

THE EFFECT OF PRODUCT QUALITY AND ONLINE SHOPPING EXPERIENCE ON CUSTOMER LOYALTY WITH CUSTOMER SATISFACTION AS A MEDIATING VARIABLE (On Rizki Jaya Customers at Shopee in the Greater Bandung Area)

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Abstract

Customers of the Rizki Jaya store on Shopee in the Greater Bandung region will be the subjects of this research, which seeks to examine the relationship between product quality, online shopping experience, customer loyalty, and customer happiness as a mediating variable. Some have speculated that poor product quality and an unpleasant shopping experience are to blame for the precipitous drop in in-store sales. Quantitative methods combined with a descriptive approach form the basis of this work. An online questionnaire was used to gather data from a sample of 128 respondents who were chosen using purposive sampling approaches. We used SPSS 27 to conduct multiple regression analysis and the Sobel test to assess our hypotheses. The findings demonstrate that compared to product quality, the online shopping experience significantly impacts consumer satisfaction in a favorable way. Customers are more loyal to brands when they have a positive experience purchasing online and with high-quality products. Satisfaction with one's service, however, does not moderate the connection between loyalty and independent factors, and it also does not significantly affect loyalty. Customer loyalty is impacted less by happiness as a mediator and more by the impression of product quality and purchasing experience, according to the study's results. Consequently, in this age of e-commerce, client retention is heavily focused on enhancing the digital buying experience and service quality.

Keywords: product quality, online shopping experience, customer satisfaction, customer loyalty, Shopee, MSMEs.

INTRODUCTION

Military gear companies on Shopee are only one example of how the fast growth of e-commerce in Indonesia has stoked intense rivalry among various business players. This phenomenon encourages every business actor to continue to innovate in maintaining and increasing sales. However, based on sales data, Toko Rizki Jaya experienced fluctuations and sales declines from 2019 to 2024, in contrast to competitors such as Toko Fajar Parahyangan, StreetMilitary, and Seniman Pertempuran Apparel which have consistently increased sales every year. This condition indicates that there is a serious problem related to customer loyalty at Toko Rizki Jaya.

Customer loyalty is a crucial aspect in maintaining business sustainability, especially in the realm of e-commerce which relies heavily on customer trust and satisfaction. According to Griffin (2010), customer loyalty is reflected in repeated purchase behavior and the tendency to recommend stores to others, which can be an effective promotion on digital platforms such as Shopee (Mashuri, 2020). This loyalty is formed through long-term relationships that are influenced by customer satisfaction levels (Kotler & Keller, 2022).

According to Zeithaml et al. (2010) and Kotler (2022), customer satisfaction is the most important measure of a product or service's ability to fulfill customer expectations and demands. When it comes to online purchasing, the quality of the products and the whole experience have a significant impact on client happiness. Customers may not evaluate the goods in person before purchase, hence product quality is king (Tjiptono, 2016).

Furthermore, the online shopping experience is crucial in molding the customer's impression of the business, which in turn affects their choice to repurchase (Rose et al, 2012). Product quality that does not match the description and an unpleasant shopping experience are the most common complaints from customers of online stores, according to multiple studies (Asianti Nainggolan et al., 2023; Surahman & Sunarya, 2024). Like many other businesses, Toko Rizki Jaya has a lot of unhappy Shopee customers who have complained about things not living up to their expectations and having a bad overall purchasing experience.

Customer happiness acted as a mediator, product quality and online shopping experience as independent factors, and customer loyalty as the dependent variable. The researchers set out to determine how consumer happiness mediated the relationship between product quality, online shopping experience, and customer loyalty. Thus, the goal of this study is to provide scientific insight into techniques to promote customer loyalty in the military gear e-commerce market and to help Toko Rizki Jaya with their diminishing consumer loyalty.

RESEARCH METHODS

In order to gather information for the purpose of testing hypotheses or answering questions about people's views on a certain subject, this research use a quantitative descriptive approach. Because it relies on numerical data subjected to statistical analysis, the quantitative method is positivistic, asserts Sugiyono (2022).

Independent, bound (dependent), and mediating factors are all used in this study. A mediating variable either enhances or diminishes the association between the bound and free variables, respectively.

Customers in the Greater Bandung region who use Rizki Jaya are the subjects of this research. The sample was selected using the non-probability sampling method known as purposive sampling. This method involves intentionally choosing respondents based on certain criteria. Shopee users who have made a purchase during the last three months are included in the survey.

Sugiyono (2022) specifies that there should be at least ten times as many samples as variables. One hundred twenty-two participants are required as a minimum sample size for the four variables (product quality, online shopping experience, customer happiness, patient loyalty). Nevertheless, due to the non-normal distribution of the data in this research, an additional 8 respondents were included. A normal distribution may be applied to the data once the notional number of respondents has been added.

The data used is derived from first-hand accounts provided by participants in an online survey (Google Form) that was shared over various social media platforms. With data obtained just once (for one week), the research might be considered cross-sectional. This study used a quantitative approach to descriptive research. Data collection for the purpose of hypothesis testing or answering inquiries on

people's perspectives on a certain subject or topic is at the heart of this descriptive technique. The quantitative approach is a positivist research strategy that relies on numerical data and statistical analysis, as stated by Sugiyono (2022). In order to describe and test an established hypothesis, this approach is used in research involving a particular population or sample.

RESULTS AND DISCUSSION

Validity and Reliability Tests

In this research, we tested the questionnaire's validity and reliability to see whether the questions could reliably and correctly assess the variables of interest. If the product-moment criterion is greater than 0, then the assertion is considered valid. $r_{\text{count}} > r_{\text{table}}$.

Because each item's computed r-value was higher than the r-table value of 0.173, the validity test concluded that the whole questionnaire was valid. The results demonstrate that the variables in issue were accurately measured using the technology used in this investigation. In the meantime, the reliability test revealed that the instrument is regarded as somewhat trustworthy, with a Cronbach's Alpha value over 0.5 (Murniati et al., 2013). This means that this measuring tool has a good level of consistency and will provide stable results even if used at different times.

Classic Assumption Test

For the purpose of legitimately interpreting the outcomes of the research, a classical assumption test was performed to determine whether the multiple linear regression model used in this study has fulfilled the statistical criteria. The following is an explanation of the usual assumptions tested for in this study: normalcy, multicollinearity, and heteroscedasticity.

Table 1. Results of the Classical Assumption Test

NO	Types of Classical Assumption Tests	Criteria for Acceptance of Test Results	Test Results	Interpretation
1	Normality Test (<i>Kolomogorov Smirnov</i>)	(sig) > 0.05	Equation 1 (sig)= 0.200 Equation 2 (sig)= 0.067	Normally distributed data
2	Multicollinearity Test	<i>Tolerance value</i> > 0,1 Dan VIF < 10	Equation 1 <i>Tolerance value</i> (X1) & (X2) = 0.468 and VIF = 2.137 Equation 2 <i>Tolerance value</i> (X1) = 0.467 and VIF = 2.139. <i>Tolerance value</i> (X2) = 0.350 and VIFO = 2.861. <i>Tolerance value</i> (Y) = 0.561 and VIF = 1.782.	There are no symptoms of multicollinearity between independent variables

3	Heteroscedasticity Test	(sig) > 0.05 and C^2 Calculate < table C^2 (Uji White)	Equation 1 (sig) X1= 0.546 dan (sig) X2= 0.052	No heteroscedasticity occurs in the regression model
			Equation 2 C^2 Count 13,952 < C^2 Table 154,302	

The results of the classical assumption test indicate that the data follows a normal distribution. The normality test using Kolmogorov-Smirnov yielded significance values of 0.067 in equation 2 and 0.200 in equation 1, both larger than 0.05. Both equations' tolerance and VIF values were within acceptable ranges, according to the multicollinearity test, ruling out the possibility of any connection between the independent variables. While equation 2 indicated signs of heteroscedasticity, warranting additional testing with the White test, the Glejser method's heteroscedasticity test in equation 1 revealed no indications of heteroscedasticity. We may infer that equation 2 does not exhibit any indications of heteroscedasticity since White's test revealed that the calculated chi-squared value was less than the table value. Because of this, the regression model is valid and meets all classical requirements.

Multiple Regression Test

This multiple linear regression analysis is carried out to examine the effect of independent factors on dependent variables after establishing that the data fits the classical assumptions that are necessary. In the accompanying table, you can see the results of the multiple linear regression test equation 1. This test examines the positive and substantial effect of product quality and online shopping experience on customer satisfaction.

Table 2. Multiple Regression Test Results Equation 1

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	T value	Sig
	B	Std.error	Beta		
1 <i>(constant)</i>	4,631	0,798		5,802	< 0.001
Total_X1	0,022	0,064	0,034	0,344	0,731
Total_X2	0,300	0,046	0,637	6,506	< 0.001

a. Dependent Variable: Total_Y (Customer Satisfaction)

Based on table 2, the multiple regression equation of equation 1 can be obtained as follows:

$$Y = 4.631 + 0.022X1 + 0.300X2$$

There is no positive and statistically significant relationship between Product Quality (X1) and Customer Satisfaction (Y) according to the regression test findings (0.022, 0.731, >0.05). The Online Shopping Experience (X2), on the other hand, has a positive and substantial impact on Customer Satisfaction, as shown by its coefficient of 0.300 and significance level of <0.001. If both independent variables are set to zero, the Customer Satisfaction level will stay at 4.631, as shown by a constant value of

4.631. According to this model, neither Product Quality nor the Online Shopping Experience significantly affect Customer Satisfaction.

Table 3. Multiple Regression Test Results Equation 2

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	T value	Sig
	B	Std. error	Beta		
1 <i>(constant)</i>	5,215	1,492		3,496	0,001
Total_X1	0,480	0,106	0,465	4,531	0,000
Total_X2	0,178	0,090	0,237	2,001	0,048
Total_Y	-0,095	0,148	-0,061	-0,640	0,523

a. Dependent Variable: Total_Z (Customer Loyalty)

The following equations for multiple regression may be derived from table 3 of the results of the equation 2 test:

$$Z = 5,215 + 0,480X_1 + 0,178X_2 - 0,095Y$$

According to the research, customer loyalty was positively and significantly impacted by the Product Quality variable (X_1), which had a coefficient of 0.480 and a significance level of less than 0.001. With a coefficient of 0.178 and a significance level of 0.048, Online Shopping Experience (X_2) was likewise shown to have a positive and statistically significant influence. When compared to this, the Customer Satisfaction (Y) variable's negative coefficient of -0.095 and significance level of 0.523 indicate that it did not have any positive or significant impact. Customer loyalty is projected to be 5.215 if all independent variables are set to zero, as shown by a constant value of 5.215. The results show that in this model, customer satisfaction has no positive or substantial effect on loyalty, however product quality and the online shopping experience have a substantial impact.

Hypothesis Test

Use the t-test to find out how X_1 and X_2 —the product quality and the online shopping experience—partially affect Z and Y , the consumer happiness and loyalty variables, respectively.

Table 4. Hypothesis Test Results

Hipotesis	Relationships Between Variables	T Count	Sig	Interpretation of Hypothesis Test Results
H1	Product Quality (X_1) → Customer Satisfaction (Y)	0,344	0,731	Ha rejected
H2	Online Shopping Experience (X_2) → Customer Satisfaction (Y)	6,506	< 0.001	Ha accepted

H3	Product Quality (X1) → Customer Loyalty (Z)	4,531	0,000	Ha accepted
H4	Online Shopping Experience (X2) → Customer Loyalty (Z)	2,001	0,048	Ha accepted
H5	Customer Satisfaction (Y) → Customer Loyalty (Z)	-0,640	0,523	Ha rejected
H6	Product Quality (X1) → Customer Satisfaction (Y) → Customer Loyalty (Z)	-0,30	> 0.05	Ha rejected
H7	Online Shopping Experience (X2) → Customer Satisfaction (Y) → Customer Loyalty (Z)	-0,639	> 0,05	Ha rejected

The hypothesis test found that although the online shopping experience was significantly related to consumer happiness, product quality was not. Customers are more loyal to brands when they have a positive experience purchasing online and with high-quality products. Having said that, there is no correlation between client happiness and loyalty. Customer happiness also did not mediate the relationship between product quality, online shopping experience, and customer loyalty, according to the mediation research.

Sobel Test

The purpose of the Sobel test is to determine whether Customer Satisfaction acts as a mediator between the independent and dependent variables. You may see the results of the following sobel test in the table:

Table 5. Sobel Test Results

Relationships Between Variables	Coefficient a	SE a	Coefficient b	SE b	Sobel Test	Interpretation
Product Quality (X1) → Customer Satisfaction (Y) → Customer Loyalty (Z)	0,022	0,064	-0,095	0,148	-0,30	Ha rejected
Online Shopping Experience (X2) → Customer Satisfaction (Y) → Customer Loyalty (Z)	0,300	0,046	-0,095	0,148	-0,639	Ha rejected

The sobel test value for the mediation line between Product Quality (X1) and Customer Satisfaction (Y) and Customer Loyalty (Z) is -0.30, as shown in the previous sobel test results. Similarly, for the Online Shopping Experience (X2) channel between Customer Satisfaction (Y) and Customer Loyalty (Z), the sobel test value is -0.639. Both of these sobel test results fall below the 5% significance criterion for a two-way

test, which is 1.65. That two independent factors on customer loyalty are not significantly mediated by customer satisfaction is suggested by this. As a result, there is no statistically significant mediation effect, therefore enhancing product quality and the online shopping experience does not automatically promote customer loyalty by raising customer satisfaction.

Discussion

The first hypothesis test found no statistically significant relationship between the Product Quality measure and customer satisfaction ($p = 0.731$). Despite consumers' high opinions of the product's quality, this data does not prove that shopping at the Rizki Jaya store on Shopee makes them happier. Contrary to what was found by other researchers, this study Wulansari et al (2022), It asserts that product quality has a favorable and substantial impact on consumer happiness. In addition, the second hypothesis test's findings demonstrate that the variable of online shopping experience significantly impacts customer satisfaction in a favorable way ($p < 0.001$). This suggests that the degree of consumer satisfaction with the Rizki Jaya business is directly proportional to the quality of their Shopee purchasing experience, which includes factors like the speed of service, the convenience of navigation, and the confidence in the store. This is in agreement with the findings of Putri et al. (2023), who found that internet purchasing significantly increases consumer satisfaction.

Next, the third hypothesis demonstrates that Customer Loyalty is significantly affected by Product Quality ($p < 0.001$). Customer loyalty, repeat business, and word-of-mouth advertising for the Rizki Jaya shop are all positively correlated with customers' opinions on the quality of the products sold there. The results of this study are in line with Putri et al. (2016) Customer loyalty is positively and significantly impacted by the quality of these items.

Additionally, with a significance level of 0.048, the findings of the fourth hypothesis test indicate that the Online Shopping Experience significantly impacts Customer Loyalty. Customers feel comfortable and trust Rizki Jaya shops via online platforms to continue transacting when they have a nice purchasing experience, which directly fosters loyalty. Consistent with previous studies, this one was Abigail et al (2024) This proves that the online purchasing experience has a significant and favorable effect on consumer loyalty. On the other hand, a significance value of 0.523 indicated that Customer Satisfaction did not significantly affect Customer Loyalty in the fifth hypothesis. This demonstrates that client satisfaction is no guarantee of future business loyalty. There is a negative correlation between the studies undertaken by and the outcomes of this one. Hanny & Krisyana (2022) establishes a favorable and statistically significant correlation between happy customers and repeat business.

Also showing no significant findings are the sixth and seventh hypotheses that examine Customer Satisfaction's function as a mediating variable. Based on the Sobel Test value of less than 1.65 and significance more than 0.05, it is evident that Customer Satisfaction is not a mediator of the link between Product Quality, Online Shopping Experience, and Customer Loyalty. What this suggests is that customer pleasure is not a mediator between the two independent factors and customer loyalty; rather, the two variables impact customer loyalty directly. The results contradict

trials undertaken by Bali (2022) This suggests that consumer happiness is influenced by product quality, which influences consumer loyalty. Similarly, research by Abigail et al (2024) demonstrates that customer happiness acts as a mediator between the online buying experience and consumer loyalty.

CONCLUSION

Product quality and the whole online shopping experience have a greater impact on consumer loyalty at the Rizki Jaya online store in Cimahi City than does customer happiness, according to the study. Specifically, product quality does not influence consumer happiness, but the online buying experience does. Customers are more loyal to brands when they have a positive experience purchasing online and with high-quality products. Curiously, neither consumer happiness nor the mediating role of online shopping experience had any bearing on the correlation between customer loyalty and product quality. This demonstrates that, when it comes to e-commerce MSMEs like Rizki Jaya, contentment is not the most significant factor in building loyalty; rather, it is the immediate sense of product value and the transactional experience. To have a better grasp of loyalty creation, future studies should look into other moderating or mediating factors like trust, perceived value, or emotional ties. This is particularly true in the ever-expanding online economy, where consumers' tastes and expectations are always evolving, hence longitudinal studies that follow their habits over time are highly recommended.

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