

The Influence of Product Quality on Customer Satisfaction at Arabella Bakery Bangkinang

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ABSTRACT

The bakery business sector faces increasingly intense competition, requiring business actors to consistently maintain and improve product quality in order to enhance customer satisfaction. This study aims to analyze the effect of product quality on customer satisfaction at Arabella Bakery Bangkinang. The research employs a quantitative approach using a survey method. Primary data were collected through questionnaires distributed to customers of Arabella Bakery Bangkinang, selected using a purposive sampling technique. The collected data were analyzed using validity and reliability tests, simple linear regression analysis, coefficient of determination, and hypothesis testing. The results indicate that product quality has a positive and significant effect on customer satisfaction at Arabella Bakery Bangkinang. These findings suggest that improving product quality contributes directly to higher levels of customer satisfaction. This study is expected to provide practical insights for the management of Arabella Bakery Bangkinang in formulating strategies to enhance product quality and maintain customer satisfaction.

Keywords: *Product Quality, Customer Satisfaction, Bakery, Bangkinang.*

1. Introduction

The development of the food and beverage business sector in Indonesia has shown significant growth along with population increase and changes in consumer consumption patterns. Bakery products have become one of the commodities with relatively high demand due to their practicality, easy accessibility, and suitability for consumption by various segments of society. This condition has encouraged the emergence of many bakery businesses, both large-scale enterprises and micro and small businesses, thereby creating increasingly intense competition (Jain, 2024).

This intense competition requires business actors to be able to create sustainable competitive advantages. In the context of marketing, product quality is a key factor that can differentiate one business from another (Mittal and Mathur, 2024). Product quality is not only assessed based on taste but also includes texture, aroma, appearance, cleanliness, and consistency of the products produced. Consumers tend to have certain expectations regarding the quality of the products they purchase, particularly food products (Mulyadi et al., 2024).

Good product quality plays an important role in shaping positive consumer perceptions of a brand. These perceptions influence the level of customer satisfaction after consuming the product (Utami et al., 2025). Customer satisfaction is a condition in which consumer expectations are met or even exceeded by the perceived product performance (Airlangga et al., 2025). High levels of satisfaction can encourage re-

peat purchases and enhance customer loyalty to a business. Conversely, when product quality does not meet consumer expectations, dissatisfaction may arise and negatively affect the company's image. In the bakery industry, consumer dissatisfaction can easily spread through word-of-mouth communication and social media, potentially reducing the purchase intentions of other consumers. Therefore, maintaining and improving product quality is a necessity that cannot be ignored by bakery business operators (Putra et al., 2025).

Arabella Bakery Bangkinang is one of the local bakery businesses that strives to meet consumer demand for high-quality bakery products. In operating its business, Arabella Bakery Bangkinang faces challenges in maintaining customer satisfaction amid the wide range of bakery options available in the Bangkinang area. Consumers have the flexibility to compare product quality among bakeries, making product quality a crucial factor in their purchasing decisions (Razak, 2022).

In practice, consumer assessments of product quality are subjective and influenced by previous consumption experiences (Akbar et al., 2023). This results in differences in satisfaction levels among consumers even when consuming the same product (Romadhan and Widjayanti, 2024). Therefore, a deeper understanding is needed of how the product quality offered by Arabella Bakery Bangkinang affects overall customer satisfaction (An Ngo et al., 2025).

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Research on the relationship between product quality and customer satisfaction is important as a basis for managerial decision-making (Mas'ud and Tenriyola, 2025). Through this research, management can obtain a clear picture of which aspects of product quality have the greatest influence on customer satisfaction. Consequently, efforts to improve product quality can be carried out in a more focused and effective manner (Maharani and Musnaini, 2024).

Based on the above explanation, this study focuses on analyzing the effect of product quality on customer satisfaction at Arabella Bakery Bangkinang (Firdausa and Nadlifatin, 2024). The results of this study are expected to contribute theoretically to the development of marketing management knowledge and provide practical benefits for Arabella Bakery Bangkinang in improving product quality and maintaining customer satisfaction on a sustainable basis (Miko et al., 2025).

2. Literature Review

2.1 Marketing Management

Marketing management refers to a series of activities carried out by an organization to plan, implement, and control marketing activities in order to achieve organizational objectives. Marketing management focuses on understanding consumer needs and desires, as well as designing strategies that create value for consumers and build long-term relationships (Zai et al., 2024). In the context of bakery businesses, marketing management plays an important role in ensuring that the products offered align with consumer preferences and remain competitive in the market (Imran, 2018).

2.2 Product Quality

Product quality can be defined as a product's ability to perform its functions in accordance with consumer expectations. Product quality includes not only physical characteristics but also non-physical aspects perceived by consumers after consuming the product (Tasia et al., 2025). In food products, product quality encompasses taste, texture, aroma, appearance, cleanliness, and consistency of quality. High product quality enhances perceived value and shapes positive consumer perceptions of a brand (Ekalestari, 2017).

2.3 Product Dimensions

Product quality consists of several interrelated dimensions, including product performance, reliability, conformity to standards, durability, and product aesthetics. In the bakery industry, product quality dimensions can be observed through the freshness of raw materials, consistency of taste, product appearance, and food safety (Erlin Kusuma and Yacobo Perdamia Sijabat, 2023). Optimal fulfillment of these product quality dimensions increases

consumer trust and strengthens a business's position in the market (Fawaiz et al., 2024).

2.4 Customer Satisfaction

Customer satisfaction refers to the level of consumer feelings resulting from a comparison between expectations and the actual performance of the product received. Satisfaction is achieved when product performance meets or exceeds consumer expectations. Satisfied consumers tend to develop positive attitudes toward the product and demonstrate repeat purchase behavior. In the long term, customer satisfaction becomes a crucial factor in sustaining business continuity (Rusliani et al., 2024).

3. Research Methodology

3.1 Type and Research Approach

This study employs a quantitative research design with descriptive and associative approaches. The descriptive approach is used to describe the condition of product quality and the level of customer satisfaction at Arabella Bakery Bangkinang, while the associative approach aims to examine the effect of product quality on customer satisfaction. A quantitative approach is chosen because the data are numerical in nature and analyzed using statistical methods (Santika et al., 2023).

3.2 Research Location and Time

This research was conducted at Arabella Bakery located in Bangkinang. The selection of the research location was based on the consideration that Arabella Bakery is one of the local bakery businesses with regular customers and faces relatively intense business competition (Nurfadilah et al., 2023). The research was carried out over a specific period covering the stages of preparation, data collection, and data processing and analysis (I Ketut Suardika and Gede Ardana Yasa, 2023).

3.3 Population and Sample

The population in this study comprises all customers of Arabella Bakery Bangkinang. Since the population size is not precisely known, the sample size was determined using the Lemeshow formula. Based on this calculation, a total of 96 respondents were obtained. The sampling technique used was purposive sampling, with the criteria that respondents had previously purchased and consumed products from Arabella Bakery Bangkinang (Pratama and Lestari, 2023).

3.4 Types and Sources of Data

The data used in this study consist of primary and secondary data. Primary data were obtained directly from respondents through the dis-

tribution of questionnaires, while secondary data were collected from literature, scientific journals, and other sources relevant to the research (Mittal and Mathur, 2024).

3.5 Data Collection Technique

Data collection was carried out using a questionnaire developed based on indicators of product quality and customer satisfaction. The questionnaire employed a Likert scale to measure respondents' levels of agreement with the statements provided

3.6 Operational Definition of Variables

The independent variable in this study is product quality, while the dependent variable is customer satisfaction. Product quality is measured using indicators such as taste, texture, appearance, cleanliness, and product consistency. Customer satisfaction is measured through the level of satisfaction after consuming the product, the conformity of the product with customer expectations, and the intention to make repeat purchases (Mas'ud & Tenriyola, 2025).

Table 1. Operational Definition of Variables

Variable	Operational Definition	Indicators	Measurement Scale
Product Quality (X)	The ability of Arabella Bakery Bangkinang's products to meet consumer expectations based on consumption experience	1. Product taste 2. Product texture 3. Product appearance 4. Product cleanliness 5. Product consistency	Likert
Customer Satisfaction (Y)	The level of consumer feelings after comparing expectations with perceived product performance	1. Satisfaction after consuming the product 2. Conformity of the product with expectations 3. Intention to make repeat purchases	Likert

3.7 Data Analysis Technique

Data analysis techniques include validity and reliability tests to examine the research instruments. Furthermore, simple linear regression analysis was conducted to determine the effect of product quality on customer satisfaction. The coefficient of determination was used to assess the contribution of product quality to customer satisfaction, and hypothesis testing was performed to test the proposed research hypotheses.

4. Results and Discussion

4.1 Respondent Characteristics

This study involved 96 respondents who were customers of Arabella Bakery Bangkinang. Respondents were selected based on the criterion that they had purchased and consumed products from Arabella Bakery Bangkinang. Respondent data were collected through the direct distribution of questionnaires.

4.2 Instrument Validity Test

The validity test was conducted by examining the Corrected Item–Total Correlation values, with the criterion that the calculated r-value must be greater than the r-table value (0.201).

Table 2. Validity Test Results for Product Quality Variable (X)

	Corrected Item–Total Correlation	Remark
X1	0.523	Valid
X2	0.611	Valid
X3	0.578	Valid
X4	0.649	Valid
X5	0.602	Valid

Table 3. Validity Test Results for Customer Satisfaction Variable (Y)

Item	Corrected Item–Total Correlation	Remark
	0.559	Valid
Y2	0.624	Valid
Y3	0.587	Valid
Y4	0.641	Valid

All questionnaire items for both product quality and customer satisfaction variables have corrected item–total correlation values greater than the r-table value, indicating that all instruments are valid and suitable for use.

4.3 Reliability Test

The reliability test was conducted using Cronbach's Alpha, with a minimum acceptable value of 0.60.

Table 4. Reliability Test Results

Variable	Cronbach's Alpha	Remark
Product Quality (X)	0.812	Reliable
Customer Satisfaction (Y)	0.784	Reliable

The Cronbach's Alpha values for each variable exceed 0.60, indicating that the research instruments are reliable and consistent.

4.4 Simple Linear Regression Analysis

Table 5. Coefficients^a

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	6.214	1.432	—	4.339	0.000
Product Quality	0.673	0.071	0.701	9.479	0.000

^a Dependent Variable: Customer Satisfaction

Regression equation:

$$Y = 6.214 + 0.673X$$

The regression coefficient for product quality is positive at 0.673, indicating that an increase in product quality leads to higher customer satisfaction.

faction. The significance value of $0.000 < 0.05$ confirms that the effect is statistically significant.

4.5 Coefficient of Determination (R^2)

Table 6. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.701	0.491	0.486	1.873

Table 6 presents the results of the coefficient of determination analysis. The R Square value of 0.491 indicates that 49.1% of the variation in customer satisfaction can be explained by product quality, while the remaining 50.9% is influenced by other factors outside this study.

This finding suggests that product quality has a substantial contribution to shaping customer satisfaction at Arabella Bakery Bangkinang. Although product quality plays an important role, the R Square value also implies that customer satisfaction is a multidimensional construct influenced by various internal and external factors. Variables such as price perception, service quality, brand image, and customer experience may also significantly affect satisfaction levels but were not examined in this study.

The adjusted R Square value of 0.486 further indicates that the regression model used in this research is relatively stable and has good explanatory power. The small difference between R Square and Adjusted R Square suggests that the model is not overfitted and can reasonably represent the relationship between product quality and customer satisfaction in the population studied. This enhances the credibility of the analytical results and supports the validity of the research model.

From a managerial standpoint, the results of the coefficient of determination analysis highlight the importance of prioritizing product quality as a key strategy to improve customer satisfaction. However, bakery management should also consider integrating other strategic factors beyond product quality to achieve higher levels of customer satisfaction. By combining product quality improvements with effective pricing strategies, service excellence, and brand development, Arabella Bakery Bangkinang can further strengthen its competitive position in the market.

4.6 Hypothesis Testing (t-test)

Based on the t-test results, the calculated t-value is 9.479 with a significance value of $0.000 < 0.05$. Therefore, the hypothesis stating that product quality has a positive and significant effect on customer satisfaction is accepted.

This result statistically confirms that product quality is a key factor influencing customer satisfaction at Arabella Bakery Bangkinang. The high t-value indicates a strong relationship between the independent variable and the dependent variable, meaning that improvements in product quality are followed by meaningful increases in customer satisfaction. This finding reinforces the

importance of focusing on product-related attributes in consumer-oriented businesses, particularly in the food and bakery industry.

Furthermore, the acceptance of the hypothesis demonstrates that the effect of product quality on customer satisfaction is not caused by random variation but represents a real and measurable influence. With a significance level far below the accepted threshold of 0.05, the probability of error in concluding the existence of this relationship is very low. This strengthens the reliability of the research results and supports the use of product quality as a strategic variable in managerial decision-making.

From a practical perspective, these findings imply that efforts to improve product quality can directly enhance customer satisfaction levels. Bakery management should therefore prioritize continuous quality improvement, including the use of high-quality ingredients, standardized production processes, and strict hygiene practices. Such efforts will help ensure that consumers consistently receive products that meet their expectations, thereby increasing satisfaction and encouraging repeat purchases.

In addition, the results of the hypothesis testing provide empirical evidence that can serve as a reference for future studies in similar business contexts. Researchers may build upon these findings by incorporating additional variables or applying the model to different types of food and beverage businesses. Overall, the t-test results confirm that product quality plays a decisive role in shaping customer satisfaction and should remain a central focus in the development and sustainability of bakery enterprises.

4.7 Discussion of Research Findings

The results of this study indicate that product quality has a positive and significant effect on customer satisfaction at Arabella Bakery Bangkinang. This finding suggests that the better the product quality perceived by consumers, the higher their level of satisfaction. These results are consistent with marketing theory, which emphasizes product quality as a key determinant of customer satisfaction. In the context of Arabella Bakery Bangkinang, product quality—reflected in taste, texture, appearance, cleanliness, and product consistency—plays an important role in shaping positive consumer experiences. Customer satisfaction, in turn, increases the likelihood of repeat purchases and fosters loyalty toward the bakery products offered.

Furthermore, the positive relationship between product quality and customer satisfaction indicates that consumers place high importance on the sensory and hygienic aspects of bakery products. Attributes such as fresh taste, soft and consistent texture, attractive appearance, and cleanliness directly influence consumers' perceptions and evaluations of the products they con-

sume. When these attributes meet or exceed consumer expectations, customers tend to develop favorable attitudes toward the brand, which strengthens their overall satisfaction and trust in the bakery.

In addition, consistent product quality is essential for maintaining customer confidence in the long term. Consumers expect bakery products to deliver the same level of quality each time they make a purchase. Any inconsistency in taste, texture, or appearance may lead to dissatisfaction and reduce the likelihood of repeat purchases. Therefore, maintaining standardized production processes and quality control becomes a strategic priority for Arabella Bakery Bangkinang in order to sustain customer satisfaction and remain competitive in the local market.

Moreover, the findings of this study highlight the strategic role of product quality as a competitive advantage in the bakery industry. In a market characterized by intense competition and diverse consumer choices, businesses that consistently deliver high-quality products are more likely to differentiate themselves from competitors. High customer satisfaction not only encourages repeat purchases but also generates positive word-of-mouth, which can attract new customers and support business growth. Thus, improving and maintaining product quality should be viewed as a long-term investment that contributes to customer loyalty and the sustainability of Arabella Bakery Bangkinang.

5. Conclusion And Recommendations

Based on the results and discussion of this study, it can be concluded that product quality has a positive and significant effect on customer satisfaction at Arabella Bakery Bangkinang. This indicates that the product quality perceived by consumers—such as taste, texture, appearance, cleanliness, and product consistency—plays an important role in shaping customer satisfaction levels. The better the quality of the products offered, the higher the satisfaction experienced by consumers. Therefore, product quality becomes a strategic factor in maintaining the sustainability of the bakery business.

Based on these conclusions, it is recommended that the management of Arabella Bakery Bangkinang continuously maintain and improve product quality in a consistent manner, particularly in aspects that are directly perceived by consumers. In addition, the business is advised to conduct regular evaluations of consumer preferences and expectations to ensure that the products produced remain aligned with market needs. For future researchers, it is recommended to include additional variables such as price, service quality, or brand image in order to provide a more comprehensive understanding of the factors influencing customer satisfaction.

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