



Journal of Economics Education and Entrepreneurship

Vol. 6, No. 3, December 2025, pp. 293-311

<https://ppjp.ulm.ac.id/journals/index.php/jee/issue/view/945>

ISSN: 2746-5438 (Print) | 2745-729X (Online)



The Influence of Brand Image, Switching Barrier, and Perceived Quality on Customer Loyalty of Telkomsel Users in Sidoarjo, Indonesia

^{1*}Farid Raditya Maulana, ²Rizky Eka Febriansah, ³Detak Prapanca

^{1,2,3} Muhammadiyah Sidoarjo University, Indonesia

Article Info

Keywords:

Brand image
Switching barrier
Perceived quality
Customer loyalty

ABSTRACT

This study aims to analyze the effect of brand image, switching barriers, and perceived quality on customer loyalty among Telkomsel users in Sidoarjo, Indonesia. This study employs a quantitative approach involving 100 respondents selected through purposive sampling. Data were collected through questionnaires and analyzed using SPSS 26. Various statistical tests were conducted, including validity, reliability, normality, multicollinearity, heteroscedasticity, multiple linear regression, coefficient of determination (R^2) test, and partial test (t-test). The results indicate that the three independent variables have a significant effect on customer loyalty. Switching barriers play the most crucial role as they prevent customers from changing providers. Perceived quality, particularly in terms of network reliability and service excellence, strengthens customer commitment. Meanwhile, brand image serves as a key factor in shaping customer perceptions but has a relatively lower impact. This study concludes that an integrated strategic approach is necessary to enhance customer loyalty, including reinforcing switching barriers, improving perceived quality, and maintaining a strong brand image. These findings offer insights for telecommunications companies to remain competitive in a dynamic market.

This is an open access article under the [CC-BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/)



*Corresponding Author:

Farid Raditya Maulana

Faculty of Business, Law and Social Sciences, Muhammadiyah University of Sidoarjo, Indonesia

Jl. Raya Lebo No.4, Rame, Pilang, Kec. Wonoayu, Kabupaten Sidoarjo, Jawa Timur 61261, Indonesia

Email: Faridraditya2001@gmail.com

Submitted 22 Apr 2025; Accepted 07 May 2025; Published 31 Dec 2025

How to cite: Maulana, F. R., Febriansah, R. E., & Prapanca, D. (2025). The Influence of Brand Image, Switching Barrier, and Perceived Quality on Customer Loyalty of Telkomsel Users in Sidoarjo, Indonesia. *Journal of Economics Education and Entrepreneurship*, 6(3), 293- 311. <https://doi.org/10.20527/jee.v6i3.14992>

1. INTRODUCTION

The world of information is currently developing very rapidly, both in terms of content and technology used to convey information. The world of information is aware of this and therefore they are working hard to create infrastructure that is capable of transmitting information quickly. With the increasingly rapid pace of globalization that demands an increasingly rapid

exchange of information between regions and countries, the role of telecommunications becomes very important (Simbolon et al., 2023). With such rapid development, the telecommunications industry, especially the cellular telecommunications industry, needs to have a precise strategy so that it can remain superior to other cellular products so that it can always attract new buyers and maintain old buyers to protect profitability. One way to do this is to pay attention to customer loyalty, because one of the most interesting industries to explore in terms of customer loyalty today is the cellular telecommunications industry. This condition makes the use of cellular phones an inseparable need in the daily lives of the population and as a result creates broad opportunities for GSM companies. However, they must know that companies also need to be aware of a different perspective on this opportunity, namely that the stronger the competitiveness between cellular phone providers, the tighter the competition between GSM companies (Lismawati, 2020). This tight competition results in various promotions and services for the Indonesian people. This is a great opportunity for internet service providers to innovate in their products that meet the needs of people in today's world, such as streaming, games, access to social networking services, information services, and the like. The tight competition is supported by the government, that all residents, both children and parents, cannot avoid the presence of cellphones and the internet, which makes telecommunications companies in Indonesia more enthusiastic. Although in another view, buyers will be confused in choosing due to the large number of offers, but in similar conditions telecommunications companies try to create certainty about what consumers are looking for, namely equality between consumer expectations and the reality received by telecommunications companies in Indonesia (Widianti et al., 2020).

In an era of increasingly tight telecommunications industry competition, maintaining customer loyalty is a major challenge for service providers, including Telkomsel. Although Telkomsel is one of the largest telecommunications service providers in Indonesia, the presence of various alternative services with competitive prices and quality threatens the sustainability of its customer loyalty. Therefore, it is important to understand the factors that influence customer loyalty, especially in areas that have unique user dynamics, such as Sidoarjo Regency.

This research is urgent because customer loyalty is not only influenced by service quality, but also by brand image, switching barriers, and perceived quality. By understanding the contribution of each variable to loyalty, companies can formulate more targeted strategies in retaining their customers. The novelty of this research lies in the combination of three main variables - brand image, switching barriers, and perceived quality - in one analysis model to see their influence on customer loyalty simultaneously, especially in the local context of the Sidoarjo area which has not been widely studied before. This research also provides a practical contribution for Telkomsel in mapping marketing strategy priorities based on the factors that have the most impact on user loyalty.

Table 1. Telkomsel user data per year

No.	Year	Number of Users
1.	2019	171,1 Million Users
2.	2020	169,5 Million Users
3.	2021	176 Million Users
4.	2022	156,8 Million Users
5.	2023	151,1 Million Users

Source: Telkomsel.Tbk Company Data

Based on the data table above, the number of Telkomsel customers over the past five years, which shows fluctuations that reflect market dynamics and the company's adaptation to

changes in consumer behavior. In 2019, Telkomsel recorded 171.1 million customers. This figure reflects Telkomsel's position as the largest cellular operator in Indonesia at that time. 2020 showed a slight decrease in the number of customers to 169.5 million. However, data service users increased significantly, reflecting a shift in consumer behavior towards more intensive internet use. In 2021, Telkomsel recorded a growth in the number of customers to 176 million. This shows significant recovery and growth after the decline in the previous year. In 2022, the number of customers fell to 156.8 million. This decline may be due to various factors including changes in business strategy and market dynamics that affect the number of active customers. In 2023, the number of Telkomsel users was recorded at 151.1 million customers. This decline indicates the challenges faced by Telkomsel in maintaining its customer base amidst increasingly fierce competition and technological changes.

Table 2. Number of Indonesian Cellular Operator Users in 2022

No.	Provider	Percent
1.	Telkomsel	41,94%
2.	XL Axiata	20,44%
3.	Indosat Ooredoo	17,78%
4.	Tri	14,08%
5.	Smartfren	5,76%

Source: According to Databoks by Katadata (2022)

Based on the data of mobile users per year, it can be proven that the use of cellular networks in Indonesia is still dominated by the Telkomsel network. Therefore, it can be concluded that the Telkomsel network still dominates the cellular market in Indonesia even though the Telkomsel usage graph per year always experiences ups and downs.

Based on available national data, Telkomsel is recorded as the cellular operator with the highest number of users in Indonesia. This dominance shows that Telkomsel has a strong appeal at the national level, both in terms of network coverage, service quality, and brand image. However, the data does not specifically explain why Telkomsel is the main choice, especially in a local context such as in Sidoarjo Regency. Therefore, this study is important to identify the factors that influence Telkomsel customer loyalty in Sidoarjo, with a focus on the influence of brand image, switching barriers, and perceived quality. The results of the study are expected to provide a more specific understanding of customer preferences in the area.

Customer loyalty is considered important because it is a key factor in the success of companies such as Telkomsel. Loyal buyers are certainly able to increase close ties with labels/brands, assess companies effectively, and prevent competitors' offers. Customer loyalty is a customer character that shows that buyers use a product or service for a long period of time. Customer loyalty is also a factor that influences business success to become an important topic that is amazing and considered meaningful to study. Situations like this are implemented in order to contribute and predict individual behavior that maintains their loyalty to service providers such as Telkomsel. (Kuswati et al., 2021) Consumer loyalty occurs when customers are able to order and are loyal to brands, prices, and other offers from the company. Loyalty is built on the basis of consumer satisfaction by the products and services set. Consumers will definitely order again the products or services that they often use. This reuse can be said to be user loyalty/loyalty in using products that they have used before. Loyalty itself is very important in business relationships between companies and their consumers. The company as a brand image or user's view of the use of a product that affects sales based on the brand of a product, and customers as assets for the company to make a profit. Telkomsel is one of the operator brands that has a good image in the community and especially among customers because its internet network is evenly distributed and very fast, making it suitable for supporting various

lifestyle activities in today's digital era (Nandasari & Ngatikoh, 2023) Telkomsel is a service facilitator in the telecommunications sector and is also a GSM company that leads the cellular industry in Indonesia. Telkomsel is the largest cellular operator in Indonesia with 178 million customers throughout Indonesia, including in remote areas and outermost islands and border areas. (Umar et al., 2022) Telkomsel is engaged in telecommunications, especially cellular operators with a 5G system. Currently, Telkomsel has 236 thousand BTS (Base Transfer Stations), making Telkomsel the largest telecommunications provider in Indonesia. With 236 thousand BTS, Telkomsel will serve more than 175 million customers in Indonesia by the end of March 2022. Halo, which is a postpaid product or bill paid after one month of use. The Simpati card remains the most widely used Telkomsel product by Indonesian users. In order to fulfill the desires of its users, Simpati generally offers cards with special quotas. In line with its brand, the latest simpati card is called Entertainment. This simpati card presents various additional quotas such as movie streaming quotas on Maxstream, Shelffire virtual game items, Freefire game coins, and access to Langit music services. Loop card is one type of simpati card, but loop card is a separate product. Kartu As provides quota options in the form of low-cost packages, and Kartu by U is Telkomsel's latest cellular card. Telkomsel cards are very popular with Indonesian people, both the lower middle class and the upper middle class, because Telkomsel cards have a fast network indicator. Although the cost of Telkomsel cards is quite high, it is very useful for people who live in remote areas such as in the countryside (Sutra, 2021a) This study aims to determine the effect of Brand Image, Switching Barrier, and Perceived Quality on customer loyalty of Telkomsel users in Sidoarjo. This study can also add to the academic literature by providing a deeper understanding of how Brand Image, Switching Barrier, and Perceived Quality affect customer loyalty of Telkomsel users. Thus, it can help develop theories about consumers, brand image, and opinions about customer loyalty. By understanding the role of brand image, Telkomsel can develop more effective marketing strategies to strengthen brand image and attract customer interest. In addition, information about customer perceptions of quality can be used to determine optimal quality standards (Eka Febriansyah, 2024). Based on the results of several studies conducted by researchers on this research phenomenon, Telkomsel users can switch to using other operator networks if Telkomsel Company does not pay attention to customer loyalty which is influenced by customer satisfaction needed by consumers, but Telkomsel Company will definitely always pay attention to customer loyalty as evidenced by Telkomsel user customers who always go up and down every year but are not less competitive with other providers and remain the main choice that leads one of the cellular industries in Indonesia. There are several factors that influence customer loyalty, namely Brand Image, Switching Barrier, and Perceived Quality.

The first factor is brand image, brand image is a view of the value of a product offered by a company to its customers, in relation to the beliefs that have been formed in the minds of customers towards a particular brand and are attached to them. Companies need to develop their brands by giving a positive impression to consumers. A good image influences consumer preferences and decisions and can even encourage customer loyalty (Singaperbangsa Karawang et al., 2023) Therefore, this statement shows that consumers choose products that they know well from their own experience in using the brand even though it is based on information from various sources Based on this explanation, brand image is the assumption of buyers and the public on the label/brand as a reflection of the assessment of the brand in question. (Pandiangan et al., 2021)

The second factor is the switching barrier, a switching barrier is something that functionally prevents someone from switching service providers, even if the customer is not satisfied with the service provider. This has a major impact on customer loyalty, so that customers are not influenced by new products or special offers from other competitors and

remain with the provider they choose. (Martha, 2023) Switching barriers are one of the factors that encourage customers to make repeat purchases. Therefore, companies must pay attention to how they can create good switching barriers so that they can be accepted by customers (Wahyuddin et al., 2019)

Perceived quality is a consumer response that provides a comprehensive picture of the advantages and disadvantages of a product. This understanding is a perception from the perspective of other consumers who have purchased the product, as well as the buyer's own opinion of the quality of the product (Batjo & Sabani, 2022) Perceived quality is very important for companies. because consumers who are satisfied with a product will tell other people about the company's product, so that other people are interested in buying the same product. This is indirectly something that businesspeople need to be aware of, and is a competitive challenge to stay ahead of other businesspeople (Puspitasari et al., 2021)

The influence of customer loyalty is influenced by brand image, switching barriers, and perceived quality, as supported by a number of studies: The results of the study indicate that brand image has a positive effect on customer loyalty. In other words, there is a significant relationship between the brand image variable and customer loyalty. Thus, it can be concluded that brand image has a positive impact on increasing customer loyalty (Efendi, 2019) However, the results of this study differ from previous studies which stated that brand image has a negative and insignificant effect on customer loyalty. This difference occurs because of the lack of marketing activities through word-of-mouth promotion, so that people are less interested in making purchasing decisions (Rizqi et al., 2024) The results of the study stated that switching barriers influence customer loyalty. This means that there is a significant influence between switching barriers and customer loyalty. So, it can be concluded that switching barriers have a positive effect on customer loyalty (Akuntansi et al., 2023) However, in several studies, regression analysis shows that switching barriers do not always have a significant effect on customer loyalty. In one study, the results showed that the coefficient value for switching barriers was not strong enough to support the hypothesis that switching barriers contribute significantly to customer loyalty. This is because customers are not satisfied with the products or services, they receive (Harmila Sari, 2022) The results of the study indicate that perceived quality has a positive impact on customer loyalty. In other words, there is a significant relationship between perceived quality and customer loyalty. Therefore, it can be stated that if perceived quality is high, then customer loyalty will increase (Nur Hidayah & Studi Manajemen Fakultas Ekonomi Dan Bisnis, 2021) Meanwhile, other studies have found that perceived quality has a negative and insignificant effect on customer loyalty. This finding shows that perceived quality can vary between individuals and is not always in line with the level of product suitability felt by each customer (Manajemen dan Bisnis & Theresia Reza, 2024).

Brand image is a perception formed in the minds of customers about a product and becomes a factor that influences their choices. Building a strong brand image is not easy, but brand popularity is one of the key elements in forming a brand image in the eyes of consumers. In the process of making purchasing decisions, consumers tend to consider the quality and reputation of the brand before choosing a product. There are various strategies that can be done to improve the brand image of a product, including superior technological innovation, competitive pricing, and effective and targeted promotions. The stronger the brand image of a product, the greater its influence on consumer purchasing decisions. The goal is to attract as many customers as possible through other people's opinions about the brand image so that customers are interested and make repeat purchase decisions (Ayu Rinawati, 2021) The results of the study stated that brand image has a negative and insignificant effect on customer loyalty. The results stated that there were differences in variables that significantly influenced customer loyalty (Wijayani et al., 2020)

However, the results of other studies stated that brand image has a positive and significant effect on customer loyalty. Brand Image is measured by the level of measurement (Sudiparwati et al., 2024) through indicators: a. Purchase interest, which shows how much influence the consumer interest factor has on a product on purchasing decisions. b. Reputation, is the view of a product brand built from a positive track record. Products with brands that consumers like tend to sell more easily, while products that are considered to have high quality will get a good reputation. c. Attraction, is the emotional bond between a brand and its consumers.

Switching Barrier is an obstacle experienced by consumers when switching from a previous product to a current product by referring to the level of complexity in switching to another service facilitator if consumers do not feel satisfied with the service they receive. Barriers to switching can be social factors, rituals/habits, and functional factors experienced by consumers when switching to a new service provider. The higher the barrier to switching, the greater the likelihood that buyers will continue to use their old service provider (Sopiyan, 2021) Switching barriers have a negative and insignificant effect on customer loyalty because they weaken the influence of customer relationships on customer loyalty. The use of indicators in switching barriers is considered less capable of encouraging interaction between marketing relationships and customer loyalty (Sutomo & Rofiuddin, 2022) However, the results of other studies state that switching barriers have a positive and significant effect on customer loyalty. Switching barriers are measured by the level of measurement through indicators, namely a. Economic value, namely the benefits obtained from the product. b. Complaining behavior, is a form of customer expression of feelings that forces them to stay even though they are not satisfied with the product. c. Anxiety, is behavior shown to customers due to comparisons with other products that arise from the impact of increasingly tight competition.

Perceived quality is the difference between personal perception and the perception of each consumer, according to the desires and experiences of each individual. Therefore, companies need to be smart in communicating information and branding their products in order to meet customer desires and expectations. So that it can strengthen the existence of a brand and increase differentiation, so that it can become one of the competitive advantages of a company. High perceived quality felt by customers causes customers to make repeat purchases and trust certain brands. If customers assess that the products or services they use are of good quality, they will feel satisfied, and this satisfaction can be one indicator of perceived quality (Chandrawati & Vidyanata, 2022) However, perceived quality has a negative and insignificant effect on customer loyalty, especially with trust as the indicator variable. This is since the quality of service and the value provided are not always a guarantee in building trust but also requires secure data protection for customers (Anandya, 2022) However, the results of other studies state that Perceived Quality has a positive and significant effect on customer loyalty. Perceived Quality is measured by the level of measurement (Sulyantri, 2021) through indicators, namely a. Word of mouth, namely the value of the product given to customers through word of mouth so that the public believes that the product is indeed good and valuable. b. Loyalty, is a form of customer satisfaction with requests according to customer needs which is meant by repurchase. c. Emotional closeness, is the goal obtained by customers by feeling comfortable with the product because of the well-known good brand image.

Customer loyalty is the dedication shown by consumers to a brand or product, where they continue to choose and use the product or service in the long term, despite various external factors or competitor marketing strategies that have the potential to change their decisions. Customer loyalty is also an incentive for repeat purchasing behavior and building customer loyalty to a company's products or services requires a long period of time through a repeat purchasing process. Customer loyalty is achieved through price competition, massive

promotions, and continuous innovation according to the demands of the times (Manajemen et al., 2020) Based on the Customer Loyalty Indicator used as the Measurement Level (Shella et al., 2024), namely a. repeat purchases, namely the emergence of a decision to make a purchase again on the product brand, b. recommendations, are when the product brand is being discussed or is being considered from other products as a reference in making purchasing decisions, and c. positive comments, are criticisms/reviews from customers either directly or from social media that say that the product brand has a good image, as evidenced by the satisfaction and repeat purchases from customers.

2. METHOD

This study uses a quantitative method with a correlational quantitative approach. This approach involves statistical analysis to identify patterns or trends between two or more variables. The main objective of correlational quantitative research is to understand the relationship between the variables studied (Mohajan, 2020). By considering the characteristics of the selected respondents, namely prepaid and postpaid mobile phone card users domiciled in Sidoarjo City with the criteria of having used the card for more than 6 months. In this study, there are three independent variables, namely brand image variables (X1), switching barriers (X2), perceived quality (X3) and one dependent variable, namely customer loyalty (Y). The population in this study consisted of Telkomsel mobile phone card customers in Sidoarjo City. Because the population is very large and the exact number is unknown, this study uses a non-probability sampling method. The sampling technique applied is purposive sampling, namely the selection of samples based on certain criteria or considerations that are in accordance with the research objectives (Klar & Leeper, 2019) (Andaniy & Bharata, 2021) Primary data collection for this study was conducted by filling out a questionnaire via Google form which was distributed to Telkomsel users in Sidoarjo. Questionnaires are one of the efficient ways to collect data, as long as the researcher understands the variables being measured and knows the information needed from the respondents (Achsan & Prapanca, 2023) Through the data obtained, data processing was then carried out using SPSS 26 to obtain results and conclusions to answer the objectives of this study (Khotimah et al., 2024) Since the population size is unknown, the Lemeshow formula is used to determine the required sample size, which is as follows:

The number of samples in this study was determined using a sample size formula for proportion estimation, which is appropriate when the total population is unknown or large. The formula used is $n = \frac{z^2 - a/2P(1-P)}{d^2}$ where n represents the minimum number of samples required, Z is the z-score at a 95% confidence level (1.96), P is the estimated proportion of the population (assumed to be 0.5 to obtain the maximum sample size), and d is the margin of error (set at 10% or 0.1). By substituting these values into the formula, the calculation becomes

$$n = \frac{1,96 \times 0,5 (1 - 0,5)}{0,1^2} \quad n = \frac{3,8416 \times 0,25}{0,01}$$

Therefore, the minimum sample size required for this study is 96 respondents.

Based on the calculations, it was determined that the minimum number of samples needed for this study was 96 respondents. However, the researcher decided to take a sample of 100 respondents as a precaution in case there was a data error in the gform. Thus, the total sample was 100 respondents (Maulana et al., 2023).

In this study, the data analyzed by a number of methods, (Darma Sari et al., 2019) namely, as follows:

2.1 Validity Test

Validity test is a method to assess the accuracy of an instrument in measuring research variables. Testing is done by correlating each item with the total score using Pearson bivariate. In SPSS, validity is determined based on the Corrected Item-Total Correlation value compared to the r-table at a significance of 0.05. If the correlation value exceeds the r-table, the item is considered valid (Marianti et al., 2023).

2.2 Normality Test

The normality test is used to determine whether the residuals in the regression model are normally distributed. The test is carried out using graphical analysis methods and statistical tests. If the statistical test results show a significance value of more than 0.05, then the residuals are considered normally distributed (Alwy Yusuf et al., 2024).

2.3 Reliability Test

The reliability test is a method for measuring the extent to which a research instrument is reliable and produces consistent data. An item is considered reliable if it has a value of ≥ 0.60 , which indicates that the item has good internal consistency (Ulfah et al., 2024).

2.4 Multicollinearity Test

The multicollinearity test aims to detect strong relationships between independent variables in regression. The model is free from multicollinearity if the tolerance value is > 0.10 or $VIF < 10$ (Fikri et al., 2023).

2.5 Heteroscedasticity Test

The heteroscedasticity test tests whether the residual variance in the regression remains constant. One method is the graph plot test with ZPRED and SRESID. If the points are randomly distributed without a clear pattern around zero on the Y axis, then there is no heteroscedasticity (Mobonggi et al., 2022).

2.6 Multiple Linear Regression Analysis

The quantitative analysis approach to answer the three problems is by applying a multiple linear regression model. To simplify the data processing and analysis process, this time using statistical software, namely SPSS, which allows calculations to be more accurate and efficient. The use of this program helps in interpreting the results systematically and ensuring the validity and reliability of the data obtained (Matematika et al., 2019).

2.7 Determination Coefficient (R^2)

The determination coefficient (R^2) shows how well the regression model explains the dependent variable. Its value ranges from 0 to 1; the higher the R^2 , the greater the influence of the independent variable in explaining the variation of the dependent variable (Ibrahim et al., 2023).

2.8 Partial Test (t)

Partial hypothesis testing aims to determine the effect of each independent variable (X) on the dependent variable (Y) individually. In this study, data analysis was carried out with the help

of SPSS statistical software, which allows data processing to be faster, more accurate, and more systematic in interpreting the relationship between variables (Balqis et al., 2023).

3. RESULTS AND DISCUSSION

In this study, 100 respondents were involved, consisting of 46% male and 54% female. Most respondents (70%) were in the age range of 17 to 25 years, while 16% were 26 to 30 years old, 7% were 31 to 40 years old, and the rest (7%) were over 40 years old. All respondents came from Sidoarjo, with none living outside the city. In addition, 100% of respondents used Telkomsel services.

Table 3. Respondent's Characteristics

Respondent's Characteristics	Number	Percentage
Gender		
Male	46	46%
Female	54	54%
Age		
17-25 years	70	70%
26-30 years	16	16%
31-40 years	7	7%
>40 years	7	7%
DOMICILE		
Sidoarjo	100	100%
Outside Sidoarjo	0	0%
Using Descriptive Respondent Variables		
Yes	100	100%
No	0	0%

3.1 Results

3.1.1 Multiple Linear Regression Test

In this equation, the meaning and significance of the regression coefficient can be explained as follows: a. Constant (α) A positive constant value of 1.316 indicates that without the influence of independent variables such as Customer Loyalty, Switching Barrier, and Perceived Quality, the value is zero (0), so the value of the dependent variable Customer Loyalty is 1.316 b. Regression coefficient value (b1) The regression coefficient value (b1) of the Brand Image variable is 0.170, indicating that the regression coefficient has a positive direction and both variables (Brand Image and customer loyalty) have a positive relationship. It can be concluded that if the customer satisfaction variable increases by one unit, the customer retention variable also increases by 0.170. c. Regression coefficient value (b2) The regression coefficient value (b2) of the switching barrier variable is 0.585, indicating that the regression coefficient has a positive direction and both variables (switching barrier and customer loyalty) have a positive relationship. It can be concluded that if the switching barrier variable increases by one unit, the customer loyalty variable also increases by 0.585. d. Regression coefficient value (b3) The regression coefficient value (b3) of the perceived quality variable is 0.194, which indicates that the regression coefficient has a positive direction and both variables (perceived quality and customer loyalty) have a positive relationship. It can be concluded that if the perceived quality variable increases by one unit, the customer loyalty variable also increases by 0.194 (see Table 4).

Table 4. Multiple Linear Regression Test Results

Model	<i>Unstandardized Coefficients</i>			<i>Standardized Coefficients</i>		
	<i>B</i>	<i>Std. Error</i>		<i>Beta</i>	<i>t</i>	<i>Sig.</i>
1	(Constant)	1.316	1.289	1.021	.310	
	Brand Image	.170	.121	.158	2.401	.164
	Switching Barrier	.585	.084	.596	6.942	.000
	Perceived Quality	.194	.125	.190	2.551	.124

a. Dependent Variable: Customer Loyalty

SPSS Source, Processed 2024

3.1.2 Validity Test

Table 5. Validity Test Result

Variable	Indicator	R Calculate	R Table	Description
Brand Image (X1)	X1.1	0,674	0,195	Valid
	X1.2	0,577	0,195	Valid
	X1.3	0,616	0,195	Valid
	X1.4	0,475	0,195	Valid
	X1.5	0,664	0,195	Valid
	X1.6	0,650	0,195	Valid
Switching Barrier (X2)	X2.1	0,650	0,195	Valid
	X2.2	0,706	0,195	Valid
	X2.3	0,768	0,195	Valid
	X2.4	0,706	0,195	Valid
	X2.5	0,768	0,195	Valid
	X2.6	0,665	0,195	Valid
Perceived Quality (X3)	X3.1	0,604	0,195	Valid
	X3.2	0,574	0,195	Valid
	X3.3	0,683	0,195	Valid
	X3.4	0,679	0,195	Valid
	X3.5	0,673	0,195	Valid
	X3.6	0,663	0,195	Valid
Customer Loyalty (Y)	Y.1	0,642	0,195	Valid
	Y.2	0,695	0,195	Valid
	Y.3	0,706	0,195	Valid
	Y.4	0,644	0,195	Valid
	Y.5	0,785	0,195	Valid
	Y.6	0,542	0,195	Valid

SPSS Source, Processed 2024

Table 5 the results of the study show that the correlation value of all statement items in the questionnaire for variables X and Y is greater than the calculated r which exceeds the t table by (> 0.195). Therefore, it is stated that all statements in the questionnaire that measure variables X and Y are declared valid and can be used in this study.

3.1.3 Reliability Test

Table 6 show that the results of the study show that all variables (X) and variables (Y) have a Cronbach Alpha value greater than 0.60, which means that the questionnaire instrument in this study is proven to be reliable.

Table 6. Reliability Test Result

Variable	Cronbach's alpha	R Critical	Description
Brand Image (X1)	0.951	0.60	Reliable
Switching Barrier (X2)	0.950	0.60	Reliable
Perceived Quality (X3)	0.944	0.60	Reliable
Customer Loyalty (Y)	0.952	0.60	Reliable

SPSS Source, Processed 2024

3.1.4 Normality Test

Table 7 shows that the results of the normality test, the requirement for a normal distribution is a significance value greater than 0.05. The test results show an Asymp.sig value of 0.080 ($0.080 > 0.05$), which indicates that the data follows a normal distribution.

Table 7. Normality Test Result

		Unstandardized Residual
N		100
Normal Parameters	Mean	.0000000
	Std. Deviation	2.08284724
Most Extreme Differences	Absolute	.128
	Positive	.096
	Negative	.128
Kolmogorov-Smirnov Z		1.277
Asymp. Sig. (2-tailed)		.080

SPSS Source, Processed 2024

3.1.5 Multicollinearity Test

Based on the results of the multicollinearity test, it can be concluded that the tolerance value is > 0.01 and $VIF < 10.00$ so that it can be concluded that the regression does not show symptoms of multicollinearity. X1 tolerance $0.145 > 0.01$, VIF $6.897 < 10.00$, X2 tolerance $0.250 > 0.01$, VIF $4.002 < 10.00$, X3 tolerance $0.122 > 0.01$, VIF $8.188 < 10.00$, so that between the independent variables (Brand Image, Switching Barrier, Perceived Quality) there is no multicollinearity.

Table 8. Multicollinearity Test Result

		Collinearity Statistics	
Model		Tolerance	VIF
1	Brand Image	.145	6.897
	Switching Barrier	.250	4.002
	Perceived Quality	.122	8.188

SPSS Source, Processed 2024

3.1.6 Heteroscedasticity Test

Table 9 explain that the results of the heteroscedasticity test, there are no symptoms of heteroscedasticity if the significance value is greater than 0.05. The test results show that X1 has a significance of 0.359 ($0.359 > 0.05$), X2 is 0.141 ($0.141 > 0.05$), and X3 is 0.656 ($0.656 > 0.05$). Therefore, it is stated that there is no heteroscedasticity problem in the independent variables.

Table 9. Heteroscedasticity Test Result

Model		Unstandardized Coefficients	Standardized Coefficients		<i>t</i>	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.318	.936		4.616	.000
	Brand Image	-.081	.088	-.229	-.922	.359
	Switching Barrier	-.091	.061	-.281	-1.485	.141
	Perceived Quality	.041	.091	.121	.447	.656

a. Dependent Variable: ABS RES

SPSS Source, Processed 2024

3.1.7 Determination Test

The test results above show that the R2 value is 0.823 or 82.3%. It can be concluded that the variables Brand Image, Switching Barrier, and Perceived Quality can explain about 82.3% of the Customer Retention variable. The remaining 17.7% is explained by other variables not included in this study.

Table 10. R2 Determination Test Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.907 ^a	.823	.818	1.157

a. Predictors: (Constant), Perceived Quality, Switching Barrier, Brand Image

SPSS source, data processed 2024

3.1.8 T Test

Using the assumption of a confidence level of 5% or 0.5 with a degree of freedom of $K = 3$ and $df = n - k - 1$ ($100 - 3 - 1 = 96$) so that the *t* table is 1.985, it can be described as follows: a. Testing the influence of Brand Image on Customer Loyalty The Brand Image variable has a *t*-count value of $2.401 > t\text{-table } 1.985$ and a significant value of $0.164 < 0.05$. It can be concluded that brand Image has a significant effect on customer loyalty. b. Testing the influence of Switching Barrier on Customer Loyalty The switching barrier variable has a *t*-count value of $6.942 > t\text{-table } 1.985$ and a significant value of $0.000 < 0.05$. It can be concluded that switching barriers have a significant effect on customer loyalty. c. Testing the influence of Perceived Quality on Customer Loyalty The perceived quality variable has a *t*-count value of $2.551 > t\text{-table } 1.985$ and a significant value of $0.124 < 0.05$. It can be concluded that perceived quality has a significant effect on customer loyalty.

Table 11. T Test Result

Model		Unstandardized Coefficients	Standardized Coefficients		<i>t</i>	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.316	1.289		1.021	.310
	Brand Image	.170	.121	.158	2.401	.164
	Switching Barrier	.585	.084	.596	6.942	.000
	Perceived Quality	.194	.125	.190	2.551	.124

SPSS source, data processed 2024

3.2 Discussion (12pt)

This study aimed to examine the influence of brand image, switching barriers, and perceived quality on customer loyalty among Telkomsel users in Sidoarjo. The results revealed that all three variables have a significant impact on customer loyalty. These findings reinforce the notion that psychological and perceptual factors play a vital role in retaining customers in the telecommunications industry.

Firstly, the results showed that brand image has a positive influence on customer loyalty. This finding is consistent with the study by Firdaus Fauzi & Rahayu (2023) which found that a strong brand image enhances customer satisfaction and strengthens loyalty. In the context of Telkomsel, the company's long-standing presence in Indonesia and its reputation for wide network coverage contribute to customer retention. This is also supported by brand equity theory, which suggests that a positive brand image influences purchasing decisions and customer retention. When a brand is perceived positively, customers tend to form emotional bonds and trust in the product or service.

Secondly, the switching barrier variable was found to significantly affect customer loyalty. Customers facing difficulties in switching such as the hassle of changing providers, dependence on additional services, or fear of losing accumulated benefits—are more likely to remain loyal. This aligns with the findings of (G R Laserto & C Wangke, 2023) who argue that higher switching barriers lead to greater customer retention, even when alternative services are available. In practice, Telkomsel's loyalty programs, such as Telkomsel Points, create both psychological and functional switching costs that discourage defection.

In addition, perceived quality also showed a significant influence on customer loyalty. Customers who perceive consistent service quality—such as fast internet speed, clear voice calls, and responsive customer service—tend to be more satisfied and loyal. This is supported by the study of Prasetyo & Nurani (2023) which found that perceived digital service quality positively influences e-customer loyalty in users of the MyTelkomsel app. These findings support the service quality theory, which emphasizes that perceived quality shapes expectations and satisfaction, ultimately driving loyalty.

A deeper interpretation of these results indicates that customer loyalty is not driven by a single factor but rather by a combination of positive brand perception, switching deterrents, and perceived service quality. In the case of Telkomsel, a strong national brand, integrated digital services, and loyalty incentives serve as core strategies for retaining customers.

However, this study has several limitations. Firstly, the study was conducted only in the Sidoarjo region, which may limit the generalizability of the findings to other regions. Secondly, it did not include mediating variables such as customer satisfaction or moderating factors such as demographics, which could further enrich the understanding of the relationships between variables. Future research is recommended to adopt more complex multivariate approaches and include broader geographic coverage to obtain more representative results.

In terms of practical implications, the findings offer valuable insights for Telkomsel and other telecom providers. It is essential to strengthen brand image through consistent communication strategies, continuously improve service quality based on customer perceptions, and maintain effective loyalty programs that create meaningful switching barriers. These strategies can help companies enhance customer retention and build long-term competitive advantage.

In conclusion, the discussion confirms that brand image, switching barriers, and perceived quality significantly influence customer loyalty among Telkomsel users in Sidoarjo. These findings contribute to the field of service marketing by offering a deeper understanding of loyalty dynamics in the telecom industry. The study also provides practical guidance for

marketers and policymakers to design more effective retention strategies in an increasingly competitive digital era.

The results of this study indicate that Brand Image significantly influences Customer Loyalty among Telkomsel users in Sidoarjo. This finding is consistent with previous studies that affirm the role of a strong brand image in enhancing customer loyalty. A positive brand image not only shapes favorable perceptions but also builds trust, satisfaction, and emotional connections, encouraging customers to remain loyal to a brand.

Research Amanta & Ahmadi (2024) confirmed that brand image plays a crucial role in fostering customer loyalty toward Telkomsel on a national scale. Similarly, Adelia et al. (2023) found that a strong brand image positively affects both customer satisfaction and loyalty in the telecommunications sector. Supporting this, Salsabilla et al. (2023) concluded that brand image and brand trust significantly affect Telkomsel customer loyalty, particularly among university students.

Furthermore, (Kurnia Illahi et al., 2022) emphasized that brand image has a notable influence on brand loyalty among Telkomsel users in Surabaya. (Sutra, 2021) added that brand image, together with pricing and product quality, contributes to consumer loyalty among Telkomsel users in Bengkulu. These findings support earlier research by Darma Sari et al. (2019) and Fitri Amran et al. (2023) which demonstrated that brand image significantly affects customer loyalty, especially among users of Telkomsel's internet data packages. Overall, the accumulated evidence underscores that a strong brand image is essential for retaining loyal customers, particularly in the competitive telecommunications industry. The findings of this study indicate that Switching Barriers significantly influence Customer Loyalty among Telkomsel users in Sidoarjo. Switching Barriers refer to the obstacles or difficulties customers face when attempting to switch to another service provider. These barriers can include economic costs, time investment, perceived risks, and the uncertainty associated with new service providers. When such barriers are high, customers are more likely to remain with their current provider, in this case, Telkomsel. This conclusion aligns with previous research. For instance, Putu Elda Nopritayani et al. (2023) found that switching barriers have a positive and significant effect on customer loyalty at GraPari Mitra Singaraja (PT. Telkomsel). Similarly, Lismawati & Arrozi (2020) reported that switching barriers significantly affect customer loyalty among Telkomsel Simpati users. (Umar et al., 2022) found that switching barriers contribute to customer loyalty among Telkomsel users at Universitas Negeri Gorontalo. Further supporting this, Febi & Juliani (2023) observed a positive relationship between switching barriers and customer loyalty in a salon business context. (Sopiyan, 2021) concluded that switching barriers have a significant effect on customer loyalty at PT. Telkomsel Manado. Additionally, a study by Samnaikubun et al. (2020) demonstrated that switching barriers positively influence customer loyalty among seafood customers in Sidoarjo. Collectively, these studies underscore the importance of switching barriers in fostering customer loyalty. By understanding and strategically managing these barriers, service providers like Telkomsel can enhance customer retention and loyalty.

This study indicates that Brand Image significantly influences Customer Loyalty among Telkomsel users in Sidoarjo. A strong brand image enhances customer trust, satisfaction, and emotional attachment, leading to increased loyalty. Customers who perceive Telkomsel positively are more likely to remain loyal, even in the face of competitive offers. These findings align with previous research. For instance, Effendi et al. (2024) found that both product quality and brand image positively affect customer loyalty to Telkomsel. Similarly, (Wahyu Hartono & Sulistyowati, 2021) observed that brand image significantly influences purchasing decisions among Telkomsel users in Surakarta. Moreover, Lorenza (2022) demonstrated that brand image positively impacts brand loyalty, with customer satisfaction mediating this relationship,

Particularly among Telkomsel Halo users in Padang, Krissianty, (2022) found that brand trust and customer relationship management significantly influence customer loyalty among Telkomsel users. Similarly, Marlius & Anwar (2023) reported that brand image, brand trust, and company reputation all have a positive and significant effect on customer loyalty in the telecommunications industry. Furthermore, Sabirin STIS Al-Hilal Sigli et al. (2022) revealed that both brand trust and customer satisfaction positively impact customer loyalty among Telkomsel users, specifically students at STIS Al-Hilal Sigli. Collectively, these studies underscore the importance of brand image, brand trust, and customer satisfaction in fostering brand loyalty. By building a strong and credible brand presence, service providers like Telkomsel can reinforce customer retention and long-term loyalty. Collectively, these studies underscore the critical role of brand image in fostering customer loyalty. For Telkomsel, maintaining a positive brand image through consistent service quality and effective communication strategies is essential for sustaining customer loyalty.

4 CONCLUSION

Telkomsel's Brand Image has a significant influence on customer loyalty, especially because customers have high confidence in the quality of services offered. The highest assessment in the Brand Image indicator is "purchase interest," which indicates that customers are interested in buying Telkomsel products because of their positive brand image. This shows the importance of reputation and trust built from customer experience. Effective switching barriers keep customers loyal and have barriers to switching implemented by Telkomsel, such as the economic value of services and customer convenience, proven to be significant in maintaining customer loyalty. Respondents indicated that factors such as cost that is comparable to quality, security, and ease of service make them reluctant to switch to other providers, even though there are choices from competitors. Telkomsel's high perception of service quality, especially in terms of word of mouth (WOM) and customer satisfaction, play an important role in creating loyalty.

This indicator shows that positive customer experiences encourage them to recommend Telkomsel services to others, strengthening the company's position in the market. In the end, switching barriers have a more significant effect on customer loyalty because this factor provides more tangible functional barriers, such as economic value, convenience, and security, which are directly felt by customers in maintaining their loyalty. These barriers also include switching risks, such as service disruptions or uncertainty about the quality of new operators, which discourage customers from switching. In addition, switching barriers have a more direct correlation with customers' decisions to stay than emotional factors such as brand image or perceived quality, making them a key element in Telkomsel's loyalty strategy. Based on the results of this study, the researcher suggests that further research add the customer satisfaction variable as a mediating or moderating variable in analyzing customer loyalty of Telkomsel users in Sidoarjo. This is based on the assumption that customer satisfaction can strengthen the relationship between brand image, switching barriers, and perceived quality on customer loyalty. By including the customer satisfaction variable, it is expected to provide a more comprehensive understanding of the factors that influence customer loyalty. In addition, further research can also explore the dimensions of customer satisfaction in more detail to gain deeper insight into customer perceptions and expectations of Telkomsel services.

REFERENCES

- Achsan, M. N., & Prapanca, D. (2023). The Influence Of Price, Product Quality And Promotion On Purchase Decisions On The Shopee Marketplace (Case Study On Students Of Muhammadiyah

- University Of Sidoarjo). *Journal Of Islamic And Muhammadiyah Studies*, 4. <https://doi.org/10.21070/jims.v4i0.1582>
- Adelia, S., Miranti Pradipta Utami, Sarwo Eddy Wibowo, Ratnawita, & Sudianto. (2023). The Role Of Customer Satisfaction And Brand Image On Customer Loyalty Of Cellular Telecommunication Operator Company. *JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi)*, 9(2), 405–410. <https://doi.org/10.35870/jemsi.v9i2.1059>
- Akuntansi, J., Syariah, P., Persepsi Harga, P., Berpindah, H., Konsumen Terhadap Loyalitas Konsumen, R., Minum Dalam Kemasan Le Minerale Trihudiyatmanto, A. M., Konsumen, R., Ahadun Rojab, A., & Purwanto, H. (2023). Jamasy: Terhadap Loyalitas Konsumen Air Minum Dalam Kemasan (AMDK) Le Minerale (Study Pada Masyarakat Kabupaten Wonosobo). *Jurnal Akuntansi, Manajemen & Perbankan Syariah*, 3(6), 2809–7580. <https://disdagkopukm.wonosobokab.go.id/>
- Alwy Yusuf, M., Abraham, A., Rukmana, H., Negeri Makassar, U., P Pettarani, J. A., Rappocini, K., Makassar, K., & Selatan, S. (2024). Analisis Regresi Linier Sederhana Dan Berganda Beserta Penerapannya. *Journal On Education*, 06(02).
- Amanta, A. Putri, & Ahmadi, M. A. (2024). *Pengaruh Brand Awareness Dan Brand Image Terhadap Loyalitas Pelanggan Telkomsel*.
- Anandya, D. (N.D.). Pengaruh Perceived Quality Dan Value For Money Terhadap Loyalty Dalam Penggunaan Aplikasi Canva Pro. *Pengaruh Perceived Quality Dan Value For Money Terhadap Loyalty Dalam Penggunaan Aplikasi Canva Pro*.
- Andaniy, A., & Bharata, W. (N.D.). *Pengukuran Customer Retention Pengguna Telkomsel Samarinda: Adopsi Relationship Quality Theory*. 18(2), 280–294.
- Ayu Rinawati, G. (2021). Adminemas,+Jurnal+9+M+Hal+98-106.Docx (11). *Pengaruh Celebrity Endorser Dan Brand Image Terhadap Keputusan Pembelian Freshcare Di Kota Denpasar*, 2.
- Balqis, A., Harmin, H., & Nurwani. (2023). *Pengaruh Kompensasi Finansial Dan Non-Finansial Terhadap Kinerja Karyawan Pada Bank Sumut Kcp Syariah Simpang Kayu Besar*.
- Batjo, N., & Sabani, A. (2022). *The Effect Of Perceived Quality And Brand Image On Smartphone Purchase Decisions*. https://ejournal.iainpalopo.ac.id/index.php/sharia_finance
- Chandrawati, A. A., & Vidyana, D. (2022). Pengaruh Perceived Quality Dan Perceived Value Of Cost Terhadap Loyalitas Pelanggan Melalui Kepuasan Pelanggan Pada Fresh.Co. *Jembatan : Jurnal Ilmiah Manajemen*, 19(1), 49–68. <https://doi.org/10.29259/jmbt.v19i1.17758>
- Darma Sari, D., Yanti Jurusan Manajemen, N., Ekonomi, F., & Ekasakti -AAI Padang, U. (2019). Pengaruh Switching Barrier Dan Citra Merek Terhadap Loyalitas Pelanggan Pada Produk Interbis (Studi Kasus Pada Pt. Multimas Sumber Harapan Padang) Influence Of Switching Barrier And Brand Image On Customer Loyalty In Interbis Product (Case Study On Pt Multimas Sumber Harapan Padang). *JM*, 1(2), 60–80.
- Efendi, B. (2019). 7615-Article Text-17869-1-10-20240714 (14). *Jurnal Akuntansi, Manajemen & Perbankan Syariah*, 4(3), 2809–7580.
- Effendi, M., Susastro, Y., Prawiro, H., & Wijayanto, A. (2024). Pengaruh Citra Merek Dan Kualitas Produk Terhadap Loyalitas Pelanggan Kartu Internet Simpati Telkomsel Di Semarang. In *Jurnal Administrasi Bisnis: Vol. X* (Issue 2).
- Eka Febriansyah, R. (2024). *The Influence Of Brand Image, Price, And Customer Reviews On Purchase Intention On Sidoarjo Gacoan Noodle Consumers (Study On Umsida Students) [Pengaruh Citra Merek, Harga, Dan Ulasan Pelanggan Terhadap Minat Beli Pada Konsumen Mie Gacoan Sidoarjo (Studi Pada Mahasiswa Umsida)]*.
- Febi, O., & Juliani, A. (2023). Pengaruh Switching Barrier Terhadap Loyalitas Pelanggan. *γ Nomo*, 2.
- Fikri, A. F., Agwil, W., & Agustina, D. (2023). *Performa Teknik Regularisasi Dalam Penanganan Masalah Multikolinieritas*. <https://ejournal.unib.ac.id/diophantine>,
- Firdaus Fauzi, L., & Rahayu, F. (2023). *Konsekuensi Brand Image, Perceived Quality, Dan Brand Experience. Customer Satisfaction Terhadap Brand Loyalty Pada Merek “Telkomsel.”*
- Fitri Amran, E., Mulia Putri, S., Indah Sari, C., Nengsih, I., & Penulis, N. (2023). *Pengaruh Kualitas Produk Dan Brand Image Terhadap Loyalitas Dengan Kepuasan Sebagai Variabel Moderating Pada Produk Telkomsel* (Vol. 4, Issue 2).

- G R Laserto, A. T., & C Wangke, S. J. (2023). *The Effect Of Price And Product Quality Towards Customer Loyalty Of Telkomsel Internet Package Users (Case Study: International Business Administration Students At Sam Ratulangi University)*. 11(4), 949–959.
- Harmila Sari, D. (2022). *Pengaruh Kepuasan Pelanggan Dan Switching Barrier Terhadap Customer Retention Kartu Gsm (Studi Kasus Pada Mahasiswa S1 Universitas Brawijaya Malang)*.
- Ibrahim, A., Canon, S., & Sudirman. (2023). Pengaruh Alokasi Dana Desa Dan Pengembangan Bumdes Terhadap Peningkatan Kesejahteraan Masyarakat. *Journal Of Economic And Business Education*, 1.
- Khotimah, H., Mulyati, A., Chairuz, U., & Nasution, M. (2024). Pengaruh Product Knowledge Dan Relationship Marketing Terhadap Loyalitas Konsumen Sepeda Motor Di Dealer Yamaha Sip Gunungsari. *Neraca Manajemen, Ekonomi*, 6. <https://doi.org/10.8734/Mnmae.V1i2.359>
- Krissianty, D. (2022). *Pengaruh Customer Relationship Management Dan Kepercayaan Merek Terhadap Loyalitas Pelanggan Telkomsel*. <https://www.wartaekonomi.co.id/read173788/telkomsel-catatkan-1963-juta->
- Kurnia Illahi, S., Andarini, S., Pembangunan, U., Veteran, N. ", & Timur, J. (2022). *Reslaj: Religion Education Social Laa Roiba Journal Pengaruh Brand Image Dan Brand Awareness Terhadap Brand Loyalty Pada Pengguna Provider Telkomsel Di Surabaya*. <https://doi.org/10.47476/Reslaj.V4i6.1205>
- Kuswati, R., Putro, W. T., Mukharomah, W., & Isa, M. (2021). The Effects Of Brand Image On Consumer Loyalty: The Role Of Consumer Satisfaction And Brand Trust As Intervening Variables. *Urecol Journal. Part B: Economics And Business*, 1(2), 58–71. <https://doi.org/10.53017/Ujeb.91>
- Lismawati. (2020). Pengaruh Kepuasan Pelanggan Terhadap Loyalitas Pelanggan Dimediasi Oleh Trust Dan Switching Barrier Pada Pengguna Kartu Telkomsel Simpati. *Ekonomi Dan Bisnis*, 1(2).
- Lismawati, & Arrozi, M. (2020). *Pengaruh Kepuasan Pelanggan Terhadap Loyalitas Pelanggan Dimediasi Oleh Trust Dan Switching Barrier Pada Pengguna Kartu Telkomsel Simpati*.
- Lorenza, D. (2022). *Pengaruh Harga Dan Citra Merek Terhadap Loyalitas Merek Dengan Kepuasan Pelanggan Sebagai Mediasi Pada Kartu Halo Telkomsel*. <https://doi.org/10.38035/Jmpis>
- Manajemen Dan Bisnis, J., & Theresia Reza, C. (2024). Pengaruh Kepercayaan Merek, Persepsi Kualitas, Dan Harga Terhadap Loyalitas Pelanggan Kosmetik Maybelline (Studi Pada Mahasiswa Aktif Fakultas Ekonomi Dan Bisnis Universitas Wijaya Kusuma Surabaya). In *Pragmatis* (Vol. 5).
- Manajemen, J. I., Bisnis, D., Widnyani, N. M., Rettobjaan, V. C., Ngurah, A. A., & Aristayudha, B. (2020). *Pengaruh Harga, Promosi Dan Inovasi Terhadap Loyalitas Pelanggan Gojek (Studi Kasus Pada Universitas Bali Internasional)*. 5(2). <http://journal.undiknas.ac.id/index.php/manajemen>
- Marianti, S., Rufaída, A., Hasanah, N., & Nuryanti, S. (2023). Comparing Item-Total Correlation And Item-Theta Correlation In Test Item Selection: A Simulation And Empirical Study. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 27(2), 133–145. <https://doi.org/10.21831/Pep.V27i2.61477>
- Marlius, D., & Anwar, F. (2023). Pengaruh Brand Image, Brand Trust Dan Company Reputation Terhadap Loyalitas Pelanggan. *JURNAL PUNDI*, 7(2), 185. <https://doi.org/10.31575/Jp.V7i2.476>
- Martha, L. (2023). 197-Article Text-427-1-10-20230207 (9). *Jurnal Ilmiah Ilmu Manajemen Dan Kewirausahaan*, 3(10.46306/Vls.V3i1).
- Matematika, J. P., Matematika, D., Padilah, T. N., & Adam, R. I. (2019). *Analisis Regresi Linier Berganda Dalam Estimasi Produktivitas Tanaman Padi Di Kabupaten Karawang*.
- Maulana, M. P., Eka, & Sari, P., & Kom, M. (2023). Analisa Kepuasan Pengguna Terhadap Aplikasi My Telkomsel Dengan Menerapkan Metode TAM (Technology Acceptance Model). In *Syntax: Jurnal Informatika* (Vol. 12, Issue 02).
- Mobonggi, I. D., Achmad, N., Resmawan, & Hasan, I. K. (2022). Analisis Regresi Data Panel Dengan Pendekatan Common Effect Model Dan Fixed Effect Model Pada Kasus Produksi Tanaman Jagung. *Jurnal Ilmiah Matematika*, 2, 52–67.

- Nandasari, E. A., & Ngatikoh, D. S. (2023). Pengaruh Brand Image Dan Harga Paket Internet Terhadap Jumlah Pengguna Kartu Telkomsel (Studi Kasus Pada Pengguna Kartu Telkomsel Di Kabupaten Kebumen). *Journal Of Management, Economics, And Entrepreneur*, 2(1). <https://Ejournal.Iainu-Kebumen.Ac.Id/Index.Php/Maen>
- Nur Hidayah, J., & Studi Manajemen Fakultas Ekonomi Dan Bisnis, P. (2021). *Pengaruh Experiential Marketing Dan Perceived Quality Terhadap Loyalitas Pelanggan*.
- Pandiangan, K., Dwi Atmogo, Y., & Author, C. (2021). Faktor-Faktor Yang Mempengaruhi Brand Equity: Brand Trust, Brand Image, Perceived Quality, & Brand Loyalty. *Ilmu Manajemen Terapan*, 2(4). <https://doi.org/10.31933/jimt.v2i4>
- Prasetyo, C. A., & Nurani, N. (2023). *The Effect Of E-Service Quality And Perceived Value On Telkomsel's E-Customer Loyalty On Mytelkomsel App Users*. <https://doi.org/10.33258/birci.v5i3.6554>
- Puspitasari, D., Syafarudin, A., & Buana, U. M. (2021). Pengaruh Kepercayaan Merek, Citra Merek Terhadap Keputusan Menggunakan Produk Perusahaan Pembiayaan Dengan Persepsi Kualitas Sebagai Variabel Intervening (Studi Kasus Di Perumahan Jatinegara Indah Kecamatan Cakung) *Jurnal Ilmiah Ilmu Manajemen Dan Kewirausahaan*, 1(10.46306/Vls.V1i1). <https://doi.org/10.46306/Vls.V1i1>
- Putu Elda Nopritayani, N., Eka Nopiyani, P., & Tinggi Ilmu Ekonomi Satya Dharma, S. (2023). Pengaruh Kepuasan, Kepercayaan Dan Switching Barrier Terhadap Loyalitas Pelanggan Pada Grapari Mitra Singaraja (PT. Telkomsel). *Jurnal Jnana Satya Dharma*, 11(2), 79–87.
- Rizqi, M., Setiawan, A., & Kusuma, K. A. (2024). Dampak Harga, Lokasi, Dan Citra Merek Terhadap Loyalitas Pelanggan. In *Frontiers In Research Journal* (Issue 1).
- Sabirin STIS Al-Hilal Sigli, T., Reviewer, A., Yunus, J. M., Ar-Raniry, U., Mariana, A., & Al-Hilal Sigli, S. (2022). *Pengaruh Kepercayaan Merek Telkomsel Dan Kepuasan Konsumen Terhadap Loyalitas Pada Mahasiswa STIS Al-Hilal Sigli* (Vol. 1, Issue 2).
- Salsabilla, M., Munisa, D., Setiyarini, T., & Korespondensi, P. (2023). Pengaruh Citra Merek Dan Kepercayaan Merek Terhadap Loyalitas Merek Telkomsel (Studi Pada Mahasiswa Manajemen Universitas Trunojoyo Madura). *Jurnal Kajian Ilmu Manajemen*, 3(3), 356–363. <https://journal.trunojoyo.ac.id/jkim>
- Samnaikubun, M. Y., Tumbuan, W. J. F. A., & Arie, F. V. (2020). The Influence Of Switching Barriers And Inertia On Customer Loyalty Of Maybelline Beauty Product Pengaruh Penghalang Pergantian Brand Dan Kelembaman Terhadap Loyalitas Konsumen Produk Kecantikan MAYBELLINE. *212 Jurnal EMBA*, 8(4), 212–221.
- Shella, S., Utama, T., & Weny, W. (2024). *Analisis Pengaruh Citra Merek Dan Kualitas Pelayanan Terhadap Loyalitas Pelanggan Fortunate Coffee Cemara Asri Deli Serdang*.
- Simbolon, V. A., Ritonga, K. B., Tania, R., Zahra, A., Sukmawati, D., & Pamulang, U. (2023). Pengaruh Citra Merek Dan Kepercayaan Merek Terhadap Loyalitas Pelanggan Pengguna Kartu Telkomsel Pada Mahasiswa. *Neraca Manajemen, Ekonomi*, 1. <https://doi.org/10.8734/Mnmae.v1i2.359>
- Singaperbangsa Karawang, U., Ronggo Waluyo, J. H., Timur, T., & Barat, J. (2023). Melan Rosmayanti. *Journal On Education*, 05(03).
- Sopiyan, P. (2021). Coopetition : Jurnal Ilmiah Manajemen Pengaruh Customer Perceived Value Dan Switching Barriers Terhadap Customer Retention. *Pengaruh Customer Perceived Value Dan Switching Barriers Terhadap Customer Retention*, 12(3).
- Sudiparwati, P. A., Arcana, I. Nyoman, & Massenga, L. M. (2024). Pengaruh Citra Merek Terhadap Loyalitas Konsumen Pada Restoran Me Gacoan Di Panjer, Denpasar, Bali. *Jurnal Gastronomi Indonesia*, 12(1), 8–19. <https://doi.org/10.52352/jgi.v12i1.1378>
- Sulyantri, S. (N.D.). Pengaruh Brand Awareness, Brand Images Dan Perceived Quality Terhadap Loyalitas Pelanggan (Studi Pada Mahasiswi Kota Malang Yang Melakukan Pembelian Di Clodia Outfit). *Jurnal Riset Manajemen*, 13(1), 2302–7061.
- Sutomo, D. A., & Rofiuddin, M. (2022). Loyalitas Nasabah Pada Bank Syariah Indonesia: Dampak Relationship Marketing Dan Mobile Banking Dengan Switching Barrier Sebagai Variabel Moderating. *Journal Of Management And Digital Business*, 2(1), 39–47. <https://doi.org/10.53088/jmdb.v2i1.153>

- Sutra, A. (2021a). Pengaruh Citra Merek, Harga Dan Kualitas Produk Terhadap Loyalitas Konsumen Pada Pengguna Kartu Telkomsel. In *Jurnal Entrepreneur Dan Manajemen Sains* (Vol. 2, Issue 2). [Www.Jurnal.Umb.Ac.Id](http://www.jurnal.umb.ac.id)
- Sutra, A. (2021). Pengaruh Citra Merek, Harga Dan Kualitas Produk Terhadap Loyalitas Konsumen Pada Pengguna Kartu Telkomsel. In *Jurnal Entrepreneur Dan Manajemen Sains* (Vol. 2, Issue 2). [Www.Jurnal.Umb.Ac.Id](http://www.jurnal.umb.ac.id)
- Ulfah, M., Herawati, I. E., Risfayanti, I., Tristiyanti, D., Sari, N. K., Fauzi, N. I., Faturrahman, M. H., & Rusmana, W. E. (2024). Gambaran Tingkat Pengetahuan Masyarakat Mengenai Hipertensi Dan Diabetes Melitus Di Desa Kayuambon Lembang Kabupaten Bandung Barat. *Jurnal Mandala Pengabdian Masyarakat*, 5(1), 187–192. <https://doi.org/10.35311/jmpm.V5i1.294>
- Umar, L. A., Taan, H., & Kango, U. (2022). Pengaruh Kepuasan Dan Switching Barrier Terhadap Loyalitas Pelanggan Telkomsel Pada Mahasiswa Fakultas Ekonomi Universitas Negeri Gorontalo. *SEIKO : Journal Of Management & Business*, 5(2), 202–238. <https://doi.org/10.37531/sejaman.V5i2.2200>
- Wahyu Hartono, N., & Sulistyowati, M. (2021). The Effect Of Brand Image, Product Quality, And Price On Decision To Buy Telkomsel Card In Surakarta. *KELOLA : Jurnal Bisnis Dan Manajemen*, 8(1). <https://e-journal.stie-aub.ac.id/index.php/kelola>
- Wahyuddin, N. N., Hurriyati, R., Lisnawati, & L., Kunci, K., Berpindah, H., Loyalitas, , & Tv Berbayar, P. ; (2019). Peran Hambatan Berpindah Dalam Membentuk Loyalitas Pelanggan Televisi Berbayar Di Indonesia. In *Journal Of Business Management Education* | (Vol. 4, Issue 1).
- Widianti, N., Kusniawati, A., & Faruk, M. (2020). *Pengaruh Ekspektasi Pelanggan Dan Bauran Promosi Terhadap Loyalitas Konsumen (Suatu Studi Pada Konsumen Telkomsel Di Desa Sukahurip-Ciamis)*. [Www.Cnnindonesia.Com](http://www.cnnindonesia.com)
- Wijayani, T., Prambudi, B., & Muhammadiyah Jakarta, S. (2020). Pengaruh Kualitas Produk Dan Brand Image Terhadap Loyalitas Pelanggan. *Jurnal Ekobis: Ekonomi, Bisnis & Manajemen*, 10(2). [Http://Ejournal.Stiemj.Ac.Id/Index.Php/Ekobis](http://ejournal.stiemj.ac.id/index.php/ekobis)