



The Effect of Pricing and Product Quality on Purchase Decisions on PT. Gunung Sentosa Sumatera Utama Industri

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ABSTRACT

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This study aims to determine the effect of price and product quality on purchase decision of PT. Gunung Sentosa Sumatera Utama Industri. This type of research is explanatory research. The population in this study were all customers of PT. Gunung Sentosa Sumatera Utama Industri, with a total of 213 customers. The technique for determining the sample is using the slovin technique with a tolerance level of 5% so that a total of 139 samples are obtained. In the study which will be distributed with questionnaires measured by a Likert scale. The data analysis used multiple linear regression analysis and the coefficient of determination as well as simultaneous test and partial test. The results showed that price and product quality partially or simultaneously have a positive and significant effect on purchase decision of PT. Gunung Sentosa Sumatera Utama Industri. Based on the results of this study, the implications for management are to further improve price and product quality.

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1. Introduction

Basically, in general, each company has an expectation that the company will develop and advance in achieving its goals well. Therefore, every company will try to improve and develop the company by planning various marketing activities to increase sales of the products it offers. With the implementation of various strategies in carrying out marketing activities, the company hopes that it will be able to achieve its predetermined goals by attracting many consumers in deciding to buy the products it offers. For every company, maintaining its existence in order to remain competitive in today's fierce competition requires various appropriate strategies in attracting consumers to make purchases on the products offered by the company. PT. Gunung Sentosa Sumatera Utama Industri is a company engaged in the business of consumer goods (consumer goods). In this line of business, of course, many competing products from competitors apply various strategies in attracting consumers to use their products so that this can worry the company because with a high level of competition, the company can experience a decline in sales which is judged to be due to consumer purchasing decisions on the products offered by the company. has decreased from time to time because consumers have various alternative choices of existing products so that the company's products cannot remain the main choice of consumers.

The factor that reduces consumer purchasing decisions at the company is the price where the price is an exchange rate issued by the buyer to obtain goods or services that have use value and their services. For this, consumers perceive that the price offered by each product is quite high and less affordable than the others. The price is also not in accordance with the purchasing power of consumers and also makes consumers unwilling to make purchases on these products so that consumers rarely make purchases of the products they need in the company. Another factor in reducing purchasing decisions is product quality where the quality of the products offered by the company is considered good and consumers who have used it also have a good impression and experience of the company's products, but every time there is always the latest product offering from the company with higher product quality. so that the competitor's products can easily attract consumers to try. In addition, there are several things that are considered less than the products offered, such as products that are



not in accordance with the benefits and uses that have been explained by the employees. In addition, sometimes the product is not clearly stated how to use it and various other important information.

Based on research conducted by Sunyono, et al (2021), the results showed that partially or simultaneously product and price had a significant effect on purchasing decisions. Research conducted by Gunarsih (2021) found that partially or simultaneously the price variable had a significant effect on purchasing decisions. Research from Sihombing and Syaifullah (2017) found that the results showed that partially or simultaneously brand image and price variables had a significant effect on purchasing decisions. In addition, based on research from Gerung et al. (2017), the results of the study show that partially or simultaneously product quality, price, and promotion have a significant effect on purchasing decisions. Furthermore, in a study conducted by Ndoen, et al (2020), the results showed that partially or simultaneously product quality had a significant effect on purchasing decisions.

Based on the background of the problem that the researcher has described above, it makes researchers interested in researching with the title "The Effect of Pricing and Product Quality on Purchase Decisions at PT. Gunung Sentosa, Sumatera Utara Industri."

According to Wijayanti (2019:51), Price is a policy regarding product pricing, which includes price lists, discounts, payment periods, credit terms, or other policies.

According to Tjiptono and Diana (2020:256), making prices for customers is as follows:

- 1) Customer purchasing power
- 2) Customer willingness to buy
- 3) Position the product in the customer's lifestyle
- 4) Product benefits for customers

According to Firmansyah (2019: 8), product quality is an understanding that the products offered by the seller have more selling value that competing products do not have.

According to Damiani, et al (2017:185), there are 7 dimensions used to assess product quality, which are as follows:

- 1) Performance (Performance)
- 2) Interaction (Employee Interaction)
- 3) Reliability (Reliability)
- 4) Durability (Durability)
- 5) Timeliness and convenience (Timeline and Convenience)
- 6) Aesthetics (Aesthetics)
- 7) Brand Equity

According to Firmansyah (2018: 27), purchasing decisions are problem solving activities carried out by individuals in selecting appropriate behavioral alternatives from two or more behavioral alternatives and is considered the most appropriate action in buying first through the decision-making stages.

According to Firmansyah (2018: 27), with a customer in making a buying decision there are several measurements, namely:

- 1) Problem Recognition (Problem Recognition)
- 2) Information Seeker (Information Search)
- 3) Alternative Evaluation (Alternative Evaluation)
- 4) Purchase Decision
- 5) Post Purchase Behavior (Post Purchase Behavior)

2. Research Method

2.1 Location and Time

The research was conducted at PT. Gunung Sentosa Sumatera Utara Industri, which is located at Jalan K.L. Yos Sudarso Tanjung Mulia. The research time is planned from October 2021 to January 2022.

2.2 Population and Sample

The population in this study were all customers of PT. Gunung Sentosa Sumatera Utara Industri, with a total of 213 customers. The technique for determining the sample is using the slovin technique with a tolerance level of 5% so that a total of 139 samples are obtained.

2.3 Data Collection Method



Collecting data through a questionnaire is done by asking questions to parties related to the problem. To assess respondents' responses, the author uses the Likert scale which uses several question items to measure individual behavior by responding to 5 choice points on each question item.

2.4 Validity and Reliability Test

The data obtained needs to be tested for its accuracy and reliability so that the results of data processing can be more precise and accurate. Therefore, it is necessary to know how high the validity and reliability of the measuring instrument (instrument) used. Based on the research, each variable of the questionnaire item that was tested for validity, all the questionnaires had met the valid criteria and were eligible to be used as a questionnaire in further research. While in reliability test, all variable questionnaire item is reliable and can be used as research instrument.

3. Research and Analysis

3.1 Normality Test

The residual normality test is used to test whether the residual value resulting from the regression is normally distributed or not. A good regression model is to have residuals that are normally distributed. There is some method to do the normality test such as histogram graphic, normal probability plot of regression graphic and one sample Kolmogorov Smirnov statistic.

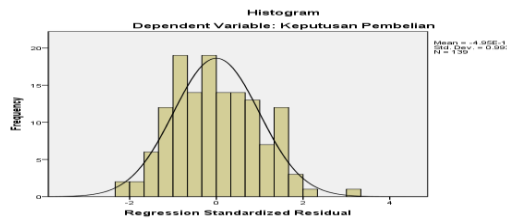


Fig 1. Histogram Graphic

Based on the picture above, it can be seen that the line forming a bell, not going left or right. This shows that the data is normally distributed and meets the assumptions of normality.

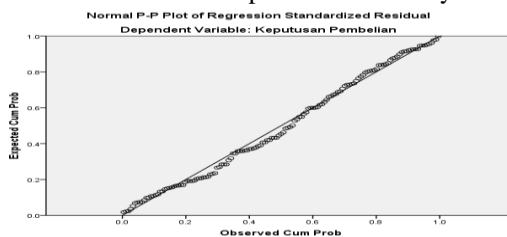


Fig 2. Normal Probability Plot of Regression Graphic

Based on the picture above, it shows that the data (dots) spreads around the diagonal line and follows the diagonal line. So from this figure it is concluded that the regression model residuals are normally distributed.

Table 1
One-Sample Kolmogorov Smirnov Test

		Unstandardized Residual
N		139
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.18486805
Most Extreme Differences	Absolute	.061
	Positive	.061
	Negative	-.035
Kolmogorov-Smirnov Z		.723
Asymp. Sig. (2-tailed)		.673

a. Test distribution is Normal.

b. Calculated from data.

Source: Research Result, 2021

Based on the table above, the results of the Kolmogorov-Smirnov normality test prove that the significant value is greater than 0.05, namely 0.673, it can be concluded that the data is classified as normally distributed.

3.2 Multicollinearity Test

Multicollinearity is a condition in the regression model where there is a perfect or near perfect correlation between independent variables where a good regression model should not have a perfect or nearly perfect correlation between the independent variables. The commonly used test method is to look at the Tolerance and Variance Inflation Factor (VIF) values in the regression model where the VIF value is less than 10 and has a Tolerance value of more than 0.1.

Table 2
Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Price	.947	1.056
Product quality	.947	1.056

a. Dependent Variable: Purchase decision
Source: Research Result, 2021

Based on the table above show that all the variables have a tolerance value more than 0.1 and VIF value less than 10 which can be concluded that there is no problem found in multicollinearity test.

3.3 Heteroscedasticity Test

Heteroscedasticity is a condition where in the regression model there is an inequality of variants from the residuals from one observation to another where a good regression model does not occur heteroscedasticity.

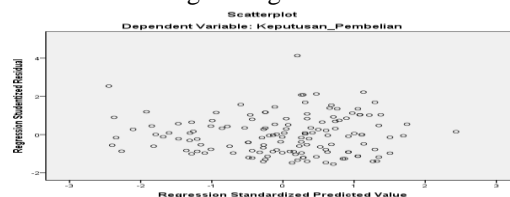


Fig 3. Scatterplot Graphic

Based on the scatterplot graph presented, it can be seen that the dots spread randomly and do not form a clear pattern and are spread either above or below zero on the Y axis. This means that there is no heteroscedasticity in the regression model, so the regression model can be used to predict purchase decision based on the input of the independent variable.

3.4 Multiple Linear Regression Analysis

Multiple regression analysis is an analysis to determine whether there is a significant influence between two or more independent variables on one independent variable.

TABLE 3
Multiple Linear Regression Analysis Test
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	14.071	1.872		7.518	.000		
Price	-.095	.044	-.128	-2.160	.033	.947	1.056
Product Quality	.547	.046	.702	11.882	.000	.947	1.056

a. Dependent Variable: Purchase decision
Source: Research Result, 2021

$$Purchase\ Decision = 14,071 - 0,095\ Price + 0,547\ Product\ Quality + e \tag{1}$$

Based on the above equation, then: Constant (a) = 14.071. This means that if the independent variable, namely price and product quality is 0, then the Purchase decision at PT. Gunung Sentosa Sumatera Utama Industri is 14.071. Where if there is an improvement in price, there will be an decrease in Purchase decision



by 0.095. Likewise with product quality where if there is an improvement in the product quality, the Purchase decision will increase by 0.547.

3.5 Coefficient Determination

Analysis of determination or also called R Square symbolized by R^2 is used to determine the magnitude of the influence of the independent variable (X) together on the dependent variable (Y) where the smaller the coefficient of determination, this means the effect of the independent variable (X) on the dependent variable (Y) is getting weaker. Conversely, if the coefficient of determination is closer to number 1, then the effect of the independent variable on the dependent variable is getting stronger.

Thus, if coefficient determination is 0, this indicates that there is no percentage contribution of influence given by the independent variable to the dependent variable. However, if the coefficient of determination is 1, then there is a contribution that the independent variable gives to the dependent variable is perfect.

Table 4.
Coefficient Determination Test
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.742 ^a	.550	.544	2.201

a. Predictors: (Constant), Product quality, Price

b. Dependent Variable: Purchase decision

Source: Research Result, 2021

Based on the table above, the value of the R Square coefficient of determination is 0.550. This shows that the variable ability of price and product quality explains the effect on Purchase decision at PT. Gunung Sentosa Sumatera Utama Industri by 55%. While the remaining 45% is the influence of other independent variables not examined in this study such as services, trust, promotion, location and others

3.6 Simultaneous Hypothesis Test (F Test)

F test or regression coefficient test is used to determine whether simultaneously the independent variable has a significant effect on the dependent variable. In this case, to find out whether simultaneously the independent variable has a significant effect on the dependent variable or not. The test uses a significance level of 5%. The criteria for evaluating the hypothesis in this F test are:

H_0 Accepted if: $F_{count} < F_{table}$,

H_a Accepted if: $F_{count} > F_{table}$

Table 5
ANOVA Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	806.373	2	403.187	83.237	.000 ^a
Residual	658.763	136	4.844		
Total	1465.137	138			

a. Predictors: (Constant), Product quality, Price

b. Dependent Variable: Purchase decision

Source: Research Result, 2021

Based on the table above, it is found that the value of F_{table} (3.06) and significant $\alpha = 5\%$ (0.05), namely F_{count} (83.237) and sig.a (0.000a). This indicates that the results of the study accept H_a and reject H_0 . Comparison between F_{count} and F_{table} can prove that simultaneously price and product quality have a significant effect on Purchase decision at PT. Gunung Sentosa Sumatera Utama Industri.

3.7 Partially Hypothesis Test (t Test)

The t test or partial regression coefficient test is used to determine whether partially the independent variable has a significant effect on the dependent variable or not. In this case, to find out whether partially the independent variable has a significant effect on the dependent variable or not. The test uses a significance level of 0.05 and a two-sided test. The criteria for evaluating the hypothesis in this t test are:

H_0 Accepted if: $t_{count} < t_{table}$

H_a Accepted if: $t_{count} > t_{table}$

Table 6
Coefficient Test

Model	t	Sig.
1 (Constant)	7.518	.000
Price	-2.160	.033
Product quality	11.882	.000

a. Dependent Variable: Purchase decision
Source: Research Result, 202

Based on the table above, it can be concluded that price and product quality partially have a positive and significant effect on Purchase decision at PT. Gunung Sentosa Sumatera Utama Industri which can be seen at the t_{count} is greater than t_{table} (1.977) and the significant is less than 0,05.

4. Conclusion

The conclusions that researchers can draw from the results of this study are as follows:

- The results of the partial test calculation obtained that price has a negative and significant influence on Purchase decision at PT. Gunung Sentosa Sumatera Utama Industri can be seen from the t_{count} value of $2.160 > t_{table}$ of 1.977 and a significant value of $0.000 < 0.05$.
- The results of the partial test calculation obtained that product quality has a positive and significant influence on Purchase decision at PT. Gunung Sentosa Sumatera Utama Industri can be seen from the t_{count} value of $11.882 > t_{table}$ of 1.977 and a significant value of $0.010 < 0.05$.
- The results of the test calculation together obtained that price and product quality have a positive and significant influence on Purchase decision with the value of F_{table} (3.06) and significant $\alpha = 5\%$ (0.05), namely F_{count} (83.237) and sig.a (0.000a). This indicates that the results of the study accept H_a and reject H_0 . Comparison between F_{count} and F_{table} can prove that simultaneously price and product quality have a significant effect on Purchase decision at PT. Gunung Sentosa Sumatera Utama Industri.
- The value of the R Square coefficient of determination is 0.550. This shows that the variable ability of price and product quality explains the effect on Purchase decision at PT. Gunung Sentosa Sumatera Utama Industri by 55%. While the remaining 45% is the influence of other independent variables not examined in this study such as services, trust, promotion, location and others.

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