






Influence Of Price, Product Quality and Brand Image Towards Oil Customer Loyalty Fried Palmanco In Medan City In East Medan District

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ABSTRACT

This research aims to determine and analyze the influence of price, product quality and brand image on customer loyalty for Palmanco Cooking Oil in Medan City in East Medan District. This research is associative research and the type of data used is quantitative. The data used was obtained from interviews, surveys and distributing questionnaires. The analytical method used is descriptive analysis and multiple linear regression analysis. The population of this research is the people of Medan city, especially in East Medan District, who use Palmanco cooking oil products. The number of samples in this study was 119 people using a purposive sampling technique with the criteria: aged over 20 years and had purchased Palmanco cooking oil products at least 3 times. The results of this research show that simultaneously Price, Product Quality and Brand Image have a positive and significant effect on Customer Loyalty for Palmanco Cooking Oil in Medan City in East Medan District. Partially, Price, Product Quality and Brand Image have a positive and significant effect on Customer Loyalty for Palmanco Cooking Oil in Medan City in East Medan District.

Keyword: Price, Product Quality, Brand Image, Customer Loyalty

ABSTRAK

1. Introduction

Currently, packaged cooking oil is the public's choice, because packaged cooking oil looks cleaner compared to bulk oil which is sold retail in jerry cans or drums. In the packaged cooking oil industry, many brands or products have been circulating on the international and national markets, one of which is Palmanco cooking oil. PT. Palmanco palm kernel with the Palmanco trademark has been doing business in the field of packaged palm cooking oil since 1990, located in Medan, North Sumatra. This company has a vision and mission to meet market demand for healthy and quality oil. Palmanco sells cooking oil derived from palm oil in various types of packaging. Sales of Palmanco cooking oil products have experienced instability and tended to decline over the last 3 months. Peak sales occurred in February 2022 with a total of 3,598,534 kilograms. However, in July 2022, there was a decline in sales to 3,028,590 kilograms. After that month, sales continued to experience a significant and consistent decline, reaching their lowest point in September 2022 with sales of 220,000 kilograms and never again reaching the highest peak sales point as in June 2022.

The customer factor is also a big influence for every company, quite a few competing companies offer advantages and innovation to customers so that customers are more selective in using the services or products offered. One of the company's strategies to increase its advantage in competition is by prioritizing customer loyalty.

Customer loyalty is the influence within a person that arises when he feels satisfied and believes in a product or service which becomes loyalty to that product or service. According to customer loyalty is a customer's willingness to continue buying from a company over a long period of time and recommending products to friends and colleagues, including preferences and intentions to buy in the future [1].

According to price has a significant role in forming customer loyalty. Competitive and fair prices can make customers feel satisfied with the value they get from the products or services purchased [2]. Customer loyalty can grow when customers feel that they are getting benefits commensurate with the price they pay. Based on the results of a pre-survey that has been carried out, 57% of Palmanco cooking oil consumers think that the prices offered are not affordable given their purchasing power and 67% of Palmanco cooking oil consumers think that the price of their products is not cheaper compared to similar competitors.

Previous research that conducted research on price variables showed different results. However, research conducted states that there is no influence between price variables and customer loyalty [3]. the price factor is one of the factors that influences customer loyalty. Therefore, companies must always pay attention to price factors in order to increase and maintain customer loyalty. Another factor that influences customer loyalty besides price is product quality[4]. product quality is anything that can be offered to the market for attention, purchase, use, or consumption that can satisfy a want or need. Previous research that conducted research on product quality variables showed different results[2]. Based on research entitled "Analysis of the Effect of Product Quality on Loyalty Through Satisfaction as an Intervening Variable for Por Kee Restaurant Customers in Surabaya" stated that product quality influences customer loyalty[5]. However, research conducted shows that product quality does not always have a direct effect on customer loyalty[6].

Brand image is also one of the factors that influences customer loyalty. Brand Image itself is the perception and trust felt by consumers which is based on the experiences felt and remembered in their minds and memories[7]. In other words, if the company's image is strong, the public as the market share will not hesitate to use the product or service or even make repeat purchases. Indirectly, the company will gain an absolute advantage among competitors operating in the same field. 46.7% of customers do not remember Palmanco Cooking Oil due to its reputation for product reliability. These findings suggest that a product's reputation for reliability may not currently be of much interest to customers or have a strong recall for some consumers. As an important element in a brand, a company's reputation must be able to reflect the characteristics and values that the product wants to present. Therefore, companies must re-evaluate and create product promotions that are more attractive, easy to remember, and more in line with the desired brand image. Previous research that conducted research on brand image variables showed different results. Based on research conducted shows that brand image has a significant effect on customer loyalty. However, research conducted stated that brand image does not have a significant effect on customer loyalty[8-10].

1.1 Marketing

The success of a company is not only through how many products are sold but also how a company maintains their market share. For this reason, it is important for companies to understand marketing so that the products they sell are in line with the targets they want to achieve. marketing is a process of preparing integrated communications which aims to provide information on goods or services in relation to satisfying human needs and desires[7].

1.2 Marketing Mix

Marketing mix or marketing mix can be interpreted as a set of controllable variables used by a company to pursue the desired level of sales in the target market or in other words 4P is a combination of marketing variables which are internal factors that are within a controllable range.

by the company[7]. These variables are as follows:

1. Product: is a combination of goods and services produced by a company and offered to the target market. The product mix has the following components: quality, characteristics, trademark style, packaging, service and guarantee.
2. Price: is the amount of money paid by consumers to producers to get a product.
3. Place: are company activities that make products available to target customers including: Location, distribution channels, inventory, transportation and logistics.
4. Promotion: is an activity carried out by a company to communicate the benefits of its product and to convince target consumers to buy its product. The means contained therein are advertising, personal marketing, sales promotion, publicity.

1.3 Price

While pricing is the easiest element in a marketing program to customize, product features, channels, and even communications take time. Price is the amount of money exchanged for a product or service [11]. According to Kotler and Armstrong, (2016) also explain that price is the amount of money charged for a product and service or the amount of value exchanged by customers to obtain benefits from owning or using a product and service.

Price affects financial performance and influences buyer perceptions and brand positioning. Price becomes a substitute measure for product quality when buyers experience difficulties in evaluating complex products. Based on the experts' explanation above, it can be concluded that indicators of understanding price are the affordability of the price when purchasing the charcoal, the suitability of the price with the image or service, price competitiveness between sellers, and suitability of the price of goods with the benefits received.

From the definition above, it explains that price is an important element in a company where with the price the company will get income for the sustainability of the company. Apart from that, price is also a tool that will later be used as an exchange process for goods or services by consumers.

there are four measures that characterize prices, namely: price affordability, price match with quality, price match with benefits, and price according to ability or purchasing power[2]. Below is an explanation of the four price measures, namely:

1. Affordability

Consumers can reach the prices set by the company. There are usually several types of products in one brand and the prices also vary from cheapest to most expensive. With the price set, many consumers buy the product.

2. Prices according to ability or price competitiveness

Consumers often compare the price of a product with other products. In this case, the price of a product is highly considered by consumers when buying the product.

3. Price match with product quality

Price is often used as an indicator of quality for consumers, people often choose the higher price between two goods because they see a difference in quality. If the price is higher, people tend to assume that the quality is also better.

4. Matching price with benefits

Consumers decide to buy a product if the perceived benefits are greater than or equal to what they have spent to get it. If consumers feel that the benefits of the product are less than the money spent, consumers will think that the product is expensive and consumers will think twice about making a repeat purchase.

1.4 Product Quality

state that product quality is the ability of a product to carry out its function, including reliability, accuracy, ease of operation[12].

A buyer/consumer tends to look for a product by looking at the quality displayed. The higher the quality offered by the company for the product, the greater the interest in the product. Because today's consumers are very critical in choosing and sorting the products they want to buy. product quality is one of the main positioning tools for marketers[11]. Quality has a direct impact on the performance of a product or service. Therefore, quality is closely related to customer value and

satisfaction. In a narrow sense, quality can be defined as being free from defects.

The indicators used to measure product quality according to [13]. are:

1. Products have main characteristics that function according to what consumers have in mind.
2. Has good resilience.
3. Product quality meets the standards that exist in consumers' minds.
4. The product is reliable in certain times and conditions.
5. Has good aesthetic value.
6. There is a good perception of the products offered.

1.5 Brand Image

In branding, brand image plays a very important role in shaping consumer perceptions of a brand. brand image is the main thing that comes to customers' minds when buying a product. There are many studies that prove that there is a positive interaction between customer loyalty and brand image[14-15].

green brand image can be defined as "consumer perceptions about a brand that are formed through brand associations, brand attributes, and relevant brand beliefs [1]." Brand image includes aspects such as product attributes, quality, brand reputation, brand values, and emotions associated with the brand. Brand Image itself is the perception and trust felt by consumers which is based on the experiences felt and remembered in their minds and memories[7].

the characteristics that form a brand image are as follows: [16].

1. Strength (Strength)

The strength of a brand can be influenced by the information conveyed by the company and remembered by customers, and how the message is received.

2. Reputation

Brands get a positive view from customers because there is confidence in the products being marketed because they have attributes or benefits that suit customer needs.

3. Uniqueness

Uniqueness is one of the reasons why customers want to buy a product. Products must have their own uniqueness that is competitive and sustainable so that they can differentiate themselves from competitors.

1.6 Customer loyalty

states "loyalty is defined as non random purchase expressed over time by some decision making unit". Based on this definition, it can be explained that loyalty refers more to the form of behavior of decision-making units to make continuous purchases of goods or services from a selected company[17].

stated that there are several indicators that can be used to measure customer loyalty[18], namely:

1. Repeat purchase

Make regular purchases of the same product;

2. Brand consumption habits

Make purchases across all product or service lines. In other words, using more than one product from the company;

3. Recommend the brand to others

Recommending products or services that have been consumed to other people, providing information about the good things about the company and recommending them to other people who have not used the products or services at the company;

4. Determination of the brand

Is rejecting products from competitors whatever the conditions that occur.

1.7 Conceptual Framework

Based on the description of the literature review and previous research, a conceptual framework can be prepared with explanations and descriptions in this research as follows:

1. The Effect of Price on Customer Loyalty

Pricing is a policy that has a big influence on marketing success. state that price is an

element in the marketing mix that not only determines probability but also acts as a signal to communicate the value proposition of a product more efficiently. The price offered by Palmanco cooking oil must consider many things because customers see price as a factor that must be in accordance with the benefits they feel [7].

Research results show that the price variable has a significant effect on the customer loyalty variable [19]. The same results were shown Price has a positive and significant effect on customer loyalty [20]. To determine the effect of price on customer loyalty, research was conducted on Palmanco cooking oil consumers in Medan City as the research object.

H1: Price, Product Quality and Brand Image simultaneously have a positive and significant effect on Customer Loyalty for Palmanco cooking oil.

H2: Prices partially have a negative and significant effect on Customer Loyalty of Palmanco cooking oil

2. The Influence of Product Quality on Customer Loyalty
product quality is an important factor that influences every customer's decision to buy a product. With good product quality, consumers will feel their needs are met and become loyal to the product [21].

The relationship between product quality and customer loyalty is also strengthened by previous research entitled "Analysis of the Effect of Product Quality, Service Quality and Customer Trust on Customer Loyalty" and the results of this research show that there is a positive and significant relationship between product quality and customer loyalty [22],

H3: Product quality partially has a positive and significant effect on Customer Loyalty of Palmanco cooking oil.

3. The Influence of Brand Image on Customer Loyalty
Brand image is the consumer's perception of a brand as a reflection of the associations that exist in the consumer's mind. In many ways, attitudes towards a particular brand often influence whether customers will be loyal or not [7]. Good perception and customer trust in a particular brand will create customer buying interest and even increase customer loyalty towards certain products. The theory of the link between brand image and customer loyalty is quoted which states that one of the factors in gaining consumer loyalty is brand image. This relationship is also strengthened by the results of research brand image has a positive and significant effect on customer loyalty. To determine whether or not there is an influence of brand image on customer loyalty, research was conducted on consumers of Palmanco cooking oil in Medan City as the research object [23-24].

H4: Brand Image partially has a positive and significant effect on Customer Loyalty of Palmanco cooking oil

2. Methods

All Research methods are basically scientific ways to obtain data with specific purposes and uses [25]. The type of research in this research is associative research with a quantitative approach. Associative research is research that connects two or more variables to see the relationship between variables. The variables linked in this research are the independent variables, namely Price (X1), Product Quality (X2), and Brand Image (X3), as well as the dependent variable Customer Loyalty (Y). The population in this research is the people of Medan city, especially in East Medan District, who use Palmanco cooking oil products.

The sample size was taken using the formula Hair, et al. The Hair formula is used because the population size is not yet known with certainty. If the sample size is too large, for example 400 (in this case the East Medan District is 118,008), then the method becomes very sensitive so it is difficult to get good Goodness of Fit Index (GFI) measurements. So it is recommended that the minimum sample size is 5-10 observations for each parameter being estimated. Suggesting that the

minimum sample size be 5-10 times the indicator variable. So the number of indicators is 17 times 7 ($17 \times 7 = 119$). So through calculations based on this formula, the sample size for this study was 119 respondents.

The sampling technique for this research uses the Purposive Sampling method. purposive sampling is a form of non-probability sampling in which the sample is determined using certain considerations[25]. So that only people who can provide the desired information can provide the information that meets the criteria determined by the researcher. The criteria created by researchers are as follows:

1. Over 20 years old. Adult respondents are expected to be able to provide objective assessments in answering the questionnaire
2. Have purchased Palmanco cooking oil products at least 3 times.

The type of data in this research is Primary data namely data obtained directly from selected respondents at the research location. Primary data was obtained by providing a list of questions[25]. Further more secondary data, namely data obtained through documentation studies from books, research journals, magazines and supporting internet sites. The data analysis techniques used are descriptive analysis and multiple linear regression analysis. Then the classical assumption test was carried out using the normality test, heteroscedasticity test and multicollinearity test. Then proceed with a simultaneous significance test (F-statistical test), partial significance test (t-statistical test) to test the hypothesis and the coefficient of determination (R^2) to measure how much the model is able to explain variations in the dependent variable.

2.1 Validity Test

The validity test is carried out to determine the level of validity or validity of the research instrument used, by comparing the rcount value (Correlated Item-Total Correlation) with the rtable value. To find the rtable value, you can do it with $n = 30$, $df = n-2 = 30-2 = 28$, then $\alpha = 0.05$ obtained $r \text{ table} = 0.361$.

Table 1. Validity Test

ITEMS	CORRELATION VALUE	R TABLE VALUE	RESULTS
X1.1	,806	0.361	Valid
X1.2	,793	0.361	Valid
X1.3	,788	0.361	Valid
X1.4	,831	0.361	Valid
X2.1	,615	0.361	Valid
X2.2	,681	0.361	Valid
X2.3	,689	0.361	Valid
X2.4	,561	0.361	Valid
X2.5	,585	0.361	Valid
X2.6	,533	0.361	Valid
X3.1	,860	0.361	Valid
X3.2	,893	0.361	Valid
X3.3	,801	0.361	Valid
Y1	,872	0.361	Valid
Y2	,850	0.361	Valid
Y3	,801	0.361	Valid
Y4	,755	0.361	Valid

The calculated r value (Correlated Item-Total Correlation) for each question item is greater than the r table value, namely 0.361, so it is concluded that the research instrument has passed

the validity test.

2.2 Reliability Test

Table 2. Reliability Test

Variable	Cronbach's Alpha	N of Items
Price (X1)	,816	4
Product Quality (X2)	,666	6
Brand Image (X3)	,812	3
Loyalty (Y)	,842	4
Total	,859	17

The value of Cronbach Alpha for each research variable is > 0.6 , so it can be stated that all statements are reliable with a good level of reliability.

3. Result and Discussion

3.1 Analysis of Respondent Characteristics

Characteristics of respondents based on gender

Table 3. Characteristics of respondents based on gender

Gender	Frequency	Percent
Man	17	14%
Woman	103	86%
Total	120	100%

Characteristics of respondents based on age:

Table 4. Characteristics of respondents based on age

Age	Frequency	Percent
20 – 30	72	60%
31 – 40	38	31.67%
> 40	10	8.33%
Total	120	100%

Characteristics of respondents by occupation:

Table 5. Characteristics of respondents by occupation

Work	Respondents (People)	Percentage (%)
Student/Students	31	26%
Housewife	52	43.3%
Private sector employee	11	9.1%
Self-employed	17	14.1%
Freelancing	3	2.5%
Civil servants	6	5%
Total	120	100%

Characteristics of Respondents Based on Income.

Table 6. Characteristics of Respondents Based on Income

Nominal	Amount (Respondent)	Percentage
< IDR 1,500,000	24	20%
Rp. 1,500,000 - Rp. 3,000,000	55	45.8%
Rp. 3,000,000 - Rp. 4,500,000	32	26.7%
> Rp. 4,500,000	9	7.5%
Total	120	100%

3.2 Descriptive Analysis of Variables

Distribution of Respondents' Answers Price Variable (X1)

Table 7. Distribution Table of Respondents' Answers to the Price Variable (X1)

Statement	STS		T.S		K.S		S		SS		Mean
	F	%	F	%	F	%	F	%	F	%	
The price of Palmanco cooking oil is very affordable with my purchasing power	1	0.8	7	5.8	19	15.8	62	51.7	31	25.8	3.96
The price of Palmanco cooking oil is in accordance with the quality provided	3	2.5	6	5	40	33.3	47	39.2	24	20	3.69
The benefits I receive are commensurate with the price I pay for Palmanco cooking oil	2	1.7	4	3.3	27	22.5	62	51.7	25	20.8	3.87
The price of Palmanco cooking oil is cheaper than similar competitors	5	4.2	8	6.7	26	21.7	48	40	33	27.5	3.80
The price of Palmanco cooking oil is very affordable with my purchasing power	1	0.8	7	5.8	19	15.8	62	51.7	31	25.8	3.96
Average Price Variable											3.83

Distribution of Respondents' Answers to Product Quality Variables (X2)

Table 8. Distribution of Respondents' Answers on Product Quality Variables (X2)

Statement Items	STS		T.S		K.S		S		SS		Mean
	F	%	F	%	F	%	F	%	F	%	
Palmanco cooking oil has quality products as the main choice of cooking oil for cooking.	1	0.8	6	5	30	25	46	38.3	37	30.8	3.93

I am satisfied with the durability performance of Palmanco cooking oil products.	0	0	6	5	34	28.3	41	34.2	39	32.5	3.94
Palmanco cooking oil products do not leave residue or sediment on fried products	1	0.8	6	5	30	25	47	39.2	36	30	3.93
Palmanco cooking oil does not easily experience undesirable changes in smell or taste during the repeated frying process	0	0	2	1.7	16	13.3	46	38.3	56	46.7	4.30
The packaging on Palmanco is more attractive compared to the packaging of other cooking oil products	1	0.8	6	5	25	20.8	46	38.3	42	35	4.02
Average Price Variable											3.83

Distribution of Respondents' Answers Brand Image Variable (X3)

Table 9. Distribution of Respondents' Answers Brand Image Variable

Statement	STS		T.S		K.S		S		SS		Mean
	F	%	F	%	F	%	F	%	F	%	
I know Palmanco cooking oil as a healthy palm oil product	0	0	9	7.5	39	32.5	66	55	6	5	3.57
I consider the reputation of Palmanco cooking oil to be very good in terms of product reliability.	0	0	6	5	30	25	72	60	12	10	3.75
Palmanco cooking oil providing cooking oil products that are safe to use	0	0	4	3.3	38	31.7	71	59.2	7	5.8	3.68
Average Brand Image Use Variable											3.66

Distribution of Respondents' Answers to the Social Brand Image Variable (X3)

Table 10. Distribution of Respondents' Answers to the Social Brand Image Variable (X3)

Statement	STS		T.S		K.S		S		SS		Mean
	F	%	F	%	F	%	F	%	F	%	
I know Palmanco cooking oil as a healthy palm oil product	0	0	9	7.5	39	32.5	66	55	6	5	3.57
I consider the reputation of Palmanco cooking oil to be very good in terms of product reliability.	0	0	6	5	30	25	72	60	12	10	3.75

Palmanco cooking oil providing cooking oil products that are safe to use	0	0	4	3.3	38	31.7	71	59.2	7	5.8	3.68
Average Brand Image Use Variable											3.66

Distribution of Respondents' Answers Customer Loyalty Variable (Y)

Table 11. Distribution of Respondents' Answers to the Customer Loyalty Variable (Y)

Statement Items	STS		T.S		K.S		S		SS		Mean
	F	%	F	%	F	%	F	%	F	%	
I will not hesitate to repurchase Palmanco cooking oil products	1	0.8	8	6.7	32	26.7	56	46.7	23	19.2	3.77
I usually use more than one Palmanco cooking oil product	1	0.8	13	10.8	32	26.7	46	38.3	28	23.3	3.72
I would have no hesitation in recommending Palmanco cooking oil to others	1	0.8	9	7.5	23	19.2	46	38.3	41	34.2	3.98
I still choose Palmanco cooking oil as my main choice among other similar brands	1	0.8	3	2.5	40	33.3	43	35.8	33	27.5	3.87
Loyalty Variable Average											3.83

3.3 Multiple Linear Regression Analysis

Table 12. Multiple Linear Regression Results

Coefficients ^a								
Model	Unstandardized		Standardized		t	Sig.	Collinearity	
	B	Std. Error	Beta				Tolerance	VIF
1 (Constant)	-1,782	1,591			-1,120	,265		
totalx1	,742	,063	,726		11,730	,000	,728	1,373
totalx2	,178	,061	,159		2,874	,013	,743	1,392
totalx3	,190	,092	,109		2,061	,042	,992	1,008

a. Dependent Variable: totally

Based on the table above, the following regression formula can be produced:

$$Y = -1.782 + 0.742X_1 + 0.178X_2 + 0.190X_3$$

From this formula it can be interpreted as follows:

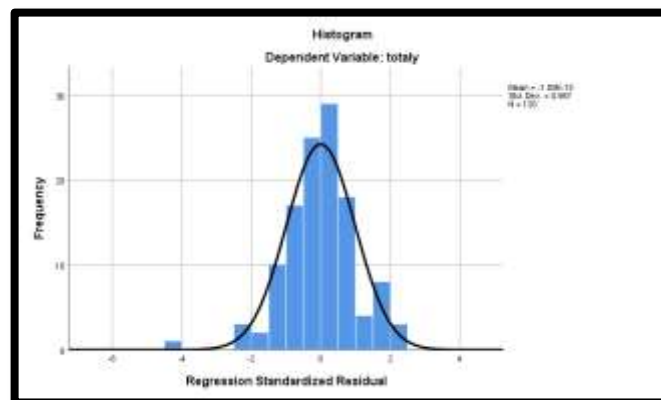
1. Constant (β_0) = -1.782. This shows a constant level, where if Price (X1), Product Quality (X2) and Brand Image (X3) are 0, then loyalty (Y) to Palmanco cooking oil customers in East Medan District will remain at -1.782, assuming other variables constant.
2. Price Coefficient (β_1) = 0.742 > 0 indicates that the Price variable (X1) has a positive effect

on buyer loyalty. If the price variable is increased, then Palmanco Cooking Oil customer loyalty in East Medan District will also increase and be positive assuming other variables are constant.

3. Product Quality Coefficient (β_2) = 0.178 > 0. This shows that the Product Quality variable (X2) has a positive effect on loyalty. If the price variable is increased, then Palmanco Cooking Oil customer loyalty in East Medan District will also increase and be positive assuming other variables are constant.
4. Brand Image Use Coefficient (β_3) = 0.190 > 0. This shows that the Brand Image Use variable (X3) has a positive effect on loyalty. If the price variable is increased, then customer loyalty for Palmanco Cooking Oil in Medan Timur District will also increase and be positive assuming other variables are constant.

3.4 Classic Assumption Test

3.4.1 Normality Test



1. Histogram Approach

Figure 1. Normality Test Histogram Image

Based on the data normality test with the histogram approach above, it can be seen that the variables are normally distributed. This can be seen from the histogram graph in the form of a curve that is balanced and in the middle.

2. Scatterplot Approach

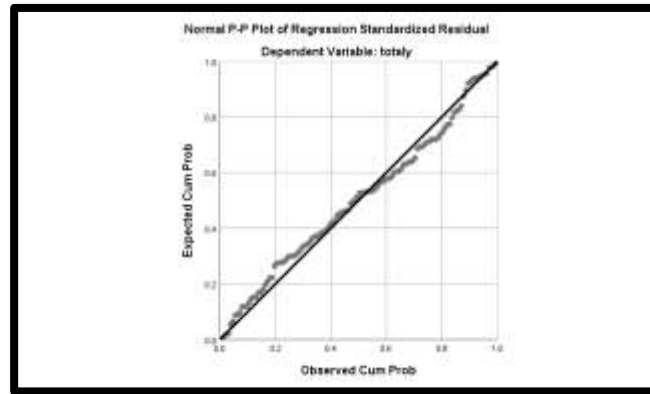


Figure 2. P-Plot Normality Test

Based on the results of the normality test using the graphic approach above, it can be seen that the data has a normal distribution or distribution. This can be seen from the distribution of points around the diagonal axis of the graph.

3. Kolmogorov-Smirnov Approach

Table 13. Kolmogorov-Smirnov (KS) Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residuals
N		120
Normal Parameters, b	Mean	.0000000
	Std. Deviation	1.72151375
Most Extreme Differences	Absolute	.071
	Positive	,063
	Negative	-.071
Statistical Tests		.071
Asymp. Sig. (2-tailed)		,200c,d
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

In Table it can be seen that the probability value p or Asymp.Sig (2 Tailed) is $0.200 > \alpha$ (0.05). This means it is accepted so it is concluded that the residual data is normally distributed.

3.4.2 Heteroxedasticity Test

1. Graphic Method (Scatterplot)

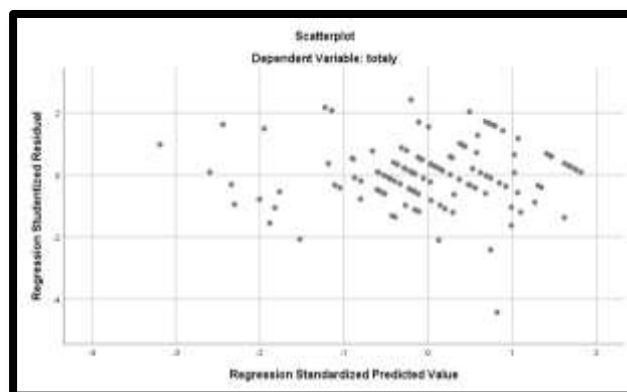


Figure 3. Heteroscedasticity Test with Scatterplot Graphs

2. Glejser Test Method

Table 14. Heteroscedasticity Test Results with the Glejser Test

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2,332	1,060		2,200	,030
Price	-.004	,042	-.010	-.095	,925
Product quality	-.010	,039	-.027	-.253	,832
Brand Image	-.069	,061	-.104	-1.126	,263

a. Dependent Variable: abs_res

From Glejser Test Table, the significance value of the variable can be seen Price (X1) is 0.925 > 0.05. Product Quality variable (X2) is 0.832 > 0.05 and for Brand Image Use (X3) is 0.263 > 0.05. The three variables studied show that all sig values are > 0.05. This means that it can be concluded that there is no heteroscedasticity problem.

3.4.3 Multicollinearity Test

Table 15. Multicollinearity Test

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-1,782	1,591		-1,120	,265		
totalx1	,742	,063	,726	11,730	,000	,728	1,373
totalx2	,178	,061	,159	2,874	,013	,743	1,392
totalx3	,190	,092	,109	2,061	,042	,992	1,008

a. Dependent Variable: totally

3.4 Coefficient of Determination (R²)Table 16. Coefficient of Determination Results (R²)

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823a	,677	,668	1,744

a. Predictors: (Constant), totalx3, totalx2, totalx1
b. Dependent Variable: totally

It can be seen that the coefficient of determination (Adjusted R Square) is 0.688 or 68.8 percent. This shows that 66.8 percent of the variation in loyalty can be explained by the independent variables, namely price, product quality and brand image. Then, the remaining 33.2 percent can be explained by other factors not included in this study.

3.4 Hypothesis Testing

3.4.1 Simultaneous Significance Test (F Test)

Table 17. Simultaneous Test (F Test)

ANOVAa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	737,997	3	245,999	80914	,000b
	Residual	352,670	116	3,040		
	Total	1090,667	119			

a. Dependent Variable: loyalty
b. Predictors: (Constant), price, product quality, brand image

In this research, it is known that the number of samples (n) is 100 respondents and the number of parameters (k) is 4 so that we get:

$$df1 = k - 1 = 4 - 1 = 3$$

$$df2 = n - k = 120 - 4 = 116$$

Based on these results, at $\alpha = 0.05$, $F_{table} = 2.68$.

From the table, the calculated F value is $80.914 > F_{table} (2.68)$ and the significance is $0.000 < \alpha (0.05)$. This means that the variables price, product quality and brand image simultaneously have a significant effect on customer loyalty for Palmanco cooking oil in East Medan District.

3.4.2. Partial Significance Test (t-Test)

The value with $df = nk$ is $120 - 4 = 116$. So the value at the 0.05 significance level is 1.626. The results of the partial test (t test) can be seen in the table

Table 18. Partial Test (t-test)

Coefficientsa							
Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		Sig.
	B	Std. Error	Beta	t	Tolerance	VIF	
1	(Constant)	-1,782	1,591		-1,120		,265
	totalx1	,742	,063	,726	11,730	,728	,000
	totalx2	,178	,061	,159	2,874	,743	,013
	totalx3	,190	,092	,109	2,061	,992	,042

a. Dependent Variable: totally

1. The Price variable (X1) has a coefficient (β_1) = 0.742 > 0 with tcount (11.730) > ttable (1.626) and significance (0.000) < (0.05). Thus, the Price variable has a positive and significant effect on Loyalty, meaning that the better the price, the Loyalty will also increase significantly, and vice versa.
2. The Product Quality variable (X2) has a coefficient (β_2) = 0.178 > 0 with tcount (2.874) > ttable (1.626) and significance (0.013) < 0.05). Thus, the product quality variable has a positive and significant effect on Loyalty, meaning that the higher the Product Quality, the Loyalty will increase significantly, and vice versa.
3. The Brand Image Use variable (X3) has a coefficient (β_3) = 0.190 > 0 with tcount

(2.061) > ttable (1.626) and significance (0.042) < 0.05). Thus, the Brand Image variable has a positive and significant effect on Loyalty, meaning that the better the Brand Image, the Loyalty will also increase significantly, and vice versa.

3.5 Discussion

3.5.1 The Effect of Price on Customer Loyalty

The Price variable (X1) has a coefficient (β_1) = 0.726 > 0 with tcount (11.730) > ttable (1.626) and significance (0.000) < 0.05). Thus, the price variable has a positive and significant effect on loyalty, meaning that for every 1 unit increase per item, the price variable score. Then Loyalty will increase by 0.726 units per score item. Vice versa, based on the regression results, price has the greatest influence of the other independent variables. These findings also indicate that the price variable will not always have a partially negative and significant impact on Palmanco cooking oil customer loyalty.

Based on the distribution of respondents' answers about price, most respondents answered agreeing with the 4 statements given. The average obtained also shows that overall the price of Palmanco cooking oil is good enough to be able to increase and maintain loyalty due to setting prices in accordance with consumer purchasing power, in accordance with the quality provided and commensurate with the benefits received based on the price paid for it. buy Palmanco edible oil.

This is related to what stated, namely price can give the impression that the product or service is of better quality. If customers believe that a high- priced product offers higher value or better social standing, they may be more inclined to remain loyal to the brand[26].

3.5.2 The Influence of Product Quality on Customer Loyalty

The Product Quality variable (X2) has a coefficient (β_2) = 0.178 > 0 with tcount (2.874) > ttable (1.626) and significance (0.013) < 0.05). Thus, the product quality variable has a positive and significant effect on loyalty, meaning that for every 1 unit increase per item the product quality variable score. Then loyalty will increase by 0.178 units per item score. Vice versa, based on the results of this regression, product quality has the third largest influence compared to other independent variables. Based on the distribution of respondents' answers regarding Product Quality, most respondents answered agreeing with the 6 statements given. The average obtained also shows that overall product quality is good enough to increase loyalty because by paying attention to product quality, companies can influence consumers by utilizing texture, packaging, aroma and convenience factors. said that product quality is the production process of an item where the quality of the product provided by the company can create a positive perception from customers towards the company and produce customer satisfaction and loyalty[8]. The results of this research are in line with the results of research conducted which states that product quality influences customer loyalty[5].

3.5.2 The Influence of Brand Image on Customer Loyalty

The Brand Image variable (X3) has a coefficient (β_3) = 0.190 > 0 with tcount (2.061) > ttable (1.626) and significance (0.042) < 0.05). Thus, the Brand Image variable has a positive and significant effect on Loyalty, meaning that for every 1 unit increase per item the Brand Image variable score. Then Loyalty will increase by 0.190 units per score item. Vice versa, based on the results of this regression, Brand Image has the second largest influence compared to other independent variables. companies that are continuously committed to improving their quality will achieve a positive impact on the company's image in the eyes of customers[7].

Based on the distribution of respondents' answers regarding brand image, most respondents answered agreeing with the 3 statements given. The average obtained also shows that overall the brand image is good enough to be able to increase loyalty because the brand image is able to present a product so that it is easy to remember.

The results of this research are in line with the results of research conducted showing that brand image has a significant effect on customer loyalty[8-9].

4. Conclusion And Recommendation

4.1 Conclusion

Based on the results of this research, the following conclusions can be outlined:

1. Based on the Simultaneous Test (F), the variables Price, Product Quality and Brand Image simultaneously have a significant effect on Customer Loyalty for Palmanco Cooking Oil in East Medan District.
2. The price variable has a positive and significant effect on Customer Loyalty for Palmanco Cooking Oil in East Medan District.
3. Product quality variables have a positive and significant effect on Customer Loyalty for Palmanco Cooking Oil in East Medan District.
4. The Brand Image variable has a positive and significant effect on Customer Loyalty for Palmanco Cooking Oil in East Medan District.

4.2 Recommendation

Based on the conclusions drawn up, the following suggestions can be written:

1. Price

In the Price variable, the statement that "The price of Palmanco cooking oil is in accordance with the quality provided" with the lowest average value of 3.69 in the context of this research reflects the existence of disagreement or doubt from some respondents regarding the relationship between the price of the product and the quality they receive. Companies can carry out more in-depth analysis regarding production costs and pricing of their products. This will help them understand whether the price set truly reflects the quality of the product and the factors that influence the price. If there is room for improvement, they may consider adjusting prices to better suit the quality provided.

2. Product Quality

Then in the Product Quality variable, the statement that "Palmanco cooking oil has quality products as the main choice of cooking oil for cooking" and "Palmanco cooking oil products do not leave residue or sediment on fried products" has the lowest value with an average answer of 3.93 in the context of this research indicating that the company may need to address several aspects in its marketing strategy and product development. The company may consider efforts to improve the quality of Palmanco cooking oil products. This includes improving quality control during the production process, use of higher quality raw materials, and regular product testing to ensure that the products delivered to customers meet expectations in terms of quality. In terms of packaging variations, it is important to maintain consistency in product quality, regardless of variations in packaging design. Ensure that attractive packaging variations do not affect customers' perception of the quality of the product itself. This could include ensuring that all packaging variations meet the same standards in terms of quality and functionality.

3. Brand Image

In the Brand Image variable, the statement that "I know Palmanco cooking oil as a healthy palm oil product" has the lowest average value of 3.57 in the context of this thesis, indicating that there is an opportunity for companies to improve their brand image in terms of product health. Companies need to make greater efforts in educating customers about the health benefits associated with Palmanco cooking oil. This could include stronger marketing about the quality of palm oil used, healthy production processes, as well as the health benefits associated with consuming their products. Companies can use stronger, more informative marketing materials to emphasize the quality of their products and can collaborate with expert resources in the field of nutrition or health to support and provide scientific validation of product health claims.

4. Customer loyalty

In the Loyalty variable, the statement that "I usually use more than one Palmanco cooking oil product" has the lowest average value of 3.72 in the brand image variable indicating the potential for companies to improve their brand image and increase customer loyalty to Palmanco cooking oil products. . This means that producers continue to improve and maintain so that consumers continue to make palmanco oil their first choice. With this average, even though it is the lowest, it can be a consideration to keep taking it into account in order to get better customer loyalty in the future.

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