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Analysis of Influencing Factors on Online Product Purchasing in The Solo Raya Region

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Keywords:

Product Quality, Promotion, Delivery Speed, Purchase Decision, Online Shopping

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Abstract

This study discusses the factors that determine consumer decisions in online shopping. This study aims to determine whether the factors of product quality, logistics delivery, and promotion have a significant effect on consumer purchasing decisions.

The method of analysis using multiple linear regression and classical assumption test using STATA16 application. The method used is a quantitative method. In this study using a probability sampling technique with a population of people in Solo Raya who have purchased products online as many as 77 respondents. Data collection is in the form of distributing questionnaires.

The results showed that the most dominant factors influencing purchasing decisions in online shopping were product quality and promotion. Product quality factors, logistics delivery, and promotion simultaneously have a significant positive influence on consumer purchasing decisions, which means that if e-commerce improves product quality, delivery, and promotion together, it will increase consumer purchasing decisions to choose e-commerce. The implication of this research is for companies that market their products online to pay attention to the factors that influence consumer purchasing decisions. So that online purchasing decisions can

increase.

Keywords: Product Quality, Promotion, Delivery Speed, Purchase Decision, Online Shopping.

1. Introduction

The increasing development of the internet has resulted in changes that affect people's lives, especially those in big cities, one of which is Solo Raya. According to the Asosiasi Penyelenggara Jasa Internet Indonesia (APJII), the Java region is the main source of growth in the contribution of internet users and penetration to the national penetration contribution. Internet users in Central Java increased by 26.5 million in 2019 up from 24.5 million in 2018 (Asosiasi Penyelenggara Jasa Internet Indonesia, 2020).

One of the changes that have occurred is where people shop. People no longer only shop at conventional stores but also in online stores. There are also many conventional shops that promote their goods through online stores. Changes in consumer behavior are one of the drivers of change in the field of marketing strategy carried out by the company

(Suharfin, 2018). Internet social networks can also affect the level of community needs in their lives. The development of technology brings many changes in lifestyle in this modern era. People use the internet not only to look for the latest information, but also about various basic needs as humans in the technological era. There are several reasons why more and more people are shopping on the internet. The first reason, online shopping time is more flexible. Second, it's easy to compare prices so you can save even more. Third, can compare between products. Lastly, look for cheaper items

According to Kotler & Armstrong (2008:45) the advantages for online

consumers include providing convenience. Customers don't have to struggle with traffic, no need to find parking spaces and shop from shop to shop. Consumers get many benefits by shopping online, namely that

online shopping can be done anywhere and anytime. No need to go to stores to buy the items you need, online shopping can be done 24 hours, besides that online shopping provides product comparisons and helps in deciding which one to buy, more convenient, more diverse products, faster transactions and without queues, consumer secrets are protected, and can save time, effort and money. Furthermore, in online shopping transactions, trust is also needed. Trust can affect consumers because the products in the store cannot be seen, the store cannot be found physically, so trust is the key to deciding whether to buy or not.

In addition, online shopping also has weaknesses, namely the lack of assistance when shopping where consumers cannot make direct physical contact with the seller and the product cannot be touched or tried, the possibility of product damage during delivery cannot be canceled and fraud that often occurs in online shopping. Consumers are aware of the purchase risks that may be faced, so it can influence consumer decisions in making purchases. The influence of the closest people also greatly influences consumers in making decisions. Indirectly, the psychology of consumers has a big influence in making purchasing decisions (Suharfin, 2018).

Many factors influence consumer behavior in purchasing decisions. In making a purchase decision, a consumer is influenced by internal factors and external factors (Suhari, 2008). In addition, the number of online shopping sites will be more noticed by consumers, where there are certain sites that are deceptive, unclear, and so on. Factors including internal factors, namely consumer psychology, while external factors, consisting of the socio-cultural environment of the community, and marketing stimuli.

From the facts above, it can be done research on consumer purchasing decisions. This is the background of the author conducting research on "Analysis of Influencing Factors on Online Product Purchasing in Solo Raya".

2. Literature review

2.1 Consumer behavior

According to Philip Kotler and Keller (2009) consumer behavior is the study of how individuals, groups, and organizations choose, buy, use and use goods and services, ideas or experiences to satisfy their needs and wants.

According to Mangkunegara (2009) consumer behavior is an action taken by individuals, groups, or organizations related to the decision-making process in obtaining, and using economic goods or services that can be influenced by the environment.

The process that consumers do in making choices according to Philip Kotler:

- Need Control: The process of consumers in recognizing the need or need for a product.

- Information Retrieval: After consumers get the product they need, consumers will search for information about the item. The information sought such as the brand to choose, the type to choose, price, features, and others. Information can be obtained from various sources such as mass media, even information from the closest people.

- Evaluation of Alternatives: In making a purchase in order to achieve a certain satisfaction, consumers look for the benefits or solutions offered by a product. Consumers evaluate each product with the information it has.

- Purchasing Decisions: After obtaining information, consumers will determine their choice, whether to buy the desired product, delay the purchase decision,

- Selling Behavior: Consumers will determine their decision on the product after purchase, this is based on satisfaction with a product purchased.

2.2 Purchasing Decisions

Consumer purchasing decisions are a process where consumers choose and evaluate products or services, often consumers consider various things that suit their needs in the purchase decision process. The results of the product selected from the purchase decision become the product of choice from consumers to meet needs.

Consumer purchasing decision factors, according to Kotler (2002):

- Cultural Factors
- Social Factor
- Personal Factor
- Psychological Factors

2.3 Product Quality

According to Juran and Godfrey (1999), quality has the meaning of freedom from lack of freedom from errors that require rework or that result in field failures, customer dissatisfaction, customer claims, and so on. higher usually the lower the price.

Product Quality Aspects:

- Performance
- Special Features
- Suitability
- Reliability
- Durability
- Service Capability
- Matches and Results

2.4 Promotion

In the world of marketing, promotion is an activity carried out in order to increase the development of something, be it a brand, product, or the company itself. But this time we will focus more on discussing promotions in the marketing field. So, in the world of marketing, promotion is a communication activity carried out by a person or company to the wider community. The goal is to introduce the product to the public and influence them to buy and use the product. That is, promotion is an activity that is very commonly carried out by marketers to be able to provide information related to a product and also encourage potential consumers to want to buy goods

or services offered by the company. This activity will generally combine several forms of promotion, such as advertisements, discounts, or branded clothing.

3. Previous Studies

Research conducted by (Pratama, 2019) regarding the consumer purchasing decision behavior of the Jabodetabek community towards online products shows that 100% of respondents do online shopping for reasons of an easy process with a choice of 3 (three) top-ranked e-commerce media namely Shopee, Tokopedia and Lazada. On the marketing mix factors that influence online shopping purchasing decisions, the results show that process and promotion variables affect online shopping purchasing decisions while product, price, location and people have no effect on online purchasing decisions. The most dominant factor influencing online purchasing decisions is the price factor. Product factors, prices, promotions, payment systems, risk of goods, logistics, and digital technology have a significant effect on online shopping for college students (Suharfin, 2018).

Research conducted by (Priscegiyanti, 2020) regarding the role of logistics services in customer service and future purchasing decisions through the Shopee online shopping application shows that four logistics services, namely customer service, delivery, tracking, and returns, have a positive influence on customer satisfaction.

In purchasing decision variables, trust,

convenience and product diversity have a positive and significant influence on online clothing purchasing decisions (Adromeda, 2014). The variables of price, trust, ease of shopping and E-Promotion together affect online shopping purchasing decisions (Istanti, 2017).

3. Research Methods

3.1 Research Type

This study uses a type of quantitative research. Because this research describes a variable, symptom or condition that is researched as it is and uses numerical data obtained from questionnaires.

3.2 Place and Sample

3.2.1 Population

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 drawn conclusions (Sugiyono, 2014:40). In this study, the population used is the community in Solo Raya, namely the people in Surakarta City, Karanganyar Regency, Sragen Regency, Wonogiri Regency, Sukoharjo Regency, Klaten Regency, and Boyolali Regency who have purchased products online. Because the population used is all of those who have purchased products via online, the numbers are very large (spread and difficult to know with certainty), so sampling *was carried out for this study.*

3.2.2 Sample

In statistics, probability sampling is a sampling procedure with the same probability that all members of the population are predetermined to be part of the sample. This technique is based on the principle of randomization, and the procedure is designed so that all individuals in the population have an equal chance of making a choice. This helps reduce the possibility of bias. This technique allows the researcher to obtain statistical inference. The results obtained can be generalized to the target population with a survey sample.

4. Types and Sources of Data

This quantitative analysis is to estimate the magnitude of the influence quantitatively from changes in one or several other events using Stata statistical analysis tools. Sources of data used in this study are primary data and secondary data. Primary data were obtained from direct respondents who filled out the questionnaire. And secondary data obtained from literature studies or journals.

5. Data Collection Method

The method of data collection in this study was done by distributing questionnaires, namely data collection by distributing a list of questions to several people who were used as respondents. In this study, because the type of data used is qualitative data, quantitative analysis is carried out by quantifying research data into numbers using a Likert scale. With a score weight, namely:

4 = Strongly Agree
3 = Agree
2 = Disagree
1 = Strongly Disagree

6. Analysis Method

Data completion of this research using quantitative analysis techniques. Quantitative analysis is done by analyzing a problem that is realized quantitatively. The analysis was performed by multiple linear regression using STATA16.

7. Results and Discussion
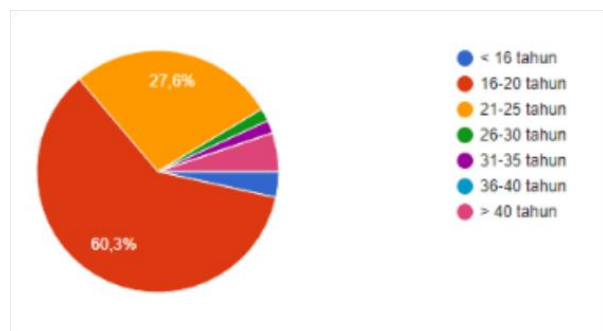
The results of the research on distributing questionnaires to the Solo Raya community showed that of the total respondents as many as 77 people, the most respondents were aged 16-20 years, namely 60.3% (47 people), then respondents aged 21-25 years were 27.6% (21 people), then the age category >40 years was 5.3% (4 people), the age category <16 years was 3.4% (3 people), and each was 1.7% (1 person) in the age category 26 -30 years and 31-35 years.
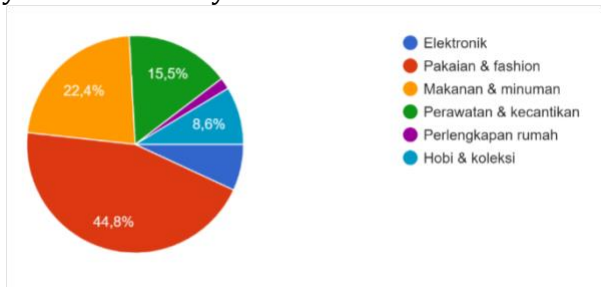
The products that are chosen by respondents or the community in the Solo Raya area in online shopping with the most order are clothing and fashion (44.8%), food and beverages (22.4%), care and beauty (15.5%), hobbies and collections (8.6%), electronics (6.9%), and home appliances (1.8%).
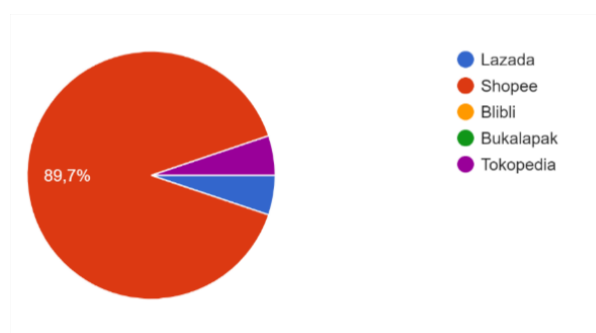
The online media of choice for the people of Solo Raya is Shopee in first place at 89.7%, followed by Tokopedia and Lazada with the same amount, which is 5.2%.

7.1 The Classical Assumption Test Normally

At the Prob>chi2 value on the Skewness/Kurtosis test for Normality, if the value is more than 0.05 then the residuals are normally distributed. Seen in this study, the value is 0.6462, so the residuals are normally distributed. So based on the Skewness Kurtosis test, the residuals are declared to be normally distributed.

7.2 Heteroscedasticity

estat hettest
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity Ho: Constant variance
Variables: fitted values of y chi2(1) = 0.16
Prob > chi2 = 0.6896

For heteroscedasticity test using the Breusch-Pagan method. It is said that there is no symptom of heteroscedasticity if the P value indicated by "Prob > chi2" is > 0.05. Above the p value of 0.6896 where > 0.05 then the regression model is free from heteroscedasticity symptoms or is also called homoscedasticity.

7.3 Multicollinearity

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. estat vif
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Variable	VIF	1/VIF
x2	1.95	0.512714
x1	1.58	0.632783
x3	1.56	0.642454
Mean VIF	1.70	

If the value of VIF < 10 and 1/VIF > 0.1, it can be said that the multiple linear regression model is free of multicollinearity symptoms. It can be seen that there is no multicollinearity symptom because the VIF value of each independent variable is less than 10, and the 1/VIF value of each independent variable is more than 0.1.

7.4 Multiple Linear regression

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. regres y x1 x2 x3
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Source	SS	df	MS			
				Number of obs	=	77
				F(3, 73)	=	47.33
Model	317.468348	3	105.822783	Prob > F	=	0.0000
Residual	163.232951	73	2.23606782	R-squared	=	0.6604
				Adj R-squared	=	0.6465
Total	480.701299	76	6.32501709	Root MSE	=	1.4953

y	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
x1	.145187	.0548147	2.65	0.010	.0359414	.2544326
x2	.1239164	.0827564	1.50	0.139	-.041017	.2888497
x3	.5808318	.0851416	6.82	0.000	.4111448	.7505188
_cons	1.341686	1.15337	1.16	0.249	-.9569779	3.64035

Based on the results above, the regression equation is:

$$Y = 1{,}342 + 0{,}145\ X1 + 0{,}124\ X2 + 0{,}581\ X3 + e.$$

Where Y is the dependent variable, 1,342 is a constant, X1 is the 1st independent variable, X2 is the 2nd independent variable, X3 is the 3rd independent variable and e is the error.

The Multiple Determination Coefficient indicated by R-squared shows how much simultaneously all independent variables can explain the dependent variable. In this study, the value is 0.6604, which means that all independent variables can explain the dependent variable by 66.04%. Then the remaining 33.96% is influenced by other variables outside the regression model.

a. **The Effect of Product Quality (X1) on Consumer Purchase Decisions (Y)**

In column t is the partial t test value. It is said to be significant at the 5% level if the column to the right is P>[t] or also called p value/significance <0.05. Based on the test criteria, the product quality variable (X1) has a significant positive effect on Purchase Decision (Y) partially, because the p value (0.010) <0.05.

b. **The Effect of Logistics Delivery Factors (X2) on Consumer Purchase Decisions (Y)**

<0.05. Based on these test criteria, the logistics delivery variable (X2) does not partially affect the Purchase Decision (Y), because the p value (0.139) > 0.05.

c. **The Effect of Promotional Factors (X3) on Consumer Purchase Decisions (Y)**

In column t is the partial t test value. It is said to be significant at the 5% level if the column to the right is P>[t] or also called p value/significance <0.05. Based on these test criteria, the promotion factor variable (X3) has a significant positive effect on Purchase Decision (Y) partially, because the p value (0.000) <0.05.

d. ***Pengaruh Kualitas Produk (X1), Pengiriman Logistik (X2), dan Promosi (X3) Secara Simultan Terhadap Keputusan Pembelian Konsumen (Y)***

F Test Value 0.000. If the value < 0.05 then the F test accepts H1 at a significance level of 5% or which means that all independent variables, namely Product Quality (X1), Logistics Delivery (X2), and Promotion (X3) simultaneously have a significant influence on the dependent variable, namely Consumer Purchase Decision (Y).

8. Conlusion

The products that are chosen by respondents or the community in the Solo Raya area in online shopping with the most order are clothing and fashion (44.8%), food and beverages (22.4%), care and beauty (15.5%), hobbies and collections (8.6%), electronics (6.9%), and home appliances (1.8%). The online media that is the choice of the Solo Raya community is Shopee in first place with a very large percentage of 89.7%, followed by Tokopedia and Lazada with the same amount, which is 5.2% each. Based on the results of the analysis, it can be concluded that all independent variables, namely Product Quality (X1), Logistics Delivery (X2), and Promotion (X3) can simultaneously explain the dependent variable, namely Consumer Purchase Decisions (Y) of 66.04%.

Based on the results of the t-test and F-test analysis, it can be concluded:

a. Product quality variable (X1) has a significant positive effect on Purchase Decision (Y) partially. This means that the better the quality of the product will partially increase consumer purchasing decisions.

b. The logistics delivery variable (X2) has no effect on the Purchase Decision (Y) partially. This means that the number of types of expeditions, speed of delivery, and shipping costs do not partially affect consumer purchasing decisions.

c. Promotional factor variable (X3) has a significant positive effect on Purchase Decision (Y) partially. This means that more promotions such as advertising, discounted shipping costs, and discounted prices will partially increase consumer purchasing decisions.

d. All independent variables, namely Product Quality (X1), Logistics Delivery (X2), and Promotion (X3) simultaneously have a significant positive influence on the dependent variable, namely Consumer Purchase Decisions (Y). This means that if e-commerce improves product quality, delivery, and promotion together it will improve consumer purchasing decisions to choose e- commerce.

9. Suggestion

Suggestions based on this research, namely:

a. The government needs to continue to promote online Micro, Small and Medium Enterprises (MSMEs) to open up business opportunities for the community by taking advantage of the convenience of online marketing which is currently developing.

b. For e-commerce companies, this research can be used as a reference in developing online shopping applications that currently exist, by simplifying the transaction process, increasing promotions through fish, providing more discounted prices, and discounted shipping costs in order to increase consumer loyalty in choosing e-commerce.

c. For online shops, it is advisable to run their online business more creatively

d. and innovatively in order to attract more new customers. Build consumer trust by maintaining the integrity of their business. For example, sending purchased products to consumers on time and as ordered with good quality to inform them of the integrity of the product and the store. Then provide a selection of categories offered, because based on a survey that has been conducted, online purchasing decisions are influenced by ease of transaction.

e. For other researchers, it is hoped that this research can be used as a reference for further research that is broader and in detail that expands knowledge about purchasing decisions. More researchers can continue this research by using other methods to study other variables that influence people's online shopping decisions. In addition, purchasing decision surveys can be conducted through in-depth interviews with respondents. This makes the information obtained more diverse and accurate than surveys for which answers are already available.

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