

## HOW IS THE LOYALTY OF TELKOMCEL CUSTOMERS IN TIMOR-LESTE?

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### ABSTRACT

This study aims to assess the loyalty of the Telkomcel customers in Timor-Leste through the service and product quality they received mediated by their satisfaction level. Telkomcel is a telecommunication service that provides internet service in Timor-Leste's urban area. During the covid-19 pandemic, there was a trend of increasing internet users in Timor-Leste due to the movement restriction in Timor-Leste. The object of the study in this research is the individual customer of Telkomcel, which has used Telkomcel for more than three months and has purchased the internet package more than three times. During the data collection, the research managed to collect 160 samples, with 138 samples being valid. Using SmartPLS 3, the Partial Least Square-Structural Equation Modelling (PLS-SEM) technique was used in this work. The results of this study showed that satisfaction had the most significant influence on customer loyalty, followed by service quality and product quality. The customer emphasized the need to enhance Telkomcel service quality as well as their frustration with the slow network connection and internet speed.

Keywords : loyalty; product quality; satisfaction; service quality

### ABSTRAK

*Penelitian ini bertujuan untuk menilai loyalitas pelanggan Telkomcel di Timor-Leste melalui layanan dan kualitas produk yang mereka terima dimediasi oleh tingkat kepuasan mereka. Telkomcel adalah layanan telekomunikasi yang menyediakan layanan internet di wilayah perkotaan di Timor-Leste. Pada masa pandemi covid-19, terjadi tren peningkatan pengguna internet di Timor-Leste akibat pembatasan pergerakan di Timor-Leste. Objek dari penelitian ini adalah pelanggan individu Telkomcel yang telah menggunakan Telkomcel lebih dari tiga bulan dan telah melakukan pembelian paket internet lebih dari tiga kali. Selama pengumpulan data, penelitian berhasil mengumpulkan 160 sampel, dengan 138 sampel valid. Penelitian ini menggunakan Partial Least Square-Structural Equation Modeling (PLS-SEM) dengan bantuan SmartPLS 3. Temuan penelitian ini mengungkapkan bahwa kualitas layanan, kualitas produk, dan kepuasan semuanya berpengaruh positif terhadap loyalitas pelanggan, dengan kepuasan memiliki dampak paling signifikan. Klien menyoroti ketidakpuasan para pelanggan Telkomcel terhadap lambatnya kecepatan internet dan sinyal jaringan serta perlunya peningkatan kualitas layanan yang diberikan Telkomcel.*

*Kata kunci : loyalitas; kualitas produk; kepuasan; kualitas layanan.*

## INTRODUCTION

The internet has become inseparable from human activities because it is used as a source of information and communication. The Covid-19 pandemic has emerged worldwide and has had a significant impact on the world (Suherman & Susan, 2022). This pandemic in all parts of the world forced us to stay at home and continue our daily activities, which increased the need for the internet. Timor-Leste, as a sovereign country, also experienced various problems due to the pandemic. The implementation of movement restrictions has increased the need for internet access for learning activities, work, and entertainment.

Total internet users in Timor-Leste in 2021 were 599.7 thousand, or an increase of 85 thousand users from 2020. The rate of mobile device connections in Timor-Leste is 1.46 million connections or 109.7%, compared to Timor-Leste's population of 1.35 million people. The internet penetration rate in East Timor is 45.1%, or an increase of 6.1% from 2020 (Simon, 2020). Timor-Leste declared a state of emergency in its tenth resolution of 2020, limiting the arrival of foreigners to Timor-Leste and restricting the movement of people within the country. All non-essential activities must be stopped or carried out from home so that teaching or learning activities and working from the office are affected by this resolution. Learning activities have shifted from offline to online learning. This online learning aims to reduce students' movement in Timor-Leste to help handle the Covid-19 pandemic (La'o Hamutuk, 2021).

Timor-Leste currently has three companies providing telecommunications services: Telemor, Timor Telecom (TT), and Telkomcel, which simultaneously have achieved 98% network coverage throughout Timor-Leste. The first to enter Timor-Leste is Timor Telecom (TT), a telecommunications service owned by Timor-Leste and Portuguese companies. The second is Telemor, a telecommunications service company from Vietnam. Third, Telkomcel is the last network provider to enter Timor-Leste in 2012 (Rosbo, 2021). However, the quality of the network provided by Timor Telecom, Telemor, and Telkomcel is considered poor, affecting the learning process carried out by students during the pandemic in Timor-Leste. The members of the G commission, which oversees education in the Timor-Leste National Parliament, believe that students struggle with various issues due to the sluggish internet speed, making it difficult for them to participate in online lessons (Tempo Timor, 2021). What frequently occurs

during the Covid-19 pandemic is the unreliable internet connection to assist online work and school activities. The difficulty of accessing the internet, particularly for students in distant places, and the issue of unstable internet networks are deeply felt, especially by students (TDB, 2020).

Ceslink, S.A. became the fourth business operating in the telecommunications sector on November 16, 2021, receiving a telecommunications operator certificate from the Ministry of Transportation and Telecommunications (MTT) of Timor-Leste. It will enable it to compete with businesses like TT, Telemor, and Telkomcel (Sousa, 2021). Telkomcel must ensure that its consumers stay loyal in the face of increased competition brought on by the emergence of new telecommunications companies in Timor-Leste. However, with numerous complaints about Telkomcel services and products, as well as signs of customer dissatisfaction, it may also have an impact on client loyalty. The ability of a company to deliver services to its consumers is one of the variables that determine its success; thus, the business needs to understand how to enhance the services offered to clients (Fernandes & Solimun, 2018). Based on the phenomena, the study's objective is to assess the loyalty of the Telkomcel customers in Timor-Leste through the service and product quality they received mediated by their satisfaction level.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

This section contains the existing literature that has the relation to the variables used in this research:

### **Service Quality**

Service quality is described as a customer's long-term view of a service based on the cognitive evaluation. It can be a differentiator for companies competing with their rivals to win customers' hearts to behave loyally (Kotler et al., 2019). According to Zeithaml (2009) in Darmawan (2018), service quality is an assessment of customers' benefits or privileges a product offers. Empathy, assurance, reliability, responsiveness, and tangible are the five characteristics of service quality in service marketing, according to Parasuraman et al. (1985). A previous study used similar dimensions in relationship with banking performance (Susan et al., 2021). In their study of service quality, customer happiness, and customer loyalty in automobile service in developing nations, Famiyeh et al. (2018) found that customers value qualities of service quality

such as empathy, certainty, responsiveness, and tangible. Hassanein & Abd-Elrahman (2018) found that the meaning of service quality has several universal aspects as proposed in other studies and proposed that the quality of service in the field of telecommunications has eight dimensions. It consists of *tangible, reliability, responsiveness, assurance, empathy, network, customer service, and convenience*. Meel (2020) proposes 6 service quality dimensions in the telecommunications industry, which is a modification of the SERVQUAL dimension proposed by Parasuraman et al. (1985): *tangibles, reliability, responsiveness, assurance, empathy, and network quality* or add network quality dimensions to technical aspects. Because the dimensions of network quality are discussed in product quality variables, researcher will use the customer quality dimension proposed by Parasuraman et al. (1985)

### **Product Quality**

A product's ability to satisfy both explicit and implicit demands determine its quality, which is the sum of all of its features and attributes. Every company owes it to its customers to satisfy their needs and wants and, if necessary, to go above and beyond their expectations (Kotler & Keller, 2016). According to Kotler et al. (2019) the capacity of a product to perform its functions to meet customers' demands and desires is defined as product quality. Garvin (1987) proposed several dimensions of product quality: performance, features, reliability, conformance, perceived value, durability, serviceability, and aesthetics. Of the eight dimensions proposed above, only a few dimensions will be used because the object of the study is in the form of service. Hence, the dimensions used to measure product quality are performance, features, suitability, durability, and serviceability.

### **Satisfaction**

According to Tjiptono (2016), Customer satisfaction is the evaluation of customers after making a purchase. The evaluation is in the form of perception of the performance of a product that if it does not match customer expectations, it will cause dissatisfaction. Satisfaction is a feeling of happiness or sadness formed from a comparison between the performance of a product with the expectations held by customers (Kotler et al., 2019). The level of customer satisfaction is the outcome of comparing the quality of expected service, and the quality of service received (Gommel et al., 2013). Zeithaml et al. (1996) propose that the relationship between customers and

companies will be stronger when customers give a good assessment of the quality of service of the company and vice versa. Customer satisfaction, customer loyalty, and perceived service quality have a positive correlation (Famiyeh et al., 2018). Satisfaction can be interpreted as a situation after a customer evaluates based on customer expectations of a product (Lai & Nguyen, 2017). Kotler et al. (2019), define product quality as a product's capacity to perform its functions in a way that satisfies the needs and preferences of customers. There are five dimensions of customer satisfaction stated by Basu & Irawan, (2003): Satisfaction towards quality, satisfaction toward value, perceived best, an emotional factor, and efficiency.

### **Loyalty**

Loyalty is the commitment of a customer to continue purchasing or making repeat purchases of a desired product despite the influence of marketing reasons or attempts that could cause the customer to switch to a different brand (Kotler & Keller, 2016; Richard L. Oliver, 2010). The delivery of positive things and the provision of recommendations also manifest loyalty (Ismadi & Susan, 2019). Since retaining and growing client loyalty is crucial to the business, efforts must be made in this direction. During the fierce commercial competition, developing client loyalty can promote consumer interest in a product or service (Anggraini & Budiarti, 2020). According to Kotler & Keller (2016), loyal customers frequently make repeat purchases, show resiliency in the face of a product's drawbacks, and work to educate or teach others about the product.

### **The effect of service quality on customer satisfaction**

Kotler & Keller (2016) found a connection between service quality, customer satisfaction, and business profitability; the higher the service quality attained, the greater the customer satisfaction. According to (Fernandes & Solimun, 2018), Customers are satisfied because the level of service they receive is in line with their expectations. Additionally, it is reinforced by Fida et al. (2020) who claim that customer loyalty, customer happiness, and service quality are all interlinked. As a result, customer satisfaction and loyalty increase as service quality does.

Customer satisfaction is positively influenced by service quality, according to (Albari & Kartikasari, 2019; Masitoh et al., 2019). Customer happiness is largely influenced by the level of service received by clients. Good service quality can meet a customer's

expectations so that customers will be satisfied and more loyal. Companies need to maintain or improve the quality of service to meet customer expectations that will make them loyal (Chakraborty, 2019). The quality of service measured using the SERVQUAL model positively influences mobile device user satisfaction in Vietnam (Chakraborty, 2019). Based on these literature reviews, the following hypothesis is proposed:

*H1: Service quality has a positive impact on customer satisfaction.*

#### **The effect of service quality on loyalty**

According to Hassan et al. (2013), any firm must establish service quality that will lead to customer satisfaction and loyalty in the long run, to thrive and remain competitive. It is also said that improved service quality is an effective way to increase consumer satisfaction and loyalty. The quality of service has a significant influence on customer loyalty, so the higher the quality of service received, the higher the customer loyalty to a company (Paulus A. Pangaila & G. Worang, 2018; Regata & Kusumadewi, 2018). Fida et al. (2020) customer satisfaction, customer loyalty, and service quality are all closely related. As a result, when service quality improves, satisfaction and loyalty will follow suit. We assume a similar association in the current investigation; thus, the study suggested the following hypothesis based on the preceding arguments:

*H2: Service quality has a positive impact on customer loyalty.*

#### **The effect of product quality on customer satisfaction**

Several kinds of research state that product quality positively influences customer satisfaction. If product quality improves, it will also affect customer satisfaction, which is also due to customers' desire to have a product with a high value in the purchases they make in the hope of getting high satisfaction (Fitriyanti, 2021; J & Ariyanti, 2020). If the quality of the product meets the expectations of the customer, it will provide happiness and consider the product as a product of good quality (Djumarno et al., 2018). Based on the above arguments, the study proposed the following hypothesis:

*H3: Product quality has a positive impact on customer satisfaction*

#### **The effect of product quality and loyalty**

Product quality significantly affects customer loyalty and becomes one of the essential elements of making a customer loyal. If the quality of the product meets the

expectations of the customer, it will provide happiness and consider the product as a product of good quality (Djumarno et al., 2018). According to (Kotler & Keller, 2016) there are several indicators of loyal customers: repeat purchase, retention, and referral. The study put out the following suggestion based on the aforementioned justifications:

*H4: Product quality has a positive impact on customer loyalty*

#### **The effect of customer satisfaction on Loyalty**

Customer loyalty is the result of satisfaction obtained by a customer when using a product in the form of goods or services (Cronin & Taylor, 1992). According to Thungasal (2019) research on the hospitality industry, customers who are satisfied with where they stay will be more loyal if they feel that what the hotel provides follows or exceeds customer expectations. According to Joudeh & Dandis (2018), customer satisfaction positively and considerably impacts internet service providers' customer loyalty in Jordan. Customer satisfaction is the determinant aspect of customer trust, which impacts client loyalty, while service quality is the determinant element of whether or not a customer is satisfied (Masitoh et al., 2019).

Customer happiness and loyalty have a clear relationship, according to this study. We assume a similar association in the current investigation; thus, the study suggested the following hypothesis based on the preceding arguments:

*H5: Customer satisfaction has a positive impact on customer loyalty*

#### **RESEARCH METHOD**

The questionnaire is divided into two parts: the first collects demographic data, while the second determines customers' impressions of service quality, product quality, contentment, and loyalty to Telkomcel internet service. To evaluate the extent of responses with numerical equivalent and interpretation, scales were used to address the questions in Part 2: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. 160 samples were collected from a survey done through Google Form, and 22 samples were discarded due to the implementation of several boundaries. In the distribution of this questionnaire, *purposive sampling* was used to get respondents who were considered to have used the RAPIDO DEMAIS internet for more than three months and had made a minimum of three times the purchase of the internet quota. The survey was conducted to collect the opinions of Telkomcel customers on their satisfaction and loyalty toward the internet product of Telkomcel. Partial Least Square -

Structural Equation Modelling (PLS-SEM) was the analysis method employed in this research.

## RESULT AND DISCUSSION

### Demographic profile

The survey was participated by 57% of the male and 43% of the female respondents. The respondents were less than 20 years at 11%, 20 to 30 years at 54%, 31 to 40 at 28%, and over 40 years old at 7%. From the data collected, 36% of respondents work as students, 46% work as employees in offices for either the government or the private sector, 16% of respondents are self-employed, and 2% work in other sectors. The amount of expenditure of respondents to buy Telkomcel internet packages. The respondents had an outlay of less than \$10 was 22%, internet spending between \$10 to \$50 was 64%, and respondents' spending on the internet was more than \$50 was as much as 14%.

### Validity and reliability analysis

The validity and reliability analysis are needed to ensure the variables and their indicators are valid and reliable enough for this research. Convergent validity, internal consistency, and discriminant validity are the three tests used to assess the validity and dependability of the samples. Convergent validity is used to see correlations between indicators within the same variable. The values that need to be considered in the convergent validity test are the value of the loading factor and the value of the Average Variant Extracted (AVE). According to Hair et al. (2017), a good loading factor value is above 0.7, while the AVE value of more than 0.5 considers good validity. The results of the *loading factor* test in SmartPLS 3 can be seen in table 7, describing all the values of the *loading factor* for all existing indicators. The result showed some indicators are below the minimum limit that has been set, and it is necessary to eliminate these indicators. The indicators that need to be eliminated are KL1, KL2, KP3, and KP4. After the elimination of the four indicators above, the *factor loading* values of the remaining indicators are above 0.7.

Internal consistency tests are used to verify whether existing variables are reliable. The value of Cronbach's alpha and composite reliability is used to perform this test. According to Hair et al., (2017) the minimum value of Cronbach's alpha is 0.5, and the minimum value of composite reliability is 0.7. The value of Cronbach's alpha and



composite reliability can be seen in table 8, with the value of service quality in both tests being the highest.

According to Hair et al., (2017) discriminant validity is the difference between each research variable so that with this test can be known the uniqueness of each variable so that other variables cannot represent it. Two approaches can be used to perform discriminant validity tests: cross-loadings and Heterotrait-Monotrait Ratio (HTMT). Table 9 shows the value of cross-loading of each variable and its indicators, and the indicators must have distinct uniqueness that can differentiate them from other indicators. The value of the loading factor of indicators must be higher than the value of cross-loadings. Henseler et al. (2015) proposed *Heterotrait-Monotrait Ratio (HTMT)* to evaluate the validity of discriminants. HTMT is the average of the construct value compared to other construct values. The proposed HTMT value limit is 0.90 for structural models with almost the same construct. As for different constructs, the proposed value limit is 0.85. The maximum value of HTMT is set to 0.85, and table 5 shows that the value of HTMT does not exceed 0.85.

### **Descriptive analysis**

Descriptive analysis aims to determine the respondent's response when filling out questionnaire items relevant to study variables. Descriptive analysis is conducted by grouping respondents' responses based on the scale in Table 2. According to the respondent response in table 3, Telkomcel employees deal with customer concerns quickly and always put customers' needs first. Customers believe that Telkomcel employees generally deliver decent customer service, although there is room for improvement given the large number of respondents who want their service improved. Although Telkomcel offers good features and a variety of internet bundles, the respondents in table 4 believe that Telkomcel internet products have a bad signal and speed. However, the customers also think that the RAPIDO DEMAIS internet product can be used in all conditions, and if there is a disruption, it can be repaired easily.

The customers consider that they are quite satisfied with the quality of service provided but are not satisfied with the quality of the products offered and feel that their needs for the internet are not met. Customers are satisfied with the products' availability and proud of using Telkomcel internet products.

The perception of the respondents toward loyalty can be seen in table 10. Although the respondents are still loyal to the product by continuing to buy and use the product, the customers are prone to the competitors offering.

### **Model Fit**

Standardized root means square residual (SRMR) and Normed Fit Index (NFI) are used to measure the suitability of measurement models as well as structural models. According to Hu & Bentler (1998), SRMR values less than 0.1 have a good model fit. As for the NFI value that is close to the value of 1 has a good model fit. Table 11 shows that the model has a good fit where the SRMR value is 0.058, and the NFI value is 0.813.

### **Coefficient of Determinants**

The value of R<sup>2</sup> is widely used to analyse a structural model of how independent variables affect dependent variables. According to Chin (1998), the value of R<sup>2</sup> is divided into three categories, namely 0.67 (Substantial), 0.33 (Moderate), and 0.19 (weak). Table 12 shows the degree of the independent variables' influence on the dependent variables in this study. Customer loyalty was affected by the variables of service quality, product quality, and customer satisfaction to the extent of 57.8% percent. The variables of service quality and product quality have a 58 percent impact on customer satisfaction, respectively.

### **Hypothesis Testing**

After the measurement and structural models have been evaluated, hypothesis testing can be performed. In SmartPLS 3, hypothesis testing was conducted by looking at the path coefficient value in the bootstrapping calculation. T statistics or P values can be used to see how an independent variable affects the dependent variable. Suppose the T statistics Z-score is higher than 1.96 or the P-Value is higher than 0.05. In that case, it is considered that the predictor variables have no significant influence on the dependent variables. Meanwhile, suppose the statistical T value > Z-score of 1.96 or the P-values is less than 0.05. In that case, it is considered that the predictor factors have a substantial impact on the dependent variables.

## **CONCLUSION**

The original sample value is positive, and the P value is 0.000 or less than 0.05, indicating a correlation between service quality and satisfaction. The initial hypothesis

of the researcher that service quality has a positive impact on customer satisfaction is confirmed. This research also supports the findings of (Albari & Kartikasari, 2019; Chakraborty, 2019; Darmawan, 2018; Fida et al., 2020; Masitoh et al., 2019; Regata & Kusumadewi, 2018; Susan, 2018). The higher the quality of service received by clients, or the quality of service that meets their expectations, the higher the customer satisfaction. Service quality, customer satisfaction, and customer loyalty are all intertwined. Therefore, as service quality improves, so will satisfaction and loyalty. As a result, the higher the quality of service perceived by Telkomcel customers, the higher the increase in customer satisfaction, and vice versa, the lower the quality of service seen by Telkomcel customers, the lower the customer satisfaction.

Due to the initial positive value of the sample and the P value of 0.000 or less, which is below the predefined significance threshold of 0.05, there is a positive association between product quality and customer satisfaction. Albari & Kartikasari, (2019); Fitriyanti, (2021); J & Ariyanti, (2020) discovered that customer satisfaction is positively impacted by product quality. Telkomcel clients desire a high-value internet package with a reliable signal and high speed in the hopes of receiving great satisfaction. Customers will be more delighted with Telkomcel internet products if they are of higher quality.

The connection between service quality and loyalty has a P value of 0.001 or less, which is below the threshold of 0.05 for significance, demonstrating that service quality has a positive impact on customer loyalty. These results support previous research by Fida et al., (2020); Paulus A. Pangaila & G. Worang, (2018); Regata & Kusumadewi, (2018), shown that customer loyalty is positively impacted by service quality. Customers will become more loyal if the company improves its service level. Consumers' inclination to continue using and promoting Telkomcel products is strongly influenced by the level of service offered by Telkomcel employees, whether when purchasing items or resolving problems.

Product quality positively impacts customer loyalty when the P-value is 0.006 or less than the pre-set significance limit of 0.05. As a result, a study by J & Ariyanti (2020) shows that the company's standards and quality of products have a long-term impact on consumer loyalty. The data supports the fourth hypothesis that product quality has a positive and large impact on customer happiness. Customers' loyalty is influenced by

the quality of internet products supplied by Telkomcel; the better the items sold, the more loyal the customers, and vice versa.

Customer loyalty is positively influenced by customer satisfaction. A P value of 0.000 or less than the significance limit level of 0.05 supports this claim. These findings corroborate with J & Ariyanti, (2020); Regata & Kusumadewi, (2018) that customer satisfaction positively impacts customer loyalty. Satisfied customers will continue to buy products and promote them to others in their community. Customers pleased with Telkomcel products will remain loyal to the company by purchasing additional products and recommending them to others.

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TABLES AND FIGURES

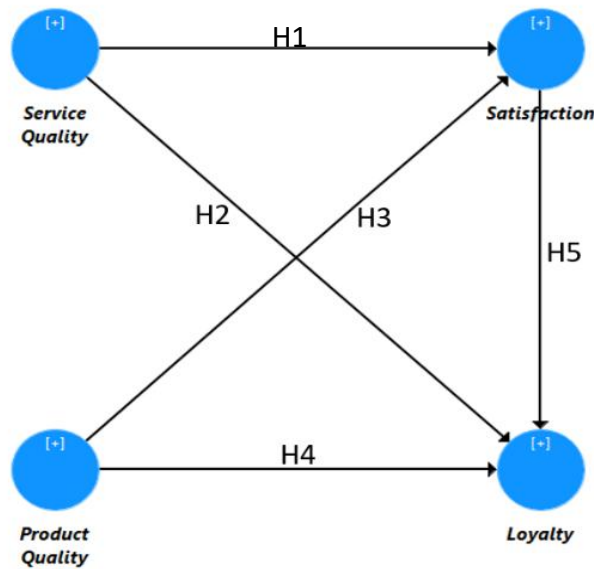


Figure 1: Research Model

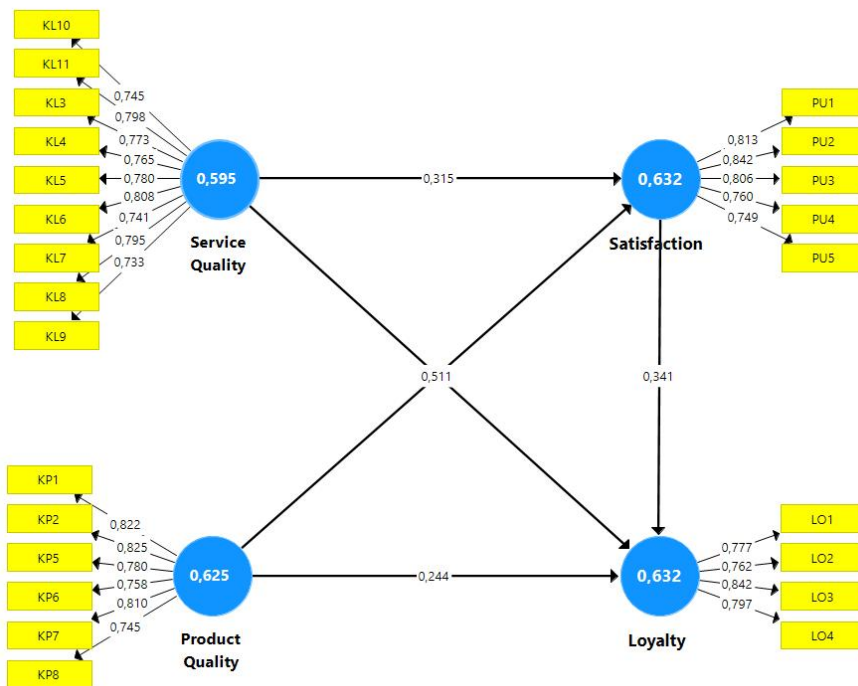


Figure 2: Test analysis result that shows the loadings, path coefficient, and AVE

Table 1: Demographic profile of the respondents

Gender	Respondent	Percentage
Man	78	57%
Woman	60	43%
<b>Age</b>		
Less than 20	15	11%
20 to 30	75	54%
31 to 40	38	28%
More than 41	10	7%
<b>Occupation</b>		
Student	50	36%
Employee	63	46%
Self Employed	22	16%
other	3	2%
<b>Internet expenses</b>		
Less than \$10	30	22%
Between \$10 to \$50	89	64%
More than \$50	19	14%

Table 2: Scale of Respondent

Scale	Category
1- 1,8	Very bad
1,81-2,6	Bad
2,61-3,4	Adequate
3,41-4,2	Good
4,21-5	Very good

Table 3: Respondent's perception on service quality

Indicator	Mean	Standard Deviation	Category
KL 1	3.623	0.717	Good
KL 2	3.493	0.737	Good
KL 3	3.406	0.986	Adequate
KL 4	3.341	0.924	Adequate
KL 5	3.123	0.985	Adequate
KL 6	3.239	1.071	Adequate
KL 7	3.659	1.057	Good
KL 8	2.833	0.917	Adequate
KL 9	3.29	0.945	Adequate
KL 10	2.935	1.012	Adequate
KL 11	3.196	0.965	Adequate
<b>Total</b>	<b>3.285</b>		<b>Adequate</b>

Table 4: Respondent's perception on product quality

Indicator	Mean	Standard Deviation	Category
KP 1	2,522	0,983	Bad
KP 2	2,420	1,002	Bad



<b>KP 3</b>	3,196	0,782	Adequate
<b>KP 4</b>	3,159	0,930	Adequate
<b>KP 5</b>	3,051	0,954	Adequate
<b>KP 6</b>	3,362	1,046	Adequate
<b>KP 7</b>	2,696	1,085	Adequate
<b>KP 8</b>	2,623	1,122	Adequate
<b>Total</b>	<b>2,879</b>		<b>Adequate</b>

Table 5: Respondent's perception on satisfaction

<b>Indicator</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Category</b>
<b>PU 1</b>	2,710	0,914	Adequate
<b>PU 2</b>	2,515	1,027	Bad
<b>PU 3</b>	2,558	0,996	Bad
<b>PU 4</b>	3,268	0,932	Adequate
<b>PU 5</b>	2,703	1,136	Adequate
<b>Total</b>	<b>2,751</b>		<b>Adequate</b>

Table 6: Respondent's perception on loyalty toward Telkomcel

<b>Indicator</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Category</b>
<b>LO 1</b>	3,051	0,907	Adequate
<b>LO 2</b>	2,862	0,998	Adequate
<b>LO 3</b>	2,275	0,965	Bad
<b>LO 4</b>	3	1,060	Adequate
<b>Total</b>	<b>2,797</b>		<b>Adequate</b>

Table 7: Loading factor value

<b>Constructs</b>	<b>Items</b>	<b>Loadings</b>
Service Quality	KL1	0,345
	KL10	0,746
	KL11	0,787
	KL2	0,572
	KL3	0,773
	KL4	0,758
	KL5	0,773
	KL6	0,799
	KL7	0,745
	KL8	0,799
Product Quality	KL9	0,739
	KP1	0,808
	KP2	0,808
	KP3	0,299
	KP4	0,420
	KP5	0,781
	KP6	0,755
	KP7	0,791
Satisfaction	KP8	0,750
	PU1	0,814
	PU2	0,843
	PU3	0,806
	PU4	0,759
Loyalty	PU5	0,749
	LO1	0,777
	LO2	0,762
	LO3	0,842

	LO4	0,797
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Table 8: Validity and reliability test

Constructs	Items	Loadings	AVE	Cronbach's Alpha	CR				
Service Quality	KL10	0,745	0,595	0,915	0,930				
	KL11	0,798							
	KL3	0,773							
	KL4	0,765							
	KL5	0,780							
	KL6	0,808							
	KL7	0,741							
	KL8	0,795							
	KL9	0,733							
Product Quality	KP1	0,822	0,625	0,880	0,909				
	KP2	0,825							
	KP5	0,780							
	KP6	0,758							
	KP7	0,810							
	KP8	0,745							
	Satisfaction	PU1				0,813	0,632	0,854	0,895
		PU2				0,842			
PU3		0,806							
PU4		0,760							
PU5		0,749							
Loyalty	LO1	0,777	0,632	0,806	0,909				
	LO2	0,762							
	LO3	0,842							
	LO4	0,797							

Tabel 9: Cross-loading value

	Satisfaction	Service Quality	Product Quality	Loyalty
KL10	0,465	<b>0,745</b>	0,527	0,474
KL11	0,582	<b>0,798</b>	0,586	0,576
KL3	0,488	<b>0,773</b>	0,518	0,508
KL4	0,507	<b>0,765</b>	0,495	0,505
KL5	0,506	<b>0,780</b>	0,574	0,491
KL6	0,617	<b>0,808</b>	0,538	0,524
KL7	0,490	<b>0,741</b>	0,523	0,473
KL8	0,496	<b>0,795</b>	0,617	0,520
KL9	0,501	<b>0,733</b>	0,492	0,573
KP1	0,611	0,558	<b>0,822</b>	0,583
KP2	0,590	0,584	<b>0,825</b>	0,559
KP5	0,586	0,552	<b>0,780</b>	0,555
KP6	0,527	0,543	<b>0,758</b>	0,508
KP7	0,576	0,490	<b>0,810</b>	0,498
KP8	0,575	0,597	<b>0,745</b>	0,531
LO1	0,533	0,523	0,468	<b>0,777</b>
LO2	0,549	0,477	0,518	<b>0,762</b>

LO3	0,628	0,601	0,640	<b>0,842</b>
LO4	0,512	0,524	0,530	<b>0,797</b>
PU1	<b>0,813</b>	0,509	0,595	0,518
PU2	<b>0,842</b>	0,553	0,648	0,599
PU3	<b>0,806</b>	0,527	0,590	0,619
PU4	<b>0,760</b>	0,569	0,524	0,485
PU5	<b>0,749</b>	0,521	0,541	0,555

Tabel 10: Heterotrait-Monotrait Ratio (HTMT)

	Satisfaction	Service Quality	Product Quality	Loyalty
Satisfaction				
Service Quality	0,760			
Product Quality	0,842	0,782		
Loyalty	0,840	0,776	0,804	

Table 11: Model Fit

	Saturated Model	Estimated Model
SRMR	0,058	0,058
d_ ULS	1,021	1,021
d_ G	0,532	0,532
Chi-Square	393,286	393,286
NFI	0,813	0,813

Table 12: Coefficient of determination

	R Square	R Square Adjusted
Kepuasan	0,586	0,580
Loyalitas	0,587	0,578

Table 13: Hypothesis analysis result

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV)	P Values
Satisfaction -> Loyalty	0,341	0,347	0,087	3,907	0,000
Service Quality -> Satisfaction	0,315	0,313	0,079	4,001	0,000
Service Quality -> Loyalty	0,270	0,274	0,079	3,413	0,001
Product Quality -> Satisfaction	0,511	0,515	0,071	7,216	0,000
Product Quality -> Loyalty	0,244	0,233	0,088	2,780	0,006