

The Influence Of Product Attributes, Brand Image And Prices On Polygon Bike Purchase Decisions In The Covid-19 Pandemic

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Abstract—Pandemic Covid-19 is an outbreak that creates new habits for people who start implementing health protocols strating from activities that also have a positive influence on the body. Cycling is one of the activities carried out by the community in their activities and spare time. Various bicycle brands are present in Indonesia, such as the Polygon Strattos S2, which is able to become a consumer choice in bycycle purchasing decision. This study disscuss the influence of product atributes, brand image and price on Polygon Bike Purchase Decision during the pandemic covid-19 which focuses on the Strattos S2 type of bicycle whicj is a road bike. This research certainly has research 45 respondents in the club SCC (Strattos Cycling Club). Technique in the research used non-probability sampling and using questionnaires distributed to respondents. The data that has been obtained is processed using staticial product and service solution (SPSS) Software. After that, analysis was carried out using IBM SPSS Statistics 16. The results obtained showed that product atributte variabel had a significant and positive effect on the purchase decision, brand image also had a significant and positive results on the purchase decision, price shows that there is a significant and positive effect on the purchase decision variable.

Keywords—Attributes Product, Brand Image, Price and Purchase Decision.

INTRODUCTION

Today transportation is needed in everyday life. The many modes of transportation create a new phenomenon that causes environmental damage, this creates a new mindset for people to prioritize health by choosing cycling activities. This can be seen from the number of people cycling during the Covid-19 Pandemic. The Covid-19 pandemic is an epidemic

that has an impact on bicycle use. The impact of the Covid-19 pandemic has implications for the increase in demand for bicycles in the community, the function of bicycles by the community, especially in Surabaya, has been transformed into a lifestyle, hobby, entertainment, and even fashion. Based on data from the Indonesian Cycling Industry Association (AIPI), it states that domestic demand for bicycles has increased from 17% to 20% (Julian, 2020). The bicycle mode of transportation can avoid public transportation by considering personal safety and health. The COVID-19 pandemic shows how important it is to adopt a healthy lifestyle in society. The Covid-19 pandemic, which has not yet ended, has made people feel a little bored with the routines they do at home. The implementation of new normal activities makes people start carrying out their activities by paying attention to health and body strength. Public awareness of consuming healthy nutritious foods, as well as using environmentally friendly products is important. The Covid-19 pandemic that has hit Indonesia since early March 2020 is a tough time for business entrepreneurs in the manufacturing industry. The weakening of people's purchasing power due to economic conditions during the Covid-19 pandemic made most businesses experience difficult times due to falling market demand. However, on the contrary, this phenomenon is surprising for the domestic bicycle industry. The demand for bicycles has experienced a significant increase in the midst of the Covid-19 Pandemic (Sukmana, 2020).

Various brands of bicycles produced in Indonesia continue to compete. The traces can be seen from the beat of a search on Google Trends based on each brand. PT Roda Maju Bahagia (RMB), which produces several brands of bicycles, was able to sell 150,000 units of bicycles for the period January to May 2020. This was also felt by PT Insera Sena, which received demand for bicycles from April 2020,

which increased by 50% to 200%. Some of the local bicycle brands tracked by trends include "Polygon", "United" bicycles, "Pacific" bicycles, "Element" bicycles and "Wymcycle" bicycles. Several bicycle brands are present in Indonesia to provide the community's needs for a healthy lifestyle during the Covid-19 Pandemic. This community lifestyle has a positive impact on increasing the volume of bicycle sales, because automatically the more healthy lifestyles increase, the higher the number of people using bicycles (Hakim, 2020).

The trend line of four overlapping bicycle brands began to split into two groups at the end of May 2020. The Polygon brand has remained in dominating the popularity competition. The second group competed against United's bicycle with Pacific. Then in the lower group, there are Element and WimCycle bicycle brands. Seeing this, Polygon can prove that its products can shine and increase sales during the Covid-19 Pandemic Period (Kompas, 2020). According to Qodariyah (2013: 41) there are three factors that influence purchasing decisions, namely brand image, product attributes and price. If the company has a good brand image for consumers, this will also affect the product attributes issued by the company, taking into account various facilities and features of good quality. In addition to these two things, consumers will also see another element, namely price. The price issued determines a product value that is considered by consumers to make a purchase. Prices that are in accordance with consumer needs with good quality product attributes and brand image owned by the company will greatly affect the consumer's desire to buy the product. This is felt by Polygon bicycles with the highest sales levels of several other brands. Polygon comes with various variants which of course have different product attributes, apart from the functions provided such as components on mountain bikes with road bikes having different attributes. The many types of bicycles offered by Polygon make people also see some of the functions and uses of these bicycles and also adjust to different price ranges. The Strattos S2 road bike is a great choice for consumers. This bike is priced starting from 5 million Rupiah. This bicycle is a bicycle that is suitable for beginners who want to try a bicycle with a road bike type.

LITERATURE REVIEW

Marketing Concepts, Marketing Mix, Products and Product Attributes

The definition of marketing management proposed by Kotler and Keller (2011: 9) is a social process in which individuals and groups obtain what consumers need and want by creating, offering and freely exchanging products of value with others. Meanwhile, according to Hasan (2013:4) marketing is the process of identifying, creating and communicating value and maintaining customer-satisfying relationships to maximize company profits. Another meaning that marketing management is a process carried out by

individuals or groups in the flow or distribution of goods or services made for sale to consumers in order to provide value to consumers.

The marketing mix is an activity that is directed and integrated with one another. Marketing mix or marketing mix according to Swastha and Irawan (2001:41) is a concept of developing a marketing strategy related to how to determine the form of offerings in certain market segments. Meanwhile, according to Assauri (2004) marketing mix is a combination of activities that are the core of the variable marketing system that can be controlled by the company to influence the reactions of buyers or consumers.

Kotler and Armstrong (2008) suggest that a product is anything that can be offered to a market to satisfy wants and needs in planning market offerings. Rusmiati and Suratmo (2001) argue that the product must have a position that can be based on technical attributes where these attributes are attached to the product. The ability of management to determine the position of its products will determine the success of the company in determining the position of the product, including similar products or competitors.

Product attributes are a description that describes a tangible or intangible product that has certain characteristics. Kotler (2008) states that product attributes are the development of a product or service that involves determining the benefits to be provided. According to Tjiptono (2008) product attributes are important elements by consumers and are used as the basis for purchasing decisions. If a product has the same attributes or characteristics as what is expected by the purchaser, then the product will be considered suitable by consumers.

Definition of Brand, Brand Image, Price and Purchase Decision

A brand is defined as a name, term, sign, symbol, design, or a combination of these which is intended to identify the goods or services of one seller or group of sellers in order to differentiate them from those of competitors. Kotler and Keller (2012) brands contain the company's promise to consistently provide certain features, benefits and services to buyers. Brands increase efficiency for buyers, with a name or brand it will make it easier for buyers to find the product they are looking for or in demand. This is certainly more efficient to attract consumers.

Perception of the brand which is a reflection of consumer memory of the association with the brand (Ferrinadewi, 2008). Meanwhile, according to Kotler and Keller (2009) brand image is the perception and belief held by consumers, as reflected or implanted in consumers' memories for the first time when they see a slogan or hear a product name. Seeing this, brand image is a thought that arises in the minds of consumers towards a brand and this can be embedded in the shape and thought of consumers and can become consumer confidence in a brand.

Business life, of course, price is one of the important factors that affect the marketing of a product. High and low prices are always the main concern of consumers when looking for a product. According to Kotler and Armstrong (2001) price is the amount of money charged for a product and service or the amount of value exchanged by customers and consumers to obtain the benefits of owning or using the product. Price can also be a consumer choice in various alternative goods or services offered by sellers in the buying process (Tjiptono, 2008).

Alwani (2018) purchasing decisions are a selection process among alternative choices of products or services, so that the one that best suits the needs of the buyer is chosen. Consumers have different bases in determining purchasing decisions. Kotler and Armstrong (2008) suggest that purchasing decisions are a buying decision-making process that includes determining what to buy or not to buy by considering various alternative choices that form the basis for the buying decision process.

Hypotheses and Hypothetical Models

In accordance with the theory described above, the following hypothesis can be formulated: It is suspected that there is an influence of product attributes, brand image and price on the decision to purchase a Polygon Strattos S2 bicycle during the Covid-19 Pandemic. The following is a description of the research hypothesis model:

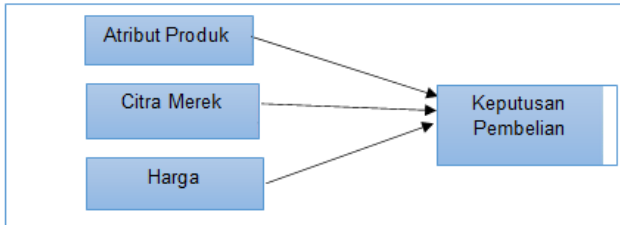


Figure 1 Hypothesis Model

Source: Data processed, 2021

RESEARCH METHODS

The method in this study uses quantitative methods because quantitative research is used to examine certain populations or samples. Data collection uses research instruments, data analysis is quantitative / statistical with the aim of testing the established hypothesis (Sugiyono, 2019). The approach used is an associative research approach to identify the extent of the contribution of the independent variable X consisting of product attributes (X1), brand image (X2) and price (X3) to variable Y, namely purchasing decisions. The location of this research was carried out in the Surabaya area with a population of SCC (Strattos Cycling Club) bicycle clubs who bought Polygon Strattos S2 bicycles during the Covid-19 Pandemic Period. The research technique used is a non-probability sampling technique with a survey method collected from respondents using a questionnaire.

RESULTS AND DISCUSSION

Data processing

The following are the results of statistical descriptive calculations by SPSS in the form of graphic images, so that it can be concluded the values from the calculation of the average or mean of product attributes, brand image, price and purchasing decisions.

Table 1 Descriptive Statistics of Product Attributes

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
X1_1	45	2	5	4.13	.842
X1_2	45	2	5	4.02	.941
X1_3	45	2	5	4.20	.991
Valid N (listwise)	45				

Source: SPSS Output, 2021

It is known that based on the results of SPSS calculations, it is known that the mean or average value of the product attribute variables is between an interval scale of 3,41-4.2, which means that the majority of respondents choose the answer to the questionnaire "Agree".

Table 2 Descriptive Statistics of Brand Image

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
X2_1	45	2	5	4.18	.912
X2_2	45	2	5	3.91	1.125
X2_3	45	2	5	3.91	.925
Valid N (listwise)	45				

Source: SPSS Output, 2021

Based on the results of SPSS calculations, it is known that the mean value of the brand image variable has an average value in the interval of 3,41-4.2, which means that the majority of respondents choose the answer in the "Agree" questionnaire.

Table 3 Descriptive Price Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
X3_1	45	2	5	4.04	.999
X3_2	45	2	5	4.02	1.055
X3_3	45	2	5	3.96	.952
Valid N (listwise)	45				

Source: SPSS Output, 2021

The results of the calculation of the price variable have an interval value of 3,41-4.2, which means that the respondent chooses the answer to the questionnaire "Agree" in the item statement of the price variable given.

Table 4 Descriptive Statistics of Purchase Decisions

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Y_1	45	2	5	3.98	.892
Y_2	45	2	5	4.00	1.044
Y_3	45	2	5	4.04	1.065
Valid N (listwise)	45				

Source: SPSS Output, 2021

The results of the SPSS output are known that the purchasing decision variable has a mean or average value in the interval of 3,41-4.2 where in this case the majority of respondents choose the answer to the questionnaire "agree" in the statement given.

a. Validity test

Validity test is used to determine whether a questionnaire is valid or not. A questionnaire is said to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire (Ghozali, 2013).

Table 5 Product Attribute Validity Test

Variabel	Pernyataan	Koefisien Korelasi	P value / Sig	Kesimpulan
Atribut Produk (X1)	X1_1	0,749	0,000	Valid
	X1_2	0,885	0,000	Valid
	X1_3	0,881	0,000	Valid
Citra Merek (X2)	X2_1	0,849	0,000	Valid
	X2_2	0,923	0,000	Valid
	X2_3	0,836	0,000	Valid
Harga (X3)	X3_1	0,895	0,000	Valid
	X3_2	0,935	0,000	Valid
	X3_3	0,878	0,000	Valid
Keputusan Pembelian (Y)	Y_1	0,905	0,000	Valid
	Y_2	0,903	0,000	Valid
	Y_3	0,869	0,000	Valid

Source: SPSS Output, 2021

The results of the product attribute validity test show that the significance value of each questionnaire statement when viewed in a significance value <0.05 means that the data obtained is valid. So it can be seen that all independent variables and dependent variables are valid.

b. Reliability Test

Reliability is a tool to measure an instrument which is a construct or variable measurement tool. If the Cronbach Alpha value > 0.6 then the observation instrument is declared reliable, and vice versa.

Table 6 Reliability Test

Variabel	Alpha	Alpha	Kesimpulan
Atribut Produk (X1)	0,792	0,6	Reliabel
Citra Merek (X2)	0,837	0,6	Reliabel
Harga (X3)	0,887	0,6	Reliabel
Keputusan Pembelian (Y)	0,867	0,6	Reliabel

Sumber : Output SPSS, 2021

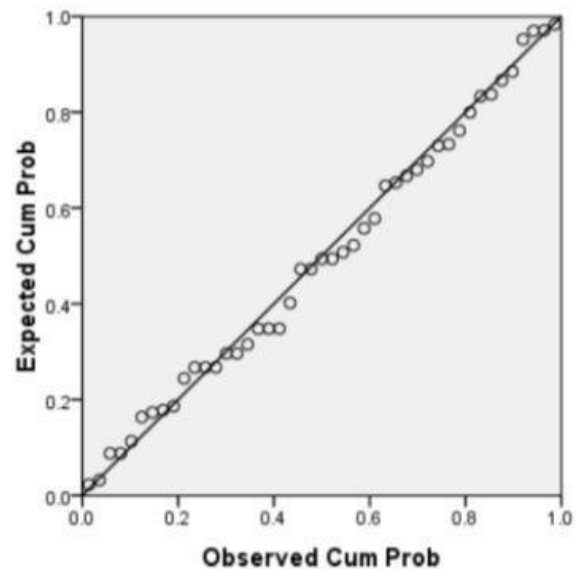
Based on the results of the tests that have been carried out, it shows that the independent variables, namely product attributes, brand image and price,

show reliable results because the Cronbach Alpha value is > 0.6. So it can be concluded that all variables used in research are reliable.

c. Normality test

The normality test is intended to test whether in the regression model the residual value has a normal distribution or not. If the points spread around the line and follow the diagonal line, then the residual value is normal (Priyatno, 2014). Research conducted

Dependent Variable: Keputusan Pembelian



The results of the normality test by looking at the diagonal line are known that the points spread by following the diagonal line, it can be seen that the residual value meets the assumption of normality. When viewed from the Kolmogorov-Smirnov test, it is known that:

Table 7 Kolmogorov-Smirnov . One-Sample Normality Test

One-Sample Kolmogorov-Smirnov Test			Unstandardized Residual
N			45
Normal Parameters ^a	Mean		.0000000
	Std. Deviation		1.06057183
Most Extreme Differences	Absolute		.079
	Positive		.079
	Negative		-.046
Kolmogorov-Smirnov Z			.532
Asymp. Sig. (2-tailed)			.940
a. Test distribution is Normal.			

Source: SPSS Output, 2021

The results of the study using the Kolmogorof-Smirnov One-Sample normality test, it is known that the sig value is 0.940 > 0.05, it is known that the

assumption of normality has been met or is normally distributed.

d. Multicollinearity Test

This multicollinearity test is intended to test whether there is a high or perfect correlation between the independent variables or not in the regression model. According to Ghazali (2017) if the value of Variance Inflation Factor (VIF) > 10 and the value of

tolerance < 0.10 then multicollinearity occurs, but if VIF value < 10 and tolerance value > 0.10 then multicollinearity does not occur.

Table 8 Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
	1 (Constant)	-.784	.945				
Atribut Produk	.256	.104	.223	2.460	.018	.465	2.149
Citra Merek	.254	.087	.246	2.915	.006	.540	1.851
Harga	.549	.096	.557	5.721	.000	.404	2.478

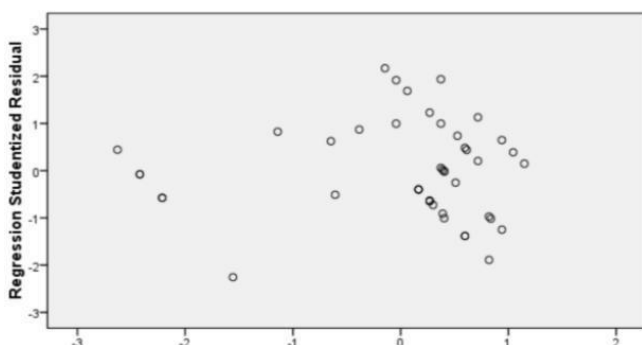
Source: SPSS Output, 2021

Based on the results of the multicollinearity test, it is known that the results obtained have a tolerance value > 0.10 for all variables and the VIF value limit < 10 for all. Seeing this, it can be seen that all variables namely product attributes, brand image and price do not occur multicollinearity.

e. Heteroscedasticity Test

The heteroscedasticity test serves to test the occurrence of differences in variance from the residual value in another observation period. If the points spread above and below or around the number 0 and the spread of the data points is not patterned, then the heteroscedasticity test is not found.

Table 9 Heteroscedasticity Test



Source: SPSS Output, 2021

The results of the study can be seen that the results of the points on the heteroscedasticity test are spread and not patterned, so it can be seen that the data does not occur heteroscedasticity.

f. Multiple Linear Regression Test

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Keterangan :

Y : Keputusan Pembelian

α : Konstanta

β1, β2, β3 : Koefisien regresi produk, citra merek, harga, gaya hidup

X1 : Atribut Produk

X2 : Citra Merek

X3 : Harga

Multiple linear regression is an equation that describes the effect of two or more independent variables on the dependent variable. Regression test as for some hypothesis testing, namely t test and f test. The t test according to (Ghozali, 2013) uses a significance probability value if the significance level is greater than 0.05 or t count < t table, it means that there is no effect of variable x on variable y but if the value is significant < 0.05 or t count > t the table means that there is a partial influence between the x variable and the y variable. The equation in the regression test is as follows.

The results obtained in the t test are known that the product attribute variable (X1) has a partial and significant effect on the purchasing decision variable. The result of the calculated t value of 2.46 is greater with the t table value of 2.01 and a significance level of 0.018 which is smaller than 0.05. Furthermore, the brand image variable (X2) obtained a t-count value of 2.915 > t table which is 2.01 and a significance value level of 0.006 < 0.05, from these acquisitions it is known that the brand image variable has a partial and significant effect on the purchasing decision variable. The results of the price variable (X3) also have partial and significant results, even the price variable which has a very high influence on other variables, namely product attributes and brand image.

In the F test, it is known that the calculated F value is 73.311 and the F table is 2.83 which in this case means the calculated F value > F table and the significance value is 0.000 < 0.05. Seeing this, the results of the F test can be proven that the independent variables include product attributes, brand image and price together have a simultaneous effect on purchasing decision variables.

CONCLUSION

Based on the results of the elaboration that has been made, the following conclusions can be drawn:

1. The results show that the product attribute variables have a significant and positive effect on the purchasing decision variables of Polygon Strattos S2 consumers with the average majority of respondents agreeing with the description of the product attribute variables.

2. The results show that the brand image variable has a significant and positive effect on the consumer

purchasing decision variables of Polygon Strattos S2 with the average majority of respondents agreeing with the description of the brand image variable.

3. The results show that the price variable has a significant and positive effect on the purchasing decision variable with the average majority of respondents agreeing with the description of the price variable. As well as in the price variable has a greater value than other variables.

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