P-ISSN: 2828-8599
E-ISSN: 2829-2111

Students Decide to Buy Products According to Their Needs on Online Shopping Applications

Indri Putri Utami[1*], Dini Fitriani[2], Nur Izzati[3]

[1,2,3] Department of Management, Sekolah Tinggi Ilmu Ekonomi Wibawa Karta Raharja, Purwakarta, Indonesia

Abstract

This study has the aim of knowing (1) whether there is an effect of product quality on purchasing decisions through the shopee marketplace. (2) whether there is an influence of trust on purchasing decisions through the Shopee marketplace. (3) is there an influence of product quality and trust on purchasing decisions through the shopee marketplace. The data source in this study was obtained from a questionnaire (primary) distributed to respondents. The research sample amounted to 91 people. The data that has been collected, processed and analyzed using smartpls 3.0 tools through a series of tests, namely descriptive statistics, measurement model / outer model (validity test, reliability test and multicollinearity test), structural model / inner model (r square, q square predictive relevance) and hypothesis testing. The results showed that partially the two independent variables, namely product quality and trust, had an effect on the dependent variable, namely purchasing decisions. And simultaneously product quality and trust affect purchasing decisions.

Article Info

Keywords:
Product Quality,
Purchase Decision,
Trust

JEL Classification:
D24, M31, M37

Corresponding Author:
Indri Putri Utami
(indri_putriutami@stie-wikara.ac.id)

Received: 16-11-2024
Revised: 05-01-2025
Accepted: 16-01-2025
Published: 21-01-2025

1. Introduction

When shopping online, one of the most important purchase factors for consumers is product quality (Edwar et al., 2018). Quality is explained that quality is the superiority of the product owned. Each company must ensure the level of quality that will support the company to improve and maintain the position of its products in the target market (Nurachman & Haviel, 2021). Companies must also develop strategies to produce quality products that buyers like and want in order to compete among other companies. If the quality of the products offered by producers does not match the wishes of buyers, buyers will choose quality products from other producers (Avianti & Putri, 2024).

According to Riady and Fageh (2023) that planning, supervising, and directing, all marketing work is part of the company. Product quality is understood as the totality of product characteristics and services in its ability to meet stated or anticipated needs (Assor & Rusdianti, 2023). Product quality is the competence, completeness of specifications and services as well as the nature of the product and its ability to complement the perceived needs of the company's buyers". Product quality is the extent to which a product satisfies the needs of its target market (Tirtayasa et al., 2021).

Based on this, the researchers conducted a pre-survey to 20 STIE Wikara student respondents regarding product quality on the shopee marketplace. The results of the pre-survey regarding product quality can be described as follows:

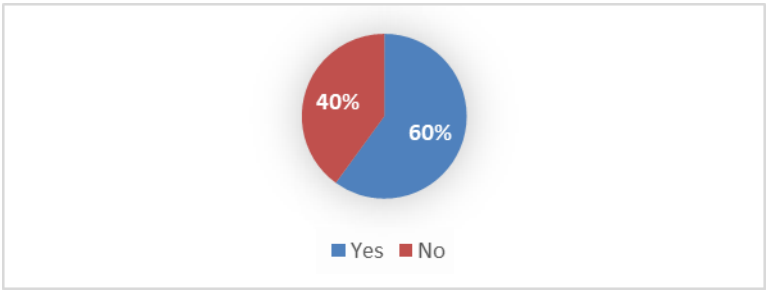

Figure 1. Pre-survey data on damage or defects when shopping at shopee
Source: Data Processed (2023)

A total of 12 people (60%) of respondents stated that they had experienced damage or defects in goods when they shopped at shopee and as many as 8 people (40%) of respondents stated that they had never experienced damage or defects in the goods they bought at shopee.

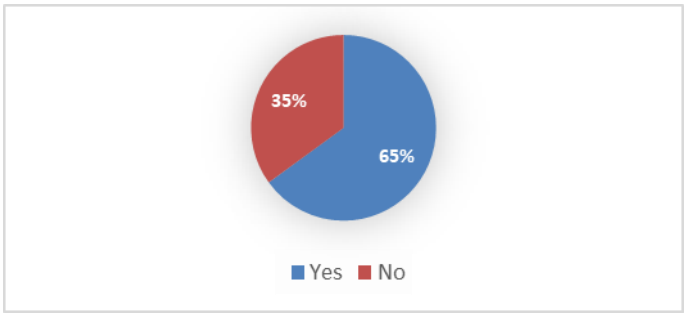

Figure 2. Color Delivery Error
Source: Data Processed (2023)

Shows 13 people (65%) respondents stated that they had experienced errors in color delivery when shopping at shopee and 7 people (35%) respondents stated that they had never experienced errors in color delivery when shopping at shopee.

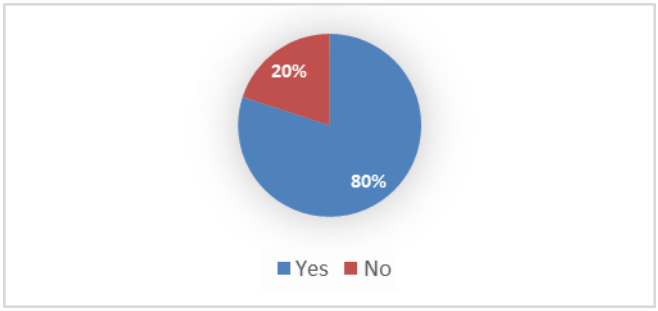

Figure 3. Pre-survey data of product mismatches with displayed images
Source: Data Processed (2023)

The results of 16 people (80%) of respondents stated that they had experienced product discrepancies with the images displayed in the shopee application and 4 people (20%) of respondents stated that they had never experienced product discrepancies with the images displayed in the shopee application.

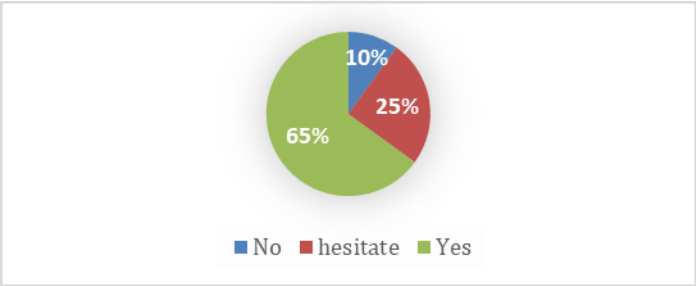

Figure 4. Packaging of goods in the old shopee
Source: Data Processed (2023)

Based on the pre-survey above, it shows that 13 (65%) respondents said yes that the packaging of goods in shopee was old, 5 (25%) respondents said it was doubtful that the packaging of goods in shopee was old, and 2 people (10%) respondents said they disagreed that the packaging in shopee was old.

Consumer trust as the dependent variable finds signs that some sellers in the shopee marketplace are disappointing customers. According to the results of the pre-survey, as many as 13 respondents (65%) stated that the statement was true due to the problem of long packaging of goods by the seller and the delivery of goods to consumers taking a long time to arrive at the destination address. Meanwhile, the ability to trust sellers is very important when making purchases online.

2. Methods

Sugiyono (2017) explains that quantitative is a research method based on the philosophy of positivism, used to examine samples or certain populations, research instruments used in collecting data, quantitative or statistical data analysis, for the purpose of testing previously established hypotheses.

According to Yuliani et al. (2023), research design is a plan for how data will be collected and analyzed so that it can be done more carefully and in accordance with the research objectives. A research plan is represented by a research design. The research design summarizes the steps taken to combine the information and data needed to answer the research question
To determine the sample in this study using the Yamane formula (Sugiyono, 2021: 137).
$n = N / (1+N (e)^2$
Description:
n = Number of samples required
N = Total population
e = Sample error rate 0.1
Based on the above formula, the number of samples in this study can be calculated as follows:
$n = 927/(1+927(0,1)^2$
n = 90,26
n = 90.26 rounded up to 91.
From the results of the above calculations, the sample size taken is 91 respondents

The relationship between product quality (X1), trust (X2), and purchasing decisions (Y). The framework in this study is:

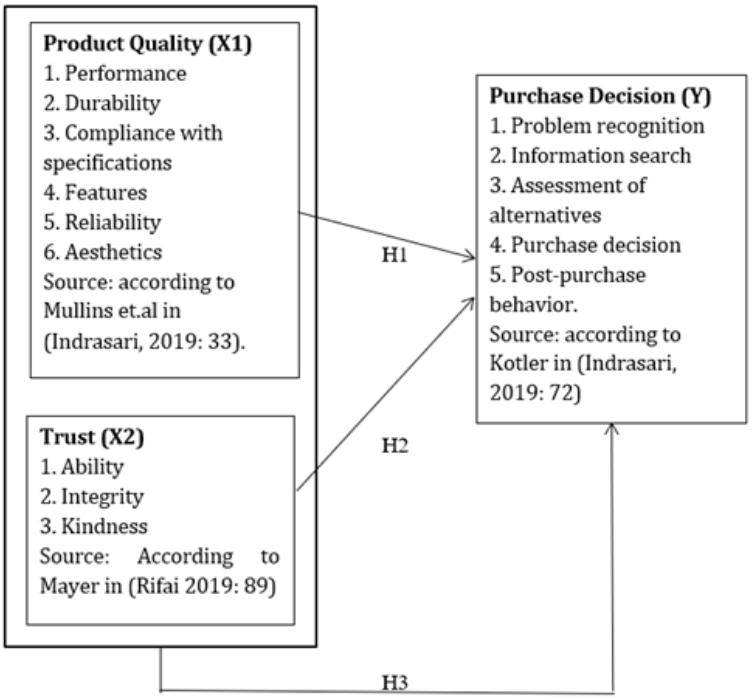

Figure 5. Framework of Thought
Source: Data Processed (2023)

3. Results and Discussion

3.1. Results

Validity testing is carried out to determine whether a questionnaire is valid or not, so that the questionnaire is considered valid, the questions must be able to explain what the questionnaire measures. The following presents the data obtained from SmartPls:

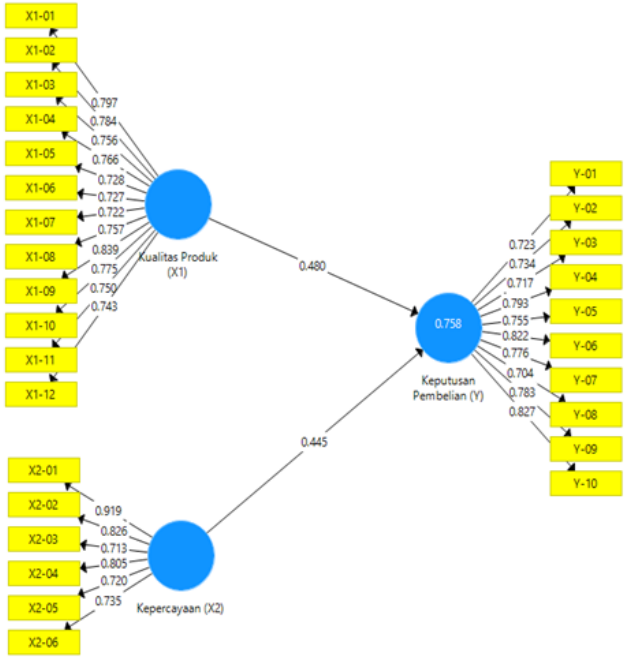

Figure 6. SmartPls Test Results
Source: Data Processed (2023)

The convergent validity value of the loading factor is expected to exceed> 0.7. The following are some data analysis with 3 variables consisting of 28 questions:

Table 1. Loading Factor

Indicator	Variable	Loading Factor	Rule of Thumb	Description
Product Quality (X1)	X1.1	0.797	0.700	Valid
	X1.2	0.784	0.700	Valid
	X1.3	0.756	0.700	Valid
	X1.4	0.766	0.700	Valid
	X1.5	0.728	0.700	Valid
	X1.6	0.727	0.700	Valid
	X1.7	0.722	0.700	Valid
	X1.8	0.757	0.700	Valid
	X1.9	0.839	0.700	Valid
	X1.10	0.775	0.700	Valid
	X1.11	0.750	0.700	Valid
	X1.12	0.743	0.700	Valid
Trust (X2)	X2.1	0.919	0.700	Valid
	X2.2	0.826	0.700	Valid
	X2.3	0.713	0.700	Valid
	X2.4	0.805	0.700	Valid
	X2.5	0.720	0.700	Valid
	X2.6	0.735	0.700	Valid
Purchase Decision (Y)	Y.1	0.723	0.700	Valid
	Y.2	0.734	0.700	Valid
	Y.3	0.717	0.700	Valid
	Y.4	0.793	0.700	Valid
	Y.5	0.755	0.700	Valid
	Y.6	0.822	0.700	Valid
	Y.7	0.776	0.700	Valid
	Y.8	0.704	0.700	Valid
	Y.9	0.783	0.700	Valid
	Y.10	0.827	0.700	Valid

Source: Data Processed (2023)

Table 1 shows that the product quality variables are all valid instruments. The trust variable is all valid instruments and the purchasing decision variable is all valid instruments. So it can be said that the data obtained is valid.

The average variance extracted (AVE) between statement items or summary variable indicators of convergent indicators is the average percentage value, as stated by Ghozali (2018). If the average value of each statement is> 0.5, it means that it shows good value.

Table 2. Average Variance Extrated (AVE) Test Results

Variabel	Average Variance Extrated (AVE)
Product Quality (X1)	0.582
Trust (X2)	0.624
Purchase Decision (Y)	0.585

Source: Data Processed (2023)

Based on Table 2, all variables have reached the required AVE of 0.5. This shows that all variables in this study passed the average variance extrated (AVE) test.

The results of the Discriminant Validity test are explained here with the assumption that the correlation between any two variables is higher than the correlation between two other variables. Discriminant validity can also be seen from the cross loading value of each statement item. Table 4.10 displays the correlation value between variables, namely:

Table 3. Correlation Value Between Variables

Variable	Trust (X2)	Purchase Decision (Y)	Product Quality (X1)
Trust (X2)	0,790		
Purchase Decision (Y)	0,816	0,765	
Product Quality (X1)	0,772	0,824	0,763

Source: Data Processed (2023)

Based on the results of the table above, it shows that the correlation of each variable with the variable itself is greater than the correlation of the variable with other variables. From this it can be concluded that the variables of this study can fulfill the discriminant validity test. In addition, to show the correlation value between variables, the discriminant validity test can be seen from the cross loading value. The following table 3 shows the cross loading value of each variable in this study:

Table 4. Cross Loading Value

Item	Code Product	Quality Product	Purchase Decision
X1.1	0.797	0.588	0.614
X1.2	0.784	0.684	0.695
X1.3	0.756	0.517	0.546
X1.4	0.766	0.581	0.581
X1.5	0.728	0.498	0.613
X1.6	0.727	0.714	0.715
X1.7	0.722	0.458	0.563
X1.8	0.757	0.588	0.672
X1.9	0.839	0.658	0.628
X1.10	0.775	0.559	0.645
X1.11	0.750	0.572	0.634
X1.12	0.743	0.591	0.580
X2.1	0.780	0.919	0.819
X2.2	0.801	0.826	0.778
X2.3	0.427	0.713	0.550
X2.4	0.579	0.805	0.617
X2.5	0.418	0.720	0.404
X2.6	0.506	0.735	0.559
Y.1	0.477	0.616	0.723
Y.2	0.604	0.685	0.734
Y.3	0.557	0.643	0.717
Y.4	0.651	0.619	0.793
Y.5	0.570	0.614	0.755
Y.6	0.636	0.720	0.822
Y.7	0.600	0.665	0.776
Y.8	0.710	0.497	0.704
Y.9	0.742	0.575	0.783
Y.10	0.722	0.597	0.827

Source: Data Processed (2023)

According to Table 4. shows that the cross loading value is higher than the correlation value of the item against other variables. So, each statement item in this study fulfills the discriminant validity test.

"Reliability test is used to test the reliability of a construct Ghozali (2018)". Reliability testing shows how precisely and consistently the instrument measures the construction. The reliability test compares the reliability of individual statement items for each research variable; if the resulting value is 0.7 or higher, the variable is considered reliable. The following shows the compostie reliability value for each variable:

Table 5. Cronbach's Alpha and Composite Reliability values

Variable	Cronbach's Alpha	Composite Reliability	Description
Product Quality	0.934	0.943	Reliabel
Trust	0.880	0.908	Reliabel
Purchase Decision	0.921	0.933	Reliabel

Source: Data Processed (2023)

Table 5 shows that the overall reliability of all variables has a value greater than 0.7. This finding shows that all variables pass the reliability test, so that all research instruments are reliable and can be used in this study.

Multicollinearity test to determine whether the regression model identifies a significant correlation between independent variables (independent), as stated by Ghozali (2018), Independent variables in a good regression model should not correlate with each other. The VIF between the independent variables is checked to perform a multicollinearity test. If the VIF value is <10, it means that there is no multicollinearity.

Table 6. Multicollinearity Test Results

Variable	VIF
Product Quality →Purchase Decision	2.475
Trust →Purchase Decision	2.475

Source: Data Processed (2023)

The multicollinearity results that the independent variables have a VIF value of less than 10. From this it can be concluded that between the variables of product quality and trust do not show symptoms of multicollinearity.

Convergent Validity, Average Variance Extracted, and Discriminant Validity are all met. Next is the evaluation of the structural model which includes testing the R-Square and Q-Square models.

1. R-Square

R-Square is used to evaluate the accuracy of the structural model for making predictions. Whether or not exogenous latent variables have a significant effect on endogenous latent variables, R-square can be used to explain this effect. Models can be classified as strong, medium, or weak based on their R-square values: 0.75, 0.50, or 0.25. PLS R-Square measures the overall variability of the model construction. The following presents the results of the R-Square value in table 7:

Table 7. R-Square Value

Variabel	R-Square
Purchase Decision	0.758

Source: Data Processed (2023)

Table 7 displays the results of the R-Square test which shows a value of 0.758. This value indicates that trust and product quality have an influence of 75.8% on the purchasing decision variable, while the remaining 24.2% is explained by other factors.

1. Q^2 Predictive Relevance

This test is done from the predictive involvement of certain variables on other variables measured using the blinfolding method, with a value of around 0.02 for a small effect, 0.15 for a medium effect, and 0.35 for a large effect. The calculation results can be seen in the table below:

Table 8. Q^2 Predictive Relevance Value

	SSO	SSE	Q^2 (=1-SSE/SSO)
Product Quality (X1)	1.092.000	1.092.000	
Trust (X2)	546.000	546.000	
Purchase Decision (Y)	910.000	910.000	0.423

Source: Data Processed (2023)

The Q-square value for this analysis is 0.423, as shown in the table. Based on these findings, this study has good predictive relevance because the value obtained is more than 0 (zero), so it can be concluded that 42.3% of purchasing decisions through the shopee marketplace are influenced by product quality (X1) and trust (X2).

The significance value between the construct t-statistic and the p-value, as well as the results of convergent validity, discriminant validity, and reliability tests, are all taken into account when deciding whether or not to accept the hypothesis. In hypothesis testing of the PLS method, software can be used to check the validity of the hypothesis.

SmartPLS 3.0 with these values can be seen from the bootstrapping results. In this analysis, the Rules of thumb used are t-statistics ≥1.96 significance level p-values 0.005 (5%) positive coefficient. This table shows the hypothesis testing presented below:

Table 9. Hypothesis Testing

	Hypothesis	Original Sample (O)	Sample Average (M)	Standard Deviation	T Statistic (O/STEDEV) hypothesis test	P Values
H1	The effect of product quality on purchasing decisions	0.480	0.501	0.110	4.360	0.000
H2	The effect of trust on purchasing decisions	0.445	0.420	0.130	3.421	0.001

Source: Data Processed (2023)

Based on the data presented in table 9, it can be concluded regarding the acceptance or rejection of the following hypotheses:

1. H1 : The T-statistic for product quality is 4.360, which is greater than 1.96, and the p-value less than 0.05 is 0.000. These findings support the first hypothesis, which shows that product quality has an effect on purchasing decisions.
2. H2 : The t-statistic for the trust variable is 3.421, which is greater than the value of 1.96, and the p-values less than 0.05 are 0.001. This finding supports the second hypothesis, which states that trust has an effect on purchasing decisions.

3.2. Discussion

Based on the analysis of the data processed, that the better the product appearance or product quality offered by shopee, the customer will feel satisfied because the product quality is in accordance with customer expectations and can influence purchasing decisions. Shopee will increase its chances of making sales by convincing customers that quality is the effect of trust on purchasing decisions.

The results obtained in this study explain that the effect of trust on purchasing decisions is positive and significant. Buyers must have a large level of trust in the seller before making a purchase, this is evidenced based on the official play store website which shows that ≥100 million downloads on the shopee application.

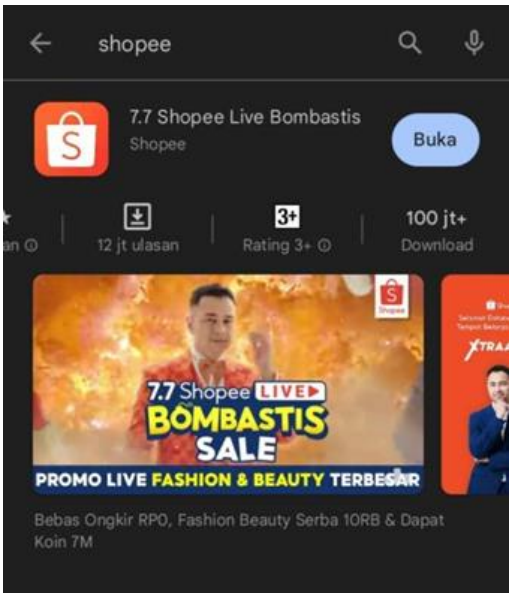

Figure 7. Shopee Downloads
Source: Google Play Store (2023)

Descriptive statistical analysis of purchasing decision variables with an average score of 4.21 is from the indicator of the desire to buy products. This means that the better the product quality and trust provided by Shopee, the higher the influence on purchasing decisions.

4. Conclusion

Product quality has a positive and significant effect on purchasing decisions through the shopee marketplace for STIE Wibawa Karta Raharja Purwakarta students. Trust has a positive and significant effect on purchasing decisions through the shopee marketplace for STIE Wibawa Karta Raharja Purwakarta students. Product quality and trust together (simultaneously) have a significant effect on purchasing decisions through the shopee marketplace for STIE Wibawa Karta Raharja Purwakarta students.

Thus, all independent variables tested in this study are proven to have a positive and significant influence on purchasing decisions through the shopee marketplace for STIE Wibawa Karta Raharja Purwakarta students.

References

Aghitsni, W., & Busyra, N. (2022). Pengaruh Kualitas Produk Terhadap Keputusan Pembelian Kendaraan Bermotor Di Kota Bogor. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *6*(3), 38-51. https://doi.org/10.31955/mea.v6i3.2271

Assor, A. R., & Rusdianti, I. S. (2023). How The Accounting Implementation In "Abon Ikan Tuna Lely Bintang" Ternate City? *Innovation Business Management and Accounting Journal*, *2*(2), 63-70. https://doi.org/10.56070/ibmaj.v2i2.36

Avianti, W. A., & Putri, A. (2024). Buying Decisions on Online Shopping Platforms Influenced by Interesting Marketing Content and E-WOM. *Journal of Management Research and Studies,* 2(2), 238-249.

Edwar, M., Diansari, R. A. A., & Winawati, N. F. (2018). The factors that affecting the product purchasing decision through online shopping by students of Surabaya state university. *International Journal of Educational Research Review*, *3*(4), 54-64. https://doi.org/10.24331/ijere.432350

Ghozali. (2018). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25. *Badan Penerbit Universitas Diponegoro*, Semarang.

Nurachman, & Haviel, M. (2021). Pencapaian Keunggulan Bersaing Melalui Inovasi Produk, Kualitas Produk dan Kualitas Pelayanan pada Kedai Kopi di Kota Bandung. *Maneggio: Jurnal Ilmiah Magister Manajemen,* 4(1), 165-177.

Riady, S., & Fageh, A. (2023). Konsep Manajemen Pemasaran Dalam Perspektif Islam. *Community Development Journal : Jurnal Pengabdian Masyarakat*, *4*(2), 3796–3804. Retrieved from https://journal.universitaspahlawan.ac.id/index.php/cdj/article/view/15555

Sugiyono. (2017). *Metode Penelitian Kuantitatif Kualitatif Dan R & D*. Alfabeta.

Sugiyono. (2021). Metode Penelitian Kuantitatif Kualitatif dan R&D. *Alfabeta*, Bandung.

Tirtayasa, S., Lubis, A. P., & Khair, H. (2021). Keputusan Pembelian Sebagai Variabel Mediasi Hubungan Kualitas Produk dan Kepercayaan terhadap Keputusan Pembelian. *Jurnal Inspirasi Bisnis dan Manajemen*, 5(1), 67-86.

Yuliani, W., & Supriatna, E. (2023). *Metode Penelitian Bagi Pemula*. Penerbit Widina.