value determined by a firm or merchant who sells products to exchange goods and entirely satisfy customers. Price is also a component of the commodity mix that contributes to the generation of cost from income and other variables. Price can also be used to express the value position of products designed for market sale or to meet customer wants.

According to Jiuhardi (2023), in economics, many individuals regard pricing determination as the most crucial aspect of business. For example, a product's market price affects production costs, wages, debt, and interest. Price decisions also have an impact on the government's legal provisions, since one includes not only the ordinary cost of the goods but also contributes to the government's tax collection. For example, paying taxes on government-approved rice so that dealers can sell it at a high price.

According to Tjiptono and Candra, as cited by Widiastuti and Hendarti (2017), pricing is an indicator of product quality because it influences the sale and purchase of existing products. Widiastuti and Hendarti (2017) define price as the amount of money paid by the consumer for the service provided in exchange for the product that we sell to meet the consumer's demands and advantages. According to Kotler and Amstrong, as cited by Rachmawansyah and Rohman (2023), price is the amount of money spent on a product or service. Price is defined as the amount of value traded by the consumer to benefit from and use a quality product; typically, a trader or corporation has the right to charge a high price for its goods.

According to Kotler and Krisdayanto, cited by Suryajaya and Sienatra (2020), the pricing indices are as follows:

- i. Price Assessment: To meet our aim, we will set a high price for our products based on consumer demand, which will fast sell out.

- ii. Effective pricing based on product quality; Consumers evaluate the financial sacrifice required to purchase the product or service at the advertised price.
- iii. Price competition refers to promoting or bidding at a higher price or maintaining the normal price.
- iv. Balancing Price and Benefit: Consumers are satisfied when they receive benefits in proportion to the profit they make when purchasing a product.

C. Customer Satisfaction

Customer satisfaction is achieved when a firm meets or exceeds its customer's expectations, which are influenced by aspects such as product quality, customer service, pricing, and overall experience. High satisfaction leads to repeat purchases, positive word-of-mouth, and greater loyalty, but low satisfaction can lead to negative feedback and business loss. Suhartapa (2022) defines consumer satisfaction as "an emotional attitude toward evaluating the consumption experience of a product or service." According to Saffa'annah (2023), "customer satisfaction is the number of a person's feelings after comparing the perceived performance to expectations or demands. According to Kotler, cited by Pitoi et al., (2021), "consumer satisfaction is the extent to which the level of quality of products and services assessed according to customer or buyer's expectations.

According to Mawarni (2018), stated that the factors that influence consumer satisfaction are as follows:

- i. Good product quality can match consumer needs and increase satisfaction.
- ii. Product promotions and discounts can impact consumer satisfaction.
- iii. Vendors need a standard and adequate location to ensure product hygiene and quality for customer satisfaction.
- iv. Dealer service ensures customer satisfaction through respect, calmness, speed, and timely delivery.
- v. Facility: The ability to facilitate and develop items in market activities, such as selling and purchasing rice, can affect customers.
- vi. Weather/Climate: For a product to yield positive results, it must be in a typical climate with multiple outcomes.

Furthermore, according to Al-Qarni and Suryana (2020), consumer satisfaction metrics are the following:

- a. Consumer reviews can influence their perspective and interest in acquiring a product. Before opting to buy, the buyer can compare numerous items; if the product they consume is associated with the quality brand that we offer, it will advance in the eyes of consumers, which is critical for our identity and the continuation of business.
- b. Price is a key signal for traders. Consumers will not switch to other traders since we offer a reasonable price and customer satisfaction, because they see this as a method to increase their profits while also making customers happy.
- c. Service: Consumers often criticize the company for its service performance. Many customers are always critical of our items, but this is not a method to stop our business, but rather to improve our clear service and produce strong business outcomes.
- d. High-quality products can propel the organization forward. Consumers, on the other hand, have become increasingly concerned with quality. As a result, quality has become a top priority for each company organization. Customers are pleased when they receive a high-quality product.

III. CONCEPTUAL FRAMEWORK

A conceptual framework helps to visually represent and understand the relationships between different variables in a study. In this case, we'll explore how product quality influences customer satisfaction through the mediating role of price. A good framework will explain theoretically the relationships between variables to be studied. This framework helps in understanding that while product quality is crucial, the way price is set to that quality also plays a significant role in determining overall customer satisfaction.

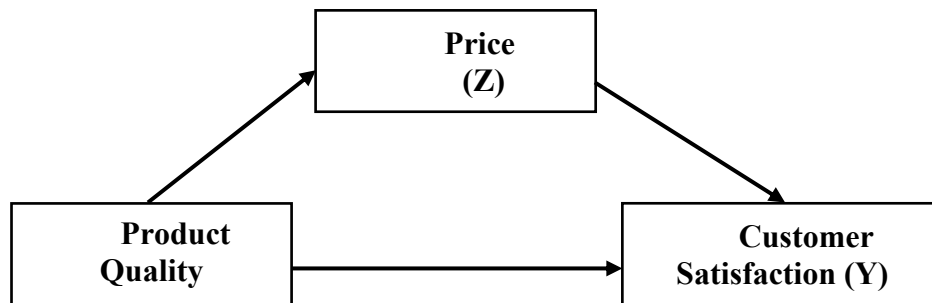


Figure 01. Research Framework

IV. RESEARCH METHOD

The method used in this research is quantitative with its correlational approach. According to Pratama et al., (2023), the correlational method is a research method that involves the action of correlating data determined in the relationship between dependent variables and independent variables. The data used by the researcher is primary data through the distribution of questionnaires to respondents to answer the questions that have been prepared. The total population in this research is the communities of Suco Lahomea with a total of 6,293 and the total sample in this research is 100 respondents. Data analysis technique, the researcher used the SMART PLS application to analyze discriminant validity, convergent validity, composite reliability, inner model, and bootstrapping.

V. RESULT AND DISCUSSION

A. Outer Model Test

1) Convergent Validity

According to Triseptya et al. (2017), a convergent validity test is utilized to assess the significance of the correlation between item and construct scores. A high item construct correlation score indicates that the item has good validity value. The convergent validity test criterion states that an item is valid if the factor loading value is more than 0.50. The following graphic shows the findings of the data analysis for the convergent validity test.

According to the results of data analysis using Smart PLS, most indicators or question items per study variable with value factor loading more than 0.50 were considered legitimate. However, question 8 of the product quality variable, questions 7 and 8 of the price variables, and questions 7 and 8 of the consumer satisfaction variables all

had factor loading values less than 0.50. Thus, the indication must be removed from the constructed model. The following figure shows the results of data analysis after deleting question items with factor loading values less than 0.50.

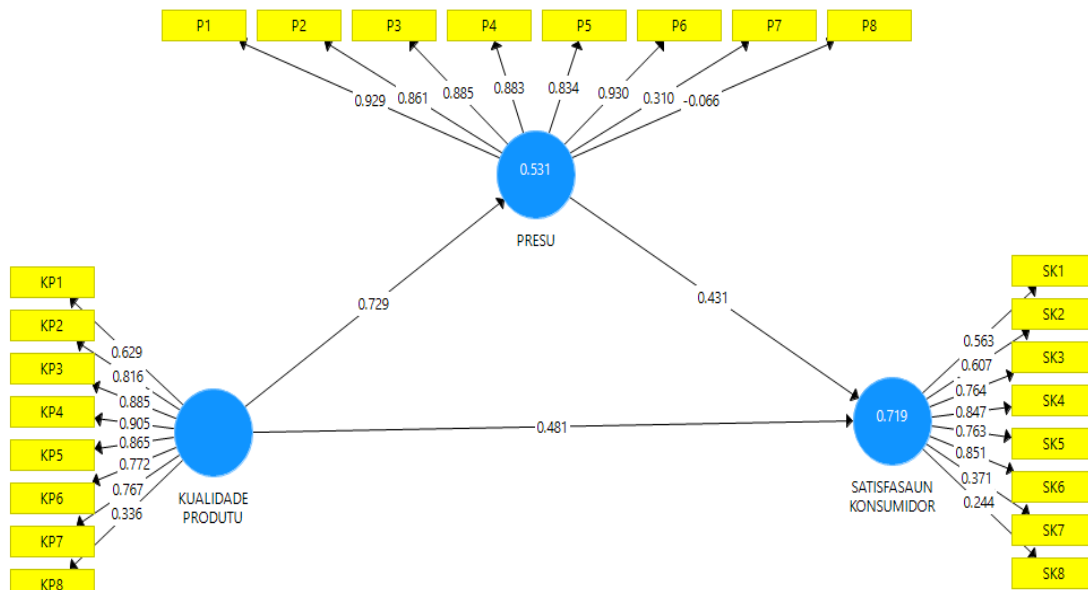


Figure 02. Structural Model

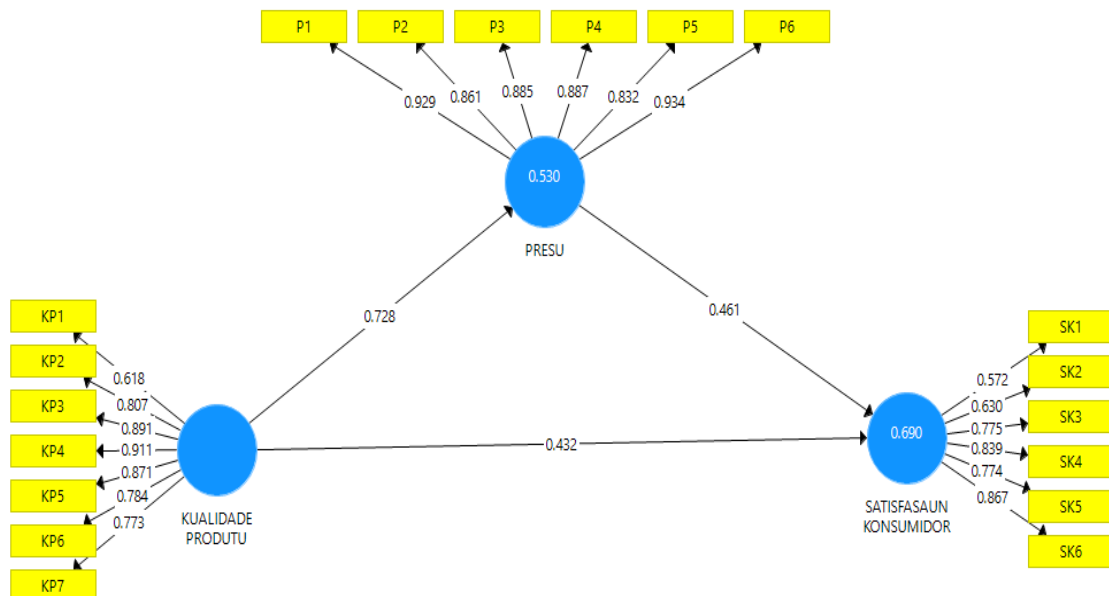


Figure 03. Structural Model

According to the results of data analysis from the above design, the question items for the product quality variable, pricing variable, and consumer satisfaction variable had factor loading values more than 0.50. Thus, the author concludes that the question items meet the convergent validity criterion.

2) Construct Reliability

Construct reliability is a part used to test the reliability value of each indicator in a variable. A variable can be said to have composite reliability when the value is greater than 0.60. Reliability testing with composite reliability

can be further strengthened with Cronbach alpha value. A variable is considered reliable when the Cronbach's alpha value is greater than 0.70. The results of the construct reliability test analysis can be seen in the following table:

Table 01. Construct Reliability Test

Variable	Cronbach's Alpha	Composite Reliability	Observation
Product Quality	0.913	0.931	Reliable
Price	0.946	0.957	Reliable
Customer Satisfaction	0.844	0.884	Reliable

According to the results of the data analysis in the table above, each variable's composite reliability value was greater than 0.60, and each variable's Cronbach alpha value was above 0.70. The result indicates that the indicator or question item in the variable is regarded as reliable.

B. Structural Model (Inner Model)

A structural model or inner model is a set of relationships between study variables. The value of the determinant coefficient between the study variables helps to evaluate the structural model. The coefficient of determination measures the independent variable's percentage influence on the dependent variable. According to Hudin et al. (2017), the classification of the determinant coefficient test is as follows: a value of 0.67 indicates a strong relationship, a value of 0.33 indicates a moderate relationship and a value of 0.19 indicates a weak relationship. Results for testing the structural model or inner model can be seen in the following table:

Table 02. Structural Model Analysis

Variable	R Square	R Square Adjusted
Price	0.530	0.525
Customer Satisfaction	0.690	0.684

The data analysis in the table above reveals that product quality variables have a determining coefficient value of 0.530 on price variables. The outcome indicates that the relationship between the product quality variable and the price variable is category moderate. On the other side, 53% of price variables are influenced by product quality variables, while 47% are influenced by other variables not included in this study. Furthermore, the association between product quality and price variables to consumer satisfaction variables has a deciding coefficient value of 0.690, indicating a strong relationship. This suggests that product quality and price variables influence 69% of consumer satisfaction, whereas other variables not included in this study influence the remaining 21% of consumer satisfaction variables.

1) Hypothesis Testing

The objective of this test is to prove or affirm the hypothesis in this research. Hypothesis testing in this research was conducted with the technique of bootstrap resampling to compare the t-table value (1.96) with the t-statistic value. The criteria for hypothesis testing using the Smart PLS application are as follows:

- i. When the t-statistic value $>$ t-table (1.96) and the significance value $<$ 0.05 means that hypothesis H_a is accepted and hypothesis H_0 is rejected.
- ii. When the t-statistic value $<$ t-table (1.96) and the significance value $>$ 0.05 means that hypothesis H_0 is accepted and hypothesis H_a is rejected.

The results of the hypothesis testing in this research can be seen in the following table:

Table 03. Hypothesis Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values	Observation
Direct Effect						
Product Quality -> Customer Satisfaction	0.432	0.404	0.147	2.940	0.003	Accepted
Product Quality -> Price	0.728	0.733	0.079	9.234	0.000	Accepted
Price-> Customer Satisfaction	0.461	0.492	0.140	3.301	0.001	Accepted
Indirect Effect						
Product Quality -> Price -> Customer Satisfaction	0.336	0.365	0.127	2.653	0.008	Accepted

Based on the results of data analysis from the table above, the researcher summarized the following information:

The product quality variable has a positive and significant influence on the consumer satisfaction variable. The results can be seen through the t-statistic value with a total of 2,940 greater than the t-table value of 1.96 and the significance value or P-values less than 0.05. This result also shows evidence that the first hypothesis which states that "there is a positive and significant influence of the quality of rice products on consumer satisfaction in Lahomea Village, Maliana Post District", is acceptable.

The product quality variable has a positive and significant influence on the price variable. The results can be seen through the t-statistic value with a total of 9,234 greater than the t-table value of 1.96 and the significance value

or P-value less than 0.05. This result also shows evidence that the second hypothesis states that "there is a positive and significant influence of the quality of rice products on the price in Lahomea Village, Maliana Post District", is acceptable.

The price variable has a positive and significant influence on the consumer satisfaction variable. The results can be seen through the t-statistic value with a total of 3,301 greater than the t-table value of 1.96 and the significance value or P-value less than 0.05. This result also shows evidence that the third hypothesis states that "there is a positive and significant influence of price on consumer satisfaction in Lahomea Village, Maliana Post District", is acceptable.

Price variable is considered as a mediation variable that has a positive and significant influence between product quality variables on consumer satisfaction. The results can be seen through the t-statistic value with a total of 2,653 greater than the t-table value of 1.96 and the significance value or P-value less than 0.05. This result also shows evidence that the fourth hypothesis states that "There is a positive and significant influence of the quality of rice products on consumer satisfaction through the price in Lahomea Village, Maliana Post District," is acceptable.

VI. CONCLUSION AND RECOMMENDATION

A. Conclusion

Based on the results of this research, the author makes a summary of the topic described and the theory that wants to conclude the results of data analysis as follows:

- i. Product quality variables influence consumer satisfaction in Lahomea Village, Maliana Administrative Post, Bobonaro Municipality.
- ii. Product quality variables influence price variables in Lahomea Village, Maliana Administrative Post, Bobonaro Municipality.
- iii. Price variable has a positive and significant influence on consumer satisfaction in Lahomea Village, Maliana Administrative Post, Bobonaro Municipality.
- iv. There is a positive and significant influence of rice product quality on consumer satisfaction through price in Lahomea Village, Maliana Administrative Post.

B. Suggestion

Based on the findings of this study, the researcher believes it is a solid foundation for the author to make the following recommendations:

- i. This research suggests that while rice products are of high quality, they may not meet all consumer needs. I recommend that Lahomea District Maliana Administrative Post collaborate to produce more rice products with three types of rice: Sihera, Meklean, and white rice.
- ii. Rice vendors benefit greatly from their goods. So, advise to farmers in Lahomea that they collaborate with vendors who have purchased your products and sell them back to consumers in the market.
- iii. Encourage Lahomean farmers to cultivate rice in abandoned fields to produce high-quality, natural rice products.

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