

The Effect of Cat Food Product Quality and Quality of Delivery Service on Customer Loyalty, Mediated by Customer Satisfaction, Among Customers of Sakura Petshop Cimahi in the Greater Bandung Area

Bimo Hendrianto¹, Hariyadi Triwahyu Putra²

^{1,2} Jenderal Achmad Yani University, Jl. Terusan Jenderal Sudirman, Cimahi, West Java, Cimahi City

Email: bimohendrianto_22p227@mn.unjani.ac.id¹, hariyaditriwahyu@mn.unjani.ac.id²

Abstract

Keywords:

Product Quality, Quality of Delivery Service, Customer Satisfaction, Customer Loyalty.

This study was motivated by the decline in the average total sales of Sakura Petshop Cimahi, as indicated by the company's internal data, which suggests a decline in customer loyalty toward Sakura Petshop Cimahi. The purpose of this study is to determine the effect of product quality and quality of delivery service on customer loyalty mediated by customer satisfaction among Sakura Petshop Cimahi customers in the Greater Bandung area. The method used in this study was a survey. The sample consisted of 145 respondents selected using convenience sampling. Data for this study were collected through the distribution of a questionnaire that had been validated and found to be reliable and had passed the classical assumption tests. To test the hypotheses in this study, multiple regression analysis and the Sobel test were used. The analysis was conducted using SPSS version 25. The results indicate that product quality and the quality of delivery service have a positive and significant effect on customer loyalty; customer satisfaction has a positive and significant effect on customer loyalty; and customer satisfaction mediates the effects of product quality and the quality of delivery service on customer loyalty. These findings suggest that Sakura Petshop Cimahi needs to improve the consistency of its cat food quality, enhance the quality of its delivery service through punctuality, product safety, and order accuracy, and optimize the customer experience through responsive service, product education, customer loyalty programs, and the use of digital media. These efforts are expected to increase customer satisfaction, thereby strengthening customer loyalty in a sustainable manner.

INTRODUCTION

The petcare industry in Indonesia has experienced rapid growth in line with the increasing number of people keeping pets, particularly cats. According to a report by Euromonitor International (2025), the petcare market in Indonesia continues to record positive growth in both sales value and volume. Cats are the most commonly kept type of pet because they are considered easier to care for, so demand for pet food and care products is projected to continue rising in the coming years. This growth is also driven by the phenomenon of “pet humanization” a shift in public perception that views pets as part of the family (pets as family). Grand View Research (2025) explains that the “pet humanization” trend increases pet owners’ willingness to spend more to meet their pets’ needs, including high-quality food, health products, and various support services. This trend is driving increasingly fierce competition among petshop operators to provide products and services that meet customer expectations. In line with these developments, the global *pet care* industry continues to show significant growth. Future Market Insights (2025) reports

that the global pet care market is projected to exceed USD 243 billion by 2025, while Indonesia's pet care market is projected to grow from approximately USD 2.8 billion in 2025 to USD 6.8 billion by 2035. This market growth indicates that product quality and service quality are key factors for pet shop business owners to ensure customer satisfaction and maintain customer loyalty amid increasingly fierce competition.

Sakura Petshop Cimahi is a small and medium-sized enterprise (SME) specializing in the sale of pet supplies, particularly cat food, and providing delivery services to customers in the Greater Bandung area.

YEAR	AVERAGE SALES (MILLION IDR)	DECREASE (%) FROM THE PREVIOUS YEAR
2022	57,657,458	-
2023	60,351,685	-
2024	58,940,708	2.33%
2025	56,551,000	4.05%

Source: Internal Data from Sakura Petshop Cimahi (2025)

Although the petcare industry has shown significant growth, according to internal data from Sakura Petshop Cimahi, there was a significant decline in average total sales approximately 2.33% in 2024 and 4.05% in 2025 compared to the previous year. From these findings and data, it can be concluded that this situation indicates a decline in customer loyalty among Sakura Petshop Cimahi's customers in the Greater Bandung area. This decline suggests that some customers have not been consistently making repeat purchases, making it necessary to identify factors that can enhance customer loyalty. This issue is crucial to examine because successfully retaining customers will have a significant impact on the business's long-term sustainability.

LITERATURE REVIEW

According to Kotler & Keller (2016), product quality is the totality of features and characteristics of a product or service related to its ability to satisfy both stated and implied needs. According to Tjiptono (2019), product quality is a product's ability to perform the functions expected by consumers, thereby providing value and satisfaction to customers. In line with these definitions, Indirrahmah & Putra (2024) emphasize that product quality is the overall set of characteristics of a product that consumers evaluate based on its alignment with their needs, expectations, and the quality standards perceived by customers during the consumption process. Garvin (1987) explains that product quality is a condition related to a product's ability to meet customer needs through eight dimensions of quality. Contextually, Garvin (1987) explains that product quality can be measured through eight key metrics, namely: 1) Performance 2) Features (features) 3) Reliability 4) Conformance 5) Durability 6) Serviceability 7) Aesthetics 8) *Perceived quality*.

Nguyen & Lee (2025) specifically define last-mile delivery service quality (quality of delivery service) as the extent to which a company is able to provide timely, safe, and reliable delivery from

the final distribution point to the customer's address, making this stage a key determinant of the customer's online shopping experience. Mentzer et al. (2001) define delivery service quality as

customers perceptions of the extent to which the product distribution and delivery process consistently and reliably meets customer expectations. Chopra & Meindl (2016) define delivery service quality as the ability of the logistics system to deliver products to customers with a high level of reliability, encompassing on-time delivery, accuracy in the quantity and type of products, and the condition of the products upon receipt by the customer. According to Do et al. (2025) in their e-commerce study, delivery service quality encompasses customers' perceptions of logistics service performance based on metrics such as 1) Punctuality 2) Order Condition (order condition), 3) Order Accuracy, 4) Tracking Information Quality, and 5) Interaction with Staff/Couriers (personal contact quality).

According to Kotler (2003), customer satisfaction is a person's feeling of pleasure or disappointment arising from a comparison between the perceived performance or results of a product and their expectations. According to Zeithaml et al. (2013), customer satisfaction is a customer's evaluation of whether a product or service has met their needs as expected. According to Tjiptono (2015), customer satisfaction is a state exhibited by consumers when they realize that their needs and desires align with their expectations. According to Oliver (1980), customer satisfaction is the result of a customer's evaluation after comparing their initial expectations with the actual performance of a product or service. According to Tjiptono (2009), there are several indicators used to measure customer satisfaction, including the following: 1) Expectation fulfillment, 2) Willingness to return, and 3) Willingness to recommend.

According to Oliver (1997), customer loyalty is the firm commitment held by customers to purchase or use a particular product or service again, or to ensure that a specific product or service will be consistently chosen in the future. According to Tjiptono (2015), loyalty is the behavior of making continuous purchases of a specific brand in the future, even in the face of marketing efforts that could potentially cause customers to switch. According to Griffin (2005), there are several indicators for measuring customer loyalty, including the following: 1) Regular repeat purchases (makes regular repeat purchases) 2) Purchases across product and service lines 3) Recommends the brand to others (refers others) 4) Demonstrates immunity to the pull of competitors.

This study is supported by expectation confirmation theory (ECT) as its underpinning theory, as proposed by Oliver (1980). ECT explains that before using a product or service, customers have expectations. After customers have an actual experience (perceived performance), they compare that experience with their expectations, resulting in confirmation. If the performance received meets or exceeds customer expectations, satisfaction is formed, which in turn encourages the intention to repurchase and loyal behavior. Bhattacharjee (2001) subsequently expanded on ECT by explaining that the higher the level of confirmation perceived by customers, the greater the likelihood of customer satisfaction and loyalty. In this study, the product quality of cat food and the quality of delivery service are positioned as forms of perceived performance, while customer satisfaction represents the outcome of confirmation that will drive the formation of customer loyalty.

Confirmation occurs when an individual compares their initial expectations with the perceived performance, which influences their level of satisfaction. This postulate is then applied to the relationships among variables in the study. Jauhari et al. (2025) found that product quality has a positive effect on customer satisfaction. Noviasari et al. (2025) found that product quality has a positive effect on customer satisfaction, which in turn impacts customer loyalty. According to Rahmawati & Dhameria (2025), product quality has a positive and significant effect on

customer satisfaction. Referring to the study by Jauhari et al. (2025), their research indicates that the quality of delivery service has a positive effect on customer satisfaction. Lee & Kim (2023) explain that customer satisfaction with online delivery is achieved when the quality of the delivery received meets or exceeds customer expectations. Thus, logically and theoretically, it can be assumed that the higher the product quality and the quality of delivery service perceived by customers, the higher the level of customer satisfaction. Therefore, product quality and the quality of delivery service are hypothesized to have a positive effect on customer satisfaction at Sakura Petshop Cimahi. This explanation forms the basis for establishing the following hypothesis:

H1: Product quality has a positive effect on customer satisfaction.

H2: The quality of delivery service has a positive effect on customer satisfaction.

ECT explains that satisfaction emerges as an affective response formed after an individual assesses the fit between expectations and perceived performance. Bhattacharjee (2001) states that the fulfillment of expectations results in satisfaction, which drives the intention to repeat the behavior in the future. The higher the level of perceived confirmation, the greater the positive impact on the intention to repeat the behavior. This postulate is operationalized in the empirical stage as the variable customer satisfaction. Gunawan et al. (2024) demonstrate that customer satisfaction has a positive effect on customer loyalty. Hassan et al. (2024) demonstrate that customer satisfaction has a positive effect on customer loyalty in delivery order services. Thus, it can be assumed that the higher the level of customer satisfaction, the higher the level of customer loyalty. Based on the above discussion, the following hypotheses are proposed:

H3: Customer satisfaction has a positive effect on customer loyalty.

ECT emphasizes that satisfaction is the result of an individual's evaluation of the alignment between expectations and perceived performance. When perceived performance meets or exceeds expectations, the resulting level of confirmation increases, thereby positively influencing future behavioral intentions. Based on the combination of postulates deduced during the stage of examining relationships among research variables by Putra & Sulastri (2024), it is shown that product quality has a positive and significant effect on customer satisfaction, and that customer satisfaction mediates the effect of product quality on customer loyalty. Rafmadini et al. (2025) demonstrated that the quality of delivery service has a positive effect on customer satisfaction, and that customer satisfaction significantly mediates the relationship between the quality of delivery service and customer loyalty. Thus, it can be theoretically assumed that customer satisfaction acts as a mediating variable that explains the mechanism by which product quality and the quality of delivery service influence customer loyalty. The above statement serves as the basis for formulating the following hypotheses:

H4: Customer satisfaction mediates the effect of product quality on customer loyalty.

H5: Customer satisfaction mediates the effect of delivery service quality on customer loyalty.

Based on the discussion regarding the effects of product quality and quality of delivery service on customer loyalty, mediated by customer satisfaction, the following conceptual model is proposed:

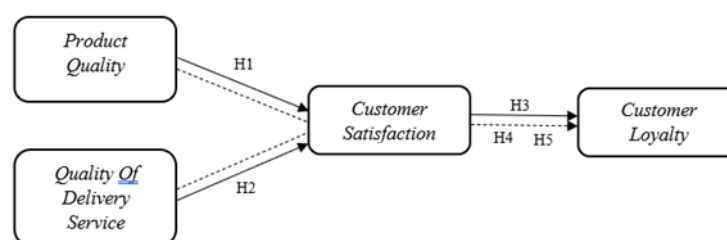


Figure 1. Conceptual Model of the Study

METHOD

The method used in this study was a survey. According to Effendi & Tukiran (2012), a survey is a research method that draws a sample from a population and uses a questionnaire as the primary data collection tool. This study involved a sample drawn from the population of all Sakura Petshop Cimahi customers who own cats and have made at least two transactions in the past six months, with an age range of 18 to 40 years. The study involved 145 respondents selected using convenience sampling, a type of nonprobability sampling. According to Sekaran & Bougie (2017), convenience sampling is a sampling technique that involves collecting information from population members who are willing to provide it; thus, it can be said that the sample is selected based on the ease of obtaining the information. This method falls under nonprobability sampling, meaning not all members of the population have an equal chance of being selected as part of the sample (Sekaran & Bougie, 2017). Furthermore, the data collection technique in this study is classified as a cross-sectional or one-shot study because data were collected only during a single time period (Sekaran & Bougie, 2017). The data used are primary data collected through the distribution of an online questionnaire using Google Forms. The measured variables consist of product quality as the first independent variable, quality of delivery service as the second independent variable, customer satisfaction as the mediating variable, and customer loyalty as the dependent variable. All indicators were measured using a five-point Likert scale, ranging from a score of 1 (strongly disagree) to a score of 5 (strongly agree).

Before hypothesis testing, the research instrument was tested for validity using the Product Moment correlation and for reliability using Cronbach's Alpha coefficient to ensure that all indicators met the criteria for validity and reliability. Next, the data were analyzed using Statistical Package for the Social Sciences (SPSS) version 25. Descriptive analysis was used to describe the characteristics of respondents' answers to each research variable. Hypothesis testing was conducted using multiple linear regression analysis, preceded by tests of classical assumptions, including tests for normality, multicollinearity, and heteroscedasticity. The mediating effect of customer satisfaction in the relationship between product quality and quality of delivery service on customer loyalty was analyzed using the Sobel test to assess the significance of the indirect effect.

RESULTS AND DISCUSSION

Validity Test

Table 1. Validity Test

VARIABLE	STATEMENT ITEM	CALCULATED R	TABLE R	NOTES
Product Quality (X1)	X1.1	0.490	0.1731	Valid
	X1.2	0.516	0.1731	Valid

	X1.3	0.514	0.1731	Valid
	X1.4	0.549	0.1731	Valid
	X1.5	0.510	0.1731	Valid
	X1.6	0.527	0.1731	Valid
	X1.7	0.544	0.1731	Valid
	X1.8	0.516	0.1731	Valid
Quality of Delivery Service (X2)	X2.1	0.629	0.1731	Valid
	X2.2	0.613	0.1731	Valid
	X2.3	0.620	0.1731	Valid
	X2.4	0.660	0.1731	Valid
	X2.5	0.632	0.1731	Valid
Customer Satisfaction (Z)	Y1	0.751	0.1731	Valid
	Y2	0.749	0.1731	Valid
	Y3	0.745	0.1731	Valid
Customer Loyalty (Y)	Y1	0.590	0.1731	Valid
	Y2	0.543	0.1731	Valid
	Y3	0.538	0.1731	Valid
	Y4	0.535	0.1731	Valid
	Y5	0.528	0.1731	Valid
	Y6	0.535	0.1731	Valid
	Y7	0.500	0.1731	Valid
	Y8	0.534	0.1731	Valid

Reliability Test

Table 2. Reliability Test

VARIABLE	CRONBACH'S ALPHA	DESCRIPTION
Product Quality (X1)	0.615	Reliable
Quality of Delivery Service (X2)	0.619	Reliable
Customer Satisfaction (Z)	0.604	Reliable
Customer Loyalty (Y)	0.644	Reliable

Based on the results of the validity and reliability tests, all items in the questionnaire were found to be valid, as the calculated r values for each item in the questionnaire's were greater than the critical r value of 0.1737. This means that the instrument used to collect data in this study can measure what it is intended to measure. Furthermore, based on the reliability test results, it was found that the Cronbach's alpha values for the Product Quality, Quality of Delivery Service, Customer Satisfaction, and Customer Loyalty instruments were above 0.60, meaning these instruments were deemed reliable. It can therefore be concluded that the measurement tools used to collect data in this study are free from error, as explained by (Sekaran & Bougie, 2017).

Descriptive Analysis

Table 3. Results of the Descriptive Analysis of the Product Quality Variable

Statement	Mean Statistic	Total Mean	Category
X1.1	4.31	4.27 (Very Good)	Very Good
X1.2	4.16		Good
X1.3	4.37		Very Good
X1.4	4.24		Very Good
X1.5	4.23		Very Good

X1.6	4.36		Very Good
X1.7	4.26		Very Good
X1.8	4.26		Very Good

Based on the descriptive analysis, the mean scores ranged from 4.16 to 4.37, with an overall average of 4.27, indicating that respondents' attitudes toward product quality were rated as "very good." The highest mean score of 4.37 was for the suitability of cat food from Sakura Petshop Cimahi for cats' digestive conditions, while the lowest mean score of 4.16 was for the nutritional benefits of cat food from Sakura Petshop Cimahi in maintaining customers' cats' skin health.

Table 4. Results of the Descriptive Analysis of the Quality of Delivery Service Variable

Statement	Mean Statistic	Total Mean Statistic	Category
X2.1	4.38	4.25 (Very Good)	Very Good
X2.2	4.10		Good
X2.3	4.32		Very Good
X2.4	4.28		Very Good
X2.5	4.20		Good

Based on the descriptive analysis, the mean scores ranged from 4.10 to 4.38, with an overall average of 4.25, indicating that respondents' attitudes toward the quality of delivery service were rated as very good. The highest mean score of 4.38 relates to the timeliness of order delivery as promised to customers of Sakura Petshop Cimahi, while the lowest mean score of 4.10 relates to the condition of the cat food sold at Sakura Petshop Cimahi, which was in good condition upon receipt by customers during the delivery process.

Table 5. Results of the Descriptive Analysis of the Customer Satisfaction Variable

Statement	Mean	Total Mean	Category
Z1.1	4.16	4.08 (Good)	Good
Z1.2	3.96		Good
Z1.3	4.13		Good

Based on the descriptive analysis, the mean scores ranged from 3.96 to 4.16, with an overall average of 4.08, indicating that the attitude criteria of respondents at regarding customer satisfaction are good. The highest mean score of 4.16 relates to the level of satisfaction customers felt regarding their transaction experience compared to their expectations at Sakura Petshop Cimahi, while the lowest mean score of 3.96 relates to the level of willingness among Sakura Petshop Cimahi customers to make future transactions at the store.

Table 6. Results of the Descriptive Analysis of Customer Loyalty Variables

Statement	Mean	Total Mean	Category
Y1.1	4.32	4.27 (Very Good)	Very Good
Y1.2	4.14		Very Good
Y1.3	4.22		Very Good
Y1.4	4.26		Very Good
Y1.5	4.32		Very Good
Y1.6	4.23		Very Good
Y1.7	4.39		Very Good
Y1.8	4.25		Very Good

Based on the descriptive analysis, the mean scores ranged from 4.14 to 4.39, with an overall average of 4.27, indicating that the respondents' attitudes toward customer loyalty are good. The highest mean score of 4.39 relates to the level of commitment among Sakura Petshop Cimahi customers to continue purchasing cat food sold at Sakura Petshop Cimahi rather than choosing other alternatives, while the lowest *mean score* of 4.14 relates to the level of consistency among Sakura Petshop Cimahi customers in using the delivery service in the future.

Classical Assumption Test

Table 3. Results of the Classical Assumptions Test

No	Type of Classical Assumption Test	Acceptance Criteria for Test Results	Test Results	Interpretation
1	Normality Test for Equation 1	(Sig) > 0.05	(Sig) = 0.098	Data Are Normally Distributed
	Normality Test for Equation 2	(Sig) > 0.05	(Sig) = 0.264	
2	Multicollinearity Test for Equation 1	Tolerance value > 0.1 and VIF < 10	• X1 Tolerance value = 0.844 or VIF = 1.185 • X2 Tolerance value = 0.844 or VIF = 1.185	There is no correlation among the independent variables
	Multicollinearity Test for Equation 2	Tolerance value > 0.1 and VIF < 10	• X1 Tolerance value = 0.714 or VIF = 1.410 • X2 Tolerance value = 0.628 or VIF = 1.592 • Z Tolerance value = 0.539 or VIF = 1.857	There is no correlation among the independent variables
3	Heteroscedasticity test for equation 1	(Sig) > 0.05	• X1 (Sig) = 0.820 • X2 (Sig) = 0.409	There is no equality of variance in the regression model residuals; heteroscedasticity does not occur
	Heteroscedasticity Test for Equation 2	(Sig) > 0.05	• X1 (Sig) = 0.0885 • X2 (Sig) = 0.913 • Z (Sig) = 0.79	There is no equality of variance in the regression model residuals, indicating no heteroscedasticity

Based on the results of the classical assumption tests in Table 3, it is known that in the normality test, the significance value of the first equation (sig.) is $0.098 > 0.05$ and for the second equation (sig.) is $0.264 > 0.05$, which means that the data are normally distributed. Furthermore, the results of the multicollinearity test show that each independent variable has a tolerance value > 0.10 and a VIF < 10 . This indicates that the model is free from multicollinearity there is no correlation among the independent variables. Furthermore, the results of the heteroscedasticity test using the Glejser test show that each variable has a significance value (sig.) > 0.05 . This proves that the regression model is free from heteroscedasticity; that is, there is no independent variable that significantly influences the absolute residual values.

Results of the Hypothesis Test (T-Test) and Sobel Test Multiple Regression Test Equation 1

Table 4. Results of the Multiple Regression Test

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	sig
	B	Std. Error	Beta		
<i>(Constant)</i>	-0.766	1.922		-0.399	0.691
<i>Product Quality</i>	0.174	0.057	0.236	3,031	0.003
<i>Quality of Delivery</i>	0.332	0.067	0.386	4.965	0.000

a. Dependent Variable: Customer Satisfaction

Based on Table 4, the following multiple regression equation can be derived:

$$Z = -0.766 + 0.174X_1 + 0.332X_2$$

Referring to the results of the multiple regression analysis, it is known that a constant value of -0.766 indicates that if all variables are zero, customer satisfaction will be -0.766 units. Product quality has a positive and significant direct effect on customer satisfaction, as evidenced by the coefficient (B) of 0.174, a calculated t-value of 3.031 (greater than the critical t-value of 1.6566), and a p-value of 0.0015 (less than 0.05). Furthermore, the quality of delivery service has a positive and significant direct effect on customer satisfaction, as evidenced by the coefficient (B) of 0.332, a calculated t-value of 4.965 which is greater than the critical t-value of 1.6566 and a significance level of 0.000, which is less than 0.05. Therefore, the management of Sakura Petshop Cimahi should prioritize improving all indicators that make up product quality and quality of delivery service, as this is expected to have a positive impact on customer satisfaction. Every 1-unit increase *in* product quality and quality of delivery service can lead to an increase of 0.174 and 0.332 units, respectively, in customer satisfaction.

Equation 2

Table 5. Multiple Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	sig
	B	Std. Error	Beta		

(Constant)	8.143	2.428		3,354	0.001
Product Quality	0.316	0.075	0.280	4.225	0.000
Quality of Delivery	0.483	0.091	0.367	5.284	0.000
Customer Satisfaction	0.400	0.106	0.262	3.778	0.000

b. Dependent Variable: Customer Loyalty

Based on Table 5, the following multiple regression equation can be derived:

$$Y = 8.143 + 0.316X_1 + 0.483X_2 + 0.400X_3$$

Based on the results of the multiple regression analysis, it is evident that a constant value of 8.143 indicates that if all variables were zero, customer loyalty would still be 8.143 units. Product quality has a positive and significant effect on customer loyalty, as evidenced by the coefficient (B) of 0.316, a calculated t-value of 4.225 (greater than the critical t-value of 1.6566), and a p-value of 0.000 (less than 0.05). Furthermore, the quality of delivery service has a positive and significant effect on customer loyalty, as evidenced by the coefficient (B) of 0.483, a calculated t-value of 5.284 which is greater than the critical t-value of 1.977 and a significance level of 0.000, which is less than 0.05. Furthermore, customer satisfaction has a positive and significant effect on customer loyalty, as evidenced by the coefficient (B) of 0.400, a calculated t-value of 3.778 which is greater than the table t-value of 1.6566 and a significance level of 0.000, which is less than 0.05. Therefore, the management of Sakura Petshop Cimahi should prioritize improving all indicators that make up product quality, quality of delivery service, and customer satisfaction, as these are expected to have a positive impact on customer loyalty. Every 1-unit increase in product quality, quality of delivery service, and customer satisfaction can lead to an increase of 0.316, 0.483, and 0.400 units, respectively, in customer loyalty.

Sobel Test

The Sobel test aims to determine the role of customer satisfaction in mediating the indirect effects of product quality on customer loyalty and the quality of delivery service on customer loyalty. This Sobel test was conducted using the online Sobel test calculator available at quantpsy.org/sobel/sobel.htm.

Table 6. Sobel Test Results

Relationships Among the Hypothesized Variables	a	b	Sa	Sb	Sobel Test Results (calculated t)	Acceptance Criteria Test Sobel	P-Value	Interpretation
product quality → customer satisfaction → customer loyalty	0.174	0.400	0.067	0.106	2.373	t-calculated > t-table = 1.977	0.017	Customer satisfaction successfully mediates the effects of product quality and quality of delivery on customer loyalty
quality of delivery → customer satisfaction → customer loyalty	0.332	0.400	0.067	0.106	2.271		0.002	

Notes:

a = regression coefficient of the independent variable on the intervening variable.

b = regression coefficient of the intervening variable on the dependent variable.

Table 6 presents the results of the test examining the mediating role of customer satisfaction in the relationship between product quality and quality of delivery service and customer loyalty. In the first relationship, the Sobel test for the effect of product quality on customer loyalty through customer satisfaction yielded a calculated t-value of 2.373, which is greater than the critical t-value of 1.977, and a p-value of 0.017, which is less than 0.05. Meanwhile, in the second relationship, the Sobel test for the effect of delivery service quality on customer loyalty through customer satisfaction yielded a calculated t-value of 2.271, which is greater than the critical t-value of 1.977, and a p-value of 0.002, which is less than 0.05. Thus, these overall results indicate that customer satisfaction significantly mediates both the effect of product quality and the effect of delivery service quality on customer loyalty.

Hypothesis Test Results

Table 7. Hypothesis Test Results

Hypothesis	Relationships Among Variables	T-value	Sig	Interpretation of Hypothesis Test Results	
H1	Product Qualityt → Customer Satisfaction	3.031	0.003	H0 was rejected	The alternative hypothesis (Ha) is supported by the empirical data
H2	Quality of Delivery → Customer Satisfaction	4.965	0.000	H0 was rejected	The alternative hypothesis (Ha) is supported by the empirical data
H3	Customer satisfaction → Customer loyalty	3.778	0.000	H0 was rejected	The alternative hypothesis (Ha) is supported by the empirical data
H4	Product quality → Customer satisfaction → Customer loyalty	4.225	0.000	H0 is rejected	The alternative hypothesis (Ha) is supported by the empirical data
H5	Quality of delivery → Customer Satisfaction → Customer loyalty	3.778	0.000	H0 was rejected	The alternative hypothesis (Ha) is supported by the empirical data

Notes:

1. H0 is rejected if t-calculated > t-table or sig ≤ 0.05

2. * = t-table (multiple regression) of 1.977

3. ** = t-table (Sobel test) of 1.977

DISCUSSION

Hypothesis 1: Product quality has a positive effect on customer satisfaction.

Based on the results of the hypothesis test, H1 successfully rejects H0. This proves that product quality has a positive effect on customer satisfaction. These findings are supported by previous research by Septiarini (2022), which showed that product quality has a positive and

significant effect on customer satisfaction. Aulia & Herawati (2023) also found that product quality has a positive and significant effect on customer satisfaction. Furthermore, Jauhari et al. (2025) demonstrated that product quality has a positive effect on customer satisfaction.

Hypothesis 2: The quality of delivery service has a positive effect on customer satisfaction.

The results of the H2 test indicate that H0 has been successfully rejected. This proves that the quality of delivery service has a positive and significant effect on customer satisfaction. These findings are supported by previous research by Bilkis et al. (2025), which showed that the quality of delivery service has a positive effect on customer satisfaction. According to Hanafi & Harahap (2024), the quality of delivery service has a positive and significant effect on customer satisfaction. Additionally, according to Ainassyifa (2024), the quality of delivery service has a positive and significant effect on customer satisfaction.

Hypothesis 3: Customer satisfaction has a positive effect on customer loyalty.

The results of the H3 test successfully rejected H0. This proves that customer satisfaction has a positive and significant effect on customer loyalty. These findings are supported by previous research by Indana (2020), which showed that customer satisfaction has a positive and significant effect on customer loyalty. According to Taufik et al. (2023), customer satisfaction has a positive and significant effect on customer loyalty. According to Parsana & Giantari, customer satisfaction has a positive and significant effect on customer loyalty. Furthermore, according to Hanifah & Nurmansyah (2024), customer satisfaction has a positive and significant effect on customer loyalty.

Hypothesis 4: Customer satisfaction mediates the effect of product quality on customer loyalty.

The results of the H4 test successfully rejected H0. This proves that customer satisfaction plays a mediating role in the relationship between product quality and customer loyalty. These findings are supported by previous research; according to Fauzan & Dhameria (2026) found that customer satisfaction acts as a mediator in the relationship between product quality and customer loyalty. According to Gunawan et al. (2024), customer satisfaction mediates the relationship between product quality and customer loyalty. Furthermore, according to Gemina et al. (2023), customer satisfaction mediates the relationship between product quality and customer loyalty.

Hypothesis 5: Customer satisfaction mediates the effect of delivery service quality on customer loyalty.

The results of the H5 test successfully rejected H0. This proves that customer satisfaction mediates the effect of delivery service quality on customer loyalty. These findings are supported by previous research by Ramadinka (2024), which showed that customer satisfaction acts as a mediating variable in the relationship between logistics delivery service quality and customer loyalty. According to Assyari et al. (2025), customer satisfaction mediates the relationship between the quality of logistics delivery services and customer loyalty. Furthermore, Hernando & Nugroho (2022) found that customer satisfaction mediates the effect of delivery service quality on customer loyalty.

CONCLUSION

This study demonstrates that product quality and the quality of delivery service have a positive and significant effect on customer satisfaction. Furthermore, customer satisfaction also

has a positive and significant effect on customer loyalty and mediates the influence of product quality and quality of delivery service on customer loyalty among customers of Sakura Petshop Cimahi in the Greater Bandung area. These results indicate that the better the perceived quality of cat food and delivery service, the higher the level of satisfaction felt by customers, thereby fostering customer loyalty. The findings of this study support the Expectation Confirmation Theory (ECT) proposed by Oliver (1980) and further developed by Bhattacharjee (2001). In the context of this study, the product quality of cat food and the quality of delivery service represent perceived performance, which is compared against customers' initial expectations. When the performance received meets or exceeds customer expectations (confirmation), customer satisfaction is established, which in turn fosters customer loyalty. Thus, this study reinforces the notion that customer satisfaction serves as a mediating mechanism that explains how product quality and *the* quality of delivery service contribute to the formation of customer loyalty.

This study contributes to the development of literature in the field of marketing management by reinforcing Expectation Confirmation Theory (ECT), which explains that product quality and *the* quality of delivery service that meet or exceed customer expectations will increase customer satisfaction, thereby fostering customer loyalty. In addition to reinforcing the findings of previous studies, this research also offers novelty in terms of its research subjects, namely customers of Sakura Petshop Cimahi who purchase cat food with delivery service in the Greater Bandung area. The limitations of this study lie in its sample, which is restricted to customers of Sakura Petshop Cimahi, meaning the results cannot yet be broadly generalized, as well as the use of a quantitative approach with a closed-ended questionnaire, which is unable to explore customer experiences in depth. Therefore, future research is recommended to expand the scope of the study, employ a qualitative or mixed-methods approach, and develop a research model by incorporating variables such as customer trust, perceived value, brand image, customer experience, or switching costs as mediating or moderating variables to gain a more comprehensive understanding of customer loyalty formation.

Based on the results of this study, it is evident that Sakura Petshop Cimahi needs to prioritize improving product quality by providing cat food with more optimal nutritional content, particularly that which supports skin and coat health. However, the lowest mean from the descriptive analysis indicates that regarding the perceived benefits of the nutritional content in Sakura Petshop Cimahi's cat food for maintaining customers cats skin health, the average score was 4.16. Although this score still falls within the "very good" category, the results suggest that customers' perceptions of the product's nutritional benefits for maintaining cat skin health remain relatively lower compared to other product quality indicators. Therefore, this aspect should be a focus for management as an opportunity to improve customer perceptions of the quality of cat food products. Sakura Petshop also needs to improve the quality of its delivery service by ensuring on-time delivery, accurate order fulfillment, product safety during distribution, and the provision of clear and easily accessible shipping information for customers. However, based on the lowest mean from the descriptive analysis, the condition of cat food sold at Sakura Petshop Cimahi which was received by customers in good condition during the delivery process scored an average of 4.10. Although this score still falls within the "very good" category, the results indicate that the condition of products received by customers during delivery remains an area with room for improvement compared to other indicators of delivery service quality. Therefore, the management of Sakura Petshop Cimahi needs to pay greater attention to the quality of delivery service by ensuring that the condition of the products remains good until they are received by

customers through more optimal packaging and distribution processes. Given that customer satisfaction has been proven to act as a mediating variable in shaping customer loyalty, the lowest mean from the descriptive analysis shows that Sakura Petshop Cimahi customers' willingness to make future purchases at the store scored an average of 3.96. Although this value still falls within the "good" category, these results indicate that customers' willingness to make future transactions still has room for improvement compared to other customer satisfaction indicators. Therefore, the management of Sakura Petshop Cimahi needs to pay greater attention to the customer experience through responsive service, product education, professional complaint handling, as well as the development of loyalty programs and the utilization of digital media. Furthermore, based on the lowest mean from the descriptive analysis, the level of consistency among Sakura Petshop Cimahi customers in using the delivery service in the future scored an average of 4.14. Although this score remains in the "very good" category, the results suggest that customer consistency in utilizing the delivery service still has room for improvement compared to other customer loyalty indicators. Therefore, the management of Sakura Petshop Cimahi needs to focus on efforts to maintain and enhance customer trust in the delivery services provided. These efforts are expected to increase customer satisfaction, encourage customers to make repeat purchases and continue using the delivery service, and strengthen customer loyalty on an ongoing basis thereby enhancing Sakura Petshop Cimahi's competitiveness amid the increasingly competitive petcare industry.

REFERENCE

- Ainassyifa, F. A. (2023). Pengaruh kualitas layanan, perceived value, dan kepercayaan terhadap kepuasan pelanggan pada layanan jasa pengiriman. *Indonesian Journal of Economics, Business, Accounting, and Management (IJEBAAM)*, 1(6). <https://doi.org/10.63901/ijebam.v1i6.40>
- Assyari, R., Firdaus, M. I., Maemunah, S., Purba, O. R., & Veronica. (2025). Pengaruh logistics service quality dan on-time delivery terhadap customer loyalty melalui customer satisfaction (Studi pada PT Magenta Media). *Jurnal Ekonomi Manajemen Sistem Informasi*, 7(2). <https://doi.org/10.38035/jemsi.v7i2.6842>
- Aulia, A. A., & Herawati, S. (2023). The effect of product quality on repurchase intention mediated by customer satisfaction of Zoya Muslim Fashion in Bandung City. *Portofolio: Jurnal Ekonomi, Bisnis, Manajemen, dan Akuntansi*, 20(2), 143–156. <https://doi.org/10.26874/portofolio.v20i2.368>
- Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation–confirmation model. *MIS Quarterly*, 25(3), 351–370. <https://doi.org/10.2307/3250921>
- Bilkis, A., Yusran, H. L., Rupilau, & Hamid. (2025). The influence of delivery service quality on customer satisfaction: A case study of Shopee Express. *Al-Zayn: Jurnal Ilmu Sosial & Hukum*, 4(1). <https://doi.org/10.61104/alz.v4i1.3122>
- Chopra, S., & Meindl, P. (2016). *Supply chain management: Strategy, planning, and operation* (6th ed.). Boston, MA: Pearson.
- Do, H. T., Nguyen, T. T., & colleagues. (2025). Roles of logistics service quality in shaping Generation Z customers' behavioral intentions in e-commerce. *PLOS ONE*, 20(5), e0323962. <https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0323962>
- Euromonitor International. (2025). *Pet food and animal feeds in Indonesia: ISIC 1533*. Euromonitor International. <https://www.euromonitor.com/pet-food-and-animal-feeds-in-indonesia-isic-1533/report> diakses pada 3 Juli 2026.
- Effendi, S., & Tukiran. (2012). *Metode penelitian survei (Edisi revisi)*. Jakarta: LP3ES.
- Fauzan, N. A. B., & Dhameria, V. (2026). The effect of product quality on consumer loyalty mediated by customer satisfaction: Evidence from Persib Bandung Official Store Merchandise. *Jurnal Manajemen*. <https://doi.org/10.32832/jm-uika.v17i2.22335>
- Garvin, D. A. (1987). Competing on the eight dimensions of quality. *Harvard Business Review*, 65(6), 101–109.

- <https://hbr.org/1987/11/competing-on-the-eight-dimensions-of-quality>
- Gemina, D., Iskandar, E. A., & Kartini, T. (2023). Customer satisfaction mediates product quality and promotion to customer loyalty. *JEMBA: Jurnal Ekonomi, Manajemen, Bisnis dan Akuntansi*, 2(5). <https://doi.org/10.53625/jemba.v2i5.6476>
- Grand View Research. (2025). Pet care market size, share & growth report. <https://www.grandviewresearch.com/industry-analysis/pet-care-market> diakses pada 3 Juli 2026
- Griffin, J. (2005). *Customer loyalty: menumbuhkan dan mempertahankan kesetiaan pelanggan*. Jakarta: Erlangga.
- Gunawan, D., Nainggolan, R., & Effendi, L. V. (2024). The effect of product quality and price on customer loyalty through customer satisfaction. *Jurnal Entrepreneur dan Entrepreneurship*, 13(1), 39–52. <https://doi.org/10.37715/jee.v13i1.4379>
- Hanafi, D., & Harahap, R. S. P. (2024). Analysis of the effect of delivery service quality on customer satisfaction of PT. JNE. *Journal of Management Science*, 6(1). <https://doi.org/10.52103/jms.v6i1.2044>
- Hanifah, A. N., & Nurmansyah, A. A. H. (2024). Pengaruh kualitas produk terhadap loyalitas pelanggan yang dimediasi oleh kepuasan pelanggan pada Toko Dunkin' Donuts di Kota Bandung. *COSTING: Journal of Economic, Business and Accounting*, 7(5). <https://doi.org/10.31539/costing.v7i5.1201>
- Hassan, M., Rahman, M., & Islam, T. (2024). Customer satisfaction and loyalty in online delivery services. *International Journal of Business and Management*, 19(2), 88–101. <https://doi.org/10.5539/ijbm.v19n2p88>
- Hernando, H., & Nugroho, J. (2022). Delivery quality and loyalty of GoFood customers: The mediation role of customer satisfaction. *Jurnal Manajemen Maranatha*, 22(1), 17–26. <https://doi.org/10.28932/jmm.v22i1.4886>
- Indana, R. (2020). Effect of customer value and satisfaction on customer loyalty: Evidence on Indonesian Islamic Bank. *EkBis: Jurnal Ekonomi dan Bisnis*, 4(1). <https://doi.org/10.14421/EkBis.2020.4.1.1248>
- Indirrahmah, S., & Triwahyu Putra, H. (2024). Pengaruh Brand Image dan Product Quality terhadap Repurchase Intention melalui Customer Trust pada Produk Teh Botol Sosro di Bandung Raya. *OIKOS: Jurnal Kajian Pendidikan Ekonomi dan Ilmu Ekonomi*, 8(2), Article 15128. <https://journal.unpas.ac.id/index.php/oikos/article/view/15128>
- Jauhari, M., Christian, T. F., & Adryan, E. (2025). Analysis of the influence of product quality, delivery quality, and service quality on customer satisfaction at CV Unggas Karya Mandiri. *JMBI UNSRAT (Jurnal Ilmiah Manajemen Bisnis dan Inovasi Universitas Sam Ratulangi)*, 12(3). <https://doi.org/10.35794/jmbi.v12i3.64430>
- Kotler, P. (2003). *Marketing management: Analysis, planning, implementation, and control* (11th ed.). Upper Saddle River, NJ: Prentice Hall.
- Kotler, P., & Keller, K. L. (2016). *Manajemen pemasaran* (Edisi ke-15). Jakarta: Erlangga.
- Lee, S., & Kim, J. (2023). Understanding customer satisfaction in online delivery services using expectation confirmation theory. *Asia Pacific Management Review*, 28(4), 412–420. <https://doi.org/10.1016/j.apmr.2023.04.002>
- Mentzer, J. T., Flint, D. J., & Hult, G. T. M. (2001). Logistics service quality as a segment-customized process. *Journal of Marketing*, 65(4), 82–104. <https://doi.org/10.1509/jmkg.65.4.82.18390>
- Nguyen, M. H., & Lee, C. (2025). The impact of last-mile delivery logistics service quality on customer satisfaction and loyalty. *International Journal of Business Studies*, 13(2), 77–95. <https://publisher.unimas.my/ojs/index.php/IJBS/article/view/8294>
- Noviasari, D. W., Hidayatullah, S., Sulistyorini, E., Alvianna, S., & Patalo, R. G. (2025). The role of customer satisfaction as a mediator: The relationship between product quality, service quality, and information quality towards loyalty. *Business Management Research*, 4(2), 153–168. <https://doi.org/10.26905/bismar.v4i2.16567>
- Oliver, RL (1980). Model kognitif anteseden dan konsekuensi keputusan kepuasan. *Jurnal Riset Pemasaran*, 17(4), 460–469. <https://doi.org/10.1177/002224378001700405>
- Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York, NY: McGraw-Hill.
- Parsana, D. N. W. D., & Giantari, I. G. A. K. (2020). Peran customer satisfaction memoderasi pengaruh relationship marketing terhadap customer loyalty (Studi pada PT Bank BRI Cabang Gatot Subroto Denpasar). *E-Jurnal Manajemen*, 9(5), 1656–1675. <https://doi.org/10.24843/EJMUNUD.2020.v09.i05.p01>

- Putra, A. Y., & Sulastri, D. (2024). The effect of product quality and service quality on customer loyalty through customer satisfaction. *International Journal of Islamic Economics & Social Sciences*, 6(1), 45–57. <https://e-journal.uac.ac.id/index.php/ijse/article/view/4941>
- Rafmadini, N., Santosa, W., & Satitidjati Dewayana, T. (2025). The influence of delivery time, service quality, product quality and condition on customer loyalty among Gen Z e-commerce customers in Jakarta via customer satisfaction. *Jurnal Manajemen & Keuangan*, 14(3), 1169–1182. <https://doi.org/10.22437/jmk.v14i03.47120>
- Rahmawati, N. N., & Dhameria, V. (2025). The influence of product quality on customer loyalty mediated by customer satisfaction in Scarlett Whitening serum products in Bandung City. *JPEKA: Jurnal Pendidikan Ekonomi, Manajemen dan Keuangan*, 9(2), 163–176. <https://doi.org/10.26740/jpeka.v9n2.p163-176>
- Ramadinka, R. I., & Irjayanti, M. (2024). Pengaruh logistics service quality terhadap customer loyalty dengan customer satisfaction sebagai variabel intervening pada logistics service provider (Studi kasus Pos Indonesia). *COSTING: Journal of Economic, Business and Accounting*, 7(5). <https://doi.org/10.31539/costing.v7i5.11464>
- Sekaran, U., & Bougie, R. (2017). *Metode penelitian untuk bisnis: Pendekatan pengembangan-keahlian* (Edisi 6). Jakarta: Salemba Empat.
- Septiarini, E. (2022). Pengaruh kualitas produk activewear terhadap kepuasan pelanggan dengan kualitas pelayanan elektronik (E-servqual) sebagai variabel mediasi (Studi kasus generasi Z di Kota Cimahi). *Portofolio: Jurnal Ekonomi, Bisnis, Manajemen, dan Akuntansi*, 19(1), 59–76. <https://doi.org/10.26874/portofolio.v19i1.242>
- Taufik, A., Santoso, S., Fahmi, M. I., Restuanto, F., & Yamin, S. (2023). The role of service and product quality on customer loyalty. *Journal of Consumer Sciences*, 7(1), 68–82. <https://doi.org/10.29244/jcs.7.1.68-82>
- Tjiptono, F. (2009). *Pemasaran jasa dan kepuasan pelanggan*. Bayumedia Publishing. <http://repository.unitomo.ac.id/2773/1/PEMASARAN%20DAN%20KEPUASAN%20PELANGGAN.pdf>
- Tjiptono, F. (2015). *Strategi pemasaran* (4th ed.). Yogyakarta: ANDI.
- Tjiptono, F. (2019). *Pemasaran jasa: Prinsip, penerapan, dan penelitian*. Yogyakarta: Andi.
- Wawasan Pasar Masa Depan. (2025). *Pasar perawatan hewan peliharaan Indonesia*. <https://www.futuremarketinsights.com/reports/indonesia-pet-care-market> diakses pada 18 September 2025
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2013). *Services marketing: Integrating customer focus across the firm* (6th ed.). New York: McGraw-Hill Irwin.