Assessing the Impact of Pricing, Service, and Product Quality on Telkomsel Customer Loyalty

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Abstract

Amidst ongoing economic development and rapid technological progress, businesses face the challenge of not solely focusing on sales to ensure profitability. Internet service providers, in particular, Telkomsel, must deliver exceptional services to thrive in a competitive landscape and maximize profits. This study examines the influence of pricing, service quality, and product quality on customer loyalty towards Telkomsel products, focusing on 8th semester students of the Faculty of Economics and Business at Islamic University Sheikh - Yusuf Tangerang. Employing a descriptive quantitative approach, data were gathered from 80 respondents through purposive sampling and distributed via Google Forms. Multiple linear regression analysis was utilized to test the relationship between the variables, with further examination through t-test, F-test, and coefficient of determination analysis. The findings indicate a positive and significant relationship between price, service quality, product quality, and customer loyalty. Moreover, the coefficient of determination analysis confirms that these factors collectively contribute to customer loyalty. Thus, the study concludes that price, service quality, and product quality significantly influence customer loyalty toward Telkomsel products.

Keywords: Price, Service Quality, Product Quality, Customer Loyalty.

1. Introduction

As economic development and rapid technological advancements continue, simply focusing on sales alone cannot fully address the challenges of profit pursuit (Purwanto, 2023). In this context, internet service providers must offer top-notch services to withstand fierce competition, and companies must maximize their profits (Sumantri, 2022). With the evolving era and technological progress, competitors emerge even among mobile phone companies seeking profits in the telecommunications industry (Adillah et al., 2022). With the rapid advancement of information technology, economic entities are required to understand and leverage IT in their business activities to enhance competitiveness (Adhani & Prihatiningrum, 2021). Despite facing intense competition, some telecommunication companies in Indonesia manage to sustain and expand their businesses. Among these are Telkomsel, Indosat, XL Axiata Tbk, and Tri (Azis, 2021).

Telkomsel stands out as one of the largest mobile operators competing to meet consumer demands for internet data services, resulting in Telkomsel's sales dominance over other products (Nizardy et al., 2022). Telkomsel is a leading brand in providing mobile telecommunication operator services in Indonesia. It continuously enhances effective telecommunication services for its customers by meeting their needs and desires and facilitating good communication (Febrianti & Sulistyawati, 2022).

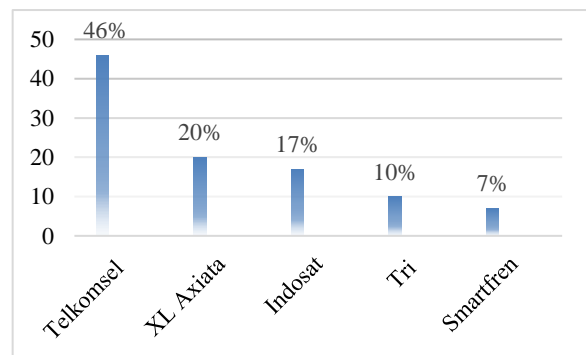Figure 1 is depicting the number of mobile operator users in Indonesia.

Figure 1. The proportion of mobile operator customers in Indonesia
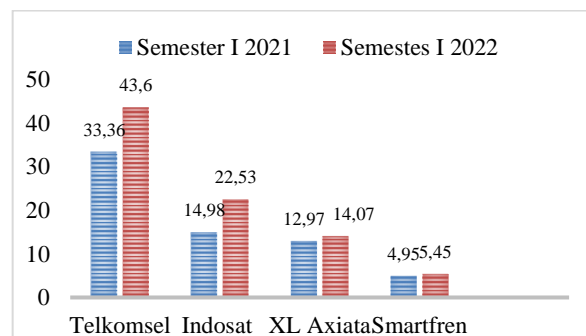

Figure 2. Revenue of 4 mobile operators in Indonesia for the first semester

Based on the Figure 1., the number of customers, and Figure 2., the revenue of mobile operators in

Indonesia, Telkomsel occupies the first position. However, as seen in Figure 3, consumers experience issues with Telkomsel's network, resulting in being surpassed by other mobile operators such as XL Axiata in terms of consumer satisfaction with the network. Therefore, it can be inferred that improvement or enhancement in Telkomsel's network is still necessary for consumers to remain loyal to the product.
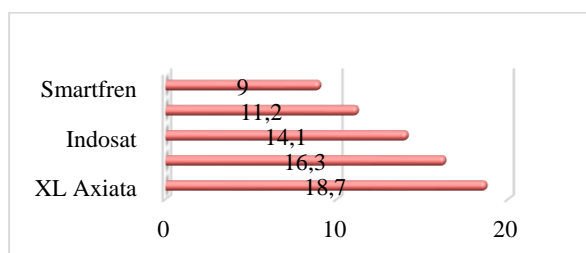

Figure 3. Report on the mobile network experience of mobile operators in Indonesia

This research investigates the elements affecting customer loyalty towards Telkomsel products, with a specific focus on pricing, service quality, and product quality. Understanding customer loyalty within the telecommunications sector is both academically and practically significant, as it can guide strategies for customer retention and market competitiveness. The rapid evolution of technology and the increasing complexity of consumer preferences make it essential for companies like Telkomsel to continuously assess and enhance the factors that contribute to customer loyalty. Previous studies have underscored the importance of these factors in shaping customer loyalty, yet there exists a need for further exploration, particularly within specific demographic segments such as university students. University students represent a unique and valuable demographic for telecommunication companies. They are often early adopters of new technologies, highly active on social media, and heavily reliant on mobile data services for their academic, social, and entertainment needs. This makes them an ideal target group for studies on customer loyalty in the telecommunications sector. This study aims to address this gap by examining how pricing, service quality, and product quality impact customer loyalty among 8th-semester students at the Faculty of Economics and Business, Islamic University Sheikh - Yusuf Tangerang. This specific demographic provides a focused lens through which to understand the broader trends in customer loyalty within the telecommunications industry. By tackling this research problem, the study seeks to achieve specific objectives: determining the influence of pricing, service quality, and product quality on customer loyalty and understanding the contextual factors that influence customer loyalty in the telecommunications industry.

The remaining sections of the article are structured as follows: Section 2 presents a review of relevant literature, Section 3 outlines the research methodology, Section 4 presents the results and analysis, and Section 5 discusses the findings, implications, limitations, and suggestions for future research. Finally, Section 6 concludes the study.

2. Literature Review

2.1. Price

According to (Sudirman et al., 2021), price is the amount paid by customers for each product or service. Price setting is a crucial part of determining your marketing mix. It is also a vital component of your marketing plan as it determines your revenue and business sustainability. Product price adjustments have a significant impact on your overall marketing strategy, which in turn affects sales and demand. According to (Arthur, 2021), price is a fundamental measure of an economic system as it influences the distribution of production factors. As a determinant of the allocation of scarce resources, prices determine what is produced (supply) and who gets how much (demand). According to (Atrisia & Hendrayati, 2021; Rianto et al., 2022), price is a key strategy in running a business. Whether a product or service is expensive or not, as measured by price, is relative. Companies must be aware of and research the prices set by competitors. The goal is for the company not to set relatively high prices so that they can compete in the long run. Price is one of the most important elements in determining a market.

Price dimensions, as elucidated by (Amilia, 2017), encompass several key aspects crucial in understanding consumer behavior and market dynamics. Firstly, affordability stands out as a cornerstone factor, reflecting consumers' expectations of finding products within their financial reach. Additionally, the price-quality suitability dimension underscores the importance of aligning price with product quality. Consumers are inclined towards products offering good quality at reasonable prices, indicating a preference for value-driven purchases. Moreover, price competitiveness emerges as a strategic consideration, with companies setting prices in response to competitor pricing strategies to maintain market relevance and competitiveness. Lastly, the price-benefit suitability dimension underscores consumers' tendency to prioritize product benefits over price, indicating that perceived value often outweighs cost considerations in purchase decisions. Together, these dimensions highlight the multifaceted nature of pricing strategies, emphasizing the need for businesses to balance affordability, quality, competitiveness, and perceived benefits to effectively meet consumer demands and achieve market success.

2.2.   Service Quality

According to (Cesariana et al., 2022; Muzakki & Tarigan, 2020), service quality refers to a company's ability to meet customer expectations, and when the service received or experienced meets expectations, the service quality is perceived as good and can satisfy customers. (Arianto & Difa, 2020) suggests that service quality is the difference between what customers think about the service provided by the company and what they anticipate from the company providing the service. Furthermore, (Rane et al., 2023) emphasizes that service quality serves as a special incentive for customers to develop long-term and mutually beneficial relationships with the company. Such systems help companies understand their customers' specific expectations and needs, thereby enhancing customer satisfaction (Lesmana & Balqiah, 2023).

According to (Adabi, 2020), customers evaluate service quality based on five dimensions. Firstly, reliability is crucial, representing a company's ability to deliver accurate services without errors and within agreed-upon timeframes. This necessitates offering reliable products and services and fulfilling promises made to customers. Secondly, responsiveness entails the willingness and ability of staff to promptly assist customers, inform them about service delivery, and fulfill promises. Thirdly, assurance involves employee behavior that enhances customer trust and ensures that staff are knowledgeable and polite. Fourthly, empathy reflects the company's understanding of customer problems and its efforts to act in their interests and maintain convenient service hours. Lastly, tangibles encompass physical facilities, equipment, and employee appearance, which contribute to customer perceptions of service quality. Management must consider these factors to ensure customer satisfaction and maintain a competitive edge in the market.

2.3.   Product Quality

According to (Aprilia, 2021), product quality encompasses everything that adds value to satisfy someone's needs or desires. This definition clarifies that product quality is about the value in meeting consumers' needs and desires. (Saribu & Maranatha, 2020) define product quality as the overall characteristics of a product that can influence its ability to satisfy consumer needs. Meanwhile, (Cesariana et al., 2022) emphasizes that product quality is of paramount importance to manufacturers/industries. Quality is the most important tool for positioning products. It indicates the level of a brand or product's ability to meet its role and expectations. Product quality can be assessed

based on the product's shelf life, thus establishing consumer trust in it.

(Fadhli & Pratiwi, 2021) suggest several dimensions to assess product quality. Firstly, performance pertains to the core or exceptional features of a product offered by the company. Secondly, additional features encompass secondary or complementary characteristics defined at specific points, distinguishing brands by their unique features despite similar performance. Thirdly, reliability focuses on minimizing product damage or failures. Lastly, durability reflects the product's ability to maintain its integrity after use or consumption. These dimensions collectively contribute to evaluating and ensuring the quality of a product, vital for meeting consumer expectations and maintaining competitiveness in the market.

2.4.   Customer Loyalty

According to (Agha et al., 2021), customer loyalty is defined as the rooted commitment of customers to consistently review or repurchase chosen products or services in the future, even when circumstances and marketing efforts may induce behavioral changes. Meanwhile, (Islahulkhair & Muhajirin, 2022) describe customer loyalty as when a consumer exhibits regular purchasing behavior or is obligated to make at least two purchases within a specified timeframe. (Marso & Idris, 2022; Wahyoedi et al., 2019) state that customer loyalty entails a commitment to continue using a company's services or products in the long term, including the willingness to repurchase or subscribe to the offered products or services.

As outlined by (Wicaksono, 2022), customer loyalty dimensions encompass several aspects. Firstly, Repeat Purchase represents the fidelity of customers towards reacquiring a specific product. Secondly, Retention illustrates the company's ability to withstand adverse influences. Lastly, Refalls signify the comprehensive references existing at the company level. These dimensions collectively underscore the multifaceted nature of customer loyalty, highlighting the importance of fostering enduring relationships and fortifying resilience against external challenges for sustainable business success.

2.5.   Hypothesis Development

Building on the research conducted by Cardia, Santika, and Respati (2019), which emphasizes the critical role of strategic pricing in fostering customer loyalty, it is evident that price strategies are fundamental in shaping consumer perceptions and behaviors. Therefore, based on the findings of previous research, the following hypotheses can be formulated:

H_1: There is a positive and significant partial influence between Price and Customer Loyalty towards Telkomsel Products.

In addition, from the extensive research conducted by (Muhtarom et al., 2022; Subawa & Sulistyawati, 2020), which consistently highlight the pivotal role of service quality in driving customer loyalty within the telecommunications sector, this study proposes the following hypothesis:

H_2: There is a positive and significant partial influence between Service Quality and Customer Loyalty on Telkomsel Products.

Scholars such as (Nazhirah et al., 2020; Puspitaweni et al., 2021; Rianawaty & Razak, 2019) have emphasized the significance of product quality in driving customer loyalty. Echoing these insights, (Ariyanto et al., 2022) also underscore the critical role of product quality in nurturing customer loyalty. Based on the findings of these studies, the researcher formulates the following hypotheses for this study:

H_3: There is a positive and significant partial influence between Product Quality and Customer Loyalty on Telkomsel Products.

Considering the Integrated Marketing Theory's emphasis on aligning various marketing elements to create customer value, and supported by the studies mentioned above, it is hypothesized that:

H_4: There is a positive and significant simultaneous influence between Price, Service Quality, and Product Quality on Customer Loyalty towards Telkomsel Products.

These hypotheses serve as the foundation for the empirical investigation into the relationships between pricing, service quality, product quality, and customer loyalty in the context of Telkomsel products. This study proposes a theoretical framework in Figure 4 for the hypotheses.
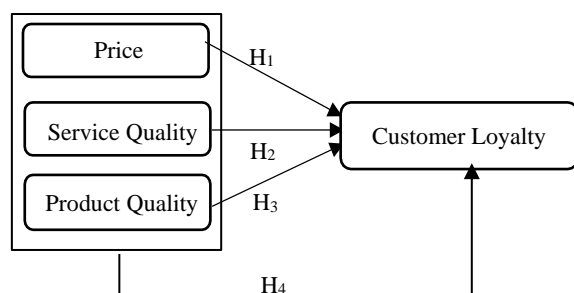

Figure 4. Theoretical framework

3. Methods

This study adopts a descriptive research methodology with a quantitative approach to thoroughly examine the factors influencing customer loyalty towards Telkomsel products among students. Descriptive research, as elucidated by (Jayusman & Shavab, 2020), involves exploring the values of independent variables, either individually or in combination, without comparison or linkage to other variables. Similarly, as described by (Rohaeni & Yuliyana, 2020), quantitative research is rooted in positivist philosophy and aims to test established hypotheses by examining specific populations or samples using quantitative/statistical data collection methods.

Data collection techniques in this study involved distributing questionnaires to predetermined samples to obtain primary data. According to (Dosinaen & Sastika, 2019), data collection techniques refer to the methods researchers employ to gather quantitative information from respondents within the scope of their study. In this research, primary data was collected through questionnaire distribution to predetermined samples.

In this study, the concept of price pertains to the monetary value customers allocate for each product or service. The measurement scale for price was adapted from the study by (Amilia, 2017). The indicators used to gauge price include Price Affordability, Price match with quality, Price Competitiveness, and Price Suitability and Benefits. Four items from the scale were: "Telkomsel product prices are affordable for FEB Unis Tangerang students.", "The prices of Telkomsel products offered are in accordance with the quality obtained.", "Telkomsel product prices are cheaper than other cellular operator competitors.", "Telkomsel product prices are according to the benefits provided (clear telephone sound is not intermittent)".

The scale employed to assess Service Quality was derived from the research conducted by (Adabi, 2020), encompassing indicators such as Reliability, Responsiveness, Guarantee, Empathy, and Physical Evidence. Sample items from this scale include statements like "I feel Telkomsel's service is very alert/fast towards its customers.", "The service provided by Telkomsel is very good/friendly.", "Telkomsel services always provide trust to its customers.", "Telkomsel services are sensitive when receiving complaints or complaints from their customers.", and "The Telkomsel GraPARI area always looks clean and comfortable.".

Furthermore, the measurement scale for Product Quality drew inspiration from the work of (Fadhli & Pratiwi, 2021), incorporating indicators such as Performance, Additional Privileges, Reliability, and Durability. Example statements from this scale include "Telkomsel

products have good signal coverage.", "I feel that Telkomsel product features have more features than other products.", "Telkomsel products guarantee that the information offered is in accordance with the benefits provided.", "The durability of the products offered by Telkomsel can last a long time.".

Lastly, the scale utilized to gauge Customer Loyalty was adapted from the research conducted by (Wicaksono, 2022), featuring indicators like Repeat purchase, Retention, and Refalls. Sample statements from this scale encompass sentiments such as "I will make repeat purchases of Telkomsel products.", "I am not interested in using 16 other cellular operators besides Telkomsel.", and "I will recommend Telkomsel products to others. I will invite other people to use Telkomsel products.".

Instrument testing in this study included validity and reliability testing. Validity testing assesses the accuracy of a questionnaire in measuring the intended variables. According to (Ikhsan et al., 2019), an item statement is considered valid if the calculated r-value exceeds the tabulated r-value. Reliability, on the other hand, refers to the consistency of a measuring tool when measured repeatedly. Reliability testing involves comparing Cronbach's alpha values, with a minimum value of 0.6 indicating reliability.

Data analysis utilized path analysis using multiple linear regression analysis. This technique includes an F-test to evaluate the simultaneous effect of independent variables on customer loyalty and a t-test to assess their partial effects. The determination coefficient (R^2) was calculated to measure the accuracy of regression analysis and determine the degree of change in the dependent variable influenced by the independent variables.

Furthermore, multiple linear regression analysis was conducted to predict changes in customer loyalty based on price, service quality, and product quality. Partial t-tests were performed to evaluate the significance of the partial effects of independent variables on customer loyalty, assuming other variables remained constant. Simultaneously, F-tests examined the collective influence of independent variables on customer loyalty.

By employing a descriptive research design with a quantitative approach, the study aims to delve into the intricate dynamics between price, service quality, product quality, and customer loyalty. Sampling techniques, particularly purposive sampling, were meticulously utilized to select representatives from the target population of 8th-semester students at the Faculty of Economics and Business, Universitas Islam Syekh–Yusuf Tangerang. The research methodology involved data collection through surveys utilizing questionnaires, a widely accepted method for gathering quantitative information. The Likert scale was judiciously utilized for measurement, facilitating the assessment of respondents' attitudes, opinions, and perceptions regarding price, service quality, product quality, and customer loyalty. Furthermore, validity testing was conducted to ensure the reliability and validity of the research instruments, employing the Pearson product-moment correlation formula aided by Statistical Product and Service Solution 25 for Windows (SPSS 25). The methodology also involved meticulous scrutiny of classical assumptions such as normality, multicollinearity, and heteroskedasticity, validating the reliability and suitability of the statistical analyses conducted. The research was conducted over a span of 6 months, from February to July 2023, at Universitas Islam Syekh – Yusuf Tangerang.

4. Result

The Classical Assumptions Test was conducted to assess various statistical assumptions in the research. Firstly, the Normality Test revealed that the data used in the study follows a normal distribution, as indicated by the Asymp. Sig (2-tailed) value of 0.200, exceeding the threshold of 0.05. Secondly, the Multicollinearity Test showed that there is no multicollinearity issue among the independent variables, with all Variance Inflation Factor (VIF) values being less than 10.00 and tolerance values greater than 0.10. Additionally, the Heteroskedasticity Test indicated that there are no heteroskedasticity problems, as observed from the scatterplot graph where data points are uniformly scattered without forming any discernible pattern. Moreover, the coefficient of determination demonstrates that a significant proportion of the variance in customer loyalty is explained by the independent variables, emphasizing their crucial role in shaping customer behavior. Overall, the validity testing conducted on the data regarding normality, multicollinearity, and heteroskedasticity confirms the reliability and suitability of the statistical analyses performed.

4.1. Hypothetical Test

4.1.1. Multiple Linear Regression Analysis

Subsequently, the multiple regression analysis (see Table 1) yielded a regression equation. The regression coefficient value for the Price variable is 0.073, meaning that if all other independent variables remain constant and the Price variable increases by 1%, customer loyalty will increase by 0.073 units. Similarly, the regression coefficient value for the Service Quality variable is 0.623, indicating that if all other independent variables remain constant and the Service Quality

variable increases by 1%, customer loyalty will increase by 0.623 units. Additionally, the regression coefficient value for the Product Quality variable is 0.439, signifying that if all other independent variables remain constant and the Product Quality variable increases by 1%, customer loyalty will increase by 0.439 units.

$$Y = -1.017 + 0.073\ X_1 + 0.623\ X_2 + 0.439\ X_3 + e \quad (1)$$

Table 1. Hypothetical test multiple linear regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-1.017	0.962		-1.058	0.293
Price	-0.073	0.101	0.056	0.724	0.471
Service Quality	0.623	0.074	0.598	8.247	0.000
Product Quality	0.439	0.126	0.325	3.480	0.001

4.1.2. Partial T-test

Decision-making in the partial test depends on the significance level, where a value below 0.05 implies statistical significance, while a value above 0.05 suggests an absence of significant impact. The results of the partial test conducted in this research can be succinctly summarized as follows:

1. According to the t-test results, the Price variable (X1) has a coefficient of 9.031 with a significance level of 0.000. With a significance value of 0.000 < 0.05, it can be utilized for predicting Customer Loyalty. Additionally, with a t-value of 9.031 > 1.991 t-table, the null hypothesis (Ho) is rejected, and H1 is accepted with a positive t-value. Therefore, the hypothesis suggests that Price positively and significantly influences Customer Loyalty to Telkomsel Products, which is validated.

2. The t-test output reveals that the Service Quality variable (X2) has a coefficient of 17.201 with a significance level of 0.000. With a significance value of 0.000 < 0.05, it can be employed for predicting Customer Loyalty. Furthermore, with a t-value of 17.201 > 1.991 t-table, the null hypothesis (Ho) is rejected, and H2 is accepted with a positive t-value. Hence, the hypothesis indicates that Service Quality positively and significantly impacts Customer Loyalty to Telkomsel Products, which is substantiated.

3. As per the t-test findings, the Product Quality variable (X3) shows a coefficient of 13.593 with a significance level of 0.000. With a significance value of 0.000 < 0.05, it can be utilized for predicting Customer Loyalty. Moreover, with a t-value of 13.593 > 1.991 t-table, the null hypothesis (Ho) is rejected, and H3 is

accepted with a positive t-value. Thus, the hypothesis posits that Product Quality positively and significantly affects Customer Loyalty to Telkomsel Products, which is confirmed.

In conclusion, the partial t-tests for each independent variable confirmed their positive and significant influences on Customer Loyalty, with all hypotheses being accepted.

4.1.3. Simultaneous F-test

The purpose of the simultaneous test is to ascertain whether the significance level is below or above 0.05, leading to either acceptance or rejection of the null hypothesis. The results of the simultaneous hypothesis testing are presented in Table 2, summarizing the findings.

Table 2. Simultaneous f-test

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	1627.047	3	542.349	138.246	0.000[b]
Residual	298.153	76	3.923		
Total	1925.200	79			

a. Dependent Variable: Customer Loyalty
b. Predictors: (Constant), Product Quality, Service Quality, Price

Table 2 indicates that the independent variables exhibit a significance value less than α, specifically 0.000, which is lower than 0.05, and the computed F value exceeds the tabulated F value, with 138.246 surpassing 3.12. Consequently, the null hypothesis is rejected, and the alternative hypothesis is accepted with a positive F value. Thus, it can be concluded that:

A confirmed positive and significant combined impact of Price, Service Quality, and Product Quality on Customer Loyalty towards Telkomsel Products exists.

5. Discussion

The outcomes of the partial t-test reveal a noteworthy positive relationship between pricing and customer loyalty. The calculated t-value of 9.031, accompanied by a significance level of 0.000, indicates that the effect of price on customer loyalty is statistically significant. This finding implies that higher prices are associated with increased customer loyalty, supporting the first hypothesis. This relationship can be attributed to the perception of quality associated with higher prices; customers often equate higher prices with superior quality and reliability. Cardia, Santika, and Respati (2019) research reinforces this conclusion, emphasizing that strategic pricing is crucial for fostering customer

loyalty. By setting prices appropriately, companies can enhance their value proposition, making customers more inclined to remain loyal. The role of pricing extends beyond mere cost; it is integral to a company's marketing strategy as it is the primary revenue-generating component in the marketing mix. In addition, Saputri's (2019) study further supports the notion that customer perception of prices significantly influences loyalty. A positive perception of prices, where customers feel they are getting good value for their money, enhances their loyalty to the brand. Therefore, it can be concluded that pricing significantly affects customer loyalty to Telkomsel products. The findings highlight the need for Telkomsel to strategically manage its pricing policies to foster and maintain customer loyalty.

Similarly, the partial t-test results reveal a significant positive influence of service quality on customer loyalty. With a calculated t-value of 17.201 and a significance level below 0.05, it is evident that superior service quality fosters greater customer loyalty. These findings are consistent with previous studies by (Muhtarom et al., 2022; Subawa & Sulistyawati, 2020)), highlighting the pivotal role of service quality in driving customer loyalty. Exemplary service quality has been shown to positively impact customer loyalty, particularly in the case of SKCK. Therefore, the second hypothesis, proposing a positive association between service quality and customer loyalty, is substantiated by empirical evidence.

Furthermore, the partial t-test outcomes demonstrate a significant positive relationship between product quality and customer loyalty. With a calculated t-value of 13.593 and a significance level below 0.05, it's evident that higher product quality leads to increased customer loyalty. These findings align with previous research by (Ariyanto et al., 2022), emphasizing the critical role of product quality in nurturing customer loyalty. Particularly, in the case of PT Nirwana Gemilang Property, superior product quality has been shown to influence customer loyalty positively. Therefore, the third hypothesis, positing a positive impact of product quality on customer loyalty, is supported by empirical evidence.

Product quality includes various attributes such as durability, reliability, performance, and aesthetic appeal. Companies that invest in improving these attributes are likely to positively impact customer loyalty. For instance, durable and reliable products reduce the likelihood of customer complaints and returns, thereby enhancing customer satisfaction. Performance attributes, such as functionality and efficiency, ensure that the product meets the intended use effectively, while aesthetic appeal enhances the overall customer experience. Therefore, the third hypothesis, suggesting a positive impact of product quality on customer loyalty,

finds empirical support in the research findings. Telkomsel should prioritize maintaining and improving product quality to foster customer loyalty.

The simultaneous F-test results reveal a collective positive influence of price, service quality, and product quality on customer loyalty. With a calculated F-value of 138.246 and a significance level of 0.000, it is evident that these three variables collectively influence customer loyalty significantly. The coefficient of determination (R^2) of 83.9% indicates that price, service quality, and product quality explain a substantial proportion of the variance in customer loyalty. This finding underscores the importance of a holistic approach to customer loyalty. Companies must simultaneously manage multiple aspects of their offerings to enhance customer loyalty. Superior pricing strategies, exemplary service quality, and high product quality collectively contribute to a positive customer experience, leading to increased loyalty. By integrating these elements, companies can create a competitive advantage in the market. For instance, competitive pricing can attract price-sensitive customers, while exceptional service quality ensures their satisfaction and retention. High product quality, on the other hand, reinforces the brand's reputation and fosters long-term loyalty.

In conclusion, the research findings underscore the significance of price, service quality, and product quality in shaping customer loyalty. By strategically managing these variables, companies can cultivate a loyal customer base, enhancing their competitiveness and long-term sustainability in the market. The findings underscore the critical role of these factors in shaping customer perceptions and loyalty in the telecommunications industry. Telkomsel and other telecommunications companies can leverage these insights to enhance customer satisfaction and loyalty by maintaining competitive pricing, improving service quality, and continuously adapting strategies to meet evolving customer expectations.

This study offers essential managerial insights for Telkomsel and similar telecommunications companies. Emphasizing service quality is crucial, involving investments in network reliability, data speed, and customer support. Training for customer service staff and infrastructure improvements are essential. Competitive, transparent pricing strategies should include flexible plans and loyalty rewards. Maintaining high product quality through continuous updates and innovations is vital for retaining customers. Gathering and analyzing customer feedback can help Telkomsel adapt to changing preferences, ensuring long-term loyalty. Theoretically, this research extends existing loyalty frameworks by examining the combined effects of price, service, and product quality. The findings support existing marketing and consumer behavior theories,

highlighting the significant positive impact of these factors on customer loyalty. By focusing on university students, the study provides insights into the loyalty drivers of a specific demographic, enriching the theoretical understanding of customer loyalty. The research bridges theory and practice, offering actionable insights for enhancing customer loyalty in the telecommunications industry.

However, while this study offers valuable contributions to understanding customer loyalty dynamics, several limitations should be acknowledged. The research focused solely on Telkomsel customers within a specific demographic, limiting the generalizability of the findings. Future research could explore a more diverse sample to ensure broader applicability. Additionally, qualitative approaches could complement quantitative methods, providing deeper insights into customer perceptions and behaviors. Despite these limitations, this study lays the groundwork for further exploration of customer loyalty dynamics in the telecommunications sector, offering valuable guidance for industry practitioners and researchers alike.

The study's focus on university students provides valuable insights into the preferences and behaviors of this significant demographic. Understanding the loyalty drivers for this group can help Telkomsel anticipate future trends and tailor their offerings to meet the needs of a tech-savvy and discerning customer base. In summary, the research highlights the critical role of price, service quality, and product quality in shaping customer loyalty towards Telkomsel products. Telkomsel can enhance customer satisfaction and loyalty by strategically managing these factors and continuously adapting to customer feedback, ensuring long-term success in the dynamic telecommunications market.

6. Conclusions

In conclusion, this research comprehensively analyzes the factors influencing customer loyalty towards Telkomsel products, focusing on pricing, service quality, and product quality. The findings indicate a positive and significant effect of all three factors on customer loyalty, individually and collectively. Among these, service quality emerges as the most critical factor, highlighting its paramount importance in fostering customer loyalty. The study demonstrates that effective pricing strategies are crucial for maintaining customer loyalty, particularly within the university student demographic. Competitive and transparent pricing that aligns with students' financial capabilities and expectations can significantly enhance their loyalty to Telkomsel. Service quality is identified as the most influential factor affecting customer loyalty. The research underscores the need for Telkomsel to ensure high customer

support standards, network reliability, and efficient problem resolution. The study highlights the importance of offering high-performance, reliable, and feature-rich products. For Telkomsel, ensuring superior network coverage, fast data speeds, and additional features can significantly enhance customer satisfaction and loyalty.

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