

Analysis of the Influence of Product Quality, Price Perception, and Packaging on Purchasing Decisions and Their Impact on Consumer Satisfaction of Bluder Bread Products

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Abstract

CV. XYZ is a food-related company that uses a make-to-order production system and sells bread as its primary product. CV. XYZ encounters issues with the low degree of customer satisfaction with Bluder Bread's product quality, cost, and packaging as well as the drop-in number of purchases made by customers. This study aims to ascertain how purchase decision are influenced by product quality, perceived pricing, and packaging, as well as how these factors affect customer happiness. Partial Least Square (PLS) based Structural Equation Modeling (SEM) analysis is used in the investigation. The research conclusions demonstrated that, although packaging did not significantly influence decisions to buy, perceptions of product quality and pricing had a major impact. However, customer satisfaction with bread was not significantly impacted by product quality, perceptions of pricing, or packaging. Purchase decisions can serve as a mediator and have a big impact on customer happiness.

Introduction

One of the industries that continues to grow is food and beverage. This is the result of increasingly changing consumer attitudes about what they need for their lifestyles. The company continues to strive to meet consumer expectations and satisfaction with a product. This helps to evaluate the marketing purpose of the product which was originally only for sale, becoming a link between producers and consumers. Thus, manufacturers will be better at creating products that are not only according to their needs, but also in accordance with consumer expectations.

CV. XYZ is a business established in 2018. Starting as a homemade bread manufacturer and continues to develop as a bread producer until now known as CV. XYZ. This business produces Bluder bread, which is a type of sweet bread with a soft texture and has various variants from sweet to salty or savory fillings. Bluder bread itself began to be known in Madiun and became one of the typical souvenirs of the region and its popularity spread throughout East Java. Recognizing the market opportunity for bluder bread in East Java which is quite promising, CV. XYZ also embraces the challenges. Bluder bread produced by CV. XYZ emphasizes the best quality of materials from the beginning of the business to date. Customer satisfaction data for CV. XYZ's bluder bread products shows a low level of satisfaction. This is a big threat to the sustainability of the marketing of bluder bread in the market.

Customer satisfaction is the final stage of the company's strategy to have better understanding the needs and desires of consumers (Nugraha et al., 2020). Customer satisfaction is the result of the correlation between expectations of a product and how it delivered. These results have two effects on the sustainability of a product when it is marketed. If the results of the correlation of expectations with reality are in convormity, it will have a positive impact on product marketing. On the other hand, if the results between expectations and reality are not in convormity, it will have a negative impact on product marketing (Murdjono et al., 2023; Ruffiansah & Seno, 2020).

Purchase decisions are closely related to customer satisfaction as a person's step in determining the satisfaction value of a product. A purchase decision is the final stage of a consumer's purchase of a product. At this stage, the consumer decides to make a purchase after considering several alternative options before actually deciding to pay for a required good or service (Novianti & Saputra, 2023). The choice between two or more options is made when making a transaction. Put differently, having a variety of options is crucial when making a decision (Damanik et al., 2023; Asnawi, 2022).

One of the components that determines consumer purchasing decisions is the quality of the products offered. According to Ronauli & Indriani (2020), product quality affects consumer preferences in making purchases. Since product quality refers to the level of performance or quality that a product can meet in order to satisfy customers, it can be a useful tactic. Product quality is the combination of attributes and features that establishes requirements of the client or evaluates the degree to which those attributes and features satisfy the client's expectations (Putra et al., 2020; Herrmann et al., 2000).

Another factor related to the purchase decision is the price. Price is one of the factors to achieve a product competitive advantage (Rukmayanti & Fitriana, 2022). One component of the marketing mix that drives revenue is price. While product features, channels, and even communication require a lot of time to modufy, pricing is the easiest aspect of marketing program to do so (Kotler & Keller, 2009). Price and packaging are factors that affect the customer's desire to purchase products. Packaging provides information about product safety from enviromental contamination by hazardous materials. Additionally, attractive and varied packaging designs are proven to be more popular with consumers when purchasing a product. Regarding pricing, it is one of the component of the marketing mix that can generate revenue for the business (Sampara, 2022; Abedian et al., 2022).

This study was carried out in reponse to the issue that CV. XYZ was facing in orer to determine the correlation between the low level of consumer satisfaction with bluder bread and the declining level of purchase decisions. It did this by focusing on factors related to product quality, price perception, and packaging.

Methods

Location and Time of Research

The location of this research is in CV.XYZ located in Surabaya. This research was designed to be performed in May until the required data has been satisfied.

Identification of Research Variables

The research variables used in this study are divided into independent variables and dependent variables. The dependent variables in this study are purchase decisions (Y1) and consumer satisfaction (Y2). The independent variables in this study are product quality (X1), price perception (X2), and packaging (X3).

Table 1. Research Variable Indicators

Variables	Indicators	Source
Product quality (X1)	Product Color (X1.1)	Solikhah et al. (2022)
	Product appearance (X1.2)	
	Product texture (X1.3)	
	Product Aroma (X1.4)	
	Product flavor (X1.5)	
Price perception (X2)	Conformity with quality (X2.1)	Ronauli & Indriani (2020)
	Compatibility with benefits (X2.2)	
	Affordability (X2.3)	
	Price competitiveness (X2.4)	
Packaging (X3)	Packaging quality (X3.1)	Murdjono et al. (2023) and Sampara (2022)
	Packaging innovation (X3.2)	
	Packaging material (X3.3)	
	Packaging size (X3.4)	
	Aesthetics (X3.5)	
Purchase decision (Y1)	Purchase purpose (Y1.1)	Solikhah et al. (2022) and Ronauli & Indriani (2020)
	Payment methods (Y1.2)	
	Deeper information search (Y1.3)	
	Purchase decision (Y1.4)	
	Repurchase decision (Y1.5)	
Consumer satisfaction (Y2)	Conformity with expectations (Y2.1)	Murdjono et al. (2023)
	Interest in returning (Y2.2)	
	Willingness to recommend (Y2.3)	

Data Analysis Techniques

The data analysis method employed in this research is Structural Equation Modeling based on Partial Least Square (SEM-PLS). Structural Equation Modeling (SEM) combines factor analysis with multiple regression analysis, making a powerful multivariate statistical technique. PLS (Partial Least Square) on the other hand, is considered an effective method for research focused on exploration or hypothesis modeling. SEM-PLS is a multivariate analysis used to determine whether there is a relationship between exogenous and endogenous variables as well as to determine the direction and magnitude of the influence. SEM-PLS analysis consists of several stages, such as validity test, reliability test, structural model test, and hypothesis test.

Results and Discussion

The results of the study were obtained through questionnaire data of 100 respondents with age criteria of 15 – 40 years. Through data processing with the assist of SmartPLS software, the following results were obtained.

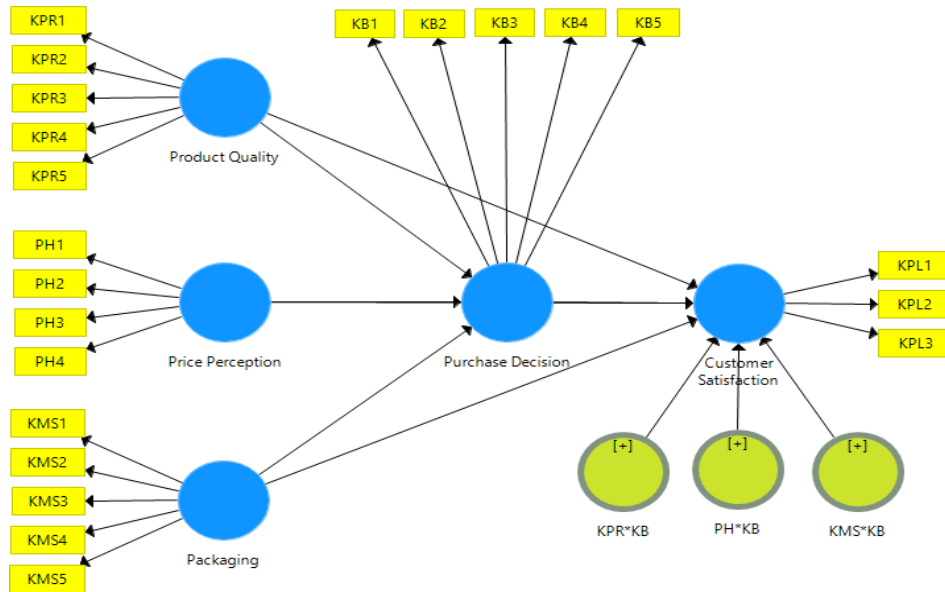


Figure 1. Conversion du modèle conceptuel du SEM-PLS

Validity Test

Validity tests were performed to evaluate the validity of a research instrument or the ability of questionnaires to measure according to actual circumstances. The validity of convergence was determined through the results of the loading factor (outer loading) test and the Average Variance Extracted (AVE) test.

Loading Factor

Table 2. Loading Factor Test Result

Variable	Item	Loading Factor
Product Quality (X1)	X1.1	0,862
	X1.2	0,839
	X1.3	0,761
	X1.4	0,713
	X1.5	0,709
Price Perception (X2)	X2.1	0,828
	X2.2	0,817
	X2.3	0,822
	X2.4	0,791
Packaging (X3)	X3.1	0,816
	X3.2	0,861
	X3.3	0,801
	X3.4	0,802
	X3.5	0,769
Purchase Decision (Y1)	Y1.1	0,845
	Y1.2	0,845
	Y1.3	0,798
	Y1.4	0,830
	Y1.5	0,739
Consumer Satisfaction (Y2)	Y2.1	0,849
	Y2.2	0,812

	Y2.3	0,797
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Source : Primary data processed by SmartPLS 2024

The Loading Factor test was conducted to determine how strong the indicator or measuring variable is with its construction or latent variable. The loading factor value above 0.70 is considered good or meets the validity test. Based on the results in table 2, it was obtained that all data was valid because the loading factor value > 0.70.

Average Variance Extracted (AVE)

Table 3. Average Variance Extracted (AVE) Test Results

Variable	Average Variance Extracted (AVE) Value
Product Quality (X1)	0,607
Price Perception (X2)	0,663
Packaging (X3)	0,657
Purchase Decision (Y1)	0,659
Consumer Satisfaction (Y2)	0,672

Source : Primary data processed by SmartPLS 2024

The AVE (Average Variance Extracted) test assesses how much variance an indicator explains within a construct. An AVE value greater than 0,50 indicates that the construct has strong convergent validity. Based on the results in table 1.3, it was obtained that all latent variables formed in the SEM-PLS model were valid because the AVE value > 0.50.

Reliability Test

Cross Loading

Table 1. Cross Loading Test Results

Item	Product Quality (X1)	Price Perception (X2)	Packaging (X3)	Purchase Decision (Y1)	Consumer Satisfaction (Y2)
X1.1	0,862	0,409	0,546	0,637	0,520
X1.2	0,839	0,321	0,613	0,578	0,590
X1.3	0,761	0,209	0,603	0,537	0,424
X1.4	0,713	0,312	0,528	0,427	0,328
X1.5	0,709	0,277	0,480	0,496	0,369
X2.1	0,388	0,828	0,327	0,348	0,393
X2.2	0,340	0,817	0,306	0,351	0,379
X2.3	0,291	0,822	0,267	0,424	0,375
X2.4	0,264	0,791	0,324	0,320	0,348
X3.1	0,618	0,354	0,816	0,480	0,383
X3.2	0,606	0,279	0,861	0,485	0,373
X3.3	0,576	0,325	0,801	0,424	0,414
X3.4	0,556	0,308	0,802	0,428	0,418
X3.5	0,519	0,247	0,769	0,435	0,415
Y1.1	0,614	0,426	0,507	0,845	0,686
Y1.2	0,631	0,308	0,490	0,845	0,582
Y1.3	0,556	0,418	0,412	0,798	0,483
Y1.4	0,523	0,324	0,450	0,830	0,610

Y1.5	0,481	0,330	0,386	0,739	0,564
Y2.1	0,510	0,436	0,393	0,599	0,849
Y2.2	0,395	0,401	0,390	0,574	0,812
Y2.3	0,533	0,292	0,432	0,608	0,797

Source : Primary data processed by SmartPLS 2024

Because all items in one latent variables are already greater than indicators in other latent variables, it was determined from the result in Table 4 that all statement items are regarded as reliable.

Composite Reliability

Table 2. Results of Composite Reliability Test

Variable	Composite Reliability Value
Product Quality (X1)	0,885
Price Perception (X2)	0,887
Packaging (X3)	0,905
Purchase Decision (Y1)	0,906
Consumer Satisfaction (Y2)	0,860

Source : Primary data processed by SmartPLS 2024

The composite reliability test measures the reliability level of latent variables constructed by the SEM-PLS model. If the composite reliability value exceeds 0,70 or 0,80, it signifies that the latent variables possess strong reliability. Based on the results of the composite reliability test processing in the study, it was concluded that all latent variables formed in the SEM-PLS model were considered to be reliable because the composite reliability value > 0.80 .

Structural Model Test (Inner Model)

R-Squared (R²)

Table 3. R-squared Test Results (R²)

Variable	R-squared value (R²)
Purchase Decision (Y1)	0,521
Consumer Satisfaction (Y2)	0,588

Source : Primary data processed by SmartPLS 2024

The R-squared test determines the endogenous variable strength level in the SEM-PLS model. A \leq value of 0.19 is considered to be weak, ≤ 0.33 is said to be moderate, ≤ 0.67 is said to be substantial, and > 0.7 is said to be strong. Based on the results in table 6, it was obtained that purchase decisions and consumer satisfaction were considered to have substantial variation because the R² value ≤ 0.67 , which are 0.521 and 0.588.

Effect Size (F²)

Table 4. Effect Size Test Results (F²)

Variable	Effect Size Value (F²)
Product Quality → Purchase Decision	0,303
Product Quality → Consumer Satisfaction	0,018

Price Perception → Purchase Decision	0,064
Price Perception → Consumer Satisfaction	0,056
Packaging → Purchase decision	0,009
Packaging → Consumer Satisfaction	0,000
Purchase Decisions → Consumer Satisfaction	0,283

Source : Primary data processed by SmartPLS 2024

The degree of the influence between exogenous and endogenous variables is displayed by the effect size (F^2) test.. if the result \geq value of 0.02 is considered to be weak, ≥ 0.15 is considered to be small, ≥ 0.35 is considered to be large. If it is below 0.02, it is considered to be very weak or has no effect. Based on the results in table 7, it is concluded that the Product Quality variable → Purchase Decision has a moderate level of variance because the F^2 value ≥ 0.15 , which is 0.303. The variable Product Quality → Consumer Satisfaction has a very small variance because the F^2 value is less than 0.02, which is 0.018. The variable Price Perception → Purchase Decision has a small degree of variance because the F^2 value ≥ 0.02 , which is 0.064. The variables Price Perception → Consumer Satisfaction have a small level of variance because the F^2 value ≥ 0.02 , which is 0.056. In the Packaging variable → the Purchase decision has a very small variance because the F^2 value is less than 0.02, which is 0.009. The Packaging → Consumer Satisfaction variable has a very small variance because the F^2 value is smaller than 0.02, which is 0.000. The Purchasing Decision → Consumer Satisfaction variable has a moderate variance level because the F^2 value ≥ 0.15 , which is 0.283.

Hypothesis Test

Table 5. Hypothesis Test Result (T-Statistic)

Variable	Original Sample (O)	T Statistic (O/STDEV)	P Value
Product Quality → Purchase Decision	0,552	5,214	0,000
Price Perception → Purchase Decision	0,193	2,029	0,043
Packaging → Purchase decision	0,092	0,744	0,457
Product Quality → Consumer Satisfaction	0,100	0,878	0,380
Price Perception → Consumer Satisfaction	0,151	1,932	0,054
Packaging → Consumer Satisfaction	0,058	0,136	0,892
Purchase Decisions → Consumer Satisfaction	0,556	4,724	0,000

Source : Primary data processed by SmartPLS 2024

Hypothesis testing is a step conducted to determine the influence of correlation between variables and the degree of correlation. Based on the results in table 8, it was obtained that the product quality variable (X1) had an effect on the purchase decision (Y1) because the T-Statistic value > 1.985 was 5.214 with a significance level of $0.000 < 0.05$. This result was supported by research (Putra et al., 2022) which product quality had a significant effect on the purchase decision. The price perception variable (X2) had an effect on the purchase decision

(Y1) because the T-Statistic value > 1.985, which was 2.029 with significance level 0.043 < 0.05. This result is supported by research supported by research (Irmawati & Chodidjah, 2023) which price has a significant effect on purchase decisions. The packaging variable (X3) has no effect on purchase decisions (Y1) because the T-Statistic value < 1.985 is 0.744 with a significance level of 0.457 > 0.05. This result is contrary to the results of research conducted (Sampara, 2022) which has a simultaneous effect on purchase decisions. The product quality variable (X1) had no effect on consumer satisfaction (Y2) because the T-Statistic value < 1.985, which was 0.878 with a significance level of 0.380 > 0.05. This result is contrary to research (Grace et al., 2021) where product quality has a positive and significant effect on customer satisfaction. The price perception variable (X2) had no effect on consumer satisfaction (Y2) because the T-Statistic value < 1.985, which is 1.932 with a significance value of 0.054 > 0.05. This result is contrary to research (Hardini et al., 2022) where price affects customer satisfaction both simultaneously and partially. The packaging variable (X3) had no effect on consumer satisfaction (Y2) because the T-Statistic value < 1.985, which was 0.136 with a significance level of 0.892 > 0.05. This result is contrary to research (Murdjono et al., 2023) where packaging has a significant effect on customer satisfaction. The purchase decision have a significance effect on customer satisfaction because the T-Statistic value > 1,985 was 4,724 with a significance level of 0,000 < 0,05.

Structural Equation Modeling

The structural equation modeling test is a stage that analyzes the suitability between the SEM-PLS structural model and the model under real conditions.

$$Y2 = 0,307X1 + 0,107X2 + 0,051X3 \quad (1)$$

The results of the structural equation model for the relationship between the exogenous latent variables of product quality, price perception, and packaging with the endogenous variables of purchase decision and consumer satisfaction were obtained to conclude that product quality is the main or most influential focus in improving purchase decisions and consumer satisfaction of bluder bread. This is because the product quality value in the structural equation model is the largest, which is 0.307 or 30.7%, followed by price perception with 0.107 or 10.7%, and packaging with 0.051 or 5.1%. Analyzing at real data in the field, from the five indicators of product quality, such as color, appearance, texture, aroma, and taste. The color of the bluder bread product is the focus of quality improvement because it has the lowest average value among other product quality indicators. As for appearance, texture, aroma, and taste, it has been considered to be good because the average value of each indicator has > 4 or close to 4.

Conclusion

Based on the research result on bluder bread produced by CV. XYZ, it is concluded that product quality and price perception significantly influence purchase decisions, with T-Statistic value of 5,214 and 2,029, both greater than 1,985, and significance levels of 0,000, which are less than 0,05. In contrast, packaging does not significantly affect purchase decisions, as the T-Statistic value is 0,744, which is less than 1,985, with a significance level of 0,457, which is greater than 0,05. The T-statistic value > 1,985 was 4,724 with a significance level of 0,000 < 0,05, indicating that purchase decisions did significantly affect customer satisfaction. However, product quality, price perception, and packaging did not significantly affect customer happiness, but the purchase decisions in this research may operate as an moderator in the link between endogenous and exogenous variables. The product quality value in the structural equation model is the largest, at 0,307 or 30,7%, indicating that product quality is the most important factor on customer satisfaction and purchasing decisions. However, there are some indicators that need to be improved, such as the bread product's color.

Suggestion

The suggestions for improvement to CV. XYZ, improvements can be made to the color of the bluder bread product by resetting the baking time and/or temperature setting when baking. For further research, variance of research variables can be executed by using variables outside this study and using the latest software assistance to obtain more accurate results.

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