The Effect of Product Reviews and Service Quality on Consumer Purchase Decisions of E-Commerce Tokopedia in Bandung

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Abstract

Product reviews have the ability to form consumer impressions of a product, which in turn helps consumers decide whether to buy the product or not, while good service leaves a positive impression on consumers and can build consumer confidence to make a purchase. The purpose of this study was to determine how much influence the variable Product Reviews and Service Quality on Purchase Decisions on Tokopedia E-Commerce consumers in Bandung. The demographics of this research are consumers who have made purchases at Tokopedia and use a quantitative methodology with 400 respondents who fill out questionnaires through online media using simple random samples or probability sampling. Analytical descriptive approach and multiple linear regression analysis were used in the analysis. Based on the results of the study, there is a partial effect between Product Reviews and Service Quality variables on the Purchasing Decision variable, either simultaneously or partially. The Product Reviews variable has an influence

of 6% on the Purchase Decision of E-Commerce Tokopedia users in Bandung, and the Service Quality variable has an influence of 21%. The simultaneous effect of Product Reviews and Service Quality variables on Purchase Decisions for E-Commerce Tokopedia consumers in Bandung is 28%, with other factors not analysed at 72%.

Keywords: Product Reviews, Service Quality, And Purchase Decision.

1. Introduction

In recent years, the digital era has developed rapidly, as indicated by the ease with which the public can now enjoy the internet, impacting human activities. In the past, humans shopped in storefronts; now, they use cell phones and the internet (Ardianti and Widiartanto, 2019). Technology has transformed humans' mindsets and impacted business. E-commerce is a business-tech development. According to researchers' findings on clothing product reviews, there are numerous product reviews, from favorable to negative ones. Negative reviews mentioned poor fabric quality, thin material, and mismatched product size. Positive and negative product reviews exist. A positive review suggests the product is excellent, and customers agree. A negative review indicates that customers rate the product poorly (Wang et al., 2017).

The company's success in influencing purchasing decisions is due to various aspects, according to (Yuniarty and Abbas, 2018): information quality, company reputation, site appearance, online shopping profits, trust, e-commerce shopping experience, and demographic features. The authors chose product reviews as an X. variable influencing buying decisions. To reinforce this research, the researchers did a pre-survey to see how consumers respond to buying factors at Tokopedia in Bandung. The author surveyed 30 Bandung Tokopedia users. Based on the pre-survey results on purchase decision variables, 30 respondents using Tokopedia claimed that 25 respondents (83.3%) use Tokopedia because of its massive assortment of products. Twenty-five respondents (83.3%) reported that many shops supplied the required things. Nineteen respondents (63.3%) disagreed that they shopped at Tokopedia once a month. Twenty-three respondents (76.7%) said Tokopedia's payment methods were complete. According to a study (Chakraborty, 2019) and (Zhao et al., 2018), product reviews influence purchasing decisions since they provide information from users regarding product quality. Based on a pre-survey of product review characteristics with 30 Tokopedia users, 26 (86.7%) said they read reviews before buying a product. 86.7% of 26 respondents said they used Tokopedia product reviews for information. Twenty-five respondents (83.3%) said they read and compare product reviews on Tokopedia before buying a product. Seventeen respondents (56.7%) disagreed that Tokopedia's product reviews assist in identifying quality products.

Based on the pre-survey of service quality characteristics of 30 Tokopedia users, 26 (86.7%) said the things they received matched what they requested. Twenty-seven respondents (90%) said they felt secure shopping at Tokopedia during a pandemic. Eighteen responses (60%) disagreed that Tokopedia users could complain. Twenty-five people (83.3%) said the Tokopedia app offers exciting features.

1.1 Objectives

Research Introduction research conducted certainly has several objectives. The following are the Introduction of research on the object of Mie Gacoan Bandung:

1. To find out how product reviews are on Tokopedia e-commerce
2. To find out how the quality of service on e-commerce Tokopedia
3. To find out how consumers' purchasing decisions on e-commerce Tokopedia
4. To find out how much influence product reviews have on Tokopedia e-commerce consumer purchasing decisions in Bandung
5. To find out how much influence service quality has on consumer purchasing decisions for e-commerce Tokopedia in Bandung
6. To find out how much influence product reviews, and service quality have on consumer purchasing decisions for e-commerce Tokopedia in Bandung

2. Literature Review

Pramono, Eldine, and Muniroh (2020) say that product reviews positively and significantly affect buying decisions at Tokopedia. This means that if there are more product reviews, there will be more purchases. Fahrevi and Satrio (2018) say that service quality significantly and positively affects how people buy things online. This means that people are more likely to buy something online if the service quality of e-commerce is higher. Good service quality will make a

good impression on customers and give them the confidence they need to decide what to buy. Ilamayah and Krishernawan (2020) say that product reviews are articles written by customers and posted in e-commerce columns. These articles talk about the actual quality of goods, such as color problems, inconsistent specifications, problems with use, or high quality and a good experience. or it is terrible. Lackermair, Kiler, and Kanmaz (2017) say that a product review is a feature on Tokopedia.com that is used to discuss a product's pros and cons. Awareness, Frequency, Comparison, and Effect are the four indicators of a good product review. Tjiptono (2021:68) says that service quality is a dynamic state closely related to products, services, and human resources. As well as processes and environments that can meet or exceed the expected service quality, Tjiptono (2017:159) says that service quality has five primary dimensions: reliability, responsiveness, assurance, empathy, and tangibles.

3. Methods
In this study, descriptive and causality research were both used. Any Tokopedia e-commerce consumers who have made a purchase are included in this study; however, the exact quantity cannot be ascertained with certainty. This formula is used to compute the sample size of respondents given population data that cannot be known with certainty. Using the Lemeshow methodology, 384.16 samples were counted, and this figure was rounded up to 400 participants. There is no way to know for sure what the population size is. Google forms are distributed online questionnaires for this study's data gathering. The goal of disseminating this online survey is to facilitate data processing by collecting responses more quickly and widely. Using both primary and secondary data, which may be collected through sources such as books, literature, and materials, the researchers could better understand the Tokopedia online marketplace's client demographics. This study relies on reading as a source of knowledge. It somehow connected to us and helped fund our investigation. If the instrument is deemed reliable and genuine, move to the next step in the analysis process. Data analysis methods employed in this work include descriptive statistics, classical assumption testing, multiple linear regression, and research hypotheses testing.

4. Data Collection

### 4.1 Descriptive Statistics
The results of data collection using a questionnaire, the characteristics of the respondents can be known as follows:
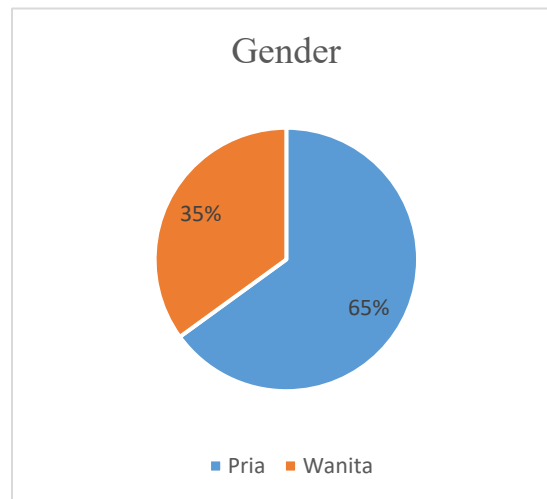
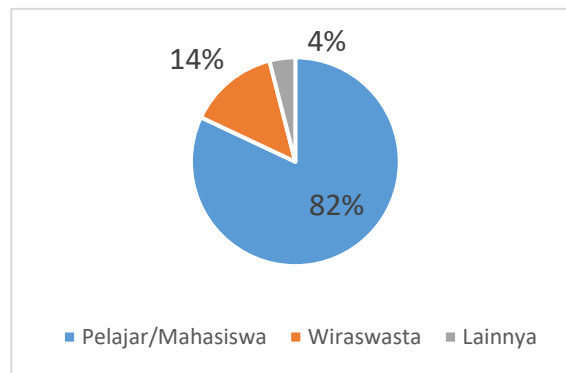
Source: SPSS data processing

Figure 1. Gender Characteristics of Respondents

Based on the Figure 1 above, it can be seen that the respondents of this study were dominated by men by 65% and 35% by women or as many as 260 male respondents. This shows that most of Tokopedia's E-Commerce users in Bandung are male compared to female.
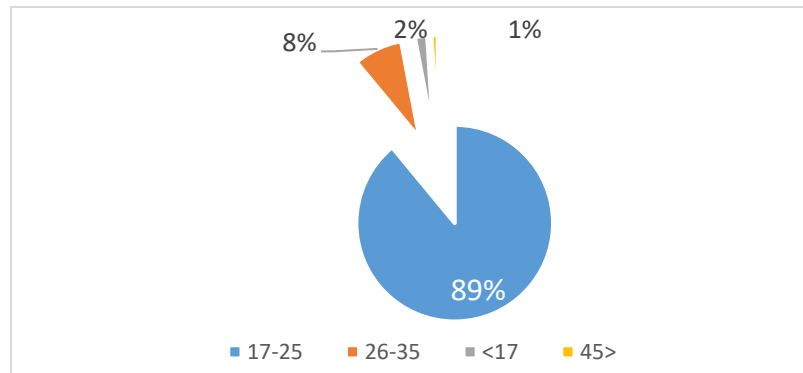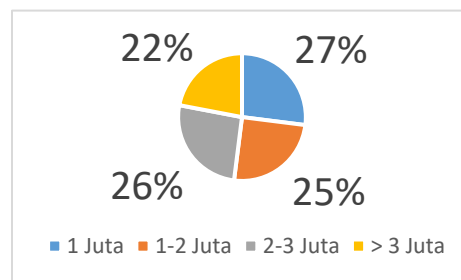
Source: SPSS data processing
Figure 2 Characteristics of Respondents Age

Based on the Figure 2, it can be seen that the respondents in this study consisted of 89% or 356 respondents aged between 17-25 years, 8% or 32 respondents aged 26-35 years, 2% or 8 respondents aged less than 17 years, and 1% or 4 respondents who are more than 45 years old. It can be concluded that the majority of respondents in this study were aged between 17-25 years.

Source: SPSS data processing
Figure 3 Characteristics of Respondents Job

Based on the Figure 3, it can be seen that the respondents in this study consisted of 82% or 328 respondents who worked as students, 14% or 56 respondents who worked as entrepreneurs, 4% or 16 respondents answered otherwise. It can be concluded that the majority of respondents in this study are students or college students.

Source: SPSS data processing

Figure 4 Characteristics of Respondents Income

The respondents of this study consisted of 27% or 108 respondents who had an income of Rp. 1,000,000, 25% or 100 respondents who had an income of Rp. 1,000,000 – 2,000,000, 26% or 104 respondents who had an income of Rp. 2,000,000 – 3,000,000, and 22% or 88 respondents who have income >Rp 3,000,000. It can be concluded that the majority of respondents in this study have an income of IDR 1,000,000. Figure 4

5. Results and Discussion

5.1 Test Instruments and Classical Assumptions
Test instruments used are validity and reliability tests. Based on the results of the validity test of the number r count > 0.361, then the calculated r is declared valid. Then for the reliable test results, it is obtained that the results of Cronbach's Alpha Variable numbers > 0.6 means that it can be said that the test results are reliable.

Table 1 Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Predicted Value
N		400
Normal Parameters[a,b]	Mean	27.8125000
	Std. Deviation	2.53313119
Most Extreme Differences	Absolute	.038
	Positive	.035
	Negative	-.038
Test Statistic		.038
Asymp. Sig. (2-tailed)		.170[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

The normality test used is the Kolmogorov-Smirnov test, (Table 1) which shows the Asymp number. Sig. (2-tailed) which is 0.546 the number is above the significant number (0.05). Then it is interpreted that the residual variable has a normal distribution. (Table 1)

Table 2 Multicolinearity Test Results

		Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	5.176	1.846		2.803	.005		
	Kualitas Pelayanan	.184	.080	.148	2.293	.022	.435	2.298
	Xclone2	.535	.085	.409	6.333	.000	.435	2.298

a. Dependent Variable: Keputusan Pembelian

Based on the Table 2 above, it can be seen that the regression model does not experience multicollinearity disorders. It can be proven that each variable has a standard error value and a Beta value of less than one. The results of the VIF calculation are also less than 10, and the tolerance value is more than 0.01, so it can be concluded that there is no multicollinearity between the independent variables in the regression model.
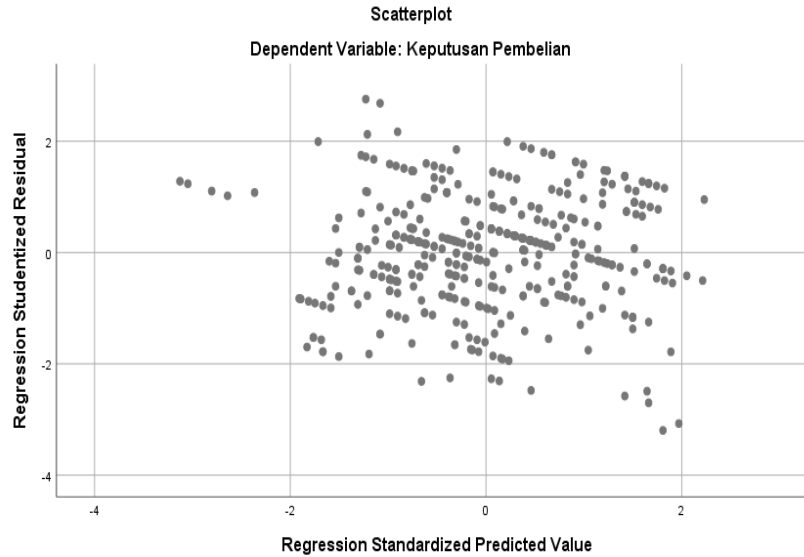
Source: SPSS data processing

Figure 5 Heteroscedasticity Test Results

Based on the Figure 5 above, it can be seen that the points spread randomly and are spread both above and below the number 0 and the Y axis. It can be concluded that there is no heteroscedasticity in the regression model, so it can be said that the regression model is feasible to be used in conducting research.

5.2 Multiple Linear Regression

Table 3 Multiple Linear Regression Results

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	5.176	1.846
	X1	.184	.080
	X2	.535	.085

The above regression test's data processing shows that the constant value is 5.176, X1 is 0.184, and X2 is 0.535. Based on the test results in Table 3, the regression equation can be written as Y=5.176+0.184+535. Based on the above equation, if Y has a value of "0," then X1 and X2 will have a value of 5.176. Also, the information in the table above shows positive values. So, if both X1 and X2 go up by 1, Y will also go up by 5.176.

5.3 Hypothesis test (partialy and simultanously)

Table 4 Hypothesis Test Result

Variable	t count	Sig.	F count	Sig
X1	2.293	0,022	77,215	0,000
X2	6.333	0,000		

According to the table just presented, the t-count value of X1 is 2.293, and the t-count value of X2 is 6.333, while the value of the t-table is 1.649. Based on the findings obtained, it is known that the t-count values for each independent variable are higher than the t-table values (1.649). Based on the author's testing of the hypothesis Table 4, it is possible to conclude that the variables X1 and X2 affect Y concerning Tokopedia E-

Commerce customers in Bandung. It is clear from the table that was just presented that the calculated value of f is 77,512 and that the value of f in the table is 3.02. Because the calculated value of F is 77,215 greater than the value of F in the table, which is 3.02, it is possible to conclude that X1 and X2 affect Y on Tokopedia E-Commerce customers located in Bandung simultaneously.

5.4 Coefficient of Determination

Product Reviews and Service Quality affect Purchase Decisions, as measured by the Coefficient of Determination. (Table 5) R2 is a squared correlation between the variables used as predictors (independent) and the one that delivers the response (dependent). The coefficient of determination is a fraction of the dependent variable's variance that the independent variable can explain.

Table 5 Coefficient of Determination Test (Simultaneous)

Model Summary

		Model Summary		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.529^a	.280	.276	4.64134

a. Predictors: (Constant), Ulasan Produk, Kualitas Pelayanan

From the description above, it can be concluded that this value indicates that Product Reviews and Service Quality variables influence Purchase Decisions by 28%, and the remaining 72% is influenced by other variables not examined in this study.

Table 6 Coefficient of Determination Test (Partial)

	Coefficients^a							
	Unstandardized Coefficients		Standardized Coefficients			Correlations		
Model	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part
1 (Constant)	5.176	1.846		2.803	.005			
Ulasan Produk	.184	.080	.148	2.293	.022	.455	.114	.098
Kualitas Pelayanan	.535	.085	.409	6.333	.000	.520	.303	.270

a. Dependent Variable: Keputusan Pembelian

Based on Table 6, the partial determinant coefficient is calculated using the Beta x Zero order formula, as follows:
1) Product Reviews: 0.148 x 0.455 = 0.067 or 6%
2) Service Quality: 0.409 x 0.520 = 0.212 or 21%

Based on the calculation of the coefficient of partial determination, it is found that the contribution of the Product Reviews variable is 6% and the Service Quality is 21%. In this study, the service quality variable has the greatest influence partially with a percentage of influence of 21%.

5.5. Discussion

Based on research conducted on 400 respondents with the characteristics of the majority being male, as much as 65%, the majority aged between 17-25 years as much as 89%, the majority being students or college students with a percentage of 82% and the majority earning a monthly income of IDR 1,000,000 as much as 27%.

Based on the results of the descriptive analysis, 88.7% of the Product Reviews fall into the "very good" category. This means that Tokopedia has done an excellent job of providing a place for customers to share their thoughts and impressions after making a purchase. In this way, other people thinking of buying the

product can get more information from people who have already bought it. The statement regarding product reviews as a source of information received the most votes (89.4%) and was included in the Very Good category. This shows that people care about what others have to say about a product before buying it. People with the lowest scores are sure to buy the product immediately after reading reviews from other customers. The statement received a score of 81%. This shows that people pay attention to what others say about a product, but that does not mean they sell it immediately. Every potential customer has something else to think about.

Based on the results of hypothesis testing to see the effect of the Product Review variable on purchasing decisions, the value of tcount (2.293) is greater than the value of ttable (1.649), and the value of Sig. Less than 0.05. This means that Product Reviews significantly impact people's decisions about what to buy. Based on the partial determination coefficient test, the Product Reviews variable affects 6% of the Purchase Decision. Based on the test results, we can say that H1 does something. So, Product Reviews significantly impact people's decisions about what to buy. Setianingsih and Aziz's research (Setianingsih & Aziz, 2021) states that the Product Review variable (X1) positively and significantly affects Purchase Decisions. This study's results align with that study (Y).

Based on the results of descriptive analysis, the Service Quality variable as a whole has a percentage value of 85%, which is in the excellent range. Of the 9 Service Quality variable statements, the security statement when doing business at Tokopedia received the best response from respondents. It gets a score of 92% and is in the Very Good category. This shows that Tokopedia has done an excellent job of making its users feel safe when making transactions, such as with the extra security features in the Tokopedia application. The statement received a score of 78%, which was included in the Good category. The one who got the lowest score was about how to file a complaint in the Tokopedia application easily. Although in the excellent category, this shows that some Tokopedia users still have difficulty submitting their complaints. This could be due to many things, including that Tokopedia has so many active users that it is difficult for the site to keep up.

The value of tcount (6.333) is more significant than ttable (1.649), and the value of Sig. the value is 0.000 < 0.05. This conclusion can be drawn from the findings of hypothesis testing conducted to determine the effect of the Service Quality variable on purchasing choices. This shows that the level of service provided significantly influences decisions made by users regarding purchases. Based on the partial determination coefficient test, the variable representing service quality has a partial effect on purchasing choices, accounting for 21% of the total. Based on the test results, it can be concluded that Ha has a significant effect. According to the findings of this research project, the choice to buy a product is significantly influenced in a good way by reading the reviews of the product. The findings of Pramono, Eldine, and Muniroh (2020) state that if the number of product reviews increases, sales will also increase, by the previously described findings.

Based on the research findings, if users get a good experience with their experience in using/shopping at Tokopedia, it will be able to stimulate these consumers to shop again/reuse Tokopedia in online shopping. This finding is in line with the findings of research conducted by Fahrevi and Satrio (2018) which found that the higher the level of service quality provided by e-commerce to customers, the higher the decision to make purchases online. Customers will have a good view of your business and more confidence in their ability to make purchasing decisions when you provide them with high-quality service.

6. Conclusion

The findings of the research lead one to the conclusion that the Product Review and Service Quality variables simultaneously and partially affect the Purchasing Decision variable. This result can be deduced from the findings of the study. The investigation findings allow one to draw this conclusion as a possible outcome. When deciding what to buy, Tokopedia E-Commerce customers in Bandung are influenced to a certain extent by two factors: the Product Reviews variable, which accounts for 6% of the total, and the Service Quality variable, which accounts for 21% of the total. There is a simultaneous influence on Purchase Decisions made by Tokopedia E-Commerce customers in Bandung of 28 percent on the variables of Product Review and Service Quality. In comparison, the influence of other factors not evaluated makes up 72 percent of the total.

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