A MULTIPLE REGRESSION ANALYSIS OF TOKOPEDIA E-COMMERCE USERS' PURCHASING DECISIONS

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Abstract
The goal of this research was to investigate the impact of word of mouth and brand image on purchasing decisions on the e-commerce site Tokopedia. The data used in this study is primary data collected through a questionnaire on Tokopedia e-commerce users using a purposive sampling technique. Tokopedia is one of the most popular online shopping platforms in Indonesia. Consumers will consider several factors when making purchasing decisions, including reviews from previous customers. Furthermore, consumers consider the platform's brand image. This study employs the uses and gratification theory as a foundation for communication thinking with a quantitative approach, analyzing data obtained from questionnaires distributed by the researchers and processed using the SPSS version 26 application. The findings of this study show that word of mouth has an impact on purchasing decisions and brand image. This can be demonstrated using the T and F tests to determine whether word-of-mouth and brand image influence purchasing decisions on Tokopedia's online store.

Keywords: buying decision; brand image; word-of-mouth

INTRODUCTION

Tokopedia is one of the marketplaces with a high level of EWOM. After eight years of operation, Tokopedia is the first Indonesian e-commerce startup to achieve unicorn status in 2017. Because of the prevalence of word of mouth, new consumers who want to make purchases pay more attention to online reviews from other people who have used the product or service first. People are happy when they use products or services that are already on the market, and they usually tell their friends and family about the products they have used through the media [1].

Brand image factors, in addition to word-of-mouth factors, are important for companies engaged in products or services to create a positive image for their company. Because brand image is one of the supporting factors that ensures the company is always remembered and visited by its consumers, if we want to buy a new product, we will of course evaluate whether the product is worth buying based on the ratings and reviews provided by previous customers [1]. Because they are at ease, audiences prefer to buy and use products from well-known brands or those they are familiar with. Companies must continue to maintain and develop a good brand image in the eyes of the public to compete with other companies [2], with the understanding that known brands are more reliable. Brand image can be defined as a set of associations that individuals have with a brand and that are disseminated through communication channels such as Tokopedia, which is well-known to the public. The purpose of this study is to determine the magnitude of the influence of word of mouth on e-commerce purchasing decisions. Tokopedia. Furthermore, the purpose of this research is to determine the extent to which brand image influences purchasing decisions on Tokopedia e-commerce. Furthermore, the purpose of this research is to determine the magnitude of the influence of word of mouth and brand image on e-commerce purchasing decisions.

METHODOLOGY

This study used a quantitative research approach in this study. Quantitative research methods can be interpreted as positivist research methods. This understanding is used to investigate a specific population or sample by collecting data with research instruments and descriptive quantitative data analysis to test the established hypothesis. This study was conducted online, with questionnaires distributed via Google Form to Tokopedia application users and individuals who had shopped at least once on the Tokopedia application. The research period for this study was from February 15, 2021, to May 15, 2021. This study's population consisted of approximately 80,945,700 users who owned or used the Tokopedia application. In this study, the researcher used the Slovin formula to determine the number of samples. The Slovin formula was used to determine the sample size taken from the population in this study, which was 99.99, or determined to be 100 participants, with a precision of 10%. The questionnaire used in this study has a Likert scale measurement scale. In this study, we used a Likert scale of 1 (strongly disagree) to 5 (strongly agree) (strongly agree). This study's analysis employed multiple regression with SPSS version 26.

RESULTS

Participant profile

Figure 1 shows that of the total respondents in this study, 88 percent (88 respondents) were between the ages of 16 and 36, 7 percent (7 respondents) were under the age of 16, and 5 percent (5 respondents) were over the age of 36. Furthermore, the gender profile of respondents resulted in 55 respondents (55 percent) being women and 45 respondents (45 percent) being men. According to the conditions set by the researcher in this study, all respondents (100%) had the Tokopedia application on their smartphone. Furthermore, all or 100 percent of respondents have shopped on the Tokopedia application at least once, allowing them to fill out the questionnaire based on their experience. This is consistent with the findings of the researchers in this study.
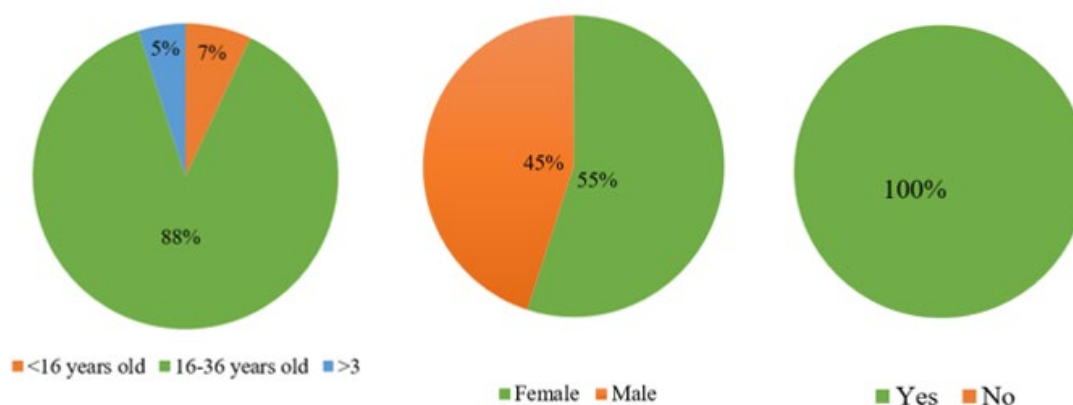

Figure 1. Participant profile

Reliability and validity tests

The Cronbach alpha column in Table 1 shows that word of mouth is reliable, with a value of 0.887. In addition, the brand image has a value of 0.776. Similarly, the purchasing decision showed 0.873. This result indicates that all variables are reliable because their values are greater than 0.60, the lower limit.

Table 1. Reliability Tests

Variable	Reliability Statistics	
	Cronbach's Alpha	N of Items
Word of mouth	0.887	6
Brand image	0.776	5
Buying decision	0.873	6

According to table 2, the results of data processing with SPSS 26 and 100 respondents on the getok tular variable, brand image, and purchasing decision show that all statements made to respondents in this study are true, because all r values are greater than the lower limit value or r table of 0.1966.

Table 2. Validity Tests

| Item	r	r_{table}	Remark
WOM1	0.849	0.1966	Valid
WOM2	0.834	0.1966	Valid
WOM3	0.819	0.1966	Valid
WOM4	0.825	0.1966	Valid
WOM5	0.752	0.1966	Valid
WOM6	0.723	0.1966	Valid
BRANDIMAGE1	0.690	0.1966	Valid
BRANDIMAGE2	0.705	0.1966	Valid
BRANDIMAGE 3	0.721	0.1966	Valid
BRANDIMAGE 4	0.762	0.1966	Valid
BRANDIMAGE 5	0.789	0.1966	Valid
BUYINGDECISION1	0.817	0.1966	Valid
BUYINGDECISION 2	0.799	0.1966	Valid
BUYINGDECISION 3	0.785	0.1966	Valid
BUYINGDECISION 4	0.798	0.1966	Valid
BUYINGDECISION 5	0.772	0.1966	Valid
BUYINGDECISION 6	0.736	0.1966	Valid

The classic assumption tests

According to Table 3, there is no multicollinearity in this study's independent variables (words of mouth and brand image). This is demonstrated by the VIF and tolerance values of 1.480 and 0.676, respectively, where if the tolerance value is greater than 0.1 and the VIF value is greater than 10, it is concluded that there is no correlation between the independent variables. Furthermore, the points on the scatterplot graph are evenly distributed at the top and bottom of the number 0. Aside from that, the points do not follow any pattern, indicating that there is no heteroscedasticity or deviation from classical assumptions. The distribution of black grains on the graph's diagonal line If the black grains spread far along the line and do not follow the diagonal line, the P-P plot is said to be non-normally distributed. The results show that the black items spread out along the diagonal line, implying that the regression model is normally distributed or meets the specifications.
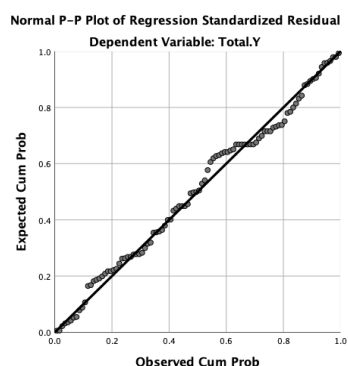
Table 3. The Classic Assumption Tests

Tests	Results
Multicollinearity	Word of Mouth, Tolerance=0.676; VIF=1.480
	Brand Image, Tolerance=0.676; VIF=1.480

Heteroscedasticity
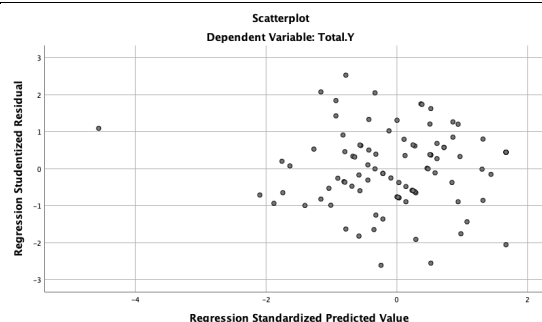
Normality

Hypothesis testing

Table 4 shows that word of mouth has a significant influence on purchasing decisions, as well as the brand image variable on purchasing decisions. This is demonstrated by a significant value of less than 0.05. If the significant value is less than 0.05 and the t count value is greater than the t table (1.98472), there is a significant influence between verbal communication and purchasing decisions, as well as brand image on purchasing decisions. The table can also be used to see how word-of-mouth and brand image influence purchasing decisions at the same time. The significance results show a value of 0.00 and a value of 49.737 in column F. If the significance value is less than 0.05 and the F count is greater than F table at a significance level of 5%, which is 3.090, it can be concluded that the word-of-mouth and brand image variables influence purchasing decisions concurrently and significantly.

Table 4. Hypothesis Testing

Description	t	Sig	F	Remark
Partial test				
Word of mouth → Buying decision	3.841	0.000	-	H1 accepted
Brand image → Buying decision	5.380	0.000	-	H2 accepted
Simultaneous test				
Regression	-	0.000	49.737	H3 accepted

Determination coefficient

The value 0.506 in column R of table 5 indicates that the verbal and brand image variables influence purchasing decisions by 0.506, or 50.6 percent, and the rest is influenced by other variables not examined in this study.

Table 5. Determination Coefficient

Variable	R square
Buying decision	0.506

DISCUSSION

Hypothesis 1 states that word of mouth has a significant influence on purchasing decisions on Tokopedia. According to the results of consumer opinions, reviews on the Tokopedia application were very helpful in knowing how to influence someone in terms of purchasing decisions. According to the Stimulus Response theory, which was used in this study, the message's content can be compared to a drug that can be injected into the consumer's body and is expected to react as expected. These findings back up previous research that found that brand image has a moderate impact on the relationship between electronic word of mouth and purchasing decisions [3]. However, other studies that contradict the findings of this study explain the opposite [4]. Hypothesis 2 asserts that there is a strong link between brand image and purchasing decisions. According to the audience, the presence of this brand image may influence people to choose Tokopedia as an e-commerce site that can help meet the needs of the community. According to the stimulus response theory, when an audience already has faith in a preferred brand or brand, individuals will prefer what they believe will satisfy them. In this case, if the individual is pleased with the Tokopedia application because he perceives benefits and convenience, he will return and continue to use the Tokopedia application. The findings of this study are consistent with previous research indicating that brand image has a positive influence on purchasing decisions [5][6][7]. According to Hypothesis 3, there is a significant relationship between brand image and word of mouth in purchasing decisions. According to the Stimulus Response Theory, the involvement of word of mouth and brand image has an interdependent relationship, which means that these two variables can influence purchasing decisions together. When a person already trusts a brand, he will return to the brand and read reviews from previous customers to persuade him to make a purchase. In this case, you have two choices: buy or not buy. Word of mouth has been shown in studies to influence purchasing decisions [8].

CONCLUSION

Based on the findings of the researcher's analysis and discussion of the effect of word of mouth and brand image on purchasing decisions, this study explains that there is a significant relationship between word of mouth and the purchasing decision variables. This study also shows that there is a significant relationship between the brand image variable and the purchasing decision variable. This study demonstrates a strong relationship between the word-of-mouth and brand image variables that influence purchasing decisions, as well as the simultaneous effect.

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