

The Effect of Perceived Quality and Brand Image on the Purchase Decision of Rapid Test Covid-19 (Case Study at PT. Sarana Megamedilab Sejahtera Purwokerto Branch)

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ABSTRACT

The level of competition in the current era of globalization makes business competition increasingly sharp. That is, companies are required to consider consumers as one of the most important factors in the market so that companies get benefits in the form of responses from consumers in making product purchasing decisions. One of the things that can be highlighted at this time is consumer purchasing decisions for the Rightsign Brand COVID-19 Rapid Test product. The purpose of this study is to find out how the influence of perceived quality, brand image, and perceived quality and brand image on the purchasing decision of the Rightsign Brand COVID-19 Rapid Test at PT. SMS Purwokerto Branch. This research is a survey and causal research. The method of data collection in this study used the method of interview, observation and literature study with purposive sampling technique. The analytical tools used in this research are validity test, reliability test, classical assumption test, multiple regression analysis, F-test, and t-test. The results showed that all variables in the questionnaire were declared valid and reliable and passed the classical assumption test. The results of multiple linear regression analysis show that 81.70 percent of the variation in purchasing decisions (Y) can be explained by the independent variable (X) in the model, namely perceived quality and brand image. The results of the F-test and t-test showed that both simultaneously and each independent variable, namely perceived quality and brand image, significantly influenced the purchasing decision variables for the Rightsign Brand COVID-19 Rapid Test at PT. SMS Purwokerto Branch.

Keywords: Perceived quality; Brand image; Purchasing decisions, COVID-19 rapid test.

1. Introduction

The development of the business world in the current era of globalization can be said to be advancing rapidly. This can be seen from the number of entrepreneurs who set up a company because the needs and desires of the community are getting bigger and more diverse. The level of competition in the current era of globalization makes business competition increasingly sharp. Competition from similar companies makes companies increasingly demanded to innovate and move faster in terms of attracting consumers. So that companies that apply the concept of marketing need to pay attention to consumer behavior and the factors that influence purchasing decisions for a product. One way to achieve company goals is to find out what the needs and wants

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of consumers or target markets are and provide the expected satisfaction more effectively and efficiently than competitors (Kotler and Armstrong, 2008).

Companies must be able to win the competition by displaying the best products and being able to meet consumer tastes that are always evolving and changing. To win the increasingly competitive competition, business actors are required to be able to create competitive advantages over their products and services in an effort to satisfy customers (Nan and Lin, 2007). Perceived quality is almost always a consideration in every consumer choice. Quality can be communicated directly by demonstration or argument that a product attribute is superior to those of competitors. This means that companies are required to consider consumers as one of the most important factors in the market. If these factors have been considered by the company, then the company will benefit in the form of responses from consumers in making product purchasing decisions. Purchasing decision is a process in which consumers evaluate various alternative choices and choose one or more alternatives that are needed based on certain considerations in purchasing (Schiffman and Kanuk, 2008).

The decision to buy a product can lead to how the decision-making process is carried out. The decision-making process begins with the needs that consumers are trying to fulfill. Fulfillment of these needs is related to several alternatives so it is necessary to evaluate which aims to obtain the best alternative from consumer perceptions. Consumers need information in the process of comparing these alternatives related to the number and level of importance that depends on the needs of consumers and the situation they face.

One of the things that can be highlighted at this time is consumer purchasing decisions for the COVID-19 Rapid Test Antibody product. The COVID-19 disease was first reported in late December 2019 in Wuhan, China. *The World Health Organization* (WHO) has declared COVID-19 as a pandemic that has spread to 216 countries. COVID-19 is caused by the *Severe Acute Respiratory Syndrome Coronavirus*-2 (SARS-CoV-2). This disease is transmitted between humans through *droplets* from the nose or mouth, which are released when a person with COVID-19 coughs, sneezes, or talks (*World Health Organization*, 2020). One method that can be used to find out someone has been exposed to the COVID-19 virus is the *rapid antibody test*. *Rapid antibody test* is an examination tool that uses the principle *lateral flow assay*, which is able to detect antibodies within 5-30 minutes, and the examination process does not require special equipment and abilities (Bai *et al.*, 2020).

Rapid test antibodies have been distributed by most medical device companies in Indonesia, one of which is PT. Sarana Megamedilab Sejahtera (SMS). PT SMS is a medical device distribution company with a head office in Lampung and branch offices in Bogor, Cirebon and Purwokerto. One of the products that is being intensified in marketing by PT SMS is the COVID-19 rapid test with various brands. The distributed COVID-19 rapid tests already have an AKL number from the Ministry of Health. PT SMS is certainly very concerned about the marketing mix system of the COVID-19 rapid test distributed with the aim that PT SMS can dominate market share among competitors, especially in Purwokerto. The marketing mix of COVID-19 rapid test products is one of the guidelines used to increase the sales volume of these products. Sales data for COVID-19 rapid tests at PT SMS are as follows:





Table 1. Sales data for COVID-19 rapid tests at PT. Sarana Megamedilab Sejahtera Purwokerto Branch for the period August 2020-April 2021

Source: PT. Sarana Megamedilab Sejahtera Purwokerto Branch, 2021.

	Month	Rapid Tes COVID-19 (box) Sale					
No		Rightsign - Rapid Covid-19	Ecotest - Rapid Covid-19	Answer - Rapid Covid-19	Clungene - Rapid Covid-19		
1	August 2020	15	0	0	0		
2	September 2020	15	15	17	0		
3	October 2020	16	42	6	3		
4	November 2020	12	43	34	21		
5	December 2020	16	72	31	8		
6	January 2021	8	17	14	5		
7	February 2021	6	10	6	0		
8	March 2021	11	8	7	0		
9	April 2021	13	6	0	2		
10	May 2021	32	4	0	0		
11	June 2021	39	0	0	0		
12	July 2021	69	0	0	0		
13	August 2021	34	0	0	5		

Table 1. shows sales of COVID-19 rapid tests at PT. SMS facility for the period August 2020 to April 2021. Based on this table, it can be seen that sales of COVID-19 rapid tests have changed and fluctuated every month. These changes and fluctuations are influenced by various factors, one of which is the increasingly fierce competition due to the increasing number of competitors that have sprung up offering the same product with various types of brands and specifications from the COVID-19 rapid test. PT SMS must determine how much influence the perception of product quality and brand image will have so that the company can continue to exist in the field of medical devices, especially in the sale of COVID-19 rapid tests. Therefore, the authors are interested in conducting a study with the title "The Influence of *Perceived Quality* and *Brand Image* on the Purchase Decision of the Covid 19 Rapid Test (Case Study at PT. Sarana Megamedilab Sejahtera Purwokerto Branch).

The objectives of this study are: (1) To analyze the effect of perceived quality on the purchase decision of the COVID-19 Antibody Rapid Test, (2) to analyze the effect of brand image on the purchase decision of the COVID-19 Antibody Rapid Test, and (3) to analyze the effect of perceived quality and brand image on the decision to purchase the COVID-19 Antibody Rapid Test at PT. Sarana Megamedilab Sejahtera Purwokerto Branch.

2. Literature Review

2.1. Perceived Quality





According to Suryani (2013) perception is essentially a complex psychological process involving physiological aspects. Important psychological processes involved begin with the activity of selecting, organizing, and interpreting stimuli so that consumers can give meaning to an object. Cleland & Bruno (Simamora, 2012) suggests three principles about perceived quality, namely: 1. Quality perceived by consumers A product includes three main aspects, namely product, price and non-product. or cheap according to the product and non-product aspects, then from the non-product aspect, consumers may be able to see the reputation of the product and after sales service. 2. Quality exists if it can be perceived by consumers. If consumers perceive a product is good even though the reality is not, then the product will be considered good. Consumers make decisions based on their perceptions, not depending on reality. So it can be said that perception is reality. 3. Perception of quality is measured relative to competitors A product is said to have good quality when the product is compared with similar competitor products and it can be proven that the quality of the competitor's product is lower.

2.2. Brand Image

Definition of brand image according to Tjiptono (2002) is a description of associations and consumer beliefs about certain brands. The brand image itself has a meaning to the same image of a brand. Every product sold in the market has its own image in the eyes of its consumers, which is deliberately created by marketers to distinguish it from competitors. Brand image is considered as a type of insurance that appears in the minds of consumers when remembering a particular brand. These assumptions can simply appear in the form of certain thoughts or images associated with a brand, as well as when someone thinks about other people. According to Kotler (2001), what is interpreted is the consumer and what is interpreted is information. Image information can be seen from the logo or symbol used by the company to represent its products. Where this symbol and logo is not only a differentiator from similar competitors but also can reflect the quality and vision and mission of the company.

2.3. Purchasing Decisions

Decisions according to Kotler (2009) are a process of problem recognition, information seeking, or selection of two or more alternatives of a product. Or in other words decision making in purchasing, namely several stages carried out by consumers before making a purchase decision on a product. There are five stages of the buying decision process that each individual goes through in making a purchase.

2.4. Research Hypothesis

2.4.1. Previous Research

Khasanah (2014) conducted a study entitled "Analysis of the Effect of Perceived Quality, Brand Image and Promotion on Purchase Decisions for Henky Glass & Craft Products in Semarang". The sampling technique used is non-probability sampling with an accidental sampling approach. Methods of data analysis using quantitative analysis with multiple linear regression analysis. The results showed that simultaneously the variables of quality, brand image, and promotion had a positive and significant effect on purchasing decisions for Henky Glass & Craft products.

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Sutikno (2020) also conducted a study entitled "Analysis of Brand Awareness, Quality Perception and Brand Association to Purchase Decisions (Case Study on Customers of CS Finance Tangerang Branch). This study uses quantitative analysis methods using multiple linear equation analysis, followed by analysis of determination (R *square*), partial hypothesis testing (t-test) and simultaneous (F-test) with SPSS 23.0. The results of the analysis can be seen that either partially or simultaneously, the variables of brand awareness, perceived quality and brand associations have a positive and significant effect on consumer purchasing decisions.

2.4.2. The Research Hypotheses

Hypotheses in this study are:

- H1: Perception of quality has a positive and significant effect on purchasing decisions for the Covid-19 Rapid Test
- H2: Brand Image has a positive and significant effect on purchasing decisions for Rapid Tests for Covid-19
- H3: Perception of quality and Brand Image in general Together, they have a positive and significant impact on the decision to purchase the Covid-19 Rapid Test

3. Research Methodology

This study was designed as a survey and causal research. Survey research is a type of research that is very widely used, namely research that is used to obtain data from certain natural places (not artificial), but researchers carry out treatments in data collection, for example by distributing questionnaires, tests, structured interviews and so on (Sugiyono, 2014). One of the main advantages of using survey methods is the possibility of making generalizations for large populations (Effendi and Tukiran, 2012). Causal research is a type of research conducted because of a causal relationship, where there is an interaction, both positive and negative, on a problem to be studied.

Methods of data collection in this study using interviews, observation and literature study. The population in this study were all customers or consumers, both hospital staff, clinics and health centers who made transactions to purchase COVID rapid tests with PT. Sarana Megamedilab Sejahtera Purwokerto Branch. This study uses a *purposive sampling technique*, which is a deliberate sampling in accordance with the specified sample requirements with a sample of 48 people. The conditions referred to are as follows:

- All consumers who make transactions to purchase COVID-19 rapid tests with PT. Sarana Megamedilab Sejahtera Purwokerto Branch.
- Currently still taking the COVID-19 rapid test.
- Please fill out the questionnaire.

The analytical tool used in this study is a research instrument testing consisting of validity test, reliability test, classical assumption test (normality test, heteroscedasticity test, multicollinearity test, autocorrelation test), multiple regression analysis, F-test, and t-test.

4. Research Results and Discussion



4.1. Descriptive Analysis

The results showed that the most dominant gender of the respondents was female as much as 75 percent of the total respondents. The age of the most dominant respondents ranged from 26-35 years, namely 41.67 percent. The most dominant job status of respondents is private employees as much as 83.33 percent of the total respondents.

4.2. Validity and Reliability Test Validity

Validity is the level of reliability and validity of the measuring instrument used. The instrument is said to be valid, meaning that the measuring instrument used to obtain the data is valid or can be used to measure what should be measured (Sugiyono, 2004). Based on the results of data processing using SPSS, all research variables were declared valid because r count > r table with a significance level of 0.05. Reliability test is a test to ascertain whether the research questionnaire that will be used to collect data on research variables is reliable or not. Based on the results of the study, all variables were declared high reliability because the reliability coefficient ranged between 0.80 and 1.00 (Guilford, 1956).

4.3. Classical Assumption Test

- The results of the normality test show that the significance value is 0.488 where the value is greater than the alpha value of 0.05, then Ha is rejected and $H_{0 \text{ is}}$ accepted, meaning that the data is said to be normally distributed.
- The results of the autocorrelation test showed that the value *Durbin Watson* obtained was 1.9810 with a value of dL = 1.4500 and dU = 1.6231 with an alpha value of 0.05. The determinant line of autocorrelation can be seen as follows:

There is autocorrelation	Can't be determined		No auto correlation		Can't be determined			There is occorrelation
	IL 2976)	dt (1,89	_	(2,10	-dU)61)	4- (2,70	-dL (24)	
			1,9	810				

• The results of the multicollinearity test show that the VIF value for all independent variables is less than 10 so it can be concluded that there is no multicollinearity in the regression model.

Table 2. Value of Variance Inflation Factor (VIF) Source: Output SPSS, 2021.

Variable	Centered VIF
С	NA
X1	1,361
X2	1,361

775



• The results of the test showed that heteroskedastisitas significance value of 0.055 where the value is greater than the value of alpha 0,050 Ha rejected and H₀ is accepted, meaning not happen heteroskedastisitas.

4.4. Multiple Linear Regression Analysis

4.4.1. The coefficient of determination (R2)

The coefficient of determination (R²) obtained from the regression analysis of 0.817 means that 81.70 percent of the variation Purchase Decision (Y) can be explained by the independent variable (X) in the model (perceived quality and brand image), while 18.30 percent was explained by other variables outside the model that were not examined.

• F-Test

Test aims to determine whether the independent variables included in the model together have a significant effect on the dependent variable. The value F_{count} obtained from the results of the regression analysis is 100.223 greater than F_{table} 3.20 or the Prob value. F_{count} of 0.00 is smaller than the alpha value of 0.05, then $H_{0 is}$ rejected and $H_{a is}$ accepted. This means that at the 95 percent confidence level, the perceived quality and brand image variables together are able to explain the variations that occur in the variable purchase decision.

• t-Test

The results of the t-test with multiple linear regression analysis are as follows:

Table 3. T-test results Source: *SPSS Output*, 2021.

Variable	t _{calculated}	t_{table}	Prob.	Description
Constanta (C)	0.232	2,01	0,817	
X_1	5,435		0,000	Significant
X_2	8,408		0,000	Significant

The t-test is used to test whether each independent variable included in the model has a significant effect on the dependent variable. The results of the t test can be explained as follows:

• Perceived quality variable

The value_t for the quality perception variables (X_1) of 5.435 is greater than t_{table} amounted to 0.817 2.01 or greater probability of an error rate of 0.05, H_a rejected and H_0 is accepted, meaning that the variable quality perception (X_1) has a significant effect on the purchasing decision variables.

Brand image variable

Thet value_{calculated} for the brand image variable (X_2) is 8.408 which is greater than t_{table} 2.01 or the probability of 0.00 is less than the error rate of 0.05, then $H_{0 is}$ rejected and $H_{a is}$ accepted, meaning that at 95 percent confidence level brand image variable (X_2) has a significant effect on purchasing decision variables.



5. Conclusions

Based on the results of this study, it can be concluded that the majority of respondents' characteristics are female, age ranges from 26-35 years and the employment status of private employees. The results of data processing using SPSS showed that all variables in the questionnaire were declared valid and reliable. All variables are declared to have passed the classical assumption test where each parameter has met the classical assumption test standard. The results of multiple linear regression analysis show that 81.70 percent of the variation in purchasing decisions (Y) can be explained by the independent variable (X) in the model, namely perceived quality and brand image. The results of the F-test and t-test show that both simultaneously and each independent variable, namely the perception of quality and brand image, significantly influences the purchasing decision variables for the rapid Covid-19 purchase. Further research is still needed on the effect of perceived quality and brand image on purchasing decisions for rapid Covid-19 involving a wider variety of independent variables and a wider scope of research.

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