

**The Influence of Price, Service Quality, and Brand Image on
Customer Loyalty In Telkomsel Products Case study Universitas
Muhammadiyah Sumatera Utara students**

Thesis

*Submitted to Fulfill the Requirements
Earning a Bachelor of Management (SM) Degree
Management Study Program*



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UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA
MEDAN
2026**



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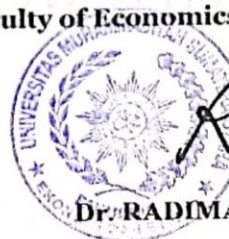
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Dengan ini menyatakan bahwa Tugas akhir saya yang berjudul **“The Influence Of Price, Service Quality, And Brand Image On Customer Loyalty In Telkomsel Products In The Environment Student Of Universitas Muhammadiyah Sumatera Utara ”** adalah bersifat asli (orginal), bukan hasil menyadur secara mutlak hasil karya orang lain.

Bilamana dikemudian hari ditemukan ketidaksesuaian dengan pernyataan ini, maka saya bersedia dituntut dan diproses sesuai dengan ketentuan yang berlaku di Universitas Muhammadiyah Sumatera Utara.

Demikian pernyataan ini dibuat dengan sesungguhnya dan dengan sebenar-benarnya.

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ABSTRACT

The Influence of Price, Service Quality, and Brand Image on Customer Loyalty In Telkomsel Products Case study Universitas Muhammadiyah Sumatera Utara students

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This study aims to analyze the influence of price, service quality, and brand image on customer loyalty of Telkomsel. The background of this research is the intense competition in the Indonesian telecommunications industry which requires operators to maintain customer loyalty. The independent variables in this study are price (X_1), service quality (X_2), and brand image (X_3), while the dependent variable is customer loyalty (Y). This research uses a quantitative approach with a survey method. The research sample consisted of 100 respondents who are Telkomsel service users, selected through purposive sampling technique. Data were collected through an online questionnaire using a 1-5 Likert scale. Data analysis was performed using SPSS software. Instrument tests included validity and reliability tests, while classical assumption tests included normality test, multicollinearity test, and heteroscedasticity test. The results showed that simultaneously, price, service quality, and brand image have a positive and significant effect on customer loyalty. Partially, all three variables also showed a positive and significant effect on customer loyalty. Among these three variables, brand image was found to have the most dominant influence on customer loyalty. The coefficient of determination indicates that most of the variation in customer loyalty can be explained by these three independent variables, while the remainder is explained by other factors outside the study. The conclusion of this study is that price, service quality, and brand image both simultaneously and partially have a positive and significant effect on Telkomsel customer loyalty. The managerial implication of this research is that Telkomsel needs to maintain and improve its service quality and brand image, while maintaining price competitiveness to retain customer loyalty amidst the increasingly competitive telecommunications industry.

Keywords: Price, Service Quality, Brand Image, Customer Loyalty

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LIST OF CONTENTS

ABSTRACT	i
ACKNOWLEDGMENTS.....	ii
LIST CONTENTS	iv
TABLE OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER I INTRODUCTION	1
1.1. Background of the Problem	1
1.2. Problem Identification	9
1.3. Problem Definition	10
1.4. Problem Statment	10
1.5. Research Objectives	11
1.6. Benefits of Research	12
CHAPTER II LITERATURE REVIEW	13
2.1. Theoretical Basis	13
2.1.1. Customer Loyalty	13
2.1.1.1. Definition of Customer Loyalty	13
2.1.1.2. Factors Influencing Customer Loyalty	14
2.1.1.3. Benefits of Customer Loyalty	15
2.1.1.4. Customer Loyalty Indicators	16
2.1.2. Price	17
2.1.2.1. Definition of Price	17
2.1.2.2. Steps to Set Prices	18
2.1.2.3. Price Indicators	19
2.1.3. Service Quality	20
2.1.3.1. Definition of Service Quality	20
2.1.3.2. Classification of Service Quality	21
2.1.3.3. Service Quality Indicators	21
2.1.4. Brand Image	22

2.1.4.1. Definition of Brand Image	22
2.1.4.2. Benefits of Brand Image	23
2.1.4.3. Brand Image Indicators	24
2.2. Conceptual Framework	25
2.2.1. The Influence of Price on Customer Loyalty	25
2.2.2. The Influence of Service Quality on Customer Loyalty	26
2.2.3. The Influence of Brand Image on Customer Loyalty	27
2.2.4. The Influence of Price, Service Quality, and Brand Image on Customer Loyalty	28
2.3. Hypothesis	29
CHAPTER III RESEARCH METHODS	31
3.1. Type of Research	31
3.2. Operational Definition	31
3.3. Place and Time of Research	33
3.3.1. Research Site	33
3.3.2. Research Time	33
3.4. Sampling Techniques	34
3.5. Data Collection Techniques	36
3.5.1. Observation	36
3.5.2. Interview	36
3.5.3. Questionnaire	36
3.6. Data Analysis Technique Test	37
3.6.1. Data Quality Test	37
3.6.1.1. Validity Test	37
3.6.1.2. Reliability Test	40
3.6.2. Descriptive Statistical Analysis	41
3.6.3. Classical Assumption Test	41
3.6.4. Inferential Statistical Analysis	43
3.6.4.1. Hypothesis Testing	43

3.6.4.2. t-Test (Partial Test)	44
3.6.4.3. F Test (Simultaneous Test)	44
3.6.4.4. Determinant Coefficient (R2)	45
CHAPTER IV RESEARCH RESULT	46
4.1. Data Description	46
4.1.1. Respondent Identity Characteristic	46
4.1.1.1. Identity Based on Gender	46
4.1.1.2. Identity Based on Current Semester	47
4.1.1.3. Identity Based on Length of Product Use	48
4.1.2. Descriptions of Research Results	46
4.1.2.1. Customer Loyalty Variable (Y)	50
4.1.2.2. Price Variable (X1)	54
4.1.2.3. Service Quality Variable (X2)	59
4.1.2.4. Brand Image Variable (X3)	64
4.2. Data Analysis Technique Test	68
4.2.1. Validity Test	68
4.2.1. Reliability Test	72
4.2.3. Descriptive Statistical Analysis	74
4.2.4. Classical Assumption Test	75
4.2.4.1. Normality Test	75
4.2.4.2. Multicollinearity Test	78
4.2.4.3. Heterosedasticity Test	79
4.2.5. Inferential Statistical Analysis	81
4.2.5.1. Hypotesis Testing	81
4.2.5.2. t-test (Partial Test)	81
4.2.5.3. F Test (Simultaneous Test)	85
4.2.5.4. Determinant Coefficient (R2).....	86
4.3. Discussion	88
4.3.1. The Influence of Price on Customer Loyalty	88

4.3.2. The Influence of Service Quality on Customer Loyalty	89
4.3.3. The Influence of Brand Image on Customer Loyalty	91
4.3.4. The Simultaneous Influence of Price, Service Quality and Brand Image on Customer Loyalty	94
CHAPTER V CONCLUSION AND RECOMENDATIONS	97
5.1. Conclusion	97
5.2. Recomendations	98
5.3. Research Limitations	98
BIBLIOGRAPHY	100
ATTACHMENT	111

LIST OF TABLES

Table 1.1. Comparison of Telkomsel, Indosat, and Axis Data Package Prices	3
Table 1.2. Telkomsel Network Service Quality	4
Table 3.1. Operational Research Variables	32
Table 3.2. Research Schedule and Time	34
Table 3.3. Measurement Scale	37
Table 3.4. Validity Test Results	38
Table 3.5. Reliability Test Results	40
Table 4.1. Respondent Gender	47
Table 4.2. Current Semester of Responden	47
Table 4.3. Length of Product Usage	48
Table 4.4. Questionnaire Discussion Scores for the Customer Loyalty Variable	50
Table 4.5. Questionnaire Discussion Scores For the Price Variable.....	54
Table 4.6. Questionnaire Discussion Scores For the Service Quality Variable.....	59
Table 4.7. Questionnaire Discussion Scores For the Brand Image Variable	65
Table 4.8. Validity Test Results	69
Table 4.9. Reliability Test Results	73
Table 4.10. Descriptive Statistics.....	74
Table 4.11. Multicollinearity Test.....	78
Table 4.12. t - Test	82
Table 4.13. F Test	85
Table 4.14. Determinant Coefficient.....	87

LIST OF FIGURES

Figure 1.1. Top Brand Index	6
Figure 1.2. Telkomsel's Efforts to Improve Customer Loyalty	7
Figure 1.3 . Review of Telkomsel Product Prices and Service Quality	8
Figure 1.4. Review of Brand Image Perceptions of Telkomsel Products	8
Figure 2.1. Conceptual Thinking Framework	29
Figure 4.1. Histogram Analysis	76
Figure 4.2. Normal Probability Plot (P-Plot)	77
Figure 4.3. Heteroscedasticity Test	80

CHAPTER I

INTRODUCTION

1.1. Background of the Problem

In today's digital era, the telecommunications industry plays a crucial role in supporting people's activities. Communication is no longer limited to exchanging messages or voice calls, but has evolved into a complex, basic need that includes internet access, social media, entertainment services, and digital transactions. Consequently, telecommunications service providers are competing to offer the best products and services to attract and retain customers.

Telkomsel is a long-standing company and market leader in this industry. The company is known for its extensive network coverage, stable signal, and various innovative digital products such as internet packages, streaming services, and the MyTelkomsel app. However, Telkomsel's dominance is now facing challenges from competitors aggressively offering lower prices and flexible internet packages. This leaves customers with numerous options and the ability to easily switch to another operator if their expectations are not met.



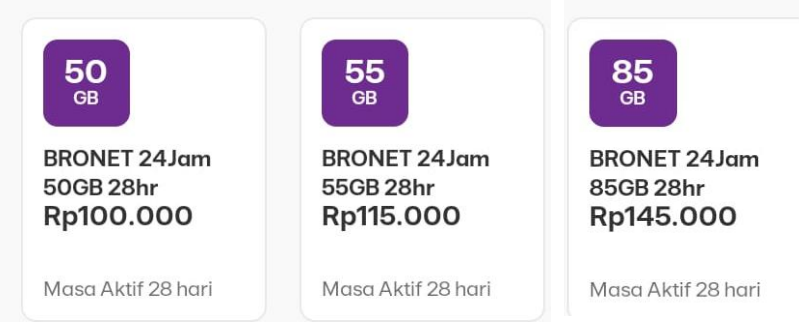
Amidst this competition, customer loyalty has become a crucial focus for telecommunications companies like Telkomsel. Customer loyalty extends beyond repeat usage, but also encompasses the customer's attitude and commitment to remain loyal despite attractive offers from competitors. Factors influencing customer loyalty are diverse, ranging from network and service quality, price, to brand perception.

Customer loyalty is a crucial aspect of a company's marketing strategy. This loyalty reflects the extent to which customers are committed to continuing to use a particular product or service. Brand loyalty is a measure of customer loyalty to a brand (Rizky FA, Susanta, and Sadeli, 2023) .

One factor influencing customer loyalty is price. Price is the amount of product value that customers exchange to obtain ownership or benefits from using a product or service (Gayatri, Saortua Marbun, and Berek, 2021) . Price reflects the value a customer must sacrifice to obtain a particular product or service. In the telecommunications context, competitive pricing can be a major draw for customers.

Price is one of the main considerations for customers when choosing a service. If the price of an internet package or phone credit is deemed disproportionate to the benefits or quality of service received, Customers tend to look for alternatives. Prices perceived as fair and affordable by customers will strengthen positive perceptions and encourage loyalty. The relationship between price and customer loyalty can be explained through customer value theory, which states that customers will remain loyal if they feel they are receiving value for money. Excessively high prices without matching quality can lead customers to switch to competitors. Conversely, reasonable prices combined with good service quality can increase loyalty.

Table 1.1. Comparison of Telkomsel, Indosat, and Axis Data Package Prices

Provider Name	Data Package Price Comparison
Telkomsel	 <p>The screenshot shows three data packages from Telkomsel:</p> <ul style="list-style-type: none"> Pembelian Ter... Super Seru 50 GB, 28 Hari, Rp100.000 Terbaik Super Seru Combo 41 GB, 30 Hari, Rp110.000 Terbaik Super Seru Internet 60 GB, 30 Hari, Rp130.000
Indosat	 <p>The screenshot shows three data packages from Indosat:</p> <ul style="list-style-type: none"> Penawaran ... SA... Internet 100GB, 30 Hari, Rp125.000 (28% off from Rp172.500) Penawaran ... SA... Internet 150GB, 30 Hari, Rp150.000 (29% off from Rp210.000) Penawaran ... SA... Internet 200GB, 30 Hari, Rp200.000 (29% off from Rp280.000)
Axis	 <p>The screenshot shows three data packages from Axis:</p> <ul style="list-style-type: none"> 50 GB BRONET 24Jam 50GB 28hr, Rp100.000, Masa Aktif 28 hari 55 GB BRONET 24Jam 55GB 28hr, Rp115.000, Masa Aktif 28 hari 85 GB BRONET 24Jam 85GB 28hr, Rp145.000, Masa Aktif 28 hari

Source: My Telkomsel Application, My IM3 Application, Axisnet Application

Besides price, service quality also plays an important role in shaping customer loyalty. According to the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry, service quality can be measured through five dimensions: reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman, Zeithaml, and L., 2008) . This model emphasizes that customer perceptions of service quality are influenced by the gap between their expectations and their perceptions of the service received.

Furthermore, service quality is also a crucial determinant. In the context of telecommunications service providers, service quality encompasses signal reliability, ease of access to customer service, and a seamless user experience. When customers perceive that they receive service that consistently meets their expectations, they develop a loyalty. High service quality can increase customer satisfaction, which in turn strengthens brand loyalty. When customers perceive that a service provider understands their needs and provides reliable and responsive service, they are more likely to continue using that service and recommend it to others. The quality of Telkomsel services in January-June 2025 is as follows:

Table 1.2. Telkomsel Network Service Quality

No	Network Services	Information
1	Network speed	Fastest Mobile Network: Telkomsel achieved a Speed Score™ of 52.34, with an average download speed of 45.89 Mbps and an average upload speed of 15.59 Mbps.
2	Network coverage	Best Mobile Coverage: Telkomsel achieved a Coverage Score™ of 29.60 based on more than 1.8 billion scans conducted by users on the Telkomsel

		network .
3	Network stability	Best Mobile Gaming Experience: Achieved a Game Score™ of 76.01 reflecting low latency and high stability for an optimal gaming experience.
No	Network Services	Information
4	5g mode network speed	Fastest 5G Mobile Network: Telkomsel recorded a Speed Score™ of 42.47 with an average download speed of 88.03 Mbps and an average upload speed of 27.00 Mbps on the 5G network.
5	5g mode network stability	Best 5G Network: With a Connectivity Score™ of 66.12, Telkomsel demonstrates reliable and stable 5G network quality.

Source: (Telkomsel) <https://www.telkomsel.com>

Furthermore, brand image plays an important role in shaping long-term customer perceptions. Brands that have a strong, symbolic, and emotionally valuable reputation are more likely to gain customer trust. According to (Rizky FA, Susanta and Sadeli, 2023) Brand image is the perception and belief held by customers such as associations that are reflected and embedded in customer memory. Brand image is “a set of beliefs, ideas, and impressions that a person has of an object.” Brand image reflects customer perceptions of the brand based on their experiences and information.

Based on the Top Brand Index, Telkomsel Prepaid SIM cards are the market leaders in the Prepaid SIM card category, with a Top Brand Index (TBI) score of 36.10%. This indicates the highest level of customer trust and preference for the brand among its competitors.

Top Brand Index

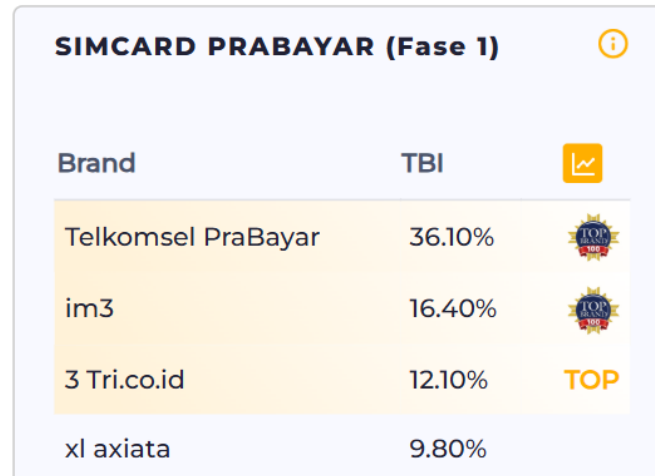


Figure 1.1. Top Brand Index

Source: Top Brand Index (Index, 2025) <https://www.topbrand-award.com>

As a major brand in Indonesia, Telkomsel must continuously maintain its reputation to maintain a positive public perception. A strong brand image not only instills trust in customers but also creates an emotional bond that makes them feel comfortable and proud to use the brand's products.

While specific data on the number of Telkomsel users in Medan is not publicly available, Telkomsel's activities and investments in the region demonstrate the company's commitment to increasing customer loyalty. This is reflected in the increased 4G network capacity and the provision of 5G networks in various strategic locations during the 21st National Games (PON) in Aceh-North Sumatra in 2024, including in Medan. Furthermore, Telkomsel also presented a 5G technology

showcase and held a Poin Festival Roadshow at the Medan Fair Plaza as a token of appreciation for loyal customers. The presence of Telkomsel GraPARI in Medan further strengthens the company's presence in meeting the communication needs of the local community.

Telkomsel Hadirkan Showcase 5G di PON XXI Aceh-Sumut 2024, Beri Keseruan dan Pengalaman Teknologi Broadband Terkini di Ajang Olahraga Terbesar Indonesia



Telkomsel 5G Showcase di PON XXI Aceh Sumut 2024

Find GraPARI & MyGraPARI

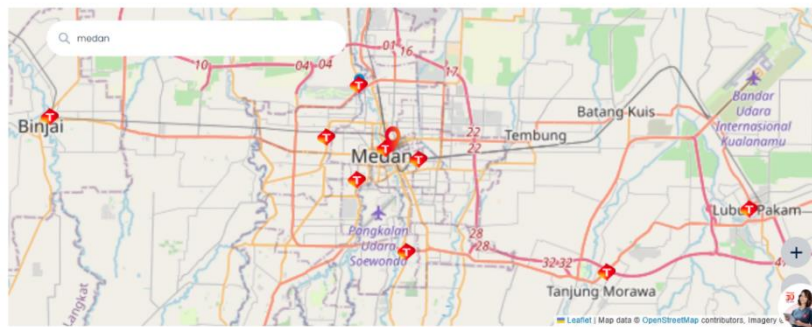


Figure 1.2. Telkomsel's Efforts to Improve Customer Loyalty

Source: Telkomsel Website (Telkomsel, 2025)

Based on the above explanation, it can be concluded that Telkomsel has a strong presence and activities in Medan City, ranging from 4G and 5G network improvements, loyalty programs such as the Poin Festival Roadshow, to direct service through several GraPARI locations throughout the city. However, all these

efforts have not been fully able to build strong loyalty among customers, as many negative reviews and complaints are still found regarding package prices that are



Figure 1.3. Review of Telkomsel Product Prices and Service Quality

Source: Telkomsel Sumatera Instagram Post, Google Review

Furthermore, prices perceived as disproportionate to benefits and inconsistent service quality can negatively impact brand image. When customers are disappointed by service that doesn't meet expectations or costs that are too high, their perception of the brand tends to deteriorate. In the long term, this can erode trust, erode loyalty, and weaken the brand's competitive position.

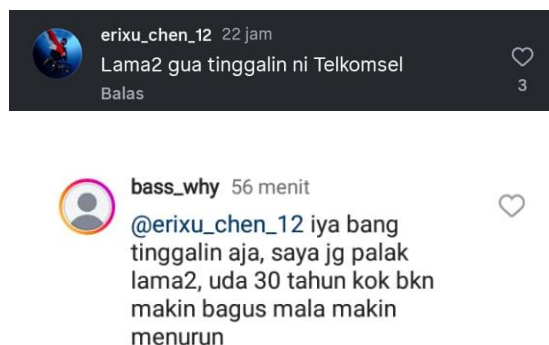


Figure 1.4. Review of Brand Image Perceptions of Telkomsel Products

Source: Telkomsel Instagram Post

<https://www.instagram.com/p/DKTXt63T2V9/?igsh=a2RtdmpudHI0ZWJ3>

Based on the above description, it can be seen that although Telkomsel has advantages in terms of network and brand image nationally, there are still customer complaints regarding price and service quality, which can affect customer loyalty locally, particularly in Medan. This mismatch between customer expectations and experience risks eroding loyalty and driving them to switch to other providers.

Therefore, research is needed that analyzes " **The Effect of Price, Service Quality, and Brand Image on Customer Loyalty to Telkomsel Products in the Student Environment of the Universitas Muhammadiyah Sumatera Utara** ", so that it can be a basis for strategic decision making and service improvements at the regional level. This research is also expected to provide scientific contributions in the field of service marketing, especially in the telecommunications industry.

1.2. Problem Identification

Based on the background description above, the problems that can be identified in this research are:

1. Customers are increasingly price sensitive, Telkomsel has relatively expensive prices.
2. Telkomsel's service quality isn't necessarily optimal for all customers, despite its generally recognized network quality. Dimensions such as reliability, responsiveness, or empathy may not be fully met from a customer perspective.

3. Telkomsel's brand image as a major operator does not necessarily guarantee loyalty, especially amidst the intense promotions of competitors who are more aggressive in building a positive and modern brand perception.
4. The lack of empirical data that simultaneously measures the influence of price, service quality, and brand image on Telkomsel customer loyalty in Medan City makes this issue relevant for further research.

1.3. Problem Definition

Based on the description of the background and identification of the problem above, the problem limitations in this study only focus on customers in the student environment of the Universitas Muhammadiyah Sumatera Utara.

1.4. Problem Statment

Based on the problem identification above, the problem formulation in this research is:

1. Does price have a significant effect on customer loyalty towards Telkomsel products among students at the Universitas Muhammadiyah Sumatera Utara?
2. Does service quality have a significant influence on customer loyalty towards Telkomsel products among students at the Universitas Muhammadiyah Sumatera Utara?

3. Does brand image have a significant influence on customer loyalty towards Telkomsel products among students at the Universitas Muhammadiyah Sumatera Utara?
4. Do price, service quality, and brand image simultaneously influence customer loyalty towards Telkomsel products among students at the Universitas Muhammadiyah Sumatera Utara?

1.5. Research Objectives

The objectives to be achieved from this research are:

1. To determine and analyze the influence of price on customer loyalty towards Telkomsel products among students at the Universitas Muhammadiyah Sumatera Utara.
2. To determine and analyze the influence of service quality on customer loyalty towards Telkomsel products among students at the Universitas Muhammadiyah Sumatera Utara.
3. To determine and analyze the influence of brand image on customer loyalty towards Telkomsel products among students at the Universitas Muhammadiyah Sumatera Utara.
4. To determine and analyze the influence of price, service quality, and brand image simultaneously on customer loyalty towards Telkomsel products among students at the Universitas Muhammadiyah Sumatera Utara.

1.6 Benefits of Research

Based on the research objectives above, the author hopes that this research can provide the following benefits:

1. Benefits for researchers: This research is expected to increase researchers' insight and understanding in the field of marketing management, especially regarding the influence of price, service quality, and brand image on customer loyalty.
2. For academics: Contributing to the development of scientific literature on customer loyalty, as well as strengthening theoretical studies on the relationship between price, service quality, and brand image in the context of the service industry, especially telecommunications.
3. For business practitioners: Providing useful information for company management, especially Telkomsel, in designing more targeted marketing and service strategies to increase customer loyalty amidst tight competition.

CHAPTER II

LITERATURE REVIEW

2.1. Theoretical Basis

2.1.1. Customer Loyalty

2.1.1.1. Definition of Customer Loyalty

Customer loyalty is defined as customer behavior that tends to purchase products or services from a company while maintaining a high level of consistency (Ester *et al.* , 2025) . Furthermore, it is stated that loyalty is characterized by customer loyalty to the brand/product, continuity of the relationship, repurchase, and the possibility of referring or promoting to others (Primasari and Dwita, 2025) .

According to (Riyadi and Erdiansyah, 2023) , customer loyalty is a positive attitude toward a brand demonstrated through repeat purchases. Commitment to a product/service is achieved through a combination of satisfaction and complaints. Satisfaction stems from the company's efforts to generate satisfaction by minimizing complaints, resulting in long-term customer purchases (Muis *et al.* , 2021) .

According to (Lesmana and Putri, 2017) Loyalty factors are the amount of consumption and frequency of purchases made by a customer towards a company.

Based on these opinions, it can be concluded that customer loyalty is a positive attitude and consistent behavior in repeating purchases of a company's products or services. Loyalty is demonstrated through brand loyalty, ongoing

relationships, recommendations to others, and a long-term commitment formed through satisfaction and a minimum of complaints.

2.1.1.2. Factors Influencing Customer Loyalty

Quoted from the book on marketing management in moderating interest in purchasing electric cars (Tirtayasa S, et.al., 2024) the main factors that influence customer loyalty are:

1. Customer Satisfaction

Customer satisfaction is considered as a strong predictor of customer loyalty including positive recommendations, repurchase intentions and others.

2. Service quality

Product or service quality is strongly linked to customer loyalty. Quality increases sales and market share, leading to loyalty.

3. Brand Image

Brand image appears to be a determining factor in customer loyalty which helps to enlarge/build a more positive company image.

4. Perceived value

Perceived value is a comparison of perceived benefits and costs incurred by customers and is treated as a determining factor for customer loyalty.

5. Trust

Trust is defined as the perception of confidence in a company's reliability as determined by systematic confirmation of expectations regarding the company's offerings.

6. Customer Relationship

Customer relational is defined as customer perception of personality, cost-benefit ratio, cost-benefit ratio in a continuous and reciprocal relationship.

7. Switching cost

In relation to customers, switching costs are a restraining or self-controlling factor in changing product suppliers/distributors and perhaps because of this, customers become loyal.

8. Reliability

Not only is it limited to its ability to create superior value for customers, but it also includes all aspects of organizational achievements related to public appreciation of the company which directly impacts customer loyalty.

2.1.1.3 Benefits of Customer Loyalty

Quoted from the marketing management book in moderating interest in buying electric cars (Tirtayasa S, et.al., 2024) there are six benefits of customer loyalty that companies must maintain and look after their customers, namely because:

1. Existing customers have greater prospects of providing profits to the company.
2. The costs incurred by companies in maintaining and retaining existing customers are much smaller than finding new customers.
3. Customers who trust an institution in one business matter tend to trust it in other business matters as well.
4. If a long-standing company has many existing customers, it will benefit from increased efficiency. Long-standing customers will naturally have fewer demands; the company simply needs to maintain and retain them. New employees can be trained to serve them, reducing service costs.
5. Long-standing customers have certainly had many positive experiences related to the company, thus reducing psychological and socialization costs.
6. Existing customers will try to defend the company, and refer the company to their friends and surroundings.

2.1.1.4. Customer Loyalty Indicators

Customer loyalty indicators according to (Nuvriasari *et al.* , 2025) :

1. Repurchase Intent: A customer's willingness to repurchase in the future.
2. Willingness to Recommend: A customer's willingness to recommend a product or service to others.

3. Not Easily Switching to Other Operators: Customer resistance to negative influences and the tendency to remain loyal to a brand despite offers from competitors.
4. Sustainable Satisfaction: The satisfaction that customers obtain continuously from the product or service they use.

Likewise, according to (Ardhana and Dermawan, 2025) , the indicators of customer loyalty are:

1. Same product purchase rate: This indicator describes the tendency of customers to continue purchasing products from the same brand consistently.
2. Repeat product purchases: This indicator shows the frequency with which customers make repeat purchases of the same brand of product within a certain period of time.
3. Not switching to another brand: This indicator indicates that customers remain loyal to a particular brand despite attractive offers or promotions from competing brands.
4. Recommend to others: This indicator shows the customer's willingness to recommend or promote the product to others (word of mouth).

2.1.2. Price

2.1.2.1. Definition of Price

According (Tabrani, Rahmatika, and Firmansyah 2021), price is the amount of money required to obtain a combination of products and services. Price is a

marketing variable that companies must consider because it directly affects sales capacity and profits (Wiguna and Padmantyo, 2023). Price can also be considered a factor that determines a product's value in the eyes of customers (Mappe *et al.* , 2024)

According (Lestari, Muna, and Renfiana 2023), price is the nominal amount that consumers exchange for the benefits of ownership or use of a product, where the nominal amount is determined by the seller and consumer during the bargaining process. According (Nasution, et al., 2023), when prices increase, the decision to make a purchase tends to decrease; conversely, if prices decrease, the decision to make a purchase tends to increase.

Based on these opinions, it can be concluded that price is an amount of money or exchange rate set as a means of acquiring a product or service, reflecting the product's value and benefits in the eyes of customers. Price plays a crucial role in marketing strategy because it directly influences purchasing decisions, sales volume, and company profitability. When prices rise, purchasing interest tends to decrease, while lower prices can increase purchasing decisions.

2.1.2.2. Steps to Setting Prices

Quoted from the book on service marketing (Fatihudin D, and Firmansyah AM), the steps in setting prices are as follows:

1. Choosing a pricing objective: The right price is a price that matches the quality of the service, and this price can provide satisfaction to customers.
2. Determining demand: estimating how many customers are willing and able to buy a product or service at a certain price level within a certain time period.
3. Estimating costs: Pricing policies are heavily influenced by existing competitive conditions. Therefore, management and sellers must first understand the competitive situation and the sources that influence it.
4. Analyzing Competitors' Costs, Prices, and Offers: By understanding production costs, customer pricing behavior, and competitor strategies, companies can determine selling prices that are competitive, remain profitable, and in line with the value perceived by customers.
5. Choosing a pricing method: Using methods when setting prices
6. Choosing the final price: after all steps are done, then the price is determined.

2.1.2.3. Price Indicators

Price indicators according to (Wiguna and Padmantlyo, 2023) are:

1. Price affordability: The extent to which the product price is affordable for customers.
2. Price-to-quality ratio: Is the price commensurate with the quality of service received?
3. Competitive prices: Compared to other providers.

4. Price transparency: Customers understand the cost components and do not feel cheated.

Likewise, according to (Kevin and Simon, 2024) , price indicators are:

1. Price Affordability : The extent to which consumers feel that the price of the product or service is within their financial means to purchase.
2. Price Suitability with Product Quality : The level of suitability between the price paid by consumers and the quality of the product or service received.
3. *Price* Competitiveness : The level of a product's price ability to compete with similar products offered by competitors in the market.
4. Price Suitability with Benefits : The level of suitability between the price paid and the benefits or uses obtained by consumers from the product or service.

2.1.3 Quality of Service

2.1.3.1 Definition of Service Quality

Service quality is the comparison between the service perceived by customers and the service quality expected by customers (Latif *et al.* , 2023) . Service quality is how well a service is able to meet customer expectations, which is assessed from various aspects such as reliability, responsiveness, and empathy of the service provider. The smaller the gap between expectations and reality, the higher the quality of service perceived by customers. According to (Andriani and Nasution, 2023)

Service quality is a crucial issue for every company. Service quality can be defined as how well the level of service is able to meet customer expectations. According to (Sigit and Soliha, 2017), service quality can be defined as the overall attributes and characteristics of a product or service that determine its ability to meet customer needs. According to (Palupi *et al.* , 2025), service quality refers to the five dimensions of SERVQUAL: tangibles, reliability, responsiveness, assurance, and empathy. A company is said to have good quality if it is consistently able to meet most of its customers' needs (JRSitinjak *et al.* , 2022) .

Based on these opinions, it can be concluded that service quality is a company's ability to consistently provide services that meet or exceed customer expectations. Furthermore, service quality also reflects a company's ability to consistently meet the majority of customer needs and expectations, thereby creating long-term customer satisfaction and loyalty.

2.1.3.2. Classification of Service Quality

Quoted from the book *Service Quality: Theory and Application* (Sulistiyowati W), service quality can be divided into three, namely:

1. satisfactory service quality (if the service received is as expected)
2. poor service quality (if the quality of service received is lower than the expected quality of service)
3. ideal service quality (if the quality of service received is higher than expected).

2.1.3.3. Service Quality Indicators

Service quality indicators refer to the SERVQUAL model (Prananda, Lucitasari and Abdul Khannan, 2019) :

1. Tangibles : Physical appearance of staff, equipment, and facilities .
2. Reliability : The ability to provide promised services in a timely and consistent manner.
3. Responsiveness : Willingness to help customers and provide prompt service.
4. Assurance : Knowledge and courtesy of staff and ability to build trust.
5. Empathy : *Attention* and understanding of individual customer needs.

Service quality indicators according to (Elrahman, 2019) are:

1. Reliability : The level of ability of telecommunications services to function stably, consistently and without interruption in meeting customer needs.
2. Convenience : The extent to which telecommunications services are easy to access, use, and provide convenience in customer interactions with operators.
3. Responsiveness : The speed and alertness of a company in responding to customer requests, complaints or questions.
4. Network Coverage : The extent of the signal coverage area and the operator's ability to provide uniform services across various regions.

2.1.4. Brand Image

2.1.4.1. Definition of Brand Image

A positive brand image can increase customer loyalty. The positive perception a company creates through product and service quality creates a positive brand image in the minds of customers, ultimately driving loyalty (Kuswati *et al.* , 2021) .

According to (Aisha and Kurnia, 2018), brand image is essentially the result of customers' views or perceptions of a particular brand based on good considerations and perceptions of a brand. Brand image involves consumer perceptions of product quality and brand exclusivity (Dati Putra Nur Akhmad and Mirzam Arqy Ahmadi, 2024) .

According to (Rizky FA, Susanta, and Sadeli, 2023), brand image is the perception and beliefs held by customers, such as associations reflected and embedded in customer memory. Brand image can be defined as a perception that arises in the minds of consumers when recalling a brand of a particular product (Sigit and Theresia Christina, 2023) .

Based on these opinions, it can be concluded that brand image is a customer's perception or view of a brand, formed through their experiences, beliefs, and assessments of the quality of the company's products and services. A positive brand image reflects trust and a positive impression in the minds of consumers, arising from product quality, exclusivity, and the company's consistency in providing satisfactory service. The stronger and more positive a brand's image in the eyes of consumers, the greater the tendency for customers to be loyal to that brand.

2.1.4.2. Benefits of Brand Image

Quoted from the book service quality, customer satisfaction, and customer loyalty: a theoretical review (Chandra, T., Chandra, S., & Hafni, L., 2019) the benefits of brand image are divided into three parts, namely:

1. Functional: benefits that seek to provide solutions to consumption problems or potential problems that customers may face, by communicating that a brand has specific benefits that can solve those problems.
2. Symbolic: trying to direct the customer's desires in an effort to improve themselves, be valued as a member of a group, affiliation and a sense of belonging.
3. Experience: customers are a representation of their desire for products that can provide pleasure, variety, and cognitive stimulation.

2.1.4.3. Brand Image Indicators

The brand image indicators according to (Alfia and Dwiridotjahjono, 2023) :

1. Product attributes : are things related to the brand, such as packaging, taste, price, etc.
2. Consumer benefits : are the uses of the product from that brand.

The brand image indicators according to (Nadjwa, Srivania and Mardhiana, 2024) :

1. Brand Awareness : the extent to which consumers recognize and are aware of the existence of a brand.

2. *Perceived Quality* : how consumers assess the quality of products/services offered by a brand compared to expectations or competing brands.
3. *Overall Brand Image* : consumer perception of a brand resulting from a combination of elements such as awareness, quality, brand associations and consumer experience.

2.2. Conceptual Framework

In this research, a conceptual framework is essential to understand the relationships between each variable. The conceptual framework can be viewed through previous research to understand the relationships between each variable. The conceptual framework is a relationship or connection between one concept and another concept of the problem to be studied (Chamariyah, Mohammad Rofiq Hariyadi and C. Sri Hartati, 2022) . This link or relationship between variables is important to be put forward as a basis for formulating Where the variables put forward in this conceptual framework are Price (X1), Service Quality (X2), Brand Image (X3) as independent variables (free) with the symbol X, while Customer Loyalty as the dependent variable (bound) with the symbol Y, which can be stated below:

2.2.1. The Influence of Price on Customer Loyalty

According to (Wiguna and Padmanty, 2023) , price is a marketing variable that companies must consider because it directly impacts sales capacity and profits. Appropriate pricing reflects a product's value in the eyes of consumers and is a

crucial strategy for winning market competition. Therefore, companies need to ensure that their pricing policies align with product quality and consumer purchasing power to foster sustainable customer loyalty.

According to (Munir AF, and Ahmadi MA, 2025), competitive prices commensurate with product quality will play a significant role in increasing customer loyalty. Customers tend to be more loyal to products they perceive as reasonably priced and providing high value. This suggests that consumer perceptions of the fit between price and quality are a key factor in shaping customer loyalty. Therefore, a fair and transparent pricing strategy can increase satisfaction and strengthen long-term relationships between customers and the company.

Based on previous research conducted by (Luh *et al.* , 2020) , (Rahmani and Rusdianto, 2024) , (Qahfi *et al.* , 2020) , (Hartanto *et al.* , 2024) , it states that there is a positive and significant influence between price and customer loyalty to service products. This indicates that the more appropriate the price set, the higher the level of customer loyalty to the service.

2.2.2. The Influence of Service Quality on Customer Loyalty

According to (Riyadi and Erdiansyah, 2023) , customer loyalty is a positive attitude toward a brand, demonstrated through repeat purchases. This loyalty is formed through consistent satisfaction from previous experiences, leading customers to continue choosing the same brand rather than switching to competitors.

According to (Widianti,R., and Safuan,S., 2025) Service quality plays an important role in forming customer loyalty, which is reflected in the customer's intention to reuse the service, provide recommendations, and maintain long-term relationships with the company.

According to (Syahran *et al.* , 2022), consistent service quality and trust in customers increase customer loyalty. Customer satisfaction can mediate the relationship between service quality and customer loyalty.

Based on research conducted by (Luh *et al.* , 2020) , (Rahmani & Rusdianto, 2024), (Jufrizen, *et al.* , 2020) , and (Hartanto et al., 2023), service quality has a significant positive effect on customer loyalty to service products. This indicates that the better the service quality received, the higher the level of customer loyalty to that service.

2.2.3. The Influence of Brand Image on Customer Loyalty

According to (Rizky FA, Susanta, and Sadeli, 2023), brand image is the perception and beliefs held by customers, such as associations reflected and embedded in their memories. A strong brand image will create trust and emotional closeness between customers and the brand, thus encouraging customer loyalty and repeat purchases.

According to (Permata Putri and Syaefulloh, 2024), a positive brand image can increase customer loyalty. The positive perception a company creates through

product and service quality creates a positive brand image in the minds of customers, ultimately driving loyalty.

Based on research conducted by (Astuti and Alfarizky, 2020) and (Alfia N, and Dwiridotjahjono J, 2023), brand image has a positive and significant effect on brand loyalty, both partially and simultaneously with brand trust. A strong image can create an emotional attachment that encourages customers to continue using the brand.

2.2.4. The Influence of Price, Service Quality, and Brand Image on Customer Loyalty

Service quality, brand image, and price fairness are the main determinants in forming customer satisfaction, which then plays a role as a key variable in creating customer loyalty (Sartika et al., 2025).

According to (Leonardo et al., 2021) Customer loyalty is influenced by service quality, brand image, and effective promotions, while high perceived prices can undermine loyalty. Therefore, companies need to balance pricing strategies with improving service quality and strengthening brand image.

According to (Reykhan & Moko, 2022) Customer loyalty is influenced by various marketing factors, including service quality, brand image, price perception, and reference groups. Good service quality will increase customer satisfaction, thus encouraging repeat purchases. A positive brand image builds trust and an emotional

connection with consumers. The perception of price commensurate with product quality increases customer perceived value, while reference groups act as a powerful social influence in shaping customer attitudes and loyalty.

Research by (Aditya Dwi Putra and Nurul Azizah 2024) ,(Joshua and Haryadi 2014) , and (Fanesya Yul Fani and Unik Dwi Lestari 2024) found that price, service quality, brand image, and product quality simultaneously significantly influence customer loyalty. This means that if these four variables are improved and maintained by a company, they can increase overall customer loyalty.

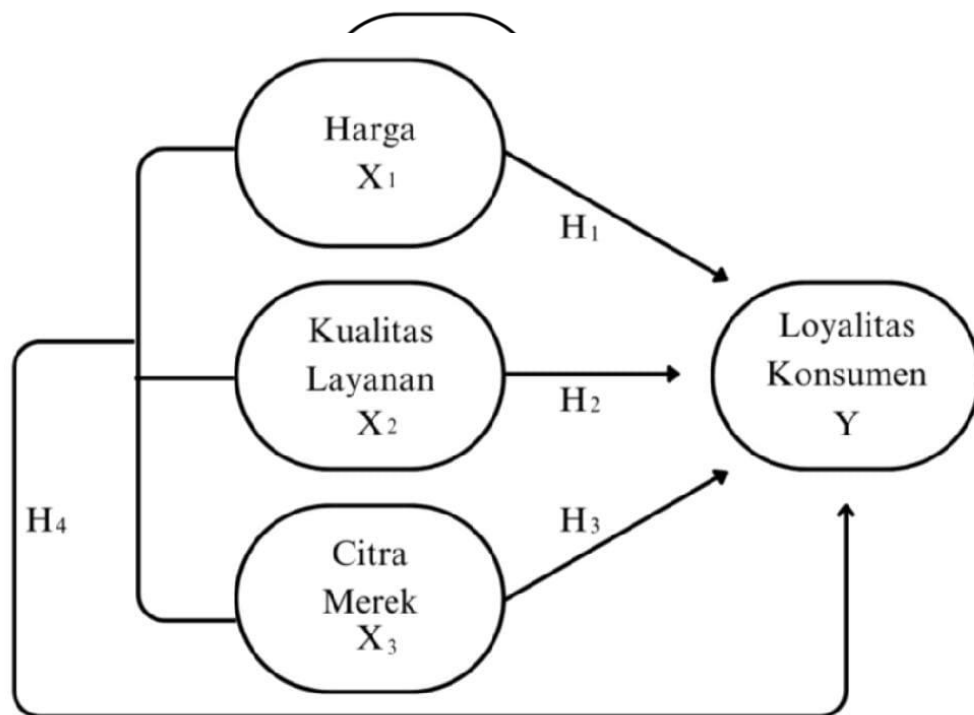


Figure 2.1 Conceptual Thinking Framework

2.3. Hypothesis

Based on the conceptual framework of the research, the researcher can draw the following research hypotheses:

H 1 : Price has a significant influence on customer loyalty to Telkomsel products in the student environment of the Universitas Muhammadiyah Sumatera Utara.

H 2 : Service quality has a significant influence on customer loyalty to Telkomsel products in the student environment of the Universitas Muhammadiyah Sumatera Utara.

H 3 : Brand image has a significant influence on customer loyalty to Telkomsel products in the student environment of the Universitas Muhammadiyah Sumatera Utara.

H 4 : Price, service quality, and brand image have a significant influence on customer loyalty to Telkomsel products in the student environment of the Universitas Muhammadiyah Sumatera Utara

CHAPTER III

RESEARCH METHODS

3.1. Type of Research

This type of research is survey research, as it samples a single population. It uses an explanatory research approach, which aims to explain the causal relationship between the research variables and the tested hypotheses. This research falls into the category of causal research using a quantitative approach. Quantitative theory contains basic concepts relevant to the problem and its objective variables for formulating hypotheses and instruments (Faiqatul Munawwarah *et al.* , 2025) . Therefore, hypotheses are identified initially after the theory and variables are determined from the research problem. According to (Daswal, Nursanty, and Fauzi, 2023), Associative research is research that aims to determine the relationship between two or more variables.

3.2. Operational Definition

An operational definition is a clear and specific explanation of how a concept or variable is measured and observed in a study. This definition aims to concretely explain what is meant by a particular term or variable so that it can be understood and measured consistently. The operational definition in this study is as follows:

Table 3.1. Operational Research Variables

No	Variables	Operational Definition of Research	Indicator	Measurement Scale
1.	Customer Loyalty (Y)	Customer loyalty is a positive attitude and consistent behavior in repeating purchases of a company's products or services.	1. Repurchase intention 2. Willingness to recommend 3. It's not easy to switch to another operator 4. Sustainable satisfaction Source: (Nuvriasari et al., 2025)	Likert
2.	Price (X1)	Price is an amount of money or exchange rate set as a means of acquiring a product or service, reflecting the product's value and benefits in the eyes of customers.	1. Price Affordability 2. Price to quality ratio 3. Competitive prices 4. Price transparency Source: (Wiguna and padmantyo,2023)	Likert
3.	Service Quality (X2)	Service quality is a company's ability to consistently provide services that meet or exceed customer expectations.	1. Tangibles 2. Reliability 3. Responsiveness: 4. Assurance 5. Empathy Source: (Prananda, Lucitasari and Abdul Khannan, 2019)	Likert
No	Variables	Operational Definition of	Indicator	Measurement Scale

		Research		
4.	Brand Image (X ₃)	Brand image is a customer's perception or view of a brand, formed through their experiences, beliefs, and assessments of the quality of the company's products and services.	1. Brand Awareness 2. Perceived Quality 3. Overall Brand Image Source: (Nadjwa, Srivania and Mardhiana, 2024)	Likert

3.3. Place and Time of Research

In the process of collecting data and information, the research location was in the city of Medan, postal code 20238. The time of this research was carried out from October 2025 to March 2026.

3.3.1 Research Location

This research was conducted at the FEB UMSU building on Jalan Mukhtar Basri No. 3A Medan

3.3.2 Research Time

The research period starts from November 2025 to March 2026. With the following research schedule and time:

Table 3.2. Research Schedule and Time

No	Activity	Month																							
		October				November				December				January				February				March			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Pre-Research	■																							
2	Title submission		■																						
3	Proposal Preparation			■	■	■	■	■	■																
4	Proposal Guidance							■	■																
5	Proposal Seminar													■	■	■	■								
6	Thesis Preparation																								
7	Thesis Guidance																	■	■	■	■				
8	Green Table Session																					■	■	■	■

Data Source: Researcher Myself, 2026.

3.4. Sampling Techniques

1. Population

According to (Juliandi, 2015) population is the totality of all elements in a research area. Based on the opinion above, the population in research is The Influence of Price, Service Quality, and Brand Image on Customer Loyalty to Telkomsel Products in the Student Environment of the Universitas Muhammadiyah Sumatera Utara. According to data from the Umsu Academic Bureau , the student population at the Universitas Muhammadiyah Sumatera Utara in 2025 will be 2.54 million.

However, the exact number of students at Universitas Muhammadiyah Sumatera Utara who use Telkomsel products is not known.

2. Sample

A sample is a portion of the population and its characteristics. If the population is too large and cannot be studied in its entirety due to limited funds, personnel, or time, researchers can use a sample drawn from that population (Sugiyono, 2013). Because the exact number of population members in this study is unknown, the sample size was determined using the Lemeshow formula as follows:

$$n = \frac{Za^2 \times P \times Q}{L^2}$$

Keterangan:

n = Minimum sample size required

Za = Standard value of the distribution according $\alpha = 95\% = 1,96$

P = Prevalansi outcome, since data has not been obtained $50\% = 0,5$

Q = $1-P$

L = Margin of error 10%

Berdasarkan perhitungan rumus yang diterapkan, maka:

$$n = \frac{(1,96)^2 \times 0,5 \times 0,5}{(0,1)^2}$$

$n = 96,04 = 100$ orang

Based on the results of these calculations, it can be concluded that the minimum number of samples required in this study is 100 respondents who use Telkomsel

products. The sample criteria in this study are active Telkomsel users for at least the last 6 months, students of Universitas Muhammadiyah Sumatera Utara (UMSU), have purchased Telkomsel internet packages at least 2 times within the last 3 months, and are willing to fill out the questionnaire completely.

3.5. Data Collection Techniques

The technique in collecting this data is to use primary data, namely data sources obtained directly from original sources and then collected by researchers specifically with the aim of answering research questions.

3.5.1. Observation

This observation technique is used as data collection by researchers for preliminary studies to find data on problems that must be researched.

3.5.2. Interview

This interview technique is used as data collection by researchers for preliminary studies to find problems that need to be researched.

3.5.3. Questionnaire

A questionnaire is a set of questions or statements prepared by researchers to determine respondents' opinions about a particular variable. In this study, the answers given by employees as respondents were arranged using a Likert scale. The Likert scale is designed to measure the attitudes, opinions, and perceptions of an individual or group of people regarding social phenomena (Juliandi, 2015).

The questionnaire distributed in this study used a Likert scale. A higher score indicates a more accurate reflection of the respondent's condition and situation. A respondent's response to a question indicates a more positive attitude toward the research object, and vice versa. The goal is to guide respondents. The Likert scale is shown in the following table:

Table 3.3. Measurement Scale

No	Answer Options	Scale
1	Strongly agree	5
2	Agree	4
3	Disagree Less	3
4	Don't agree	2
5	Strongly Disagree	1

3.6. Data Analysis Technique Test

3.6.1. Data Quality Test

3.6.1.1. Validity Test

Validity testing is used to determine whether a questionnaire is valid or not. A questionnaire is considered valid if its questions are able to reveal improvements in work performance. Validity testing is performed by comparing the calculated r value (correlated item-total correlations) with the table r value. If the calculated r value is greater than the table r value and is positive, the questionnaire is considered valid (Ghozali,2018). Validity was carried out outside the minimum sample of 30 people with an r-table of 0.361 (Sugiyono, 2019).

Tabel 3.4
Validity Test Results

No	Corrected Item-Total Correlation	r-tabel	Result
Price (X₁)			
1	,851	0,361	Valid
2	,823	0,361	Valid
3	,838	0,361	Valid
4	,848	0,361	Valid
5	,829	0,361	Valid
6	,814	0,361	Valid
7	,833	0,361	Valid
8	,870	0,361	Valid
9	,776	0,361	Valid
10	,735	0,361	Valid
11	,764	0,361	Valid
12	,763	0,361	Valid
Sercive Quality (X₂)			
13	,878	0,361	Valid
14	,871	0,361	Valid
15	,853	0,361	Valid
16	,747	0,361	Valid
17	,907	0,361	Valid
18	,820	0,361	Valid
19	,847	0,361	Valid
20	,905	0,361	Valid
21	,903	0,361	Valid

Sercive Quality (X₂)			
22	,887	0,361	Valid
23	,842	0,361	Valid
24	,872	0,361	Valid
25	,896	0,361	Valid
26	,870	0,361	Valid
27	,851	0,361	Valid
Brand Image (X₃)			
28	,855	0,361	Valid
29	,839	0,361	Valid
30	,788	0,361	Valid
31	,883	0,361	Valid
32	,867	0,361	Valid
33	,911	0,361	Valid
34	,811	0,361	Valid
35	,907	0,361	Valid
36	,940	0,361	Valid
Customer Loyalty (Y)			
37	,870	0,361	Valid
38	,792	0,361	Valid
39	,912	0,361	Valid
40	,916	0,361	Valid
41	,924	0,361	Valid
42	,930	0,361	Valid
43	,952	0,361	Valid
44	,951	0,361	Valid
45	,954	0,361	Valid

Customer Loyalty (Y)			
46	,896	0,361	Valid
47	,918	0,361	Valid
48	,926	0,361	Valid

Source: Research Results, 2026 (processed data).

Based on Table 3.4, it is known that at a significance level of 5% and a sample (N) of 30 people, the Corrected Item-Total Correlation value of each question item is greater than the r-table value of 0.361 ($r\text{-calculated} > r\text{-table}$). Thus, it can be concluded that each question item from each variable of price, service quality, brand image and customer loyalty is declared valid and can be used in research.

3.6.1.2. Reliability Test

Reliability is a tool for measuring a questionnaire, which is an indicator of a variable or construct. A questionnaire is said to be reliable if a person's answers to the questions are consistent or stable over time. SPSS provides a facility to measure reliability using the *Cronbach Alpha* (α) statistical test. A variable is said to be reliable if it produces an α value of 0.60 (Ghozali, 2018).

Tabel 3.5
Reliabilitas Test Results

No	Variabel	Cronbach's Alpha	N of items	Hasil
1	Price (X_1)	0,952	12	Reliabel
2	Service Quality (X_2)	0,974	15	Reliabel
3	Brand Image (X_3)	0,958	9	Reliabel
3	Customer Loyalty (Y)	0,981	12	Reliabel

Source: Research Results, 2026 (processed data).

Table 3.5 shows that the test results for all research variables have a Cronbach's Alpha value greater than the r-table value of 0.60. Therefore, it can be concluded that the variables price, service quality, brand image, and customer loyalty are reliable, making all items suitable for use in the study.

3.6.2. Descriptive Statistical Analysis

According to Sugiyono (2011 :147), descriptive analysis is a statistic used to analyze data by describing or depicting the collected data as it is without the intention of drawing conclusions that apply to the public or generalize. The descriptive statistical analysis used in this study is:

1. The minimum value is the lowest or smallest value answered by a respondent in a research questionnaire. The maximum value is the highest or largest value answered by a respondent in a research questionnaire.
2. *Mean* (measurement of central tendency) is the average value of respondents' answers to research questionnaire questions.
3. Calculation of data distribution through average and standard deviation.
4. The percentage of agreement is calculated using the answer categories strongly agree and agree. The percentage of disagreement is calculated using the answer categories somewhat agree, disagree, and strongly disagree.

3.6.3. Classical Assumption Test

The hypothesis requires a classical assumption test, because the analysis model used is multiple linear regression. The classical assumptions used are as follows:

a) Normality test

The normality test aims to test whether in the regression model, the interfering variables or residuals have a normal distribution. If this assumption is violated, the statistical test becomes invalid for small sample sizes (Ghozali, 2018).

b) Multicollinearity Test

This test is conducted to determine whether the regression model found any correlation between independent variables. A good model should not have any correlation between independent variables (Ghozali, 2018). According to (Ghozali, 2018) multicollinearity test with SPSS is conducted regression test, with the benchmark value of VIF (Variance Inflation Factor) and correlation coefficient between independent variables. The criteria used are:

- a. If the VIF value is around 1 or has a tolerance close to 1, then it is said that there is no multicollinearity problem.
- b. If the coefficient between independent variables is less than 0.10, it indicates multicollinearity.

c) Heteroscedasticity Test

According to (Sunyoto, 2015), heteroscedasticity means that the variation of variables is not the same for each observation. In this test, the errors that occur are random but show a systematic relationship according to the magnitude of one or more independent variables.

3.6.4. Inferential Statistical Analysis

Inferential statistics is a data analysis technique used to determine the extent of similarity between the results obtained from a sample and the results that would be obtained in the population as a whole. In this case, a significance test is carried out from an analysis based on the t-test (partial) , f-test (simultaneous) , and coefficient of determination (Sugiyono, 2011 :157) .

3.6.4.1. Hypothesis Testing

To determine whether or not there is an influence of price, service quality , and brand image on customer loyalty, the data analysis model used in the hypothesis is multiple linear regression analysis, with the following formulation:

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

Y = Customer Loyalty

a = Constant (value at zero)

b1, b2, b3 = The magnitude of the coefficient of each variable

x1 = Price

x2 = Service Quality

x3 = Brand Image

e = Error value

3.6.4.2. t-Test (Partial Test)

This is done to test each independent variable to see whether it has a positive or significant influence on the dependent variable. The hypothesis model used in this t-test is (Ghozali, 2018):

$H_0 : b_i = 0$, meaning that partially there is no positive and significant influence of the independent variable on the dependent variable.

$H_0 : b_i \neq 0$, meaning there is a positive and significant influence of the independent variable on the dependent variable.

The statistical t-test value will be compared with the t-table value with an error rate of $\alpha = 5\%$. The test criteria used are:

H_0 is accepted, if $t_{\text{count}} < t_{\text{table}}$ in Sig. $t_{\text{count}} > \alpha = 5\%$

H_a is accepted, if $t_{\text{count}} > t_{\text{table}}$ in Sig. $t_{\text{count}} \alpha = 5\%$

3.6.4.3. F Test (Simultaneous Test)

The F-statistic test is carried out to see together whether there is a positive or significant influence of the independent variables consisting of price (x_1), service quality (x_2), and brand image (x_3), and the values of customer loyalty , namely the dependent variable (y), the hypothesis model used in this F-statistic test is:

$H_0 : b_1 , b_2 = 0$, meaning that the independent variables together do not have a positive and significant effect on the dependent variable.

Ho: $b_1, b_2 \neq 0$, meaning that the independent variables together have a positive and significant effect on the dependent variable.

The statistical F value will be compared with the table F value with an error rate of $\alpha = 5\%$. The test criteria used are:

If $F_{\text{count}} > F_{\text{table}}$, then H_a is accepted at Sig. $F_{\text{count}} < 0.05$

This means that statistically the data used to prove the independent variables (price, service quality, and brand image) have an effect on the value of the dependent variable (customer loyalty).

If $F_{\text{count}} < F_{\text{table}}$, then H_a is accepted at Sig. $F_{\text{count}} > 0.05$

This means that statistically the data used to prove the independent variables (price, service quality, and brand image) have no effect on the value of the variable (customer loyalty).

3.6.4.4. Determinant Coefficient (R^2)

Determinants are used to see how much influence the independent variable has on the dependent variable. In other words, the determinant coefficient is used to measure the magnitude of the influence of the independent variables studied, namely price (x_1), service quality (x_2), brand image (x_3), while the dependent variable is customer loyalty (y). The determinant coefficient (R^2) ranges from zero to one ($0 < R^2 < 1$). This means that if $R^2 = 0$ indicates no influence of the independent variable on the dependent variable and if R^2 approaches 1, it indicates an increasingly strong

influence of the independent variable on the dependent variable , (Sugiyono 2011 :97).

CHAPTER IV

RESEARCH RESULT

4.1. Data Description

4.1.1. Respondent Identity Characteristic

The respondents in this study were Telkomsel consumers at the Universitas Muhammadiyah Sumatera Utara, totaling 100 people. Respondents were obtained by distributing questionnaires to consumers who happened to be encountered during the research on the influence of price, service quality, and brand image on customer loyalty. The number of questionnaires distributed in this study was 100, all of which were fully completed, thus matching the predetermined sample size. In addition to analyzing the responses to each questionnaire, the results of the questionnaire will also be used to analyze the respondents' identities based on gender, current semester, and how long they have been using Telkomsel products. In general, the characteristics of the respondents can be summarized as follows:

4.1.1.1. Identity Based on Gender

The gender of respondents can be categorized into male and female. The results of this study regarding the characteristics of respondents based on gender from 100 Telkomsel consumer respondents at the Universitas Muhammadiyah Sumatera Utara can be seen in table 4.1. As follows:

Table 4.1 Respondent Gender

No	Gender	Amount	Percentage (%)
1	Man	32	32 %
2	Woman	68	68 %
Amount		100	100 %

Source: Data Processed by the author, 2026

Based on the data in Table 4.1, it shows that the respondents in this study were male, totaling 32 respondents or approximately 32% of all respondents, while female respondents numbered 68 respondents or approximately 68% of the total respondents used for this study. The majority of the respondents in this study were female. Generally, the reason women tend to choose Telkomsel is because they perceive Telkomsel as a stable, trustworthy, and well-known provider. Telkomsel meets these characteristics, which is why it appears to be more commonly used by women.

4.1.1.2. Identity Based on Current Semester

The results of the study regarding characteristics based on current semester from 100 Telkomsel consumer respondents at the Universitas Muhammadiyah Sumatera Utara can be seen in table 4.2 below:

Table 4.2 Current Semester of Responden

No	Current Semester	Amount	Percentage (%)
1	Semester 1-3	3	3 %

2	Semester 4-6	41	41 %
No	Current Semester	Amount	Percentage (%)
3	Semester 7 and above	56	56 %
Amount		100	100 %

Source: Data Processed by the author, 2026

Based on the data in Table 4.2, it shows that the respondents in this study were semester 1-3 totaling 3 respondents or approximately 3% of all respondents, semester 4-6 totaling 41 respondents or approximately 41% of the total respondents, semester 7 and above totaling 56 respondents or approximately 56% used for this study. This indicates that most respondents in this study are senior students who have experienced longer academic exposure at the university. The majority of respondents were in their 7th semester or above. This indicates that the choice of provider tends to be based on communication needs that support professional activities and preparation for entering the workforce, leading respondents to prioritize service quality over other providers.

4.1.1.3. Identity Based on Length of Product Use

The results of the study regarding characteristics based on length of product use from 100 Telkomsel consumer respondents at the Universitas Muhammadiyah Sumatera Utara can be seen in table 4.3 below:

Table 4.3 Length of Product Usage

No	Length of Product Use	Amount	Percentage (%)
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1	< 6 months	5	5%
2	6 Months – 1 Year	4	4%
No	Length of Product Use	Amount	Percentage (%)
3	1 Years – 3 Years	15	15%
4	>3Years	76	76%
Amount		100	100%

Source: Data Processed by the author, 2026

Based on the data in Table 4.3, it shows identity based on product usage duration, it can be seen that respondents who have used the product for <6 months totaling 5 respondents or approximately 5% of all respondents, 6 months - 1 year totaling 4 respondents or approximately 4% of the total respondents, 1 years – 3 years totaling 15 respondents or approximately 15% of the total respondents. > 3 years totaling 76 respondents or approximately 76% of the total respondents.

It can be concluded that the majority of respondents 76% have been using Telkomsel for more than 3 years. This indicates that most Telkomsel consumers at the Universitas Muhammadiyah Sumatera Utara are long term loyal users who have experienced Telkomsel services for a considerable period of time. This condition suggests that the majority of respondents have had sufficient experience in using Telkomsel services, allowing them to provide more accurate assessments regarding price, service quality, and brand image offered by Telkomsel. Therefore, the responses obtained in this study are expected to reflect the actual perceptions and

experiences of customers who have used Telkomsel products for a relatively long period of time.

4.1.2. Descriptions of Research Results

The variables in this study consist of 4 variables, namely customer loyalty (Y), price (X1), service quality (X2) and brand image (X3). The description of the statements will display the answer options of each respondent to each statement item provided by the author to the respondents.

4.1.2.1. Customer Loyalty Variable (Y)

Based on the distribution of questionnaires to Telkomsel product customers in Universitas Muhammadiyah Sumatera Utara, the frequency values of respondents answers regarding the Customer Loyalty variable are as follows:

Table 4.4 Questionnaire Discussion Scores for the Customer Loyalty Variable

No	Customer Loyalty Responses											
	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
1	47	47.0	36	36.0	14	14.0	2	2.0	1	1.0	100	100
2	45	45.0	44	44.0	7	7.0	3	3.0	1	1.0	100	100
3	43	43.0	32	32.0	14	14.0	11	11.0	0	0	100	100
4	38	38.0	35	35.0	16	16.0	11	11.0	0	0	100	100

5	37	37.0	32	32.0	16	16.0	15	15.0	0	0	100	100
6	36	36.0	38	38.0	16	16.0	10	10.0	0	0	100	100
7	40	40.0	21	21.0	25	25.0	14	14.0	0	0	100	100
No	Customer Loyalty Responses											
Ask	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
8	38	38.0	23	23.0	22	22.0	17	17.0	0	0	100	100
9	40	40.0	22	22.0	23	23.0	15	15.0	0	0	100	100
10	37	37.0	31	31.0	23	23.0	8	8.0	1	1.0	100	100
11	36	36.0	33	33.0	22	22.0	8	8.0	1	1.0	100	100
12	38	38.0	34	34.0	22	22.0	5	5.0	1	1.0	100	100

Source: Data Processed by the author, 2026

From the table above, it can be explained that the statement of the Customer Loyalty variable is:

1. In the first statement, "I intend to continue using Telkomsel in the future," the majority of respondents answered strongly agree (47%), followed by 36% who agreed. This indicates that 83% of respondents have a very strong retention intention towards Telkomsel.
2. In the second statement, "I will repurchase Telkomsel packages when the active period expires," the majority of respondents answered strongly agree (45%), followed by 44% who agreed. Cumulatively, 89% of respondents

show a commitment to repurchase, which is a very positive signal of behavioral loyalty.

3. In the third statement, "Telkomsel is my main choice for mobile and internet services," the majority of respondents answered strongly agree (43%), followed by 32% who agreed. This means 75% of respondents consider Telkomsel as their primary preference compared to other operators.
4. In the fourth statement, "I am willing to recommend Telkomsel to friends or family," the majority of respondents answered strongly agree (38%), followed by 35% who agreed. With a total of 73% of respondents willing to recommend, this indicates good word-of-mouth potential for Telkomsel.
5. In the fifth statement, "I often suggest others to use Telkomsel," the majority of respondents answered strongly agree (37%), followed by 32% who agreed. A total of 69% of respondents actively recommend Telkomsel to others, which is a form of customer advocacy.
6. In the sixth statement, "I will give positive reviews about Telkomsel," the majority of respondents answered agree (38%), followed by 36% who answered strongly agree. Although positive (74% chose agree or strongly agree), there are 26% of respondents who were hesitant or disagreed, which needs attention.
7. In the seventh statement, "I am not interested in switching to another operator besides Telkomsel," the majority answered strongly agree (40%), but only 21% agreed. The total respondents who agreed and strongly agreed is 61%,

while 42% others were still hesitant or disagreed (KS + TS), indicating potential vulnerability to switch.

8. In the eighth statement, "Even if there are promotions from other operators, I still choose Telkomsel," the majority answered strongly agree (38%), followed by 23% who agreed. This indicates that 61% of respondents have resistance to competitor, but nearly 40% of the remainder might be tempted by other operators' promotions.
9. In the ninth statement, "I find it difficult to switch Telkomsel with another operator," the majority of respondents answered strongly agree (40%), followed by 22% who agreed. A total of 62% of respondents perceive barriers to switching, which could be due to service satisfaction or other factors such as old numbers.
10. In the tenth statement, "I am consistently satisfied using Telkomsel," the majority of respondents answered strongly agree (37%), followed by 31% who agreed. With 68% of respondents stating consistent satisfaction, this is a main foundation for long-term loyalty.
11. In the eleventh statement, "Telkomsel always meets my expectations as a customer," the majority of respondents answered strongly agree (36%), followed by 33% who agreed. A total of 69% of respondents feel their expectations are always met, meaning Telkomsel's service performance is considered to meet expectations.
12. In the twelfth statement, "My experience using Telkomsel remains positive from time to time," the majority of respondents answered strongly agree

(38%), followed by 34% who agreed. A total of 72% of respondents acknowledge consistent positive experiences, which is important for maintaining loyalty in a competitive market.

Based on the results of the respondent data processing, the highest customer loyalty indicator was repurchase intention. This is reflected in the first and second statements, where 83% and 89% of respondents respectively expressed a strong commitment to continue using and repurchasing Telkomsel packages. This shows that customers have a very strong behavioral loyalty towards Telkomsel.

Meanwhile, the indicator with the lowest score is resistance to switching (ketahanan terhadap perpindahan), which includes statements 7, 8, and 9. Although the scores are still positive, only around 61-62% of respondents stated that they would not be tempted by other operators or found it difficult to switch. This indicates that there are still around 38-40% of respondents who are vulnerable and could potentially switch to competitors, especially if attracted by promotions from other operators.

4.1.2.2 Price Variable (X1)

Based on the distribution of questionnaires to Telkomsel product customers in Universitas Muhammadiyah Sumatera Utara, the frequency values of respondents' answers regarding the price variable are as follows:

Table 4.5 Questionnaire Discussion Scores for the Price Variable

No	Price Responses
----	-----------------

Ask	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
1	40	40.0	35	35.0	17	17.0	6	6.0	2	2.0	100	100
2	39	39.0	38	38.0	15	15.0	7	7.0	1	1.0	100	100
No	Price Responses											
Ask	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
3	39	39.0	33	33.0	19	19.0	8	8.0	1	1.0	100	100
4	38	38.0	34	34.0	18	18.0	8	8.0	2	2.0	100	100
5	39	39.0	33	33.0	19	19.0	6	6.0	3	3.0	100	100
6	37	37.0	32	32.0	22	22.0	7	7.0	2	2.0	100	100
7	35	35.0	32	32.0	14	14.0	17	17.0	2	2.0	100	100
8	35	35.0	29	29.0	13	13.0	21	21.0	2	2.0	100	100
9	38	38.0	28	28.0	13	13.0	19	19.0	2	2.0	100	100
10	41	41.0	52	52.0	4	4.0	2	2.0	1	1.0	100	100
11	42	42.0	49	49.0	7	7.0	1	1.0	1	1.0	100	100
12	42	42.0	49	49.0	7	7.0	1	1.0	1	1.0	100	100

Source: Data Processed by the author, 2026

From the table above, it can be explained that the statement of the price variable is:

1. In the first statement, "The price of Telkomsel internet packages matches my financial ability," the majority of respondents answered strongly agree (40%),

followed by 35% who agreed. This indicates that 75% of respondents feel Telkomsel's prices match their financial ability.

2. In the second statement, "I feel Telkomsel service prices are still affordable for me," the majority of respondents answered agree (38%), followed by 39% who answered strongly agree. Cumulatively, 77% of respondents stated that Telkomsel's prices are still affordable.
3. In the third statement, "Telkomsel package prices are not burdensome for me in daily use," the majority of respondents answered strongly agree (39%), followed by 33% who agreed. This means 72% of respondents feel the prices are not burdensome.
4. In the fourth statement, "Telkomsel package prices match the network quality I receive," the majority of respondents answered strongly agree (38%), followed by 34% who agreed. With a total of 72% of respondents, this indicates that the majority feel there is alignment between price and quality.
5. In the fifth statement, "Telkomsel services provide value commensurate with the price I pay," the majority of respondents answered strongly agree (39%), followed by 33% who agreed. A total of 72% of respondents feel they get good value for money from Telkomsel.
6. In the sixth statement, "Telkomsel network quality is comparable to the costs incurred," the majority of respondents answered strongly agree (37%), followed by 32% who agreed. Although positive (69% chose agree or strongly agree), there are 31% of respondents who were hesitant or disagreed, which needs attention regarding the perception of price and quality comparability.

7. In the seventh statement, "Telkomsel package prices are competitive compared to other operators," the majority answered strongly agree (35%), while 32% agreed. The total respondents who agreed and strongly agreed is 67%, while 31% others were still hesitant or disagreed (KS + TS), indicating doubts about Telkomsel's price competitiveness.
8. In the eighth statement, "Compared to other operators, Telkomsel's prices are still attractive to me," the majority answered strongly agree (35%), followed by 29% who agreed. This indicates that 64% of respondents still find Telkomsel's prices attractive, but 34% of respondents (KS+TS) showed significant hesitation or disagreement.
9. In the ninth statement, "I consider Telkomsel's prices to be quite competitive in the market," the majority of respondents answered strongly agree (38%), followed by 28% who agreed. A total of 66% of respondents consider Telkomsel's prices competitive, but 32% others (KS+TS) hold different views.
10. In the tenth statement, "Information about Telkomsel package prices is conveyed clearly," the majority of respondents answered agree (52%), followed by 41% who answered strongly agree. This shows that 93% of respondents feel price information is conveyed clearly, which is a very high and positive score.
11. In the eleventh statement, "There are no hidden costs in using Telkomsel services," the majority of respondents answered agree (49%), followed by 42% who answered strongly agree. With a total of 91% of respondents, this indicates a very high level of trust that there are no hidden costs.

12. In the twelfth statement, "I understand the details of the prices I pay to Telkomsel," the majority of respondents answered agree (49%), followed by 42% who answered strongly agree. A total of 91% of respondents claim to understand the price details, which indicates good price transparency from Telkomsel.

Based on the results of the respondent data processing, the highest score in the price variable was found in statement 10, where 93% of respondents agreed or strongly agreed that information about Telkomsel package prices is conveyed clearly. This was closely followed by statements 11 and 12, each with 91% of respondents agreeing or strongly agreeing that there are no hidden costs and that they understand the price details. This shows that price transparency is the strongest aspect of Telkomsel's pricing in the eyes of customers.

Meanwhile, the lowest score in the price variable was found in statement 8, where only 64% of respondents agreed or strongly agreed that compared to other operators, Telkomsel's prices are still attractive. This was followed by statement 9 (66%) and statement 7 (67%) regarding price competitiveness. This indicates that price competitiveness is the weakest aspect, with around one-third of respondents (34-36%) expressing doubt about whether Telkomsel's prices are competitive or attractive compared to other operators.

Other statements showed moderate to high scores. Statements 1-5 regarding affordability and value for money ranged from 72% to 77% agreement. However, statement 6, regarding whether network quality is comparable to costs incurred,

received the lowest among the quality-related statements at 69%, with 31% of respondents expressing hesitation or disagreement.

In conclusion, Telkomsel excels in price transparency and clarity, which builds customer trust. However, the company needs to address concerns regarding price competitiveness, as a significant portion of customers perceive Telkomsel's prices as less attractive or competitive compared to other operators in the market.

4.1.2.3. Service Quality Variable (X2)

Based on the distribution of questionnaires to Telkomsel product customers in Universitas Muhammadiyah Sumatera Utara, the frequency values of respondents' answers regarding the service quality variable are as follows:

Table 4.6 Questionnaire Discussion Scores for the Service Quality Variable

No	Service Quality Responses											
	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
1	46	46.0	46	46.0	6	6.0	2	2.0	0	0	100	100
2	51	51.0	38	38.0	9	9.0	2	2.0	0	0	100	100
3	43	43.0	50	50.0	6	6.0	1	1.0	0	0	100	100
4	37	37.0	31	31.0	21	21.0	11	11.0	0	0	100	100
5	39	39.0	39	39.0	16	16.0	6	6.0	0	0	100	100
6	37	37.0	36	36.0	19	19.0	7	7.0	1	1.0	100	100

7	38	38.0	39	39.0	21	21.0	2	2.0	0	0	100	100
8	41	41.0	35	35.0	20	20.0	4	4.0	0	0	100	100
9	39	39.0	39	39.0	20	20.0	2	2.0	0	0	100	100
No	Service Quality Responses											
Ask	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
10	40	40.0	46	46.0	12	12.0	2	2.0	0	0	100	100
11	42	42.0	42	42.0	14	14.0	2	2.0	0	0	100	100
12	39	39.0	45	45.0	14	14.0	2	2.0	0	0	100	100
13	43	43.0	39	39.0	15	15.0	3	3.0	0	0	100	100
14	41	41.0	41	41.0	16	16.0	2	2.0	0	0	100	100
15	45	45.0	36	36.0	15	15.0	3	3.0	1	1.0	100	100

Source: Data Processed by the author, 2026

From the table above, it can be explained that the statement of the service quality variable is:

1. In the first statement, "The display of the MyTelkomsel application looks modern and is easy to use," the majority of respondents answered strongly agree (46%) and agree (46%) in equal numbers. This indicates that 92% of respondents rate the MyTelkomsel application display as modern and easy to use.
2. In the second statement, "Telkomsel service facilities (GraPARI, website, application) look professional and trustworthy," the majority of respondents

answered strongly agree (51%), followed by 38% who agreed. Cumulatively, 89% of respondents consider Telkomsel service facilities to be professional and trustworthy.

3. In the third statement, "Information on Telkomsel packages and services is presented with a clear and attractive display," the majority of respondents answered agree (50%), followed by 43% who answered strongly agree. This means 93% of respondents feel the information is presented clearly and attractively, which is a very high score.
4. In the fourth statement, "The Telkomsel network rarely experiences disruptions when I use it," the majority of respondents answered strongly agree (37%), followed by 31% who agreed. The total respondents who agreed and strongly agreed is 68%, while 32% of other respondents expressed doubt (KS) or disagreed (TS), indicating that almost one-third of respondents have experienced network disruptions.
5. In the fifth statement, "Telkomsel provides services as promised in promotions or advertisements," the majority of respondents answered strongly agree (39%) and agree (39%) in equal numbers. A total of 78% of respondents feel the service matches the promotional promises, but 22% others still doubt or disagree.
6. In the sixth statement, "Telkomsel network quality is consistent in daily use," the majority of respondents answered strongly agree (37%), followed by 36% who agreed. With a total of 73% of respondents, this indicates that the

majority feel consistency in network quality, but 27% of respondents (KS+TS+STS) have different experiences.

7. In the seventh statement, "Telkomsel customer service responds to my complaints quickly," the majority of respondents answered agree (39%), followed by 38% who answered strongly agree. A total of 77% of respondents stated that customer service responds quickly, but 23% others still doubt or disagree.
8. In the eighth statement, "Telkomsel provides solutions immediately when I experience network problems," the majority of respondents answered strongly agree (41%), followed by 35% who agreed. A total of 76% of respondents feel solutions are provided immediately, while 24% of respondents (KS+TS) doubt this.
9. In the ninth statement, "My questions regarding Telkomsel services are answered quickly and clearly," the majority of respondents answered strongly agree (39%) and agree (39%) in equal numbers. A total of 78% of respondents feel their questions are answered quickly and clearly, but 22% others (KS+TS) still doubt or disagree.
10. In the tenth statement, "I feel safe using Telkomsel services for communication and internet," the majority of respondents answered agree (46%), followed by 40% who answered strongly agree. This shows that 86% of respondents feel safe using Telkomsel services, which is a strong indicator of trust.

11. In the eleventh statement, "Telkomsel employees or customer service have good knowledge about products and services," the majority of respondents answered strongly agree (42%) and agree (42%) in equal numbers. A total of 84% of respondents rate that customer service has good knowledge.
12. In the twelfth statement, "Telkomsel provides confidence that the services provided are reliable," the majority of respondents answered agree (45%), followed by 39% who answered strongly agree. With a total of 84% of respondents, this shows a high level of trust in the reliability of Telkomsel services.
13. In the thirteenth statement, "Telkomsel understands my needs as a customer," the majority of respondents answered strongly agree (43%), followed by 39% who agreed. A total of 82% of respondents feel their needs are understood by Telkomsel.
14. In the fourteenth statement, "Telkomsel pays attention to customer complaints," the majority of respondents answered strongly agree (41%) and agree (41%) in equal numbers. A total of 82% of respondents feel that Telkomsel pays attention to customer complaints.
15. In the fifteenth statement, "Telkomsel strives to provide services that suit customer needs," the majority of respondents answered strongly agree (45%), followed by 36% who agreed. A total of 81% of respondents acknowledge Telkomsel's efforts in providing services that suit customer needs.

Based on the results of the respondent data processing, the highest score in the service quality variable was found in statement 3, where 93% of respondents agreed or strongly agreed that information on Telkomsel packages and services is presented with a clear and attractive display. This was followed by statement 1 (92%) regarding the modern and easy-to-use application display. This shows that the tangible aspect, particularly information presentation and interface display, is the main strength of Telkomsel's service quality in the eyes of customers.

Meanwhile, the lowest score in the service quality variable was found in statement 4, where only 68% of respondents agreed or strongly agreed that the Telkomsel network rarely experiences disruptions. This is the only statement with a score below 70%. This was followed by statement 6 (73%) regarding the consistency of network quality. This indicates that the reliability aspect, particularly related to network stability and consistency, is the weakest point in Telkomsel's service quality, with nearly one-third of respondents (32%) having experienced disruptions or doubting network consistency.

Other statements showed quite high scores. Statements 10 to 15 related to the assurance and empathy aspects were all in the range of 81% to 86% , indicating that customers feel safe, confident, and understood by Telkomsel. The responsiveness aspect in statements 7, 8, and 9 also showed good scores, ranging from 76% to 78% .

In conclusion, Telkomsel excels in the tangible, assurance, and empathy aspects, which build perceptions of professionalism, trust, and understanding of customers. However, the company needs to pay serious attention to the network reliability

aspect, as there is still one-third of customers who feel the network is not disruption-free or inconsistent. This is a critical area that needs improvement to maintain long-term customer loyalty.

4.1.2.4. Brand Image Variable (X3)

Based on the distribution of questionnaires to Telkomsel product customers in Universitas Muhammadiyah Sumatera Utara, the frequency values of respondents' answers regarding the brand image variable are as follows:

Table 4.7 Questionnaire Discussion Scores for the Brand Image Variable

No	Brand Image Responses											
	SS		S		KS		TS		STS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
1	44	44.0	46	46.0	6	6.0	4	4.0	0	0	100	100
2	44	44.0	45	45.0	8	8.0	3	3.0	0	0	100	100
3	40	40.0	44	44.0	11	11.0	5	5.0	0	0	100	100
4	39	39.0	42	42.0	10	10.0	8	8.0	1	1.0	100	100
5	42	42.0	29	29.0	17	17.0	10	10.0	2	2.0	100	100
6	42	42.0	36	36.0	13	13.0	7	7.0	2	2.0	100	100
7	43	43.0	37	37.0	12	12.0	7	7.0	1	1.0	100	100
8	42	42.0	38	38.0	14	14.0	6	6.0	0	0	100	100
9	42	42.0	39	39.0	9	9.0	8	8.0	2	2.0	100	100

Source: Data Processed by the author, 2026

From the table above, it can be explained that the statement of the brand image variable is:

1. In the first statement, "I easily recognize Telkomsel compared to other operators," the majority of respondents answered agree (46%), followed by 44% who answered strongly agree. This indicates that 90% of respondents find it easy to recognize Telkomsel compared to other operators.
2. In the second statement, "Telkomsel is one of the first operator brands that comes to my mind," the majority of respondents answered agree (45%), followed by 44% who answered strongly agree. Cumulatively, 89% of respondents remember Telkomsel as one of the first operator brands that comes to their mind.
3. In the third statement, "I am aware of the various products and services offered by Telkomsel," the majority of respondents answered agree (44%), followed by 40% who answered strongly agree. This means 84% of respondents are aware of Telkomsel's various products and services, indicating a high level of brand knowledge.
4. In the fourth statement, "I rate the quality of the Telkomsel network as very good," the majority of respondents answered agree (42%), followed by 39% who answered strongly agree. The total respondents who agreed and strongly agreed is 81%, while 19% of other respondents expressed doubt (KS), disagreed (TS), or strongly disagreed (STS).
5. In the fifth statement, "Telkomsel provides better services compared to other operators," the majority of respondents answered strongly agree (42%),

followed by 29% who agreed. A total of 71% of respondents feel Telkomsel's services are better than other operators, but 29% of respondents (KS+TS+STS) have different views or doubt this.

6. In the sixth statement, "Overall, I believe that the quality of Telkomsel services is high," the majority of respondents answered strongly agree (42%), followed by 36% who agreed. With a total of 78% of respondents, this indicates the majority believe Telkomsel's service quality is high, but 22% of respondents (KS+TS+STS) still doubt or do not believe this.
7. In the seventh statement, "Telkomsel has a positive brand image in my view," the majority of respondents answered strongly agree (43%), followed by 37% who agreed. A total of 80% of respondents have a positive brand image perception of Telkomsel.
8. In the eighth statement, "Telkomsel is known as a superior and trustworthy operator," the majority of respondents answered strongly agree (42%), followed by 38% who agreed. A total of 80% of respondents agree that Telkomsel is known as superior and trustworthy, while 20% others (KS+TS) doubt this.
9. In the ninth statement, "I have a good impression of Telkomsel as a brand," the majority of respondents answered strongly agree (42%), followed by 39% who agreed. With a total of 81% of respondents, this shows that the majority of respondents have a good impression of the Telkomsel brand.

Based on the results of the respondent data processing, the highest score in the brand image variable was found in the brand awareness dimension, particularly in statement 1, where 90% of respondents agreed or strongly agreed that they easily recognize Telkomsel compared to other operators. This was followed by statement 2 (89%) regarding top of mind, and statement 3 (84%) regarding product knowledge. This shows that brand awareness is the strongest dimension of Telkomsel's brand image. Telkomsel has successfully built very strong brand recognition and recall in the minds of customers.

Meanwhile, the lowest score in the brand image variable was found in the perceived quality dimension, specifically in statement 5, where only 71% of respondents agreed or strongly agreed that Telkomsel provides better services compared to other operators. This statement also has the highest percentage of disagreement (TS+STS) at 12% , as well as 17% of respondents who were doubtful (KS). This was followed by statement 6 (78%) regarding belief in high service quality. This indicates that perceived quality, particularly in terms of superiority compared to competitors, is the weakest dimension. Nearly one-third of respondents (29%) are unsure or disagree that Telkomsel's services are better than other operators.

The overall brand image dimension shows solid scores, with statements 7, 8, and 9 ranging from 80% to 81% . This shows that in general, Telkomsel has a positive, superior, and trustworthy brand image in the eyes of customers.

In conclusion, Telkomsel has very strong brand awareness and a positive overall brand image. Customers easily recognize, remember, and have a good

impression of Telkomsel. However, the company needs to pay attention to the perceived quality dimension, especially in convincing customers that their services are truly superior compared to other operators. Improving this perceived quality is important to maintain competitive advantage in the market.

4.2. Data Analysis Technique Test

4.2.1. Validity Test

Validity testing is used to determine whether a questionnaire is valid or not. A questionnaire is considered valid if its questions are able to reveal improvements in work performance. Validity testing is performed by comparing the calculated r value (correlated item-total correlations) with the table r value. If the calculated r value is greater than the table r value and is positive, the questionnaire is considered valid (Ghozali,2018). Validity was carried out outside the minimum sample of 100 people with an r-table of 0.195 (Sugiyono, 2019).

Tabel 4.8 Validity Test Results

No	Corrected Item-Total Correlation	r-tabel	Result
Price (X₁)			
1	,904	0,195	Valid
2	,926	0,195	Valid
3	,913	0,195	Valid
4	,904	0,195	Valid
5	,924	0,195	Valid
6	,943	0,195	Valid
7	,913	0,195	Valid
8	,911	0,195	Valid

9	,909	0,195	Valid
10	,864	0,195	Valid
11	,835	0,195	Valid
12	,848	0,195	Valid
Sercive Quality (X₂)			
13	,823	0,195	Valid
14	,797	0,195	Valid
15	,834	0,195	Valid
16	,857	0,195	Valid
17	,890	0,195	Valid
18	,881	0,195	Valid
Sercive Quality (X₂)			
19	,954	0,195	Valid
20	,919	0,195	Valid
21	,957	0,195	Valid
22	,922	0,195	Valid
23	,934	0,195	Valid
24	,964	0,195	Valid
25	,926	0,195	Valid
26	,957	0,195	Valid
27	,916	0,195	Valid
Brand Image (X₃)			
28	,896	0,195	Valid
29	,880	0,195	Valid
30	,914	0,195	Valid
31	,956	0,195	Valid

32	,951	0,195	Valid
33	,956	0,195	Valid
34	,962	0,195	Valid
35	,960	0,195	Valid
36	,959	0,195	Valid
Customer Loyalty (Y)			
37	,861	0,195	Valid
38	,816	0,195	Valid
39	,894	0,195	Valid
40	,943	0,195	Valid
41	,907	0,195	Valid
Customer Loyalty (Y)			
42	,944	0,195	Valid
43	,932	0,195	Valid
44	,940	0,195	Valid
45	,942	0,195	Valid
46	,946	0,195	Valid
47	,933	0,195	Valid
48	,921	0,195	Valid

Source: Research Results, 2026 (processed data).

Based on the table "Validity Test Results" (Table 4.8) , a validity test was conducted on the research instrument consisting of four variables, namely Price (X1) , Service Quality (X2) , Brand Image (X3) , and Customer Loyalty (Y) . The total number of statements tested was 48 items. The validity test was carried out by comparing the Corrected Item-Total Correlation (r-count) value with the r-table value at a 5% significance level (0.195) , which

applies to all variables as they use the same sample size ($N=100$, $df=98$). Based on the test results, it can be concluded that:

1. All statement items are declared valid. This is because the Corrected Item-Total Correlation (r-count) value for each statement item (numbers 1 to 48) is greater than the r-table value of 0.195.
2. Price Variable (X1): 12 statement items (numbers 1-12) have r-count values ranging from 0.835 to 0.943. These values are far above the r-table of 0.195, meaning all price statement items are valid.
3. Service Quality Variable (X2): 15 statement items (numbers 13-27) have r-count values ranging from 0.797 to 0.964. These values are far above the r-table of 0.195, meaning all service quality statement items are valid.
4. Brand Image Variable (X3): 9 statement items (numbers 28-36) have r-count values ranging from 0.880 to 0.962. These values are far above the r-table of 0.195, meaning all brand image statement items are valid.
5. Customer Loyalty Variable (Y): 12 statement items (numbers 37-48) have r-count values ranging from 0.816 to 0.946. These values are far above the r-table of 0.195, meaning all customer loyalty statement items are valid.

All statement items in the research questionnaire for the variables Price (X1) , Service Quality (X2) , Brand Image (X3) , and Customer Loyalty (Y) are declared valid and suitable for use as research instruments. Not a single statement item was discarded or invalid in this test.

4.2.2. Reliability Test

Reliability is a tool for measuring a questionnaire, which is an indicator of a variable or construct. A questionnaire is said to be reliable if a person's answers to the questions are consistent or stable over time. SPSS provides a facility to measure reliability using the *Cronbach Alpha* (α) statistical test. A variable is said to be reliable if it produces an α value of 0.60 (Ghozali, 2018).

Table 4.9 Reliabilitas Test Results

No	Variabel	Cronbach's Alpha		N of items	Hasil
1	Price (X_1)	0,976	0,6	12	Reliabel
2	Service Quality (X_2)	0,983	0,6	15	Reliabel
3	Brand Image (X_3)	0,982		9	Reliabel
3	Customer Loyalty (Y)	0,982		12	Reliabel

Source: Research Results, 2026 (processed data).

Based on the table "Reliabilities Test Results" (Table 4.9), a reliability test was conducted on the four variables in this study, namely Price (X_1), Service Quality (X_2), Brand Image (X_3), and Customer Loyalty (Y). The reliability test was carried out using the Cronbach's Alpha method. From the test results, the Cronbach's Alpha values for each variable are as follows:

1. Price Variable (X_1) has a Cronbach's Alpha value of 0.976 with 12 statement items.
2. Service Quality Variable (X_2) has a Cronbach's Alpha value of 0.983 with 15 statement items.
3. Brand Image Variable (X_3) has a Cronbach's Alpha value of 0.982 with 9 statement items.
4. Customer Loyalty Variable (Y) has a Cronbach's Alpha value of 0.982 with 12 statement items.

All variables in this study, namely Price (X_1), Service Quality (X_2), Brand Image (X_3), and Customer Loyalty (Y), have Cronbach's Alpha values above 0.60, all research instruments are declared reliable.

4.2.3 Descriptive Statistical Analysis

Descriptive statistical measurement in this study was conducted to examine the general overview of the data, such as the mean value, maximum value, minimum value, and standard deviation of each variable, namely Price (X_1), Product Quality (X_2), and Customer Loyalty (Y). The results of the descriptive statistics test can be seen in Table 4.10 as follows:

Table 4.10 Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Price	100	12.00	60.00	48.3100	10.67395
Service Quality	100	30.00	75.00	62.8900	10.98290
Brand Image	100	16.00	45.00	37.3800	7.72217

Customer Loyalty	100	20.00	60.00	48.0200	10.98482
Valid N (listwise)	100				

Source: Research Results, 2026 (processed data).

Based on Table 4.10, a descriptive statistical analysis was conducted on four variables in this study, namely Price, Service Quality, Brand Image, and Customer Loyalty, with a total of 100 respondents (N = 100) . From the analysis results, the data overview is as follows:

1. Price Variable has a minimum value of 1.2 and a maximum value of 60.00. The mean value for this variable is 48.31 with a standard deviation of 10.67395.
2. Service Quality Variable has a minimum value of 3.0 and a maximum value of 75.00. The mean value for this variable is 62.89 with a standard deviation of 10.98290.
3. Brand Image Variable has a minimum value of 1.6 and a maximum value of 45.00. The mean value for this variable is 37.38 with a standard deviation of 7.72217.
4. Customer Loyalty Variable has a minimum value of 2.0 and a maximum value of 60.00. The mean value for this variable is 48.02 with a standard deviation of 10.98482.

Overall, the highest mean value is found in the Service Quality variable (62.89) , while the lowest mean value is found in the Brand Image variable (37.38) . The

relatively large standard deviations in several variables indicate considerable variation in responses among respondents.

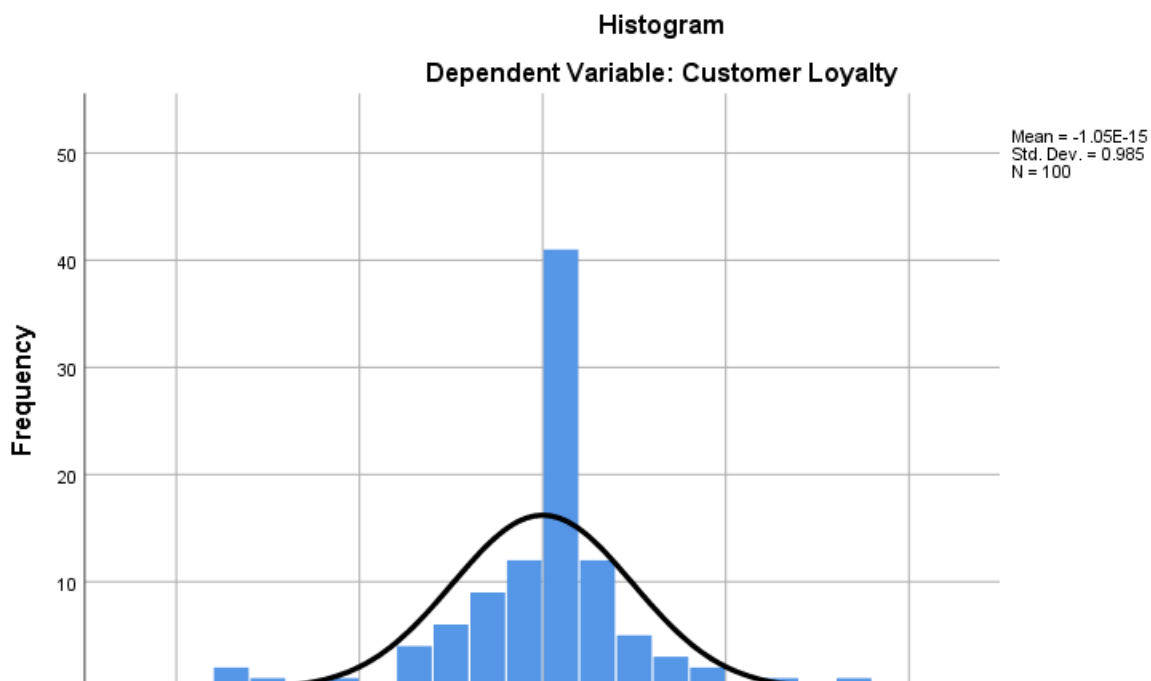
4.2.4 Classical Assumption Test

The hypothesis requires a classical assumption test, because the analysis model used is multiple linear regression. The classical assumptions used are as follows:

4.2.4.1 Normality test

To ensure the validity of the data before proceeding to further analysis, this study conducted a normality test as one of the classical assumptions that must be met in regression analysis. The normality test aims to verify whether the distribution of the research data follows a normal distribution pattern, which serves as an indicator that the data is suitable for accurately explaining the phenomena under study. The test was carried out using a graphical approach, namely through histogram analysis and the Normal Probability Plot (P-Plot), to visually examine the data distribution prior to conducting further statistical testing.

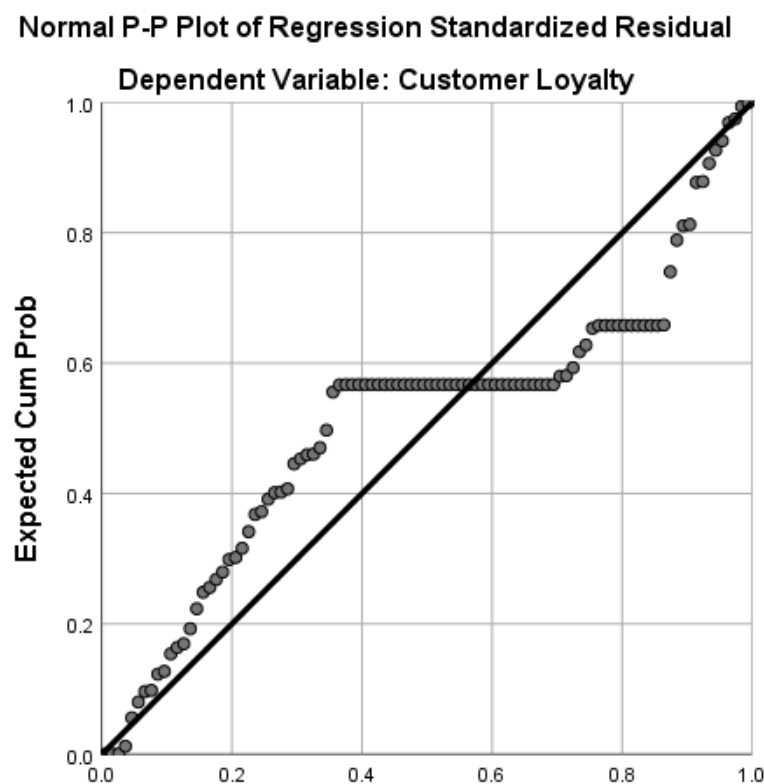
Figure 4.1 histogram analysis



Source: Research Results, 2026 (processed data).

Based on the histogram display in the figure above, it can be observed that the distribution of the Regression Standardized Residual approximates a normal curve. This is indicated by the symmetrical bell-shaped graph, where the highest frequency of data is centered around the value 0 (zero) and gradually decreases towards both ends. Furthermore, the Mean value close to 0 ($-1.05E-15$) and the Standard Deviation of 0.985 (close to 1) also indicate that the standardized residuals have met the normality assumption. Thus, visually, it can be concluded that the residual data is normally distributed and the regression model is suitable for further analysis.

Figure 4.2 Normal Probability Plot (P-Plot)



Source: Research Results, 2026 (processed data).

Based on the Normal P-P Plot of Regression Standardized Residual above, it can be observed that the data points (plots) are scattered around the diagonal line and follow the direction of the diagonal line from the bottom left to the top right. This pattern indicates that the residuals of the regression model are normally distributed. There is no significant deviation of points away from the diagonal line, meaning that the normality assumption in regression analysis is satisfied. Thus, the regression model used in this study is appropriate to proceed to the next stages of analysis.

4.2.4.2 Multicollinearity Test

The multicollinearity test aims to examine whether there is a correlation between independent variables in the regression model. A good regression model should have no high correlation among independent variables. Multicollinearity can be detected through Tolerance and Variance Inflation Factor (VIF) values. The criteria used are if the Tolerance value > 0.10 and VIF < 10.00 , then there is no multicollinearity (Ghozali, 2018)."

Table 4.11 Multicollinearity Test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-5.522	2.435		-2.268	.026		
	Price	.325	.079	.316	4.105	.000	.234	4.271
	Service Quality	.312	.104	.312	3.007	.003	.129	7.764
	Brand Image	.486	.146	.342	3.333	.001	.132	7.557

a. Dependent Variable: Customer Loyalty

Source: Research Results, 2026 (processed data).

Based on the multicollinearity test results in the table 4.11, it can be concluded that:

1. Price Variable has a Tolerance value of 0.234 (> 0.10) and a VIF of 4.271 (< 10.00).
2. Service Quality Variable has a Tolerance value of 0.129 (> 0.10) and a VIF of 7.764 (< 10.00).
3. Brand Image Variable has a Tolerance value of 0.132 (> 0.10) and a VIF of 7.557 (< 10.00).

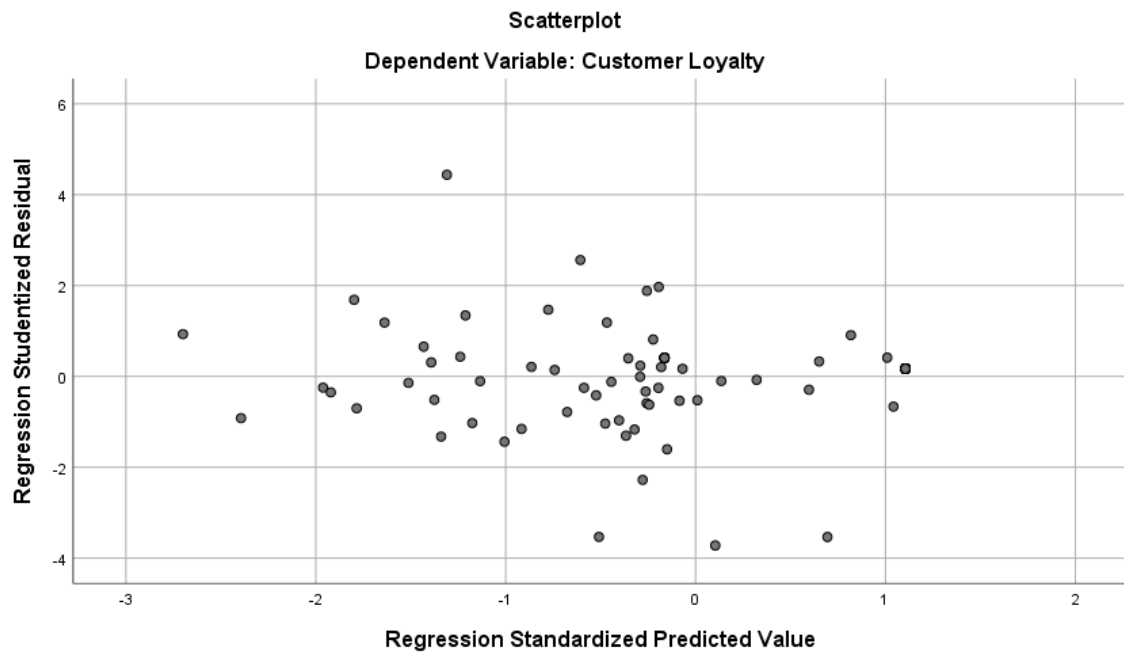
Thus, it can be stated that there are no symptoms of multicollinearity among the independent variables in this research regression model. All variables meet the criteria of Tolerance > 0.10 and VIF < 10.00 , so the regression model is appropriate for further analysis.

4.2.4.3 Heteroscedasticity Test

Heteroscedasticity is a condition in a regression model where the variance of the residuals (errors) is not constant or not the same across all observations. A good

regression model expects homoscedasticity, where the residual variance is constant from one observation to another.

Figure 4.3 Heteroscedasticity Test



Source: Research Results, 2026 (processed data).

Based on the Scatterplot image titled "Scatterplot Dependent Variable: Customer Loyalty" that you displayed, the analysis is as follows:

1. Point Distribution: The data points appear to be randomly scattered without forming any specific pattern.
2. Point Spread: The points are distributed above and below 0 on the Y-axis (Regression Standardized Residuals).

3. Distribution Pattern: No visible pattern such as waves, widening then narrowing, or clustering on one side. The distribution tends to be consistent from left to right.

Based on the testing criteria, it can be stated that there is no heteroscedasticity in this regression model. The points are randomly scattered and do not form any clear pattern, thus the homoscedasticity assumption is satisfied. Therefore, the regression model is appropriate for further analysis.

4.2.5. Inferential Statistical Analysis

4.2.5.1. Hypothesis Testing

To determine whether or not there is an influence of price, service quality, and brand image on customer loyalty, the data analysis model used in the hypothesis is multiple linear regression analysis, with the following formulation:

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

4.2.5.2. t-Test (Partial Test)

The t-test (partial test) is a statistical analysis technique used to examine the significance of the influence of each independent variable individually on the dependent variable. In the context of this research, the t-test is used to determine whether Price, Service Quality, and Brand Image partially have a significant influence on Customer Loyalty among Telkomsel consumers at the Universitas Muhammadiyah Sumatera Utara. The test was conducted by comparing the calculated t-value with the t-table value at a significance level of $\alpha = 0.05$ (5%) and a degree of freedom $(df) = n - k - 1 = 100 - 3 - 1 = 96$, resulting in a t-table value of 1.985. The

decision-making criterion is that if the calculated t-value $>$ the t-table value or the significance value < 0.05 , then the alternative hypothesis (H_a) is accepted, meaning the independent variable has a significant influence on the dependent variable.

Table 4.12 t-Test

No	Indicator Variable	t count	t table	significance
1	Price	18,117	1,985	0.000
2	Service Quality	20,477	1,985	0,000
3	Braand Image	20,557	1,985	0,000

Source: Research Results, 2026 (processed data).

1. Hypothesis Test 1(The Influence of Price on Customer Loyalty)

Based on the results of the t-test analysis in Table 4.12, the calculated t-value for the Price variable was 18.117 with a significance level of 0.000. When compared to the t-table value at $df = 96$ and $\alpha = 0.05$, which is 1.985, it is known that the calculated t-value (18.117) $>$ the t-table value (1.985). Furthermore, the obtained significance value is also smaller than the predetermined critical limit of 0.05 ($0.000 < 0.05$). These results indicate that Price has a positive and significant influence on Customer Loyalty. In other words, the first hypothesis (H_1), which states that price influences customer loyalty, is accepted.

This finding implies that consumers' perceptions of the prices offered by Telkomsel play an important role in building customer loyalty. The better the consumer's assessment regarding the fairness, affordability, and suitability of the price to the quality of services provided, the higher the level of customer loyalty to

continue using Telkomsel products or services. Consumers tend to feel satisfied and loyal when they perceive they receive value commensurate with the costs incurred. Therefore, a pricing strategy that is competitive and aligned with consumer expectations is a crucial factor in maintaining customer loyalty amidst the increasingly intense competition in the telecommunications industry.

2. Hypothesis Test 2(The Influence of Service Quality on Customer Loyalty)

The t-test results for the Service Quality variable showed a calculated t-value of 20.477 with a significance level of 0.000. This calculated t-value is significantly larger than the t-table value (1.985), and its significance value is also below 0.05 ($0.000 < 0.05$). Thus, it can be concluded that Service Quality has a positive and significant influence on Customer Loyalty. This means that the second hypothesis (H2) in this study is accepted.

This finding indicates that the quality of service provided by Telkomsel to its consumers is an important determinant in creating customer loyalty. The better the service quality perceived by consumers, whether in terms of network reliability, customer service responsiveness, service assurance, empathy, or the tangible aspects of service, the more it will increase customer loyalty to continue using Telkomsel services. Consumers who have a satisfying service experience tend to be reluctant to switch to competitors and are even willing to recommend Telkomsel services to others. This aligns with the theory that superior service quality can create satisfaction, which ultimately impacts long-term customer loyalty. For Telkomsel, maintaining

and continuously improving service quality standards is a strategic investment to win customers' hearts in an increasingly competitive digital era.

3. Hypotesis Test 3(The Influence of Brand Image on Customer Loyalty)

Based on Table 4.12, the Brand Image variable obtained a calculated t-value of 20.557 with a significance level of **0.000**. When compared to the t-table value (1.985), the calculated t-value (20.557) > the t-table value (1.985). Similarly, the significance value is smaller than 0.05 ($0.000 < 0.05$). This result proves that Brand Image has a positive and significant influence on Customer Loyalty, thus the third hypothesis (H3) in this study is accepted. In fact, among the three variables studied, Brand Image has the highest calculated t-value, indicating that this variable is the most dominant predictor influencing customer loyalty.

This finding provides an understanding that a positive brand image in the minds of consumers has a very strategic role in building and maintaining customer loyalty. The stronger, more positive, and more trustworthy Telkomsel's brand image is in the eyes of consumers, the higher their loyalty will be to continue using Telkomsel services. Consumers tend to feel proud, trusting, and emotionally connected to a brand with a good reputation, making them reluctant to switch to other brands even if there are more attractive offers from competitors. A strong brand image also makes it easier for Telkomsel to introduce new products because consumers have pre-existing trust. Therefore, efforts to build and maintain a positive

brand image through consistent quality, innovation, and effective marketing communication are key to creating sustainable customer loyalty.

4.2.5.3. F Test (Simultaneous Test)

The F-test, often referred to as the simultaneous test, is a statistical method used to examine whether all independent variables together (simultaneously) have a significant influence on the dependent variable. In the context of this research, the F-test is used to determine whether Price, Service Quality, and Brand Image collectively influence Customer Loyalty among Telkomsel consumers at the Universitas Muhammadiyah Sumatera Utara. The decision-making criteria in the F-test are:

1. If the calculated F-value $>$ F-table value or the significance value $<$ 0.05, then simultaneously the independent variables have a significant influence on the dependent variable.
2. If the calculated F-value $<$ F-table value or the significance value $>$ 0.05, then simultaneously the independent variables do not have a significant influence on the dependent variable.

Table 4.13 F Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10351.783	3	3450.594	207.792	.000 ^b
	Residual	1594.177	96	16.606		
	Total	11945.960	99			

Source: Research Results, 2026 (processed data).

Based on the results of the F-test analysis in the ANOVA table, the calculated F-value was 207.792 with a significance level of 0.000. When compared to the F-table value at $df_1 = 3$ and $df_2 = 96$ with a significance level of 0.05, which is 2.70, it is known that the calculated F-value (207.792) > the F-table value (2.70). Furthermore, the obtained significance value is also smaller than the predetermined critical limit of 0.05 ($0.000 < 0.05$).

$$\mathbf{Df_1: k-1: 4-1=3}$$

$$\mathbf{Df_2 : n-k: 100-4=96}$$

These results indicate that Price, Service Quality, and Brand Image simultaneously (together) have a positive and significant influence on Customer Loyalty among Telkomsel consumers at the Universitas Muhammadiyah Sumatera Utara. In other words, the fourth hypothesis (H4) in this study, which states that the three independent variables together influence customer loyalty, is accepted.

4.2.5.4. Determinant Coefficient (R^2)

Determinants are used to see how much influence the independent variable has on the dependent variable. In other words, the determinant coefficient is used to measure the magnitude of the influence of the independent variables studied, namely price (x_1), service quality (x_2), brand image (x_3), while the dependent variable is customer loyalty (y). The determinant coefficient (R^2) ranges from zero to one ($0 < R^2 < 1$). This means that if $R^2 = 0$ indicates no influence of the independent variable on the dependent variable and if R^2 approaches 1, it indicates an increasingly strong

influence of the independent variable on the dependent variable , (Sugiyono 2011 :97).

Table 4.14 Determinant Coefficient

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.931 ^a	.867	.862	4.075

Source: Research Results, 2026 (processed data).

Based on the results of the analysis in the Model Summary table, the R Square (R^2) value was 0.867 and the Adjusted R Square value was 0.862. An R^2 value of 0.867 indicates that 86.7% of the variation occurring in the Customer Loyalty variable can be explained by the three independent variables in this study, namely Price, Service Quality, and Brand Image. Meanwhile, the remaining 13.3% (100% – 86.7%) is explained by other factors outside this research model that were not examined, such as customer satisfaction, brand trust, usage habits, social influence, or other variables not included in the analysis.

Meanwhile, the Adjusted R Square value of 0.862 is a version of R^2 that has been adjusted for the number of independent variables and sample size. This value is slightly smaller than R^2 ($0.862 < 0.867$) due to the adjustment for model complexity. Adjusted R Square is considered a more accurate estimate for generalizing research

results to a wider population. In this study, an Adjusted R Square value of 0.862 indicates that if this model were applied to the population, the ability of the independent variables to explain customer loyalty would be 86.2%.

4.3. Discussion

4.3.1 The Influence of Price on Customer Loyalty

The research results show that the Price variable has a positive and significant influence on Customer Loyalty. This is evidenced by the calculated t-value of 18.117, which is greater than the t-table value (1.985), and a significance value of 0.000, which is smaller than 0.05. Thus, the first hypothesis (H1), which states that price influences customer loyalty, is accepted.

In Chapter I, it was explained that one of the problems identified was that Telkomsel's prices tend to be expensive or continuously increase compared to other providers. This problem was assumed to influence customers' attitudes in maintaining their use of Telkomsel services. Based on the results of the analysis using SPSS, it was found that the price variable has a significant effect on customer loyalty. This indicates that customers' perceptions of price play an important role in determining whether customers will remain loyal to using Telkomsel or not. Thus, the findings of this study support and reinforce the problems identified in Chapter I, because it is empirically proven that price is indeed a factor influencing customer loyalty. This means that when customers perceive the offered price as too high or not commensurate with the benefits received, customer loyalty may decrease.

Conversely, if customers perceive that the price is still appropriate for the network quality and services provided, then customer loyalty can be maintained. Therefore, it can be concluded that the research results are consistent with the research problems in Chapter I, because the price factor is proven to have a significant influence on Telkomsel customer loyalty.

The managerial implication of this finding is that Telkomsel needs to maintain and even enhance its competitive pricing strategy. The company can consider offering more diverse and flexible tariff packages according to the needs and purchasing power of students as a price-sensitive consumer segment. Furthermore, transparency in pricing offers and the absence of hidden fees will further strengthen consumers' positive perceptions of price, which will ultimately impact increasing customer loyalty.

The results of this study are consistent with the theory proposed by (Wiguna and Padmanty, 2023), price is a marketing variable that companies must consider because it directly affects sales capacity and profits. Appropriate pricing reflects the value of a product in the eyes of consumers and is an important strategy for winning market competition and customer loyalty. In the context of a highly competitive telecommunications industry, an appropriate pricing strategy is a crucial factor in retaining customers.

This finding is also supported by previous research conducted by (Luh et al., 2020), (Rahmani and Rusdianto, 2024), (Qahfi et al., 2020), (Hartanto et al., 2024), who found that price has a significant influence on customer loyalty in

telecommunications service providers. Consumers who feel that the price paid matches the benefits received tend to continue using the same service and are reluctant to switch to competitors.

4.3.2 The Influence of Service Quality on Customer Loyalty

The t-test results for the Service Quality variable show a calculated t-value of 20.477 with a significance level of 0.000. This calculated t-value is greater than the t-table value (1.985) and the significance value is smaller than 0.05, so it can be concluded that service quality has a positive and significant influence on customer loyalty. Thus, the second hypothesis (H2) in this study is accepted.

In Chapter I, it was explained that one of the problems identified was Telkomsel's service quality, which is often complained about by customers, such as network disruptions, unstable internet speeds, and slow customer service responses in handling complaints. This problem was assumed to influence customers' attitudes in maintaining their use of Telkomsel services. Based on the results of the analysis using SPSS, it was found that the service quality variable has a significant effect on customer loyalty. This indicates that customers' perceptions of service quality play an important role in determining whether customers will remain loyal to using Telkomsel or not. Thus, the findings of this study support and reinforce the problems identified in Chapter I, because it is empirically proven that service quality is indeed a factor influencing customer loyalty. This means that when customers perceive the service quality provided as not optimal or not in line with expectations, customer loyalty may decrease. Conversely, if customers perceive that the service quality provided is good and satisfactory, then customer loyalty can be maintained.

Therefore, it can be concluded that the research results are consistent with the research problems in Chapter I, because the service quality factor is proven to have a significant influence on Telkomsel customer loyalty.

The practical implication of this finding is that Telkomsel needs to consistently improve its service quality, especially in terms of internet network reliability in campus areas, response speed in handling customer complaints, and the friendliness and professionalism of service officers. Given that student consumers heavily rely on internet connections for academic purposes, stable and fast network quality becomes a primary determining factor. Regular training for customer service and field technicians also needs to be conducted to ensure that every interaction with customers leaves a positive impression that builds long-term loyalty.

The results of this study confirm the SERVQUAL model theory, which states that service quality consists of five main dimensions: reliability, responsiveness, assurance, empathy, and tangibles. These five dimensions collectively shape consumers' perceptions of service quality, which will ultimately influence customer satisfaction and loyalty.

This finding is also in line with research conducted by (Luh et al., 2020), (Rahmani & Rusdianto, 2024), (Jufrizen, et al., 2020), and (Hartanto et al., 2023), who found that service quality has a significant influence on customer loyalty in service provider companies. Consumers who have a satisfying service experience tend to be reluctant to switch to competitors and are even willing to recommend the

service to others. This indicates that investment in improving service quality will yield a positive return in the form of higher customer retention.

4.3.3 The Influence of Brand Image on Customer Loyalty

Based on the t-test results, the Brand Image variable obtained a calculated t-value of 20.557 with a significance level of 0.000. This calculated t-value is greater than the t-table value (1.985) and the significance value is smaller than 0.05, so it can be concluded that brand image has a positive and significant influence on customer loyalty. Thus, the third hypothesis (H3) in this study is accepted. In fact, among the three variables studied, Brand Image has the highest calculated t-value, indicating that this variable is the most dominant predictor influencing customer loyalty.

In Chapter I, it was explained that one of the problems identified was Telkomsel's challenge in maintaining a positive brand image amidst the proliferation of competitor promotions and negative issues developing in the community. This problem was assumed to influence customers' attitudes in maintaining their use of Telkomsel services. Based on the results of the analysis using SPSS, it was found that the brand image variable has a significant effect on customer loyalty. This indicates that customers' perceptions of brand image play an important role in determining whether customers will remain loyal to using Telkomsel or not. Thus, the findings of this study support and reinforce the problems identified in Chapter I, because it is empirically proven that brand image is indeed a factor influencing customer loyalty. This means that when customers perceive Telkomsel's brand image as declining or less positive compared to competitors, customer loyalty may decrease. Conversely, if

customers perceive that Telkomsel's brand image remains positive and trustworthy, then customer loyalty can be maintained. Therefore, it can be concluded that the research results are consistent with the research problems in Chapter I, because the brand image factor is proven to have a significant influence on Telkomsel customer loyalty.

The managerial implication of this finding is that Telkomsel needs to continuously build and maintain a positive brand image through various effective marketing and communication programs. The company can utilize social media, sponsorship of campus events, partnership programs with educational institutions, and advertising campaigns that touch the emotional aspects of students. Consistency in providing quality service will also strengthen the brand image because consumers will have direct experiences that align with the brand promise. With a strong brand image, Telkomsel will not only retain existing customers but will also find it easier to attract new customers.

The results of this study are consistent with the theory proposed by (Permata Putri and Syaefulloh, 2024), a positive brand image can increase customer loyalty. Positive perceptions created by the company through product and service quality create a positive brand image in the minds of customers, which ultimately encourages loyalty.

This finding is also supported by previous research conducted by (Astuti and Alfarizky, 2020) and (Alfia N, and Dwiridotjahjono J, 2023), who found that brand image has a significant influence on customer loyalty. A positive brand image makes

it easier for companies to introduce new products because consumers already have pre-existing trust. In the telecommunications industry, characterized by a high level of competition, having a strong brand image is a competitive advantage that is difficult for competitors to imitate.

4.3.4 The Simultaneous Influence of Price, Service Quality, and Brand Image on Customer Loyalty

The F-test results show that simultaneously (together), the variables Price, Service Quality, and Brand Image have a positive and significant influence on Customer Loyalty. This is evidenced by the calculated F-value of 207.792, which is much larger than the F-table value (2.70), and a significance value of 0.000, which is smaller than 0.05. Thus, the fourth hypothesis (H4) in this study is accepted.

In Chapter I, it was explained that the identified problems included perceptions of Telkomsel's prices tending to be expensive, complaints about service quality such as network disruptions and slow customer service responses, as well as challenges in maintaining a positive brand image amidst competition in the telecommunications industry. These three problems were assumed to collectively influence customers' attitudes in maintaining their use of Telkomsel services. Based on the results of the analysis using SPSS through the F-test, it was found that the variables of price, service quality, and brand image simultaneously have a significant effect on customer loyalty. This indicates that customers' perceptions of price, service quality, and brand image together play an important role in determining whether

customers will remain loyal to using Telkomsel or not. Thus, the findings of this study support and reinforce the problems identified in Chapter I, because it is empirically proven that price, service quality, and brand image simultaneously are indeed factors influencing customer loyalty. This means that when customers perceive these three aspects overall as not meeting expectations, customer loyalty may decrease. Conversely, if customers perceive that the price is still appropriate, service quality is good, and brand image is positive, then customer loyalty can be maintained and even increased. Therefore, it can be concluded that the research results are consistent with the research problems in Chapter I, because the factors of price, service quality, and brand image are simultaneously proven to have a significant influence on Telkomsel customer loyalty.

This finding confirms that the three factors studied together are important determinants in building Telkomsel customer loyalty. This means that efforts to increase customer loyalty cannot be made by focusing on only one aspect but must be carried out holistically and in an integrated manner. Consumers form their loyalty based on a comprehensive evaluation of various aspects of their experience with the company, including the price offered, the quality of service received, and the brand image perceived.

The F-test result, which shows very strong significance (a very large calculated F-value and a significance of 0.000), also indicates that the regression model used in this study is valid and appropriate for explaining the influence of the

three independent variables on customer loyalty. Thus, the conclusions drawn from this study have a strong and reliable empirical basis.

This finding is also supported by previous research conducted by (Aditya Dwi Putra and Nurul Azizah, 2024), (Joshua and Haryadi, 2014), and (Fanesya Yul Fani and Unik Dwi Lestari, 2024) who found that price, service quality, and brand image simultaneously significantly influence customer loyalty. This means that if these four variables are improved and maintained by a company, they can increase overall customer loyalty.

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Based on the results of the research and discussion on The Influence of Price, Service Quality, and Brand Image on Customer Loyalty among Telkomsel consumers at the Universitas Muhammadiyah Sumatera Utara, the following conclusions can be drawn:

1. Price has a positive and significant effect on Customer Loyalty. Competitive, fair prices that are commensurate with the quality of services received encourage consumers to remain loyal to using Telkomsel services.
2. Service Quality has a positive and significant effect on Customer Loyalty. Network reliability, customer service responsiveness, service assurance, empathy, and good physical evidence of service increase customer loyalty.
3. Brand Image has a positive and significant effect on Customer Loyalty. In fact, brand image is the most dominant variable influencing customer loyalty. Telkomsel's positive, trustworthy, and high-quality brand image creates an emotional bond that keeps customers loyal.
4. Price, Service Quality, and Brand Image simultaneously (together) have a positive and significant effect on Customer Loyalty. These three variables together are able to explain 86.7% of the variation in customer loyalty, which means that increasing customer loyalty requires holistic attention to these three aspects.

5.2 Recommendations

Based on the conclusions drawn, the researcher offers the following recommendations for the Company (Telkomsel):

1. **Strengthening Brand Image:** It is hoped that Telkomsel can continue to strengthen its brand image through activities relevant to students, such as sponsoring campus events, internship programs, digital workshops, and creative social media campaigns that touch emotional aspects.
2. **Improving Service Quality:** It is hoped that Telkomsel can ensure network quality in campus areas remains stable and fast, improve customer service responsiveness, and provide regular training for service officers to create positive interactions with customers.
3. **Competitive Pricing Strategy:** It is hoped that Telkomsel can continue to offer affordable, flexible tariff packages that suit student needs, and maintain price transparency with no hidden fees.
4. **Enhancing Customer Loyalty Programs:** It is hoped that Telkomsel can design and implement more attractive loyalty programs for customers, such as point systems or rewards that can be exchanged for various benefits, including data package discounts, free quotas, or exclusive access to digital content. Effective loyalty programs will encourage customers to continue using Telkomsel services and strengthen their emotional connection with the brand

5.3 Research Limitations

This study has several limitations that need to be considered in interpreting the results, including:

1. The research sample is still limited, only covering 100 Telkomsel consumer respondents at the Universitas Muhammadiyah Sumatera Utara, so the results of this study may not fully represent the wider population of Telkomsel consumers in Indonesia.
2. Other variables that have the potential to influence customer loyalty have not been studied, so this analysis only includes the variables Price, Service Quality, and Brand Image used in this study.
3. The data collection method using questionnaires filled out by respondents themselves (self-report) has the potential to introduce bias, such as the possibility that respondents did not answer honestly or the presence of social desirability bias.
4. This study used a cross-sectional design where data was collected at one specific point in time, so it cannot capture changes in customer loyalty behavior over time.
5. The author's limited knowledge in compiling and writing this research means that its reliability needs to be re-examined in the future through further research.

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ATTACHMENT

RESPONDENT IDENTITY

1. Gender : Male Female

2. Current Semester : Semester 1-3 Semester 4 - 6

Semester >7

3. Length of Product Usage: < 6 Months 6 Months – 1 Year

1 Years – 3 Years > 3 Years

The results of the pre-survey conducted before the main research was carried out are presented in the appendix as supporting data in compiling the background and formulating the research problem

QUESTIONNAIRE

CUSTOMER LOYALTY (Y)

No	Statement	Answer				
		SS	S	KS	TS	STS
Repurchase Intention						
1	I intend to continue using Telkomsel in the future.					
2	I will repurchase Telkomsel packages when the active period expires.					
3	Telkomsel is my main choice for mobile and internet services.					

Willingness to Recommend					
1	I am willing to recommend Telkomsel to friends or family.				
2	I often suggest others to use Telkomsel.				
3	I will give positive reviews about Telkomsel.				
Not Easy to Switch					
1	I am not interested in switching to other operators besides Telkomsel.				
2	Even if there are promotions from other operators, I still choose Telkomsel.				
3	I find it difficult to replace Telkomsel with other operators.				
Sustainable Satisfaction					
1	I feel consistently satisfied using Telkomsel.				
2	Telkomsel always meets my expectations as a customer.				
3	My experience using Telkomsel remains positive over time.				

PRICE (X1)

No	Statement	Answer				
		SS	S	KS	TS	STS
Price Affordability						
1	The price of Telkomsel internet packages is in accordance with my financial ability.					
2	I feel that Telkomsel service prices are still affordable for me.					
3	The price of Telkomsel packages does not burden me in daily use.					

Price to Quality Ratio					
1	The price of Telkomsel packages is appropriate for the network quality I receive.				
2	Telkomsel services provide value commensurate with the price I pay.				
3	Telkomsel's network quality is comparable to the costs incurred.				
Competitive Prices					
1	Telkomsel package prices are competitive compared to other operators.				
2	Compared to other operators, Telkomsel prices are still attractive to me.				
3	I consider Telkomsel prices to be quite competitive in the market.				
Price Transparency					
1	Information about Telkomsel package prices is conveyed clearly.				
2	There are no hidden costs in using Telkomsel services.				
3	I understand the price details that I pay to Telkomsel.				

SERVICE QUALITY (X2)

No	Statement	Answer				
		SS	S	KS	TS	STS
Tangibles						
1	The MyTelkomsel application display looks modern and is easy to use.					
2	Telkomsel service facilities (GraPARI, website, application) appear professional and trustworthy.					
3	Information about Telkomsel packages and services is presented with a clear and					

	attractive display.					
Reliability						
1	The Telkomsel network rarely experiences disruptions when I use it.					
2	Telkomsel provides services as promised in promotions or advertisements.					
3	The quality of the Telkomsel network is consistent in daily use.					
Responsiveness						
1	Telkomsel customer service responds to my complaints quickly.					
2	Telkomsel provides immediate solutions when I experience network problems.					
3	My questions regarding Telkomsel services are answered quickly and clearly.					
Assurance						
1	I feel safe using Telkomsel services for communication and internet.					
2	Telkomsel employees or customer service have good knowledge about the products and services.					
3	Telkomsel gives me confidence that the services provided are reliable					
Empathy						
1	Telkomsel understands my needs as a customer.					
2	Telkomsel pays attention to customer complaints.					
3	Telkomsel strives to provide services that suit customer needs					

BRAND IMAGE (X3)

No	Statement	Answer				
		SS	S	KS	TS	STS
Brand Awareness						
1	I easily recognize Telkomsel compared to other operators.					
2	Telkomsel is one of the operator brands that first comes to my mind.					
3	I am aware of the various products and services offered by Telkomsel.					
Perceived Quality						
1	I consider the quality of the Telkomsel network to be very good.					
2	Telkomsel provides better services compared to other operators.					
3	Overall, I believe that the quality of Telkomsel services is high					
Overall Brand Image						
1	Telkomsel has a positive brand image in my view.					
2	Telkomsel is known as a superior and trustworthy operator.					
3	I have a good impression of Telkomsel as a brand.					

TABULATION OF 30 RESPONDENTS QUESTIONNAIRE ANSWERS

CUSTOMER LOYALTY (Y)

Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	TOTAL
4	5	4	5	5	4	4	5	4	4	5	4	53
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	4	3	3	4	4	4	3	3	3	46
4	4	4	5	4	4	4	5	5	5	5	5	54
4	5	4	3	3	2	2	2	2	3	3	3	36
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
4	4	3	3	3	4	2	2	2	3	3	3	36
5	5	5	4	5	5	4	5	5	4	4	4	55
5	5	5	4	4	5	3	3	3	4	4	4	49
4	4	4	3	4	4	4	4	4	4	4	4	47
5	5	5	5	5	5	5	5	5	5	5	5	60
4	5	5	5	4	4	4	4	4	4	4	4	51
4	4	4	4	4	4	4	4	4	4	4	4	48
5	5	5	5	5	5	5	5	5	5	5	5	60
4	5	5	5	5	3	3	3	3	2	3	3	44
5	2	4	4	4	3	3	3	3	3	3	4	41
3	4	2	2	2	3	2	2	2	4	4	4	34
5	5	5	5	5	5	5	4	4	3	3	4	53
2	2	2	2	2	2	2	2	2	2	2	2	24
1	1	1	1	1	1	1	1	1	1	1	1	12
4	4	4	4	4	4	4	4	4	4	4	4	48
4	5	3	2	2	4	3	3	3	4	4	4	41
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
2	2	2	2	2	2	2	2	2	2	2	2	24
3	3	3	3	3	3	3	3	3	3	3	4	37
4	4	2	2	2	2	2	2	2	2	2	2	28
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60

PRICE (X1)

X1. 1	X1. 2	X1. 3	X1. 4	X1. 5	X1. 6	X1. 7	X1. 8	X1. 9	X1. 10	X1. 11	X1. 12	TOTA L
4	3	5	4	5	4	5	4	4	5	4	5	52
5	5	4	4	4	4	4	4	4	4	4	4	50
3	4	4	3	4	4	4	3	3	5	5	5	47
5	5	4	5	5	5	5	5	4	4	4	5	56
5	5	5	3	3	3	5	4	4	5	5	5	52
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
3	3	3	3	3	3	3	3	3	4	4	4	39
4	3	4	3	4	4	4	3	3	4	4	4	44
3	3	4	4	4	4	3	3	4	5	5	5	47
4	4	4	4	4	4	4	4	4	4	4	4	48
5	5	5	5	5	5	5	5	5	5	5	5	60
4	4	4	4	4	4	5	4	4	4	4	4	49
4	4	4	4	4	4	4	4	4	4	4	4	48
4	3	2	4	5	5	2	2	2	5	5	5	44
3	4	3	4	3	3	1	4	5	4	3	4	41
4	3	4	3	3	3	4	3	3	5	5	5	45
2	2	2	4	4	4	2	2	2	4	4	4	36
4	4	4	4	4	3	4	3	4	5	4	4	47
2	2	2	2	2	2	2	2	2	2	2	2	24
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	4	4	4	4	4	4	4	4	4	48
2	2	2	2	4	4	4	3	4	4	4	4	39
5	5	5	5	5	5	5	5	5	5	5	5	60
2	2	2	3	3	3	2	3	4	4	3	4	35
3	3	3	3	3	3	3	3	2	4	4	4	38
4	4	4	2	2	2	2	3	2	2	2	4	33
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60

SERVICE QUALITY (X2)

X 2.1	X 2.2	X 2.3	X 2.4	X 2.5	X 2.6	X 2.7	X 2.8	X 2.9	X2. 10	X2. 11	X2. 12	X2. 13	X2. 14	X2. 15	TOTAL
5	4	4	4	5	5	4	3	3	5	4	5	4	4	4	63
5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	73
4	5	4	2	4	4	5	4	4	4	5	4	4	4	4	61
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
5	5	5	3	4	4	3	3	3	5	5	3	4	5	5	62
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	5	5	3	4	4	5	5	4	5	5	4	4	4	4	65
5	5	5	4	5	4	4	4	4	5	4	4	4	4	4	65
5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	74
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
5	5	5	5	4	5	4	5	4	5	5	5	5	5	5	72
4	3	5	2	3	4	5	3	3	5	2	5	2	5	5	56
5	5	5	3	5	2	4	4	4	4	5	5	5	5	4	65
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
5	5	5	2	4	4	4	4	4	4	4	4	4	4	4	61
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	30
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
4	4	4	4	4	4	3	3	3	3	3	4	4	3	4	54
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	4	4	4	3	3	3	3	3	3	4	4	4	54
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
4	4	4	2	3	3	3	3	3	3	3	3	3	3	3	47
4	3	4	3	3	3	3	3	3	3	3	3	3	3	4	48
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75

BRAND IMAGE (X3)

X3.1	X3.2	X3.3	X3.4	X3.5	X3.6	X3.7	X3.8	X3.9	TOTAL
4	5	4	5	4	4	4	4	5	39
4	4	4	4	4	4	4	4	4	36
4	5	4	4	4	4	5	5	5	40
5	5	5	5	5	5	4	5	5	44
4	5	5	3	3	3	4	4	4	35
5	5	5	5	5	5	5	5	5	45
5	5	5	5	5	5	5	5	5	45
4	3	4	4	4	4	4	4	4	35
4	4	4	4	4	4	5	4	4	37
5	5	5	4	4	4	4	5	5	41
4	5	5	5	5	5	5	5	5	44
5	5	5	5	5	5	5	5	5	45
4	4	4	4	4	4	4	4	4	36
4	4	4	4	4	4	4	4	4	36
4	5	4	4	5	5	4	5	5	41
5	5	3	4	3	5	5	3	4	37
5	5	5	3	3	4	3	5	5	38
4	3	4	4	4	3	3	4	3	32
4	5	4	4	3	4	4	4	4	36
2	2	2	2	2	2	2	2	2	18
4	4	4	4	4	4	4	4	4	36
4	4	4	4	4	4	4	4	4	36
4	4	4	4	4	4	5	4	4	37
4	4	4	4	4	4	4	4	4	36
5	5	5	5	5	5	5	5	5	45
3	3	4	2	2	3	3	3	3	26
4	4	4	3	3	3	3	3	3	30
3	3	3	4	4	4	4	4	4	33
5	5	5	5	5	5	5	5	5	45
5	5	5	5	5	5	5	5	5	45

TABULATION OF 100 RESPONDENTS QUESTIONNAIRE ANSWERS

CUSTOMER LOYALTY (Y)

Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	TOTAL
5	5	5	5	5	5	5	5	5	5	5	5	60
4	4	4	4	4	4	3	3	3	4	4	4	45
4	4	4	4	4	4	3	3	4	4	4	3	45
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	4	4	4	4	5	4	4	4	53
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	3	2	4	4	4	4	4	3	3	43
5	5	5	4	5	4	5	5	5	4	4	5	56
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	4	4	3	3	3	3	3	3	3	41
3	3	2	4	4	4	3	3	2	3	4	4	39
5	5	5	4	4	4	3	4	3	4	4	4	49
4	4	3	4	4	3	3	3	3	3	3	3	40
4	4	4	4	3	4	3	4	4	4	4	4	46
3	3	3	3	3	3	3	3	3	3	3	3	36
5	5	5	4	4	3	2	3	4	4	4	4	47
5	4	5	5	3	4	5	4	4	5	4	3	51
3	3	2	4	4	4	3	2	3	3	4	4	39
5	5	4	4	4	4	3	2	3	3	3	3	43
4	4	4	4	4	4	3	3	4	3	4	3	44
5	5	5	4	3	4	5	5	5	4	3	4	52
4	4	3	4	3	4	3	3	3	4	4	4	43
4	4	4	4	4	4	4	4	3	3	4	4	46
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	TOTAL

4	4	4	4	4	4	4	4	4	4	4	4	48
5	5	5	5	5	5	5	5	5	5	5	5	60
2	1	4	2	4	2	4	2	3	3	3	4	34
5	4	3	4	4	4	2	2	2	4	3	3	40
4	4	4	4	4	4	4	4	4	4	4	4	48
5	5	4	3	3	3	3	3	3	3	3	3	41
2	2	2	2	2	2	2	2	2	2	2	2	24
5	5	5	5	5	5	5	5	5	5	5	5	60
4	4	4	4	4	4	4	4	4	4	4	4	48
3	3	3	3	3	3	3	3	3	3	3	3	36
3	4	3	3	3	4	3	3	3	4	3	4	40
4	4	4	2	2	2	2	2	2	2	2	4	32
4	4	3	3	3	3	3	3	3	3	3	3	38
4	4	4	2	2	2	2	2	2	2	2	2	30
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
3	4	2	2	2	2	2	2	2	2	2	2	27
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
3	4	2	3	3	3	3	3	3	3	3	3	36
5	5	5	5	5	5	5	5	5	5	5	5	60
4	4	4	4	4	4	4	4	4	4	4	4	48
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	TOTAL

4	4	2	4	2	4	3	3	3	4	4	4	41
5	5	5	4	4	4	5	5	5	4	4	4	54
4	5	4	4	4	4	4	4	4	4	4	4	49
5	4	4	4	4	4	4	4	5	5	5	5	53
4	4	4	4	4	4	4	4	3	3	3	4	45
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	4	4	4	4	3	3	4	4	4	46
4	4	4	2	2	4	3	3	3	4	4	4	41
4	4	3	3	3	3	3	3	3	4	4	4	41
3	4	3	2	2	2	2	3	3	2	3	3	32
4	4	4	4	4	4	4	4	4	3	3	4	46
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	3	3	2	3	2	3	3	3	3	3	36
4	4	4	4	4	4	4	4	4	4	4	4	48
3	4	2	3	2	3	3	2	2	3	2	3	32
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	4	4	4	4	5	56
3	4	2	2	2	2	2	2	2	2	2	2	27
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	TOTAL

4	2	2	2	2	2	2	3	2	2	2	2	27
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	3	3	3	3	3	2	2	3	2	3	35
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
3	4	3	3	3	3	2	2	3	3	3	3	35
4	4	4	3	2	4	3	2	2	3	3	3	37
1	2	2	2	2	2	2	2	2	1	1	1	20
5	5	5	5	5	5	5	5	5	5	5	5	60
4	4	4	3	3	3	3	3	4	3	3	3	40

PRICE (X1)

X1.1	X1.2	X1.3	X1.4	X1.5	X1.6	X1.7	X1.8	X1.9	X1.10	X1.11	X1.12	TOTAL
5	5	5	5	5	5	5	5	5	5	5	5	60
3	3	2	4	4	4	4	3	4	4	4	4	43
4	4	4	3	3	3	4	4	4	4	5	5	47
5	5	5	5	5	5	4	4	4	5	5	5	57
4	4	4	4	4	4	4	4	3	4	4	4	47
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	3	4	3	3	4	4	3	4	4	4	44
5	5	4	5	5	5	5	5	5	5	5	5	59
4	4	4	4	4	4	4	4	4	4	4	4	48
3	3	3	2	3	3	3	3	3	4	4	4	38
4	4	4	4	4	4	3	3	3	3	4	3	43
5	4	4	4	4	4	4	4	4	4	4	4	49
3	3	3	4	4	4	4	3	4	4	4	4	44
4	4	4	4	4	4	4	4	4	4	4	4	48
3	3	3	3	3	3	3	3	3	3	3	3	36
4	4	4	5	4	4	3	2	3	4	4	4	45
4	5	5	4	5	4	4	4	5	4	5	4	53
3	4	4	4	4	4	4	3	4	4	4	4	46
4	4	4	3	4	3	4	4	4	4	4	4	46
3	4	3	3	4	3	3	4	4	4	3	4	42
1	2	2	4	4	3	4	2	4	4	3	3	36
4	4	3	3	4	4	4	4	4	4	4	4	46
3	4	3	4	4	4	4	4	3	4	3	4	44
4	4	4	4	4	4	4	4	4	4	4	4	48
X1.1	X1.2	X1.3	X1.4	X1.5	X1.6	X1.7	X1.8	X1.9	X1.10	X1.11	X1.12	TOTAL

4	4	4	2	3	3	4	3	4	4	4	4	43
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	4	4	4	4	4	5	5	4	5	51
5	5	5	5	5	5	5	5	5	5	5	4	59
4	3	3	4	4	4	4	4	4	4	4	4	46
4	4	4	4	4	4	4	4	4	4	4	4	48
3	3	3	4	4	4	3	3	3	4	4	4	42
3	3	3	4	4	4	2	2	2	4	4	4	39
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	3	3	3	3	3	3	4	4	4	42
4	4	4	3	3	3	2	2	2	4	4	4	39
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	4	4	4	4	4	4	4	4	4	48
4	4	4	3	3	3	2	2	3	4	4	4	40
4	4	4	4	4	4	4	4	4	4	4	4	48
2	2	2	2	2	2	2	2	2	4	4	3	29
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
4	4	5	4	5	4	4	4	5	5	4	5	53
X1.	X1.	X1.	X1.	X1.	X1.	X1.	X1.	X1.	X1.1	X1.1	X1.1	TOTA
1	2	3	4	5	6	7	8	9	0	1	2	L

3	3	3	2	2	2	2	2	2	4	4	4	33
3	3	3	2	2	2	2	2	2	4	4	4	33
4	4	4	3	3	3	2	2	2	4	4	4	39
4	4	4	4	4	4	2	2	2	4	4	4	42
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	2	2	2	5	5	5	51
4	4	3	3	3	3	2	2	2	3	3	4	36
4	4	4	3	3	3	3	2	2	4	4	4	40
3	3	3	4	4	4	3	3	2	4	5	5	43
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
5	5	5	5	5	5	5	5	5	5	5	5	60
3	3	3	3	3	3	2	2	2	4	4	3	35
3	3	3	3	3	3	2	2	2	4	4	3	35
3	3	3	1	1	1	1	1	1	4	4	4	27
5	5	5	5	5	5	5	5	5	5	5	5	60
X1.	X1.	X1.	X1.	X1.	X1.	X1.	X1.	X1.	X1.1	X1.1	X1.1	TOTA
1	2	3	4	5	6	7	8	9	0	1	2	L

3	3	3	3	3	3	3	3	3	3	4	4	4	39
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SERVICE QUALITY (X2)

X2 .1	X2 .2	X2 .3	X2 .4	X2 .5	X2 .6	X2 .7	X2 .8	X2 .9	X2. 10	X2. 11	X2. 12	X2. 13	X2. 14	X2. 15	TOT AL
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	61
5	5	5	3	3	3	4	4	4	4	4	4	4	4	4	60
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
4	4	4	3	4	4	4	4	4	4	3	4	4	4	4	58
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	3	4	4	3	3	4	4	4	4	3	4	3	55
5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	74
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	2	3	1	3	3	3	4	3	3	3	3	4	47
3	4	3	4	4	4	3	3	3	4	4	4	4	4	4	55
4	4	4	4	3	3	3	4	4	4	4	4	4	4	4	57
4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	59
4	4	4	4	4	4	4	4	4	5	4	4	4	4	4	61
3	3	3	3	3	3	3	3	3	3	3	3	5	3	3	47
5	5	4	3	4	4	4	3	3	4	4	4	5	4	5	61
4	5	4	5	4	5	4	5	4	3	5	4	5	4	5	66
4	4	4	3	4	4	3	3	4	4	4	4	4	4	4	57
4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	59
4	3	5	4	3	4	4	4	4	5	4	5	4	5	5	63
X2 .1	X2 .2	X2 .3	X2 .4	X2 .5	X2 .6	X2 .7	X2 .8	X2 .9	X2. 10	X2. 11	X2. 12	X2. 13	X2. 14	X2. 15	TOT AL

4	5	4	4	4	4	3	3	3	4	4	4	4	4	4	58
4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	61
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
4	2	4	4	4	4	4	2	3	3	5	4	4	3	2	52
5	4	4	3	4	4	4	5	4	4	4	4	5	4	4	62
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
5	5	5	3	5	4	5	5	5	5	5	5	5	5	5	72
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	30
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
4	4	4	4	4	4	4	4	4	4	5	4	4	4	4	61
5	5	5	2	2	2	4	4	4	4	4	4	4	4	4	57
4	3	4	4	4	4	3	3	3	4	3	3	3	3	3	51
4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	69
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	2	2	2	3	3	3	3	3	3	3	3	3	48
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
X2	X2	X2	X2	X2	X2	X2	X2	X2	X2.	X2.	X2.	X2.	X2.	X2.	TOT
.1	.2	.3	.4	.5	.6	.7	.8	.9	10	11	12	13	14	15	AL

5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
3	3	4	2	3	3	3	3	3	3	3	3	3	3	3	45
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	2	4	3	4	3	4	4	4	4	4	4	4	56
4	5	4	3	4	3	4	4	4	4	4	4	4	4	4	59
5	5	4	3	5	3	4	4	4	4	4	4	4	4	5	62
4	5	4	2	5	3	4	4	4	4	4	4	4	5	5	61
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	4	4	3	3	3	3	4	3	4	3	3	3	52
4	4	4	4	4	4	3	3	3	4	4	4	4	3	4	56
4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	48
4	4	4	2	2	2	4	4	4	4	4	4	4	4	4	54
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	75
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
4	4	4	3	3	3	3	3	3	4	3	3	3	3	3	49
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	60
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
X2	X2	X2	X2	X2	X2	X2	X2	X2	X2.	X2.	X2.	X2.	X2.	X2.	TOT
.1	.2	.3	.4	.5	.6	.7	.8	.9	10	11	12	13	14	15	AL

3	3	3	2	2	2	3	3	3	24
4	4	4	3	1	1	3	3	1	24
2	4	3	1	1	1	1	2	1	16
5	5	5	5	5	5	5	5	5	45
4	4	4	4	3	4	4	4	4	35

	N	100	100	100	100	100	100	100	100	100	100
X3.05	Pearson Correlation	.800**	.752**	.858**	.912**	1	.943**	.898**	.884**	.927**	.951**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	100	100	100	100	100	100	100	100	100	100
X3.06	Pearson Correlation	.798**	.772**	.807**	.933**	.943**	1	.934**	.903**	.930**	.956**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	100	100	100	100	100	100	100	100	100	100
X3.07	Pearson Correlation	.821**	.807**	.826**	.934**	.898**	.934**	1	.943**	.933**	.962**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	100	100	100	100	100	100	100	100	100	100
X3.08	Pearson Correlation	.846**	.846**	.872**	.896**	.884**	.903**	.943**	1	.913**	.960**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	100	100	100	100	100	100	100	100	100	100
X3.09	Pearson Correlation	.818**	.792**	.828**	.911**	.927**	.930**	.933**	.913**	1	.959**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	100	100	100	100	100	100	100	100	100	100
TOTAL	Pearson Correlation	.896**	.880**	.914**	.956**	.951**	.956**	.962**	.960**	.959**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	100	100	100	100	100	100	100	100	100	100

** . Correlation is significant at the 0.01 level (2-tailed).

Reliability Test

Reliability Table Customer Loyalty (Y)

Reliability Statistics	
Cronbach's Alpha	N of Items
.982	12

Reliability Table Price (X1)

Reliability Statistics	
Cronbach's Alpha	N of Items
.976	12

Reliability Table Service Quality (X2)

Reliability Statistics	
Cronbach's Alpha	N of Items
.983	15

Reliability Table Brand Image (X3)

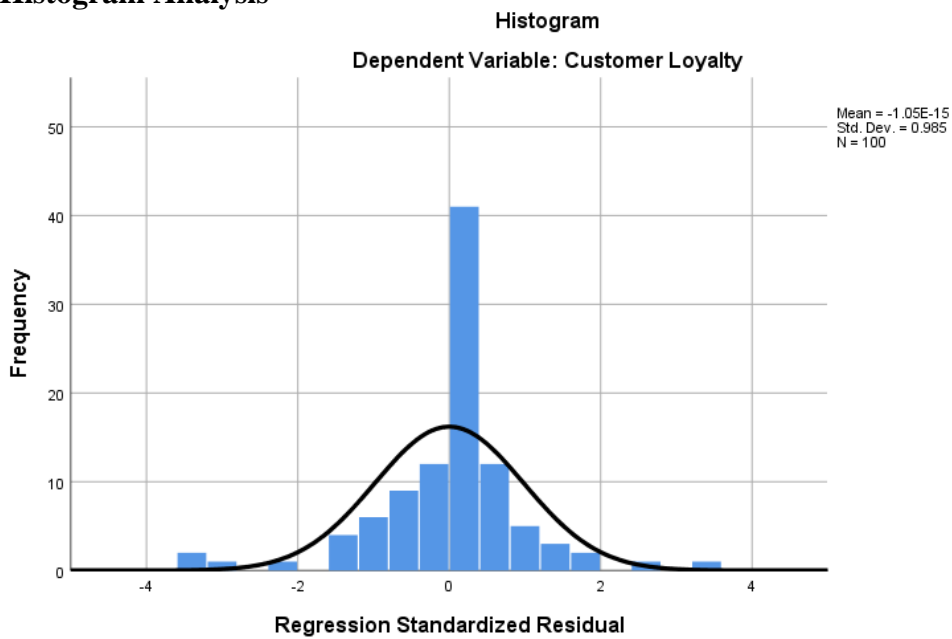
Reliability Statistics	
Cronbach's Alpha	N of Items
.982	9

Descriptive Statistics Analysis Table

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Price	100	12.00	60.00	48.3100	10.67395
Service Quality	100	30.00	75.00	62.8900	10.98290
Brand Image	100	16.00	45.00	37.3800	7.72217
Customer Loyalty	100	20.00	60.00	48.0200	10.98482
Valid N (listwise)	100				

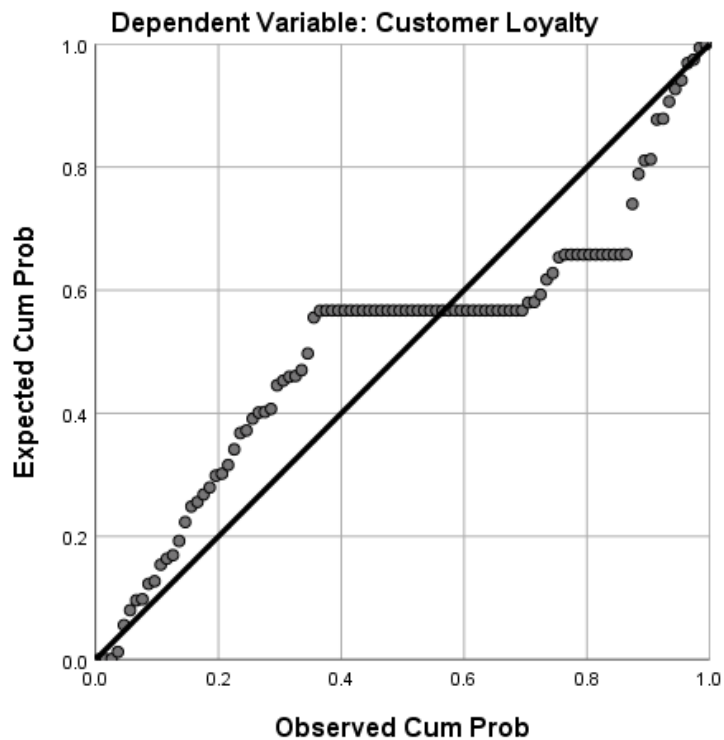
Normality Test

Histogram Analysis



Normal Probability Plot (P-Plot)

Normal P-P Plot of Regression Standardized Residual

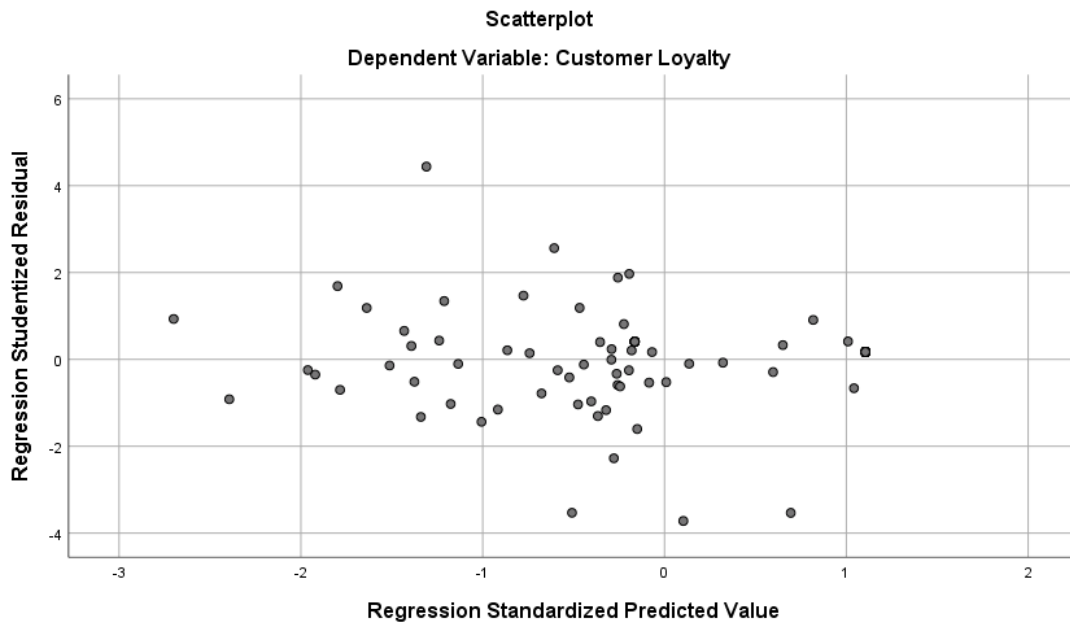


Multicollinearity Test

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-5.522	2.435		-2.268	.026		
	Price	.325	.079	.316	4.105	.000	.234	4.271
	Service Quality	.312	.104	.312	3.007	.003	.129	7.764
	Brand Image	.486	.146	.342	3.333	.001	.132	7.557

a. Dependent Variable: Customer Loyalty

Heteroscedasticity Test



T Test Price (X1)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.391	2.466		1.781	.078
	Price	.903	.050	.878	18.117	.000

a. Dependent Variable: Customer Loyalty

T Test Service Quality (X2)

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-8.595	2.810		-3.058	.003
	Service Quality	.900	.044	.900	20.447	.000

a. Dependent Variable: Customer Loyalty

T Test Brand Image (X3)

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.112	2.379		.047	.962
	Brand Image	1.282	.062	.901	20.557	.000

a. Dependent Variable: Customer Loyalty

F Test

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10351.783	3	3450.594	207.792	.000 ^b
	Residual	1594.177	96	16.606		
	Total	11945.960	99			

Source: Research Results, 2026 (processed data).

Determinant Coefficient (R₂)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.931 ^a	.867	.862	4.075

Source: Research Results, 2026 (processed data).

MAJELIS PENDIDIKAN TINGGI MUHAMMADIYAH
UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA
FAKULTAS EKONOMI DAN BISNIS

Jl. Kapten Mukhtar Basri No. 3, Medan, Telp. 061-6624567, Kode Pos 20238

PERMOHONAN JUDUL PENELITIAN

No. Agenda: 5440/JDL/SKR/MAN/FEB/UMSU/10/7/2025

Medan, 10/7/2025

Kepada Yth.
Ketua Program Studi Manajemen
Fakultas Ekonomi dan Bisnis
Universitas Muhammadiyah Sumatera Utara
di Medan

Dengan hormat.

Saya yang bertanda tangan di bawah ini,

Nama : Jibly Fikransyah
NPM : 2205160097
Program Studi : Manajemen
Konsentrasi : Marketing

Dalam rangka proses penyusunan skripsi, saya bermohon untuk mengajukan judul penelitian berikut ini:

Identifikasi Masalah : In an era of increasingly competitive business, companies are required to understand and fulfill consumer needs and wants optimally. One of the key indicators of a company's success in attracting and retaining customers is consumers' purchase intention and loyalty toward the products or services offered. However, in practice, several issues are still frequently encountered, particularly those related to factors such as price, brand image, service quality, and product quality. These issues form an important basis for studying how these factors influence consumer purchase intention and loyalty, so that companies can formulate more effective and efficient marketing strategies.

Rencana Judul : 1. The Influence Of Price, Service Quality, And Brand Image On Customer Loyalty
2. The Influence Of Price, Promotion, And Product Quality On Consumer Purchase Intention
3. The Influence Of Product Quality, Product Price, And Product Design On Purchase Decision

Objek/Lokasi Penelitian : Telkomsel, Kopi Kenangan, Iphone

Demikianlah permohonan ini saya sampaikan. Atas perhatiannya saya ucapkan terimakasih.

Hormat Saya

Pemohon


(Jibly Fikransyah)



MARJES LEMBINGAN LOGO PENELITIAN & PENGEMBANGAN PIMPINAN PUSAT MUHAMMADIYAH
UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA
FAKULTAS EKONOMI DAN BISNIS

UMSU Terakreditasi Unggul Berdasarkan Keputusan Badan Akreditasi Nasional Perguruan Tinggi No. 174/SK/BAN-PT/Ak.Pp/PT.M/2024
 Pusat Administrasi: Jalan Mukhtar Basri No. 3 Medan 20238 Telp. (061) 6622400 - 66224567 Fax. (061) 6625474 - 6631003
<http://feb.umsu.ac.id> feb@umsu.ac.id [umsu](https://www.facebook.com/umsu) [umsu](https://www.instagram.com/umsu) [umsu](https://www.youtube.com/umsu) [umsu](https://www.tiktok.com/umsu)

**PENETAPAN DOSEN PEMBIMBING
 PROPOSAL / SKRIPSI MAHASISWA**

NOMOR : 10/TGS/IL3.AU/UMSU-05/F/2026

Assalamu 'alaikum Warahmatullahi Wabarakatuh

Fakultas Ekonomi Dan Bisnis Universitas Muhammadiyah Sumatera Utara, berdasarkan Persetujuan
 permohonan judul penelitian Proposal / Tugas Akhir / Jurnal / dari Ketua / Sekretaris :

Program Studi
 Pada Tanggal

: Manajemen

Dengan ini menetapkan Dosen Pembimbing Proposal / Tugas Akhir / Jurnal Mahasiswa :

Nama

: Jibly Fikransyah

NPM

: 2205160097

Semester

: VII (Tujuh)

Program Studi

: Manajemen

Judul Proposal / Skripsi

**: The Influence of Price, Service Quality, and Brand Image on Customer Loyalty
 In Telkomsel Products in the Environment Student of Universitas
 Muhammadiyah Sumatera Utara**

Dosen Pembimbing

: Dr. Muthia Ardha S.E M.Si

Dengan demikian di izinkan menulis Proposal / Tugas Akhir / Jurnal dengan ketentuan :

1. Penulisan berpedoman pada buku panduan penulisan Proposal/ Tugas Akhir / Jurnal / Fakultas Ekonomi dan Bisnis UMSU.
2. Pelaksanaan Sidang Tugas Akhir harus berjarak 3 bulan setelah dikeluarkanya Surat Penetapan Dosen Pembimbing Tugas Akhir
3. Proyek Proposal / Tugas Akhir / Jurnal dinyatakan "BATAL" bila tidak selesai sebelum Masa Daluarsa tanggal : **05 Januari 2027**
4. Revisi Judul.....

Assalamu 'alaikum Warahmatullahi Wabarakatuh.



Ditetapkan di
 Pada Tanggal

: Medan
 : 15 Rajab 1447 H
 05 Januari 2026 M

Dekan



Dr. Radiman, S.E., M.Si
 N I D N : 0107087801

Tembusan :
 1. Pertinggal.





**MAJELIS PENDIDIKAN TINGGI MUHAMMADIYAH
UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA
FAKULTAS EKONOMI DAN BISNIS**
Jl. Kapten Mukhtar Basri No. 3, Medan, Telp. 061-6624567, Kode Pos 20238

BERITA ACARA BIMBINGAN PROPOSAL

Nama Mahasiswa : Jibly Fikransyah
 NPM : 2205160097
 Dosen Pembimbing : Dr. Mutia Arda SE., M.Si.
 Program Studi : Manajemen
 Konsentrasi : Manajemen Pemasaran
 Judul Penelitian : Pengaruh Harga, Kualitas Layanan, dan Citra Merek terhadap Loyalitas Pelanggan Pada Produk Telkomsel di Lingkungan Mahasiswa Universitas Muhammadiyah Sumatera Utara

Item	Hasil Evaluasi	Tanggal	Paraf Dosen
Bab 1	Berikan bukti pendukung dari latar belakang Perbaiki rumusan masalah Perbaiki judul dan nomor tabel		
Bab 2	Kerangka konseptual → gambar & jay dan tambahkan teori		
Bab 3	Tabel operasional Tabel waktu penelitian Analisis deskriptif & inferensial		
Daftar Pustaka	Sumber lain jika lupa dimasukkan		
Instrumen Pengumpulan Data Penelitian	—		
Persetujuan Seminar Proposal	Ace seminar proposal		

Diketahui oleh:
Ketua Program Studi

Agus Sani, S.E., M.Sc.

Medan, November 2025

Disetujui oleh:
Dosen Pembimbing

Dr. Mutia Arda, S.E., M.Si.

MAJLIS PENDIDIKAN TINGGI MUHAMMADIYAH PIMPINAN PUSAT
UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA
FAKULTAS EKONOMI DAN BISNIS

Jl. Kapt. Mukhtar Basri No. 3 Tel. (061) 6624567 Ext. 304 Medan 220238



PENGESAHAN PROPOSAL

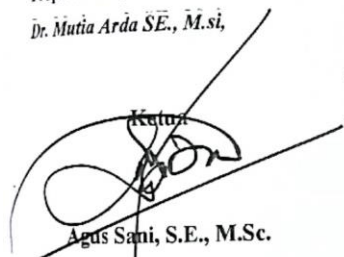
Berdasarkan hasil seminar Proposal Program Studi Manajemen yang diselenggarakan pada hari *Rabu 21 Januari 2026* menerangkan bahwa:

Nama	: Jibly Fikransyah
Konsentrasi	: Man. Pemasaran
N.P.M.	: 2205160097
Tempat / Tgl.Lahir	: Rimp, 26 Desember 2004
Alamat Rumah	: Jl Alfalah 6, Gelugur, Medan Timur, Kota Medan
Judul Proposal	: The Influence of Price, Service Quality, and Brand Image on Customer Loyalty In Telkomsel Products in the Environment Student of Universitas Muhammadiyah Sumatera Utara.

Proposal dinyatakan syah dan memenuhi Syarat untuk menulis Tugas Akhir dengan pembimbing:
Dr. Mutia Arda SE., M.si,

Medan, Rabu 21 Januari 2026


TIM SEMINAR


Agus Sani, S.E., M.Sc.
Pembimbing

Sekretaris

Arif Pratama Marpaung, S.E., M.M.
Pemanding


Dr. Mutia Arda SE., M.si,


Hazmanan Khair, Ph.D.

06/04
Diketahui / Disetujui
An. Dekan
Wakil Dekan - I

Assoc.Prof. Dr. Hasrudy Tanjung, S.E., M.Si.
NIDN. 0118127401

SURAT PERNYATAAN PENELITIAN/TUGAS AKHIR

Saya yang bertandatangan dibawah ini :

Nama Mahasiswa : Jibly Fikransyah
 NPM : 2205160097
 Program Studi : Manajemen
 Konsentrasi : Manajemen Pemasaran
 Judul Penelitian : The Influence of Price, Service Quality, and Brand Image on Customer Loyalty In Telkomsel Products in the Environment Student of Universitas Muhammadiyah Sumatera Utara

Menyatakan bahwa:

1. Saya bersedia melakukan penelitian untuk penyusunan TUGAS AKHIR atas usaha sendiri, baik dalam hal penyusunan proposal penelitian, pengumpulan data penelitian, dan penyusunan laporan akhir penelitian/Tugas Akhir.
2. Saya bersedia dikenakan sanksi untuk melakukan penelitian ulang apabila terbukti penelitian saya mengandung hal-hal sebagai berikut :
 - Menjiplak/Plagiat hasil karya penelitian orang lain.
 - Merekayasa tanda angket, wawancara, observasi, atau dokumentasi.
3. Saya bersedia dituntut di depan pengadilan apabila saya terbukti memalsukan stempel, kop surat, atau identitas perusahaan lainnya.
4. Saya bersedia mengikuti sidang meja hijau secepat-cepatnya 3 bulan setelah tanggal dikeluarkannya surat "penetapan proyek proposal/makalah/Tugas Akhir dan penghunjakkan Dosen Pembimbing" dari Fakultas Ekonomi dan Bisnis UMSU.

Demikianlah surat pernyataan ini saya perbuat dengan kesadaran sendiri.

Medan, Januari 2026

Pembuat Pernyataan



 B*18EEANX227057119 **Jibly Fikransyah**

NB :

- Surat pernyataan asli diserahkan kepada Program Studi Pada saat pengajuan judul
- Foto copy surat pernyataan dilampirkan di proposal dan TUGAS AKHIR

DAFTAR RIWAYAT HIDUP**1. DATA PRIBADI**

NAMA : Jibly Fikransyah
NPM : 2205160097
Tempat dan Tanggal Lahir : Rimo, 26 Desember 2004
Jenis Kelamin : Laki - Laki
Agama : Islam
Kewarganegaraan : Indonesia
Anak Ke : 1 dari 4 bersaudara
Alamat : Jl Alfalah VI. No 6
No. Telepon : 085668202889
Email : Jiblyguitar@gmail.com

2. DATA ORANG TUA

Nama Ayah : Zubiruddin
Pekerjaan : Wiraswasta
Nama Ibu : Wagirah
Pekerjaan : Ibu Rumah Tangga
Alamat : Jl Iskandar Muda No 72
No. Telepon : 085763816856
Email : -

3. DATA PENDIDIKAN FORMAL

Sekolah Dasar : SD Negeri 1 Rimo
Sekolah Menengah Tingkat Pertama : SMP Negeri 1 Rimo
Sekolah Menengah Tingkat Atas : SMK Negeri 1 Gunung Meriah
Perguruan Tinggi : Universitas Muhamadiyah Sumatera Utara