

The Influence of Product Quality on Consumer Purchasing Decisions at PT Sinar Cakrawala Gemilang

Shelly Wijaya¹, Nurjafa Liaufaldi^{2*}, Supriyanto Supriyanto³

¹Economic Faculty, Management Study Program, Polytechnic Cendana, Indonesia

²Economic Faculty, Management Study Program, Polytechnic Cendana, Indonesia

³Economic Faculty, Business Administration, Polytechnic LP3I Medan

Email: ¹shellywijaya02@gmail.com, ^{2*}pukat7murni@gmail.com, ³faiziqameira@gmail.com

Abstract

The purpose of this research is to determine the influence of product quality on consumer purchasing decisions at PT Sinar Gemilang Cakrawala. The method used in this research is descriptive method, this type of research is quantitative data, primary data obtained through questionnaires. The research population that will be used in this research is all consumers who make purchases from the company, totaling 1,457 consumers. Because the entire population of only 1,457 consumers will be used as a sample, the sampling technique that will be used is the Slovin technique with a confidence level of 90% and an error rate of 10% where 94 samples were obtained. The analysis technique used is simple linear analysis and statistical tests, namely t-test (partial) using SPSS (statistical package for the social sciences) software. Test results show that product quality partially influences consumer purchasing decisions at PT Sinar Gemilang Cakrawala.

Keyword: Product Quality, Purchase Decision

1. INTRODUCTION

1.1 Background of The Study

The era of globalization has had a significant influence on marketing and has created new challenges in today's marketing profession. Marketers are required to be able to understand how events in various corners affect the domestic market and opportunities to look for new breakthroughs and of course also about how these developments will influence marketing patterns for them as entrepreneurs. With increasingly diverse requests from customers, entrepreneurs are competing to gain sympathy and loyalty from customers. If customers have decided to become customers, it is certain that they will return to buy the products offered by the entrepreneurs.

Marketing becomes a social and managerial process so that consumers can obtain their needs/wants through demand, supply, and exchange of the value of a product between sellers and buyers. Marketing is very important and crucial for many leading companies. In the face of new competitors, companies must rethink their business models. Even market leaders realize that they cannot relax and must change. Marketing is closely related to identifying and meeting the needs of people and society. One of the shortest definitions of marketing is satisfying a need profitably. With marketing intelligence, personal or social needs are transformed into business opportunities that can generate profits.

In this era of increasingly competitive competition, entrepreneurs are increasingly realizing the importance of customer purchasing decisions to ensure the continuity of their business. Purchasing decisions are a problem-solving activity carried out by individuals in selecting appropriate behavioral alternatives from two or more behavioral alternatives and are considered the most appropriate action in purchasing by first going through the stages of the decision-making process. A customer who continuously makes purchases makes that customer a very valuable asset for entrepreneurs and when they continue to be retained they will become loyal and loyal customers who make regular purchases. In maintaining a consumer's purchasing decision, it is natural to pay attention to various factors that might influence it, such as product quality. Product quality is an understanding that the product offered by the seller has more selling value than competitors' products do not have. Therefore, companies try to focus on product quality and compare it with products offered by competing companies.

PT Sinar Cakrawala Gemilang is a company located at KIM I Jalan Bangka No. 1 Malindo Synergy Complex. PT Sinar Cakrawala Gemilang is engaged in making cardboard or packaging boxes. The problem currently occurring in companies is that consumer purchasing decisions are decreasing from year to year because consumers have many alternative places to purchase so consumers often compare the company's products with other companies. Apart from that, marketing stimuli from the company also cannot attract consumers' interest in trying to make purchases of the products the company offers. The company sets sales targets that must be achieved by marketers, but these targets are not achieved so that for the following year the company lowers the targets that must be achieved slightly in order to motivate its employees. This was not in accordance with the company's wishes because for the following year product sales continued to decline and there was no visible increase again. This decrease in purchasing decisions was caused by the large number of places for consumers to make similar purchases. Moreover, the lack of stimulation from the company's marketing activities makes consumers less interested in making purchases and starts switching to other companies.

Based on observations made by researchers, it was found that the quality of the products offered by the company was still not good, such as cardboard products that were easily damaged or cardboard products that

smelled unpleasant so consumers did not like them. Some consumers complained that the quality of the cardboard did not last long, making consumers not want to buy the company's products again. On the other hand, there are several consumers who experience dissatisfaction with several things that the company does, such as employee service which is considered not good because employees are very unreliable in providing responses. Apart from that, several consumers also often complain and criticize the company so that the company can make improvements so that consumers do not feel disappointed with the company and return to purchasing its products.

1.2 Previous Research

Previous research is the researcher's effort to look for comparisons and then to find new inspiration for further research. In addition, previous research helps research in positioning the research and shows the originality of the research. In this research, there are several previous studies that will be used as references to support this research, such as according to Gerung, et al (2021) with the research title The Influence of Product Quality, Price and Promotion on the Decision to Purchase a Nissan X-Trail Car at PT Wahana Wirawan Manado which shows research results that both partially and simultaneously product quality, price and promotion have a positive and significant effect on purchasing decisions. Meanwhile, other research conducted by Noden, et al (2020) with the research title The Influence of Product Quality on Purchase Decisions for Daihatsu Sirion Cars shows the research results that both partially and simultaneously Product Quality has a positive and significant effect on Purchase Decisions. Another research conducted by Erwin, et al (2021) with the title Analysis of Customer Satisfaction on Labeled Purchasing Decisions shows the research results that both partially and simultaneously Customer Satisfaction has a positive and significant effect on Purchasing Decisions.

1.3 Literature Review

According (Kotler and Keller, 2019) Purchasing Decisions are decisions taken by consumers to purchase a product through the stages that consumers go through before making a purchase which include felt needs, activities before purchasing, behavior when using and feelings after purchasing, Meanwhile according (Sawhani, 2021), a purchasing decision is one of the stages of the entire mental process and other physical activities that occur in the purchasing process at a certain period and time as well as fulfilling certain needs, in other words, a series of stages taken by a consumer.

Based on the opinion (Damiati, et al. 2017), Product Quality is the overall consumer evaluation of the superior performance of a good or service. Furthermore, based on the opinion (Astuti and Matondang, 2020), Product Quality is a factor of the product which can measure the value of the product whether it meets standards. Based on opinion (Firmansyah, 2019), Product Quality is an understanding that the product offered by the seller has more selling value that competitors' products do not have.

2. RESEARCH METHODS

2.1 Research Design

This research uses quantitative methods with associative research. The research location is PT Sinar Cakrawala Gemilang which is located at Jalan Bangka No.mor 1, Gg. Buntu, District. Medan Team., Medan City. The planned research time will start from March 2023 to May 2023. There are 2 variables used, namely Product Quality (X) as the independent variable and Purchase Decision (Y) as the dependent variable. The research population that will be used in this research is all consumers who make purchases from the company, totaling 1,457 consumers. Because the population used is 1,457 consumers, the population will be reduced using the Slovin sampling technique with a confidence level of 90% and an error rate of 10%, where 94 research samples were obtained. Meanwhile, the sampling technique is to use simple random sampling where consumers who are met first by chance will be used as samples.

Data sources in this research include primary data which is a data source that directly provides data to data collectors. Data is collected by the researcher himself directly from the first source or place where the research object is carried out. Meanwhile secondary data is a data source that does not directly provide data to the data collector, for example through other people or through documents.

2.2 Data analysis method

2.2.1 Simple Linear Regression Analysis

Based on the opinion of (Priyatno, 2020), simple regression analysis is an analysis to determine whether there is a significant influence between the independent variable and the dependent variable. The purpose of using simple regression analysis in this research is to find out how much influence the independent variable has on the dependent variable which can be calculated using the following formula:

$$Y = a + bX + e$$

Information:

Y = Purchase Decision (dependent variable)

X = Product Quality (independent variable)

a = Constant

b = Regression coefficient

e = Percentage error (10%)

2.2.2 Coefficient of Determination (R²)

According to (Ariawan, et al. 2019), an important characteristic of R² is that its value is a function that never decreases from the number of independent variables in the model. Therefore, to compare two R² from two models, you must take into account the number of independent variables in the model. This can be done using Adjusted R Square. The term adjustment means that the R² value has been adjusted to the number of variables (degrees of freedom) in the model. Indeed, this adjusted R² will also increase as the number of variables increases, but the increase is relatively small. It is often also recommended that, if there are more than two independent variables, it is best to use Adjusted R Square. The coefficient of determination formula is as follows:

$$KD = r^2 \times 100\%$$

Information:

KD = Coefficient of Determination Value

R² = Correlation Coefficient Value

2.2.3 Hypothesis testing

According to (Jaya, 2020), the t test is a test carried out to determine the relationship between the independent variable and the dependent variable partially. The significant level is 5%. Criteria:

If Zcount > Ztable, Ho is rejected and Ha is accepted.

If Zcount < Ztable Ho is accepted and Ha is rejected.

Or:

If p < 0.05, Ho is rejected and Ha is accepted.

If p > 0.05 Ho is accepted and Ha is rejected.

3. RESULT AND DISCUSSION

3.1 Normality Test

Residual normality testing is used to test whether the value of a residual resulting from regression is normally distributed or not. A good regression model has residuals that are normally distributed. The results of the histogram graph normality test and P-P plot analysis test can be seen below as follows:

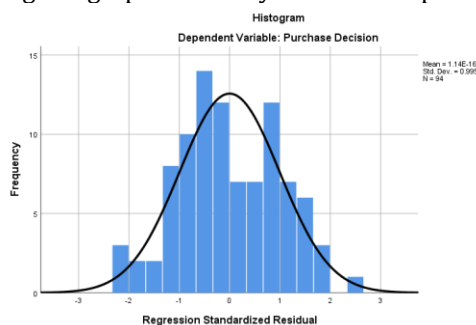


Figure 1. Histogram

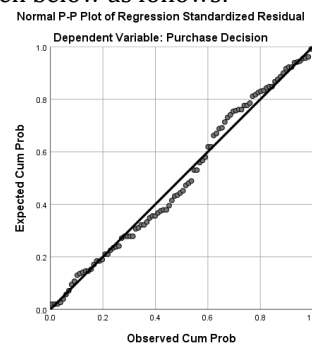


Figure 2. Normal P-P Plot

From the Figure 1 it can be seen that the data spreads around the diagonal line and follows the direction of the diagonal line or the histogram graph shows a normal distribution pattern, so the regression meets the assumption of normality. In the Figure 2 can be seen that the points approach the diagonal line. This shows that the data is normally distributed and meets the assumptions of normality testing. The results of the One Sample Kolmogorv-Smirnov test can be seen in the table below:

Table 1. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		94
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	3.68950060
Most Extreme Differences	Absolute	.069
	Positive	.069
	Negative	-.064
Test Statistic		.069
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: Research Results, 2023 (Processed Data)

In the table above, it can be seen that the results of the Kolmogorov-Smirnov normality test prove that the resulting significance level value is greater than 0.05, namely 0.200, so it can be concluded that the normality statistical test is classified as normally distributed.

3.2 Correlation Test

The following correlation test can be seen in the table below:

Table 2. Correlations

		Product Quality	Purchase Decision
Product Quality	Pearson Correlation	1	.668**
	Sig. (2-tailed)		.000
	N	94	94
Purchase Decision	Pearson Correlation	.668**	1
	Sig. (2-tailed)	.000	
	N	94	94

** Correlation is significant at the 0.01 level (2-tailed).

Source: Research Results, 2023 (Processed Data)

Based on the table above, it can be seen that the correlation value obtained is 0.668, which indicates that the correlation between Product Quality and Purchasing Decisions is 66.8%.

3.3 Simple Linear Regression Analysis

The results for testing simple linear regression analysis can be seen in the table as follows:

Table 3. Simple Linear Regression Analysis Test Results
 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	17.458	2.064			8.458	.000
	Product Quality	.731	.085	.668		8.617	.000

a. Dependent Variable: Purchase Decision

Source: Research Results, 2023 (Processed Data)

$$\text{Purchase Decision} = 17.458 + 0.731 \text{ Product Quality} + e$$

Based on the equation obtained above, it can be described as follows:

1. The constant (α) = 17.458 shows a constant value, if the value of the independent variable (X), namely Product Quality, is 0 then the Purchase Decision is fixed at 17.458.
2. The coefficient This means that for every increase in Product Quality (X) by 1 unit, Purchasing Decisions will increase by 73,1%.

3.4 Hypothesis Test

The results of testing the Product Quality hypothesis on Purchasing Decisions in this research can be seen in the Z test calculation using the formula below:

$$Z = \frac{r}{\frac{1}{\sqrt{n-1}}} = \frac{0,668}{\frac{1}{\sqrt{94-1}}} = \frac{0,668}{0,115} = 5,81$$

From the calculation above, it can be seen that 5.81 is still above 1.96 (Ztable), thus it can be concluded that the Null Hypothesis (H0) is rejected and the Alternative Hypothesis (Ha) is accepted.

3.5 Coefficient of Determination Test (R2)

The test results using the coefficient of determination can be seen in the table below:

Table 4. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.668 ^a	.447	.441	3.709

a. Predictors: (Constant), Product Quality

b. Dependent Variable: Purchase Decision

Source: Research Results, 2023 (Processed Data)

The Adjusted R Square (R²) value or coefficient of determination obtained is 0.668, meaning that the Purchasing Decision variable can be explained by the Word of Mouth Promotion variable of 66,8% while the remaining 66,8% is influenced by other factors originating from outside this research model such as determination price, product quality, service quality and various other variables.

4. CONCLUSION

Based on the research results and discussion, the author concludes that Product quality partially influences consumer purchasing decisions at PT Sinar Cakrawala Gemilang. From the calculation hypothesis test, it can be seen that 5.81 is still above 1.96 (Z_{table}), thus it can be concluded that the Null Hypothesis (H_0) is rejected and the Alternative Hypothesis (H_a) is accepted. The Adjusted R Square (R^2) value or coefficient of determination obtained is 0.668, meaning that the Purchasing Decision variable can be explained by the Word of Mouth Promotion variable of 66,8% while the remaining 33,2% is influenced by other factors originating from outside this research model such as determination price, product quality, service quality and various other variables. The constant (α) = 17.458 shows a constant value, if the value of the independent variable (X), namely Product Quality, is 0 then the Purchase Decision is fixed at 17.458. The coefficient This means that for every increase in Product Quality (X) by 1 unit, Purchasing Decisions will increase by 73,1%. The results of the Kolmogorov-Smirnov normality test prove that the significant level value produced is greater than 0.05, namely 0.200, so it can be concluded that the normality statistical test is classified as normally distributed. the correlation value obtained is 0.668, which indicates that the correlation between Product Quality and Purchasing Decisions is 66.8%.

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