



## Analysis of Product Quality on Interest in Buying Makuku Products

Siti Mabrur Rachmah

Universitas Bina Sarana Informatika (UBSI)

**Corresponding Author:** Siti Mabrur Rachmah [siti.smc@bsi.ac.id](mailto:siti.smc@bsi.ac.id)

---

### ARTICLE INFO

*Keywords:* Product Quality,  
Purchase Intention, Makuku

*Received :* 21, April

*Revised :* 23, May

*Accepted:* 25, June

©2023 Rachmah: This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

The purpose of this study is to determine the effect of Product Quality on Purchase Intention Makuku product. This research uses quantitative research type. The data source of this research is primary data by using consumer and buyer of Makuku as sample. Data were collected by accidental sampling with 40 respondents of Makuku. This study uses simple regression analysis. The findings of this study indicate that the Product Quality significantly influence the Purchase Intention of Makuku.

## INTRODUCTION

Consumers generally buy goods and services to meet their daily needs. As a country with the fourth highest birth rate in the world, the existence of the retail industry for the needs of mothers and babies in Indonesia is currently increasing with people's consumption patterns that always crave innovative products. The existence of a diaper brand with good quality is also what consumers need today. This is what moved Makuku to be present in July 2021 to enliven the modern mother and baby retail industry in Indonesia. Makuku is here to educate the public about the advantages of SAP technology, especially to keep a baby's skin dry and reduce the risk of diaper rash. As the sole player using SAP technology, Makuku is engaged in the premium quality diaper industry with high absorption which provides high-quality and safe household products and services for mothers and babies.

Diapers with high absorption are one of the standards for quality diapers. In the core layer, an absorbent material is needed that can accommodate large amounts of liquid, as well as a waterproof outer layer. Innovation The core structure of SAP (Super Absorbent Polymer) in Makuku SAP Diapers does not cause the diaper to agglomerate at one point, so liquid absorption is more even and keeps the surface dry.

The advantages possessed by Makuku SAP Diapers are found in the core structure of the SAP Core Technology. Makuku has the maximum absorption quality and is evenly distributed from the core SAP structure so that it does not cause leakage in the diaper and is anti-clot. With this advantage, the baby's skin will be protected from prolonged contact with urine which can increase the alkaline pH of the skin, thus reducing the risk of diaper rash. In addition to the advantages of its absorbent core, Makuku also has a bubble belt feature. This feature is specially designed at the waist so that diapers do not leave reddish marks on the baby's skin.

At the end of 2021, Makuku also launched Makuku Air Diapers, which are diapers with anti-clot technology so that the skin remains dry, and comfortable to wear because they are thin, and have maximum capacity. During his two years in Indonesia, Makuku has participated in educating the problem of diaper rash through many programs with various platforms in Indonesia.

## LITERATURE REVIEW

From this description, the researcher has an interest in carrying out research related to Product Quality Analysis of Interest in Buying Makuku Products. The purpose of this study is to understand whether product quality variables affect the intention to buy Makuku products in Indonesia.

### 1. *Product Quality*

Product quality is the ability of a product to carry out its functions, including durability, reliability, ease of operation, repair and value attributes (Kotler, 2016). Product quality is the overall characteristics and characteristics of goods and services that affect the ability to meet stated and implied needs and desires between sellers and potential customers in the process of introducing products,

conveying information to consumers and persuading them to buy products through communication. private (Purnama & Rialdy, 2019).

Product quality indicators according to (Tjiptono & Chandra, 2016), namely:

1. Performance  
Operational characteristics and core product purchased. Examples are speed, ease and comfort in use.
2. perceived quality  
Consumer perception of the overall quality or superiority of a product. Assessment of the image, brand, or advertising.
3. conformance to specification  
Conformity of product performance, design characteristics and operations meet predetermined standards.
4. Additional features or features  
Karakteristik sekunder atau pelengkap.
5. realibility

The probability of a product being free from failure while performing its function.

### 2. *Interest to Buy*

Purchase intention is how likely consumers are to buy a brand that is bigger than services or how likely consumers are to switch from one brand to another (Kotler and Keller, 2016). Meanwhile, according to (Syahnaz & Wahyono, 2016) buying interest is the possibility that consumers will make purchases by seeking information from various sources.

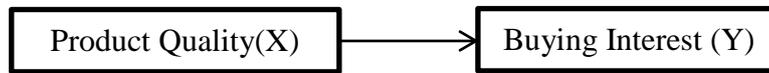
Morinez defines purchase intention as a situation where customers tend to buy certain products under certain conditions and at certain times (Mirabi et al., 2015). Meanwhile, according to Tran (2018), buying interest is a customer's action to buy certain products or services. Purchase intention is an important aspect not only for customers but also for marketers. Purchase intention arises because of consumer confidence in a product, the lower consumer confidence in a product, the lower consumer buying interest in the product, Durianto (2011). In Salim et al., 2017 there are indicators of buying interest as follows:

1. Explorative Interests  
Reflecting the behavior of consumers who are always looking for information related to the product or service they want.
2. Preferential Interest  
Reflecting consumer behavior with primary preferences for the services or products they want.
3. Transactional Interests  
The tendency of consumers to buy the services or products they want.
4. Referential  
The tendency of consumers to recommend a service or product to others.

### 3. *Framework of Mind*

According to Sugiyono (2017), the framework is a synthesis that describes the relationships between variables that are designed and researched to answer

research questions and formulate research hypotheses in the form of flowcharts accompanied by qualitative explanations.



#### 4. *Research Hypothesis*

The hypothesis is an alternative to the alleged answer made by the researcher for the problems raised in his research (Arikunto, 2010). The alleged answer is a temporary truth, then the truth is tested by data collected through research.

The hypothesis in this study is as follows:

H1 = Product Quality (X) has a positive effect on Purchase Intention (Y)

### **METHODOLOGY**

This research was conducted to test the proposed hypotheses using research methods that have been designed according to the variables studied to obtain accurate results. Romadhoni (2015) explains that it is very relevant if the research carried out includes the type of explanatory research (explanation). The approach taken is quantitative with the survey method. A quantitative approach is carried out by searching for data or information from the reality of existing problems by referring to the proof of the concept or theory used (Sugiyono, 2017).

#### 1. *Populaion*

The population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2017). According to Arikunto (2010), the population is the entire research subject. So what is meant by population is individuals who have the same characteristics even though the percentage of similarity is small, or in other words, all individuals who will be used as research objects. The population in this study were all customers of Makuku products in Indonesia.

#### 2. *Sampel*

According to Arikunto (2010), the sample is part or representative of the population studied. The sampling method used is the purposive sampling method, namely the conscious selection of data collection according to certain considerations and goals (Sugiyono, 2017). The determination of the minimum number of samples in the practice of the central limit theorem has been set at 30. The sample size is suitable for most studies i.e. greater than 30 and smaller than 500 (Idrus Alwi, 2015). The number of samples to be taken in conducting this research is 40 people.

### 3. *Sampling technique*

The sampling technique used in this research is using a questionnaire. Questionnaires or questionnaires are data collection techniques that can respond by submitting a series of statements or questions to respondents in writing (Sugiyono, 2017). The questions in the questionnaire reflect the indicators that have been determined to produce a logical correlation with the problem and have meaning in testing the research hypothesis.

The sampling method in this study is the Simple Random Sampling method, which means taking sample members from the population randomly without regard to the strata in the population (Sugiyono, 2017). Each population element independently has a probability of being selected once. While the data analysis technique used is a statistical analysis by measuring various kinds of tests using the SPSS software application. The type of interval scale used is the Likert scale. This scale is used to measure the opinions, perceptions, and attitudes of a person or group of people about the variable social phenomena being measured. The Likert scale is the most widely used attitude measurement technique in marketing research. Through a Likert scale, the variables to be measured are translated into variable indicators, then these indicators are used as a starting point for compiling instrument items in the form of questions and statements.

The Likert scale has a scale from very positive to very negative, including:

Skor 1 : Strongly Disagree

Skor 2 : Disagree

Skor 3 : Neutral

Skor 4 : Agree

Skor 5 : Strongly agree

This study uses multiple regression analysis, heteroscedasticity test, multicollinearity test, normality test, reliability test, validity test, F test, t-test, and the coefficient of determination and data processing with SPSS.

### 4. *Research Instrument Test*

#### a. Product Quality Validity Test (X) Purchase Interest (Y)

According to Juliansyah (2012), validity or validity is an index that shows the measuring instrument measures what is being measured. Validity relates to the accuracy of the instrument. A validity test is used to measure whether or not a questionnaire is valid. The questionnaire is said to be valid if the questions on the questionnaire can reveal something that will be measured by the questionnaire.

Criteria for evaluating the validity test are:

- 1) If the variable significance > Significance is 0.05, then the questionnaire is not valid.

- 2) If the variable significance < 0.05, then the questionnaire is said to be valid.

b. Reliability Test

According to Arikunto (2010), reliability means that an instrument can be trusted enough to be used as a data collection tool because the instrument is good. The aim is to assess the stability of the size and consistency of the respondents in answering the questionnaire.

c. Reliability testing criteria as follows:

- 1) If the results of the Alpha coefficient are greater than the significance level of 60% or 0.6 then the questionnaire is reliable.
- 2) If the result of the Alpha coefficient is less than the significance level of 60% or 0.6 then the questionnaire is not reliable.

5. *Simple Linear Regression*

This technique is used if the researcher intends to predict how the condition (rise and fall) of the dependent variable if there is only one independent variable as a predictor factor, is manipulated (the value is increased or decreased). Simple regression analysis will be performed if the number of independent variables is only one (Akdon & Riduwan, 2009). The formula is as follows:

$$\hat{Y} = a + b_1X$$

Information:

$\hat{Y}$  = Buying Interest

a = Constant Numbers

b = Regression Coefficient

X = Product Quality variable score

6. *Hypothesis test*

a. Influence Coefficient Test (t)

The assessment process uses SPSS software. Significance testing rules:

- 1) If the significance value of  $t < 0.05$  then a (symbol alpha),  $H_0$  is rejected and  $H_1$  is accepted (significant).
- 2) If the significance value of  $t > 0.05$  then,  $H_0$  is accepted and  $H_1$  is rejected (non-significant).

## RESEARCH RESULT AND DISCUSSION

Judging from the profile of the respondents in this study, respondents with female gender were greater than male respondents, namely 97.5% female respondents and 2.5% male respondents, while for the majority aged 21-30 years, there were 60%, for types the majority of housewives work as much as 45%, and for the majority domicile in Jabodetabek as much as 77.5%.

### Test Classical Assumptions Test

The classical assumption is a prerequisite test that must be carried out before conducting data analysis. The classical assumption test was carried out to find out how the condition of the data will be used in the study. The classic

assumption test consists of tests for normality, heteroscedasticity, autocorrelation and multicollinearity. The following are the results of each classic assumption test in this study.

### A. Normality Test

The normality test is used to test whether in the research regression model, the confounding or residual variables have a normal distribution. The normality test can be performed using the Kolmogorov-Smirnov test. One of the test requirements that must be met is the normality test of population data. A good normality test result is a normal or nearly normal distribution. The following are the results of the normality test.

Table 1. Test Normalitas Kolmogrov Smirnov

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		40
Normal Parameters <sup>a,b</sup>	Mean	-.1358149
	Std. Deviation	2.75281848
Most Extreme Differences	Absolute	.075
	Positive	.075
	Negative	-.060
Test Statistic		.075
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

The normality test results in Table 4.1 show the result that the probability value of each variable is  $\geq 0.05$ , so it meets the normality requirement

### A. Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there is an inequality of residual variance for all observations in the linear regression model. Testing whether there is heteroscedasticity in this study can be done with the Glejser test. The basis for decision-making is to look at the probability figures from the Glejser test statistics. The following are the results of the heteroscedasticity test:

Tabel 2. Uji Heteroskedestisitas metode Glejser

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1					
	(Constant)	3.438	1.239		
	X	-.045	.041	-.173	
				2.774	.009
				-1.086	.284

a. Dependent Variable: ABS\_RES

Source : Olah Data SPSS,2023

The results of the heteroscedasticity test in Table 4.2 show that the prob value of each variable is  $\geq 0.05$ , so there are no symptoms of heteroscedasticity in the residuals.

### B. Autocorrelation test

The autocorrelation test is used to test the classical regression assumptions related to the presence of autocorrelation. A good regression model is a model that does not contain autocorrelation. The autocorrelation test aims to test whether there is a correlation between residual errors in period  $t$  and the previous period  $t - 1$  (previous). If there is a problem, it can be called an autocorrelation problem. To find out the assumptions regarding the independence of the residuals (non-autocorrelation), it can be tested using the Durbin-Watson test. The statistical value of this test ranges between 0 and 4. If the value of the Durbin-Watson test results is less than 1 or greater than 3, it is indicated that autocorrelation has occurred.  $< 4 - du$ .

Table 3. Autocorrelation Test with Durbin Watson

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.851 <sup>a</sup>	.725	.718	2.78872	2.136

a. Predictors: (Constant), X

b. Dependent Variable: Y

Sourcer : Olah Data SPSS,2023

Berdasarkan tabel 4.3 nilai dari statistik Durbin-Watson menunjukkan angka 2.136 Karena nilai Durbin-Watson lebih besar dari satu, yakni  $1 > 2.136 < 3$ , maka model tidak mengalami gejala autokorelasi.

### C. Multicollinearity Test

The multicollinearity test is a situation that indicates a strong relationship between the independent variables in a multiple regression model. The multicollinearity test aims to determine whether the regression model found a correlation between the independent variables. The effect of this multicollinearity is to cause high variables in the sample. This means that the standard error is large, as a result when the coefficients are tested, the t-count will have a smaller value than the t-table. The results of the multicollinearity test are presented in Table 4.4 below

Table 4. Muticollinearity test with correlation

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.790	2.012		.890	.379		
	X	.671	.067	.851	10.004	.000	1.000	1.000

a. Dependent Variable: Y

Source : Olah Data SPSS,2023

The research model does not experience symptoms of multicollinearity if the tolerance value is greater than 0.10 and the VIF value is less than 10.00. So it can be seen in Table 4.4 that the tolerance value is 1.0 and VIF is 1.0, so the independent variables in the study fulfill the absence of multicollinearity symptoms.

### Multiple Linear Regression Test

Multiple Linear Regression Analysis serves to measure the effect of more than one independent variable on the dependent variable. In this study, it is projected with a regression model based on the following table:

Table 5. Multiple Linear Regression Analysis  
 Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.790	2.012		.890	.379
	X	.671	.067	.851	10.004	.000

a. Dependent Variable: Y

Source: Olah Data Spss,2023

Based on data processing in Table 4.5, it produces a multiple linear regression equation for the panel data model, as follows:  
 $Y = 1.790 + 0.671 X_1$

Table 6. Multiple Linear Test Analysis

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	778.251	1	778.251	100.071	.000 <sup>b</sup>
	Residual	295.524	38	7.777		
	Total	1073.775	39			

a. Dependent Variable: Y

b. Predictors: (Constant), X

Source : Olah Data SPSS,2023

Based on the test results in Table 4.6, it can be seen that the Prob value (F-statistic) is 0.000 < 0.05, so H<sub>0</sub> is rejected and H<sub>1</sub> is accepted so that it can be concluded that the independent variable X<sub>1</sub> affects the dependent variable (Y).

Tabel 7. Multiple Linear Test Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851 <sup>a</sup>	.725	.718	2.78872

a. Predictors: (Constant), X

Source : Olah Data SPSS,2023

Based on Table 4.7, it is known that the R-Squared value is 0.725. This value can be interpreted as variable X can influence variable Y by 72.5%, and the remaining 17.5% is influenced by other factors not explained in this study.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based on the results of analysis, data processing and discussion regarding the Influence of Product Quality on Interest in Buying Makuku Products, it can be concluded that the variable Product Quality has a positive and significant effect on Purchase Intention. From these results, the hypothesis that states that "product quality has a significant effect on interest in buying Makuku products" can be declared accepted.

- a. Future research can use different objects because it can produce different conclusions as well.
- b. Conduct research using or adding other variables that influence consumer buying interest.

### **ADVANCED RESEARCH**

This research still has limitations, it is necessary to carry out further research related to the topic "analysis of Product Quality on Interest in Buying Makuku Products" to perfect this research, as well as add insight to the reader

## REFERENCES

- Alwi, I. (2015). Kriteria Empirik Dalam Menetapkan Ukuran Sampel Pada Uji Hipotesis Statistika Beserta Analisis Butir. *Formatif : Jurnal Ilmiah Pendidikan MIPA*, 2(2)
- Arikunto, S. (2010). *Prosedur penelitian: Suatu Pendekatan Praktik*. (Edisi Revisi). Jakarta Rineka Cipta.
- Durianto, Darmadi. (2011). *Strategi Menaklukkan Pasar Melalui Riset Ekuitas dan Perilaku Merek*, Cetakan XX. Jakarta: PT. Gramedia Pustaka Utama.
- Juliansyah, Noor. (2012). *Metodologi Penelitian Skripsi*. Tesis. Disertasi dan Karya Ilmiah. Jakarta: Kencana Prenada Media Group.
- Kotler & Keller, L. K. 2016. *Manajemen Pemasaran*, Edisi 12 Jilid 1 &2. Jakarta: PT.Indeks.
- Mirabi, V., Akbariyeh, H., Tahmasebifard, H. (2015). A study of Factors Affecting On Customers Purchase Intention. (*JMEST*), 2 (1).
- Purnama, N. I., & Rialdy, N. (2019). Pengaruh Kualitas Produk dan Personal Selling Terhadap Kepuasan Pelanggan Alat-Alat Bangunan Pada PT. Rodes Chemindo Medan. *Prosiding Seminar Nasional Kewirausahaan*, 1(1), 174-181.
- Salim, Y., & Widaningsih, S. (2017). Analisis Minat Beli Pelanggan Pada Program Kursus Bahasa Inggris Di Lembaga Kursus Bahasa Northern Lights Education Center (NLEC). Bandung : *eProceedings of Applied Science*, 3 (2)
- Shahnaz dan Wahyono. 2016. Faktor Yang Mempengaruhi Minat Beli Konsumen Ditoko Online. *Jurnal Manajemen*. UNES.
- Sugiyono. 2017. *Metode Penelitian Kualitatif, Kuantitatif, Dan R&D*. Bandung :Alfabeta

Tjiptono, F., & Chandra, G. (2016). *Pemasaran Strategik* (2nd ed). Yogyakarta : Andi.

T. Tran. (2018). *Factors Affecting The Purchase And Repurchase Intention*

*Smartphones Of Vietnamese Staff*. Int. J. Adv. Appl. Sci. 5 (3)

<https://makuku.co.id/id>