

ANALYSIS OF THE INFLUENCE OF PRODUCT QUALITY AND SERVICE QUALITY ON CUSTOMER LOYALTY THROUGH CUSTOMER SATISFACTION AS A MEDIATION VARIABLE FOR UD. PADMA NADI CUSTOMERS

I Putu Indra Ariestha Putra Utama¹, Thomas Stefanus Kaihatu^{2*}
Ciputra University

*Corresponding author: thomas.kaihatu@ciputra.ac.id

ABSTRACT

This study aims to determine the effect of product quality and service quality on customer loyalty through customer satisfaction with UD Padma Nadi as the research object. The variables used in this research are product quality and service quality as the independent variables, customer satisfaction as the mediating variable and customer loyalty as the dependent variable. The method used is quantitative mediation. The sample used in this study used a non-probability sampling method with a purposive sampling technique and a sample of 100 respondents. Data collection techniques in this study were carried out by distributing questionnaires using a Likert scale. Based on the results of data analysis, it can be interpreted that product quality has a significant effect on customer loyalty, product quality has a significant effect on customer satisfaction, service quality has a significant effect on customer loyalty, service quality has a significant effect on customer satisfaction, customer satisfaction has a significant effect on customer loyalty. In addition, mediation occurs in the relationship between product quality and customer loyalty through customer satisfaction, and mediation occurs in the relationship between service quality and customer loyalty through customer satisfaction.

Keywords: Service Quality, Product Quality, Customer Satisfaction, Customer Loyalty, Brand Image

INTRODUCTION

Increasingly tight competition in marketing activities makes customers choose to be careful in making decisions when choosing products. Companies are expected to better understand customer desires to foster customer loyalty. Customer loyalty is an important factor for a company's sustainability and determines the company's success now and in the future by providing benefits to companies that have loyal customers to the company (Ramadhan and Zuliestiana, 2019). Customer loyalty is also a reflection of a person's loyalty to a product or service. Customers who have a high sense of loyalty help improve the welfare and image of the company. According to Pahlawan et al. (2019). In order to find out the needs and complaints of UD. Padma Nadi customers.

Customer satisfaction is a post-purchase evaluation between perceptions of the performance of selected product or service alternatives that meet or exceed expectations. If perceptions of performance cannot meet expectations, then what will happen is dissatisfaction (Tjiptono, 2019). Good service quality will have a positive impact on the company because service quality will be the customer's assessment of whether the service provided is satisfactory and fulfills their desires or not. Poor service quality will lead customers to switch to other service companies which they think are better. This research aims to test Product Quality and Service Quality on Customer Loyalty through Customer Satisfaction as a Mediating Variable for UD Customers. Padma Nadi.

LITERATURE REVIEW

Grand Theory

The use of grand theory is due to the relationship between the variables used in this research and grand theory. The relevance of this research is because it achieves customer satisfaction so as to create loyal customers for UD. Padma Nadi can pay attention to strategies both in service quality, pricing and improving product quality by paying attention to customer behavior.

Customer Loyalty

Loyalty plays an important role for companies, because loyal customers tend to repeatedly make purchases from the same brand (Aziz et al., 2018). Customer loyalty has an important role for companies to achieve competitiveness and profits, customer loyalty can increase wages and reduce company costs (Purwadi et al., 2020).

Loyalty consists of a strong bond between a customer and a brand, and loyal customers are those who do not want to change brands and prefer to stick with the same brand (Shin et al., 2019).

Customer satisfaction

According to Tjiptono (2019), customer satisfaction is an emotional response to experiences related to certain products or services that have been purchased. Customer satisfaction is customer knowledge and perception, which is obtained through experience with an object, attitudes and information from various sources (Sunarsi, 2020). Meanwhile, according to Kotler and Keller (2019) customer satisfaction is the customer's response to the fulfillment of their needs and expectations, this means an assessment that a form of feature of a good or service itself provides a level of comfort related to fulfilling a need.

Product Quality

According to Mariansyah and Syarif (2020), product quality is a characteristic of a product or service that depends on its ability to meet stated or implied consumer needs. Kannan (2017) explains that quality is a form of element that is assessed from the presentation of a product or service.

Service Quality

According to Kotler and Keller (2019), services are all actions that can be offered by a party to another party which are basically intangible. Service quality is a dynamic state that is closely related to products, services, human resources, as well as processes and the environment that can at least meet or even exceed the expected service quality (Tjiptono, 2019).

Product Quality on Customer Loyalty

Dhasan and Aryupong (2019) in their research found that product quality has an influence on customer loyalty. Test results using quantitative methods in research show a significant influence on product quality variables on customer loyalty.

H1: product quality influences customer loyalty

Service Quality on Customer Loyalty

Lie et al. (2019) in their research found that service quality has an influence on customer loyalty. Test results using quantitative methods in research show a significant influence on service quality variables on customer loyalty. Dhasan and Aryupong (2019) in their research found that service quality has an influence on customer loyalty. Test results using quantitative methods in research show a significant influence on service quality variables on customer loyalty. Sigit and Soliha (2017) in their research found that service quality has an influence on customer loyalty. Test results using quantitative methods in research show a significant influence on service quality variables on customer loyalty.

H2: service quality influences customer loyalty

Product Quality on Customer Satisfaction

Vasic et al. (2019) in their research found that product quality has an influence on customer satisfaction. Test results using quantitative methods in research show a significant influence on product quality variables on customer satisfaction. Yuan et al. (2020) in their research found that product quality has an influence on customer satisfaction. Test results using quantitative methods in research show a significant influence on product quality variables on customer satisfaction. Sigit and Soliha (2017) in their research found that product quality has an influence on customer satisfaction. Test results using quantitative methods in research show a significant influence on product quality variables on customer satisfaction.

H3: product quality influences customer satisfaction

Service Quality on Customer Satisfaction

Lie et al. (2019) in their research found that service quality has an influence on customer satisfaction. Test results using quantitative methods in research show a significant influence on service quality variables on customer satisfaction. Othman et al. (2019) in their research found that service quality has an influence on customer satisfaction. Test results using quantitative methods in research show a significant influence on service quality variables on customer satisfaction. Ibrahim and Thawil (2019) in their research found that service quality has an influence on customer satisfaction. Test results using quantitative methods in research show a significant influence on service quality variables on customer satisfaction. Kaihatu (2008) in his research found that service quality has

an influence on customer satisfaction. Test results using quantitative methods in research show a significant influence on service quality variables on customer satisfaction.

H4: service quality influences customer satisfaction

Customer Satisfaction on Customer Loyalty

Sigit and Soliha (2017) in their research found that customer satisfaction has an influence on customer loyalty. The test results using quantitative methods in research show a significant influence on the customer satisfaction variable on customer loyalty. Lie et al. (2019) in their research found that customer satisfaction has an influence on customer loyalty. The test results using quantitative methods in research show a significant influence on the customer satisfaction variable on customer loyalty.

H5: customer satisfaction influences customer loyalty

Product Quality Against Customer Loyalty through Customer Satisfaction

Sigit and Soliha (2017) in their research found that product quality has an influence on customer loyalty through customer satisfaction. Test results using quantitative methods in research show a significant influence on product quality variables on customer loyalty through customer satisfaction. Ariyanto (2019) in his research found that product quality has an influence on customer loyalty through customer satisfaction. Test results using quantitative methods in research show a significant influence on product quality variables on customer loyalty through customer satisfaction.

H6: product quality influences customer loyalty through customer satisfaction

Service Quality on Customer Loyalty through Customer Satisfaction

Ariyanto (2019) in his research found that service quality has an influence on customer loyalty through customer satisfaction. Test results using quantitative methods in research show a significant influence on service quality variables on customer loyalty through customer satisfaction. Lie et al. (2019) in their research found that service quality has an influence on customer loyalty through customer satisfaction. Test results using quantitative methods in research show a significant influence on service quality variables on customer loyalty through customer satisfaction.

H7: service quality influences customer loyalty through customer satisfaction

RESEARCH METHODS

The location of this research is at UD. Padma Nadi is engaged in the retail industry by producing rice. The population are consumers of UD. Padma Nadi, while samples taken are 100 respondents. The sample in this research was customers from UD. Padma Nadi who has purchased the product more than once.

This research is quantitative and will use the Structural Equation method (SEM) with the Partial Least Square (PLS) method using Smart PLS 3.0.

Outer Model Evaluation

Validity is a tool to determine whether what is being measured is valid or not (Ferdinan, 2014). Validity test measurements are divided into two, namely:

a. Convergent Validity

It occurs when the value of each item loading factor > 0.70 and each construct has an average variance extracted (AVE) value of 0.50 or more (Hair et al., 2014).

b. Discriminant Validity

This measurement must have a loading value for each construct that is higher than other cross loadings. This measurement is declared valid if the average variance extracted (AVE) value is 0.50 or more (Hair et al., 2014).

c. Reliability Test

Hair et al. (2014) stated that reliability testing can be done in two ways, namely by looking at the composite reliability value meeting the reliability test requirements or being accepted if it is greater than 0.6, and looking at the indicators being tested for consistency if the Cronbach alpha value is above 0.6.

Inner Model Evaluation

Evaluation of the Inner Model using the PLS method in Ghazali (2018) was carried out using the following criteria:

a. Coefficient of Determination (R^2)

The coefficient of determination is useful for measuring the predicted influence of a free indicator on a dependent indicator (Hair et al., 2014). The R^2 value is divided into several categories, namely: 0.67 means strong, 0.33 means moderate, 0.19 means weak.

b. Q² predictive relevance (Q²)

If Q Square > 0, it shows that the model has predictive relevance, and vice versa, if the Q Square value < 0 then the model used shows that it has less predictive relevance (Hair et al., 2014).

c. Test (t)

The calculated t value can be obtained through the bootstrapping process with a cut off value of > 1.96. The value of 1.96 was obtained from the 0.05 significance level of the statistical test ($|z|$) which shows that the cut off value must be more than 1.96 so that the hypothesis can be rejected (Hair et al., 2014).

RESULT AND DISCUSSION

General Description of Research Objects

UD. Padma Nadi was founded in 1978. This company is a company that operates in the retail industry by producing rice. This company is chaired by I Wayan Latra.

Table 5.1 Respondent demographics

Items	Gender Amount	Percentage (%)
Male	71	%
Female	29	%
	Age	
17-22 years	4	%
23-27 years	33	%
28-32 years	31	%
>32 years	32	%
	Domicile	
Bandung	65	%
Denpasar	32	%
Lainnya	3	%

Source: Appendix

Based on the demographics of the respondents obtained, it is known that the majority gender is male with 71 respondents or 71%, compared to only 29 respondents or 29% female. In terms of age range, only 17-22 years is very different from other age ranges. In the age range 17-22 years there were only 4 respondents or 4%, while in the age range 23-27 years there were 33 respondents or 33%, 28-32 years there were 31 respondents or 32%, >32 years there were 32 respondents or 32%. Based on domicile, most respondents came from Bandung with 65 respondents or 65%, Denpasar with 32 respondents or 32% and the rest came from outside Bandung and Denpasar with 3 respondents or 3%. This means that UD consumers. The majority of Padma Nadi are men with varying ages and domiciled in Bandung. This shows that UD. Padma Nadi can carry out marketing activities to all people in Bandung, because UD. Padma Nadi can have consumers from various age groups. Marketing activities carried out can be focused on the Bandung area, considering the location in Bandung so that people around Bandung can get to know UD better. Padma Nadi.

Variable Description

The variables in this research include product quality, service quality, customer satisfaction and customer loyalty. The results of the descriptive analysis are shown as follows:

Descriptive Analysis of Product Quality Variables

Table 5.2 Description of Product Quality Variables

No	Statement	Mean	Std. Dev
1	The quality of rice from UD Padma Nadi is in accordance with the price set	3.820	1.071
2	The quality of UD Padma Nadi rice can compete with other brands	3.900	0.985
3	UD Padma Nadi's rice is long-lasting	3.760	0.918

No	Statement	Mean	Std. Dev
4	UD Padma Nadi's rice has safe packaging so the quality of the rice is affordable	3.760	0.950
Overall Average Product Quality Rating		3,810	0,981

Source: Data processed by SmartPLS

Table 5.2 shows respondents' answers to the product quality variable. The average value of the product quality variable is 3.810, meaning that respondents agree with the product quality variable. The highest mean value is in the second statement of 3,900, meaning that respondents agree most with the statement "The quality of UD Padma Nadi rice can compete with other brands". Meanwhile, the lowest mean value is in the third and fourth statements with a mean value of 3.760. This value is still relatively high, but can be said to be the lowest in the product quality variable, meaning that UD Padma Nadi needs to pay attention to the aspects contained in the statements "UD Padma Nadi's rice is long-lasting" and "UD Padma Nadi's rice has safe packaging so that the quality of the rice priceless." The standard deviation value for the product quality variable is 0.981, so it can be said that the respondents' answers to the product quality variable are varied (heterogeneous).

Descriptive Analysis of Service Quality Variables

Table 5.3 Description of Service Quality Variables

No	Statement	Mean	Std. Dev
1	The UD Padma Nadi shop is well maintained and clean	3.730	1.018
2	Karyawan UD Padma Nadi berpenampilan rapi	3.800	0.980
3	UD Padma Nadi has a safe shop so you don't have to worry about losing things when shopping	3.790	0.920
4	UD Padma Nadi serves customers quickly	3.750	0.921
5	UD Padma Nadi employees are friendly in serving	3.700	1.044
Overall Average Service Quality Rating		3,754	0,976

Source: Data processed by SmartPLS

Table 5.3 shows respondents' answers to the service quality variable. The average value of the service quality variable is 3.754, meaning that respondents agree with the service quality variable. The highest mean value is in the second statement of 3,800, meaning that respondents most agree with the statement "UD Padma Nadi employees have a neat appearance". Meanwhile, the lowest mean value is in the fifth statement with a mean value of 3,700. This value is still relatively high, but can be said to be the lowest in the service quality variable, meaning that UD Padma Nadi needs to pay attention to the aspects contained in the statement "UD Padma Nadi employees are friendly in serving". The standard deviation value for the service quality variable is 0.976, so it can be said that the respondents' answers to the service quality variable are varied (heterogeneous).

Descriptive Analysis of Customer Satisfaction Variables

Table 5.4 Description of Customer Satisfaction Variables

No	Statement	Mean	Std. Dev
1	I feel happy to be able to shop at UD Padma Nadi	3.780	1.064
2	I feel satisfied after buying rice at UD Padma Nadi	3.820	1.014
3	The rice sold by UD Padma Nadi meets my expectations	3.730	0.999
4	The quality of the rice sold by UD Padma Nadi is guaranteed	3.700	1.005
5	I am satisfied with rice products from UD Padma Nadi	3.720	0.950
Overall Average Customer Satisfaction Score		3,750	1,0064

Source: Data processed by SmartPLS

Table 5.4 shows respondents' answers to the customer satisfaction variable. The average value of the customer satisfaction variable is 3.760, meaning that respondents agree with the customer satisfaction variable. The highest mean value is in the second statement of 3.820, meaning that respondents most agree with the statement "I feel satisfied after buying rice at UD Padma Nadi". Meanwhile, the lowest mean value is in the fourth statement with a mean value of 3,700. This value is still relatively high, but can be said to be the lowest in the customer satisfaction variable, meaning that UD Padma Nadi needs to pay attention to the aspects in the statement "The quality of the rice sold by UD Padma Nadi is guaranteed". The standard deviation value for the customer satisfaction variable is 1.0064, so it can be said that the respondents' answers to the customer satisfaction variable are varied (heterogeneous).

Descriptive analysis of the Customer Loyalty variable

Table 5.5 Description of Customer Loyalty Variables

No	Statement	Mean	Std. Dev
1	I am interested in making a repeat purchase at UD Padma Nadi	3.780	0.986
2	Compared to other brands of rice, I prefer to buy rice at UD Padma Nadi	3.830	0.906
3	I do not hesitate to recommend UD Padma Nadi to others	3.820	0.984
Overall Average Value of Customer Loyalty		3,810	0,958

Source: Data processed by SmartPLS

Table 5.5 shows respondents' answers to the customer loyalty variable. The average value of the customer loyalty variable is 3.810, meaning that respondents agree with the customer loyalty variable. The highest mean value is in the second statement of 3.830, meaning that respondents agree most with the statement "Compared to other brands of rice, I prefer to buy rice at UD Padma Nadi". Meanwhile, the lowest mean value is in the first statement with a mean value of 3.780. This value is still relatively high, but can be said to be the lowest in the customer loyalty variable, meaning that UD Padma Nadi needs to pay attention to the aspects contained in the statement "I am interested in making a repeat purchase at UD Padma Nadi". The standard deviation value for the customer loyalty variable is 0.958, so it can be said that the respondents' answers to the customer loyalty variable are varied (heterogeneous).

Structural Model Equation Analysis

This research is research with quantitative methods and uses a Structural Equation Modeling approach. This method is a strong method of analysis because it lacks dependence on the measurement scale, sample size and distribution of residuals Garson (2016).

Outer Model

Reliability Indicators

Table 5.6 PLS Loading Factor Test Results

Variables	Indicators	Loading Factor
Product Quality	KP1	0,908
	KP2	0,916
	KP3	0,861
	KP4	0,890
	KL1	0,865
Service Quality	KL2	0,842
	KL3	0,877
	KL4	0,865
	KL5	0,816
Customer satisfaction	KN1	0,863
	KN2	0,877
	KN3	0,898
	KN4	0,895
	KN5	0,866
Customer Loyalty	LP1	0,873
	LP2	0,873
	LP3	0,897

Source: Data processed by SmartPLS

The results of the loading factors in Table 5.6 show that all statements used in this study with a total of 17 statements have a loading factor value that meets the requirements, namely at least 0.5, so it can be concluded that all statements in this study are valid.

Convergent Validity (AVE (Average Variance Extracted))

Table 5.7 PLS Construct Validity Test Results

Variables	Average Variance Extracted (AVE)
Product Quality	0,799

Service Quality	0,728
Customer satisfaction	0,774
Customer Loyalty	0,777

Source: Data processed by SmartPLS

The AVE value is used to measure the amount of variance that can be captured by the construct compared to the variance caused by measurement error. The average variance with a value > 0.5 is used as a determinant of validity. So if < 0.5 then it is invalid. From the PLS test results, it can be seen that the AVE values of the four variables have met the requirements, namely greater than 0.5. So it can be concluded that the four variables are declared valid.

Discriminant Validity (Cross Loading)

Table 5.8 PLS Cross Loading Test Results

	Product Quality	Service Quality	Customer satisfaction	Customer Loyalty
KP1	0,908	0,788	0,840	0,777
KP2	0,916	0,783	0,820	0,741
KP3	0,861	0,745	0,753	0,708
KP4	0,890	0,724	0,759	0,723
KL1	0,765	0,865	0,755	0,735
KL2	0,767	0,842	0,759	0,751
KL3	0,688	0,877	0,707	0,644
KL4	0,739	0,865	0,760	0,667
KL5	0,661	0,816	0,711	0,653
KN1	0,790	0,781	0,863	0,704
KN2	0,759	0,722	0,877	0,751
KN3	0,772	0,804	0,898	0,728
KN4	0,816	0,781	0,895	0,773
KN5	0,770	0,724	0,866	0,697
LP1	0,802	0,743	0,788	0,873
LP2	0,676	0,672	0,663	0,873
LP3	0,695	0,724	0,736	0,897

Source: Data processed by SmartPLS

The results of the cross loading test in Table 5.8 show that the indicator results for each variable have the largest value when compared with the indicator results for other variables, so that they are in accordance with the provisions and it can be stated that all statements in this study are valid.

Composite Reliability

Table 5.9 PLS Construct Reliability Test Results

	Cronbach's Alpha	Composite Reliability
Product Quality	0,916	0,941
Service Quality	0,906	0,930
Customer satisfaction	0,927	0,945
Customer Loyalty	0,857	0,913

Source: Data processed by SmartPLS

The composite reliability results will show a value that must be greater than 0.6 to be considered reliable. From the construct reliability test results in Table 5.9, it can be seen that the composite reliability value complies with the provisions, namely greater than 0.6. So it can be concluded that the four variables are declared reliable.

Inner Model

Structural Model

Before entering the inner model test, the following is the structural model in this research before the inner model is carried out. All outer model tests have been carried out and have met the requirements in accordance with the basis for decision making in this research.

Accuracy and Relevance of Model Predictions

Table 5.10 Inner Model R Square Test Results

	R Square	R Square Adjusted
Customer satisfaction	0,834	0,831
Customer Loyalty	0,742	0,734

Source: Data processed by SmartPLS

Table 5.11 Inner Q Square Model Test Results

	Q ² (=1-SSE/SSO)
Customer Satisfaction	0,636
Customer Loyalty	0,555

Source: Data processed by SmartPLS

Based on Table 5.10, the R Square value obtained for customer satisfaction is 0.834, while the R Square value for customer loyalty is 0.742. Both have high values, customer satisfaction has a strong value because it is more than 0.75, while customer loyalty has a moderate value because it is between 0.50 to 0.75, so it can be stated to have a moderate influence.

$$\begin{aligned}
 Q^2 &= 1 - (1 - R^2_{KN}) \times (1 - R^2_{LP}) \\
 &= 1 - (1 - 0,636) \times (1 - 0,555) \\
 &= 1 - (0,364) \times (0,445) \\
 &= 1 - 0,16198 \\
 &= 0,83802
 \end{aligned}$$

The Q-square result is 0.83802, which means that the model has good predictive relevance because it has a high value and is close to 1

Statistical t test

The cut-off value of the t-test is 1.96, where if the t value obtained is 1.96 it will produce a significant effect of one variable on the other variables. The following is a structural model of bootstrap testing which also shows the statistical t test results:

Table 5.12 T statistics

	T Statistics	P Values	Remark
Product Quality -> Customer Loyalty	2,710	0,007	Positive & Significant
Service Quality -> Customer Loyalty	2,707	0,007	Positive & Significant
Product Quality -> Customer Satisfaction	5,728	0,000	Positive & Significant
Service Quality -> Customer Satisfaction	4,229	0,000	Positive & Significant
Customer Satisfaction -> Customer Loyalty	2,462	0,014	Positive & Significant
Product Quality -> Customer Satisfaction -> Customer Loyalty	2,128	0,033	Positive & Significant
Service Quality -> Customer Satisfaction -> Customer Loyalty	2,156	0,031	Positive & Significant

Source: Data processed by SmartPLS

Based on Table 5.12, the following conclusions can be drawn:

1. Effect of Product Quality \geq Customer Loyalty

The resulting T statistic value is 2.710, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value of less than 0.05, so it can be concluded that it is significant.

2. Effect of Service Quality \geq Customer Loyalty

The resulting T statistic value is 2.707, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value of less than 0.05, so it can be concluded that it is significant

3. Influence of Product Quality \geq Customer Satisfaction

The resulting T statistic value is 5.728, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value of less than 0.05, so it can be concluded that it is significant.

4. Influence of Service Quality \geq Customer Satisfaction

The resulting T statistic value is 4.229, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value of less than 0.05, so it can be concluded as significant

5. Influence of Customer Satisfaction \geq Customer Loyalty

The resulting T statistic value is 2.462, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value of less than 0.05, so it can be concluded that it is significant.

6. Influence of Product Quality \geq Customer Satisfaction \geq Customer Loyalty

The resulting T statistic value is 2.128, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value of less than 0.05, so it can be concluded that it is significant.

7. Effect of Service Quality \geq Customer Satisfaction \geq Customer Loyalty

The resulting T statistic value is 2.156, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value of less than 0.05, so it can be concluded as significant.

Mediation Test

In this mediation test, it will be seen from Table 5.12 that all variables have an influence on each other, but in the mediation test, the results obtained must comply with the following conditions:

1. The path coefficient c (direct effects model before including mediating variables) must be significant.
2. Path coefficients a (path coefficient from the predictor variable to the mediating variable) and b (path coefficient from the mediating variable to the dependent variable) must be significant after the mediating variable is entered into the model.

With the two conditions above, the conclusion of the mediation effect is as follows:

- a. If the path coefficient c from the estimation results is significant then the mediation hypothesis is not supported.
- b. If the path coefficient c is low, but still significant, then the form of mediation is partial mediation.
- c. If the path coefficient c is low and not significant then the form of mediation is full mediation.

If you look at the results of the T statistical test in Table 5.12, as well as with the conditions of the mediation test, it can be concluded that partial mediation occurs in the relationship between product quality and customer loyalty through customer satisfaction, as well as in the relationship between service quality and customer loyalty through customer satisfaction. .

CONCLUSIONS AND PRACTICAL IMPLICATION

Based on the statistical analysis that has been carried out, all tests have been tested well with positive results and in accordance with the proper procedures. In the next sub-sub-chapter, the results will be explained descriptively regarding the variables in this research.

The Influence of Product Quality on Customer Loyalty

Based on the results of the T test in the T test sub-chapter, it is known that the product quality variable has an effect on the customer loyalty variable. Based on Table 5.12, the T statistical value of product quality on customer loyalty is 2.710, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value smaller than 0.05, so it can be concluded that product quality has an influence on customer loyalty.

The Effect of Service Quality on Customer Loyalty

Based on the results of the T test in the T test sub-chapter, it is known that the service quality variable has an effect on the customer loyalty variable. Based on Table 5.12, the T statistical value of service quality on customer

loyalty is 2.707, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value smaller than 0.05, so it can be concluded that service quality has an influence on customer loyalty.

The Influence of Product Quality on Customer Satisfaction

Based on the results of the T test in the T test sub-chapter, it is known that the product quality variable influences the customer satisfaction variable. Based on Table 5.12, the T statistical value of product quality on customer satisfaction is 5.728, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value smaller than 0.05, so it can be concluded that product quality has an influence on customer satisfaction.

The Effect of Service Quality on Customer Satisfaction

Based on the results of the T test in the T test sub-chapter, it is known that the service quality variable influences the customer satisfaction variable. Based on Table 5.12, the T statistical value of service quality on customer satisfaction is 4.229, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value smaller than 0.05, so it can be concluded that service quality has an influence on customer satisfaction.

The Influence of Customer Satisfaction on Customer Loyalty

Based on the results of the T test in the T test sub-chapter, it is known that the customer satisfaction variable influences the customer loyalty variable. Based on Table 5.12, the T statistical value of customer satisfaction for customer loyalty is 2.462, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value smaller than 0.05, so it can be concluded that customer satisfaction has an influence on customer loyalty.

The Effect of Product Quality on Customer Loyalty through Customer Satisfaction

Based on the results of the T test in the T test sub-chapter, it is known that the product quality variable influences the customer loyalty variable through customer satisfaction. Based on Table 5.12, the T statistical value of product quality on customer loyalty through customer satisfaction is 2.128, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value smaller than 0.05, so it can be concluded that product quality has an influence on customer loyalty through customer satisfaction.

The Effect of Service Quality on Customer Loyalty through Customer Satisfaction

Based on the results of the T test in the T test sub-chapter, it is known that the service quality variable influences the customer loyalty variable through customer satisfaction. Based on Table 5.12, the T statistical value of service quality on customer loyalty through customer satisfaction is 2.156, which is in accordance with the provisions, namely greater than 1.96. Apart from that, it has a p value smaller than 0.05, so it can be concluded that service quality has an influence on customer loyalty through customer satisfaction.

REFERENCES

- Adabi, N. (2020). Pengaruh citra merek, kualitas pelayanan dan kepercayaan konsumen terhadap keputusan pembelian indihome di witel telkom depok. *Jurnal Manajemen*, 12(1), 32-39.
- Ajzen, I., & Fishbein, M. (1975). A Bayesian analysis of attribution processes. *Psychological bulletin*, 82(2), 261.
- Annur, C. M. (2022). Konsumsi Beras Penduduk RI Meningkat sejak Pandemi [Online]. <https://databoks.katadata.co.id/datapublish/2022/09/22/konsumsi-beras-penduduk-ri-meningkat-sejak-pandemi>., diakses pada Maret 2023)
- Ariyanto, A. (2019). Analisis Kualitas Produk, Kualitas Pelayanan dan Harga yang Mempengaruhi Kepuasan Konsumen Serta Dampaknya Terhadap Loyalitas Pelanggan Pada Cireng Moncrot Cv Good Food–Tangerang. *Jurnal Ekonomi Efektif*, 1(3), 1-15.
- Aziz, N. E. M., Othman, S. A., Esa, M. M., Jais, Z., & Gafar, Z. (2018). Kesan Penjenamaan Ke Atas Kesetiaan Pelanggan Telekomunikasi Di Kolej Universiti Islam Melaka (KUIM). *Journal of Business Innovation*, 3(2), 72.
- Dhasan, D., & Aryupong, M. (2019). Effects of product quality, service quality and price fairness on customer engagement and customer loyalty. *ABAC Journal*, 39(2).

- Fadillah, F., & Haryanti, I. (2021). Analisis Pengaruh Fasilitas dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan Pada PT. Pelabuhan Indonesia (Pelindo) III Cabang Bima. *Jurnal At-Tamwil: Kajian Ekonomi Syariah*, 3(2), 125-139.
- Ferdinand, A. (2014). Metode penelitian manajemen: Pedoman penelitian untuk penulisan skripsi tesis dan disertasi ilmu manajemen. Badan Penerbit Universitas Diponegoro
- Gultom, D. K., Arif, M., & Fahmi, M. (2020). Determinasi kepuasan pelanggan terhadap loyalitas pelanggan melalui kepercayaan. *Maneggio: Jurnal Ilmiah Magister Manajemen*, 3(2), 171-180.
- Guswaman, H., & Sutrisna, E. (2019). Pengaruh Kualitas Pelayanan dan Karakteristik Sosiodemografi terhadap Minat Kunjungan Ulang yang dimoderasi oleh Kepuasan Pasien pada Pelayanan Rawat Jalan Puskesmas Kedungbanteng Kabupaten Banyumas. *Jurnal Ekonomi, Bisnis Dan Akuntansi (JEBA)*, 1(1), 1.
- Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European business review*, 26(2), 106-121.
- Haryono, N., & Octavia, R. (2020). Analisis pengaruh citra merek dan mutu layanan terhadap kepuasan konsumen serta dampaknya terhadap loyalitas konsumen. *Jurnal Industri Elektro Dan Penerbangan*, 4(2).
- Ibrahim, M., & Thawil, S. M. (2019). Pengaruh kualitas produk dan kualitas pelayanan terhadap kepuasan konsumen. *Jurnal Riset Manajemen Dan Bisnis (JRMB) Fakultas Ekonomi UNIAT*, 4(1), 175-182.
- Kaihatu, T. S. (2008). Analisa kesenjangan kualitas pelayanan dan kepuasan konsumen pengunjung Plaza Tunjungan Surabaya. *Jurnal Manajemen dan Kewirausahaan*, 10(1), 66-83.
- Kannan, R. (2017). The impact of food quality on customer satisfaction and behavioural intentions: a study on Madurai restaurant. *Innovative Journal of Business and Management*, 6(3), 34-37.
- Kotler, P., & Armstrong. (2018). Prinsip-prinsip Marketing Edisi Ke Tujuh. Penerbit Salemba Empat. Jakarta.
- Kotler, P., Keller, K. (2019). Marketing Management. New Jersey: Pearson Prentice Hall, Inc
- Kusnandar, V. B. (2022). Sektor Industri Jadi Penopang Terbesar Ekonomi RI Kuartal II 2022 [Online]. <https://databoks.katadata.co.id/datapublish/2022/08/05/sektor-industri-jadi-penopang-terbesar-ekonomi-ri-kuartal-ii-2022>., diakses pada Maret 2023)
- Levy, P. S., & Lemeshow, S. (2013). Sampling of populations: methods and applications. John Wiley & Sons.
- Lie, D., Sudirman, A., Efendi, E., & Butarbutar, M. (2019). Analysis of mediation effect of consumer satisfaction on the effect of service quality, price and consumer trust on consumer loyalty. *International Journal of Scientific and Technology Research*, 8(8), 421-428.
- Liu, H. T., & Tsaur, R. C. (2020). The theory of reasoned action applied to green smartphones: Moderating effect of government subsidies. *Sustainability*, 12(15), 5979.
- Lupiyoadi, R. (2018). Manajemen pemasaran jasa, Edisi 3, Jakarta: Salemba Empat
- Mariansyah, A., & Syarif, A. (2020). Pengaruh kualitas produk, kualitas pelayanan, dan harga terhadap kepuasan konsumen cafe kabalu. *Jurnal Ilmiah Bina Manajemen*, 3(2), 134-146.
- Othman, B., Harun, A., Rashid, W., & Ali, R. (2019). The impact of Umrah service quality on customer satisfaction towards Umrah travel agents in Malaysia. *Management Science Letters*, 9(11), 1763-1772.
- Pahlawan, M. R., Nurlia, N., Laba, A. R., Pakki, E., & Hardiyono, H. (2019). Pengaruh Kualitas Produk Dan Kualitas Pelayanan Terhadap Peningkatan Kepuasan Dan Loyalitas Pelanggan Perusahaan Daerah Air Minum (Pdam) Kota Makassar. *Journal of applied business administration*, 3(2), 228-244.
- Purwadi, P., Devitasari, B., & Darma, D. C. (2020). Store Atmosphere, SERVQUAL and Consumer Loyalty: Case Study of Excelso Coffee Shop. *SEISENSE Journal of Management*, 3(4), 21-30.
- Ramadhan, A. F., & Zuliestiana, D. A. (2019). Analisis Pemanfaatan Youtube Sebagai Social Media Marketing Go-Jek Dalam Mempengaruhi Minat Beli Dan Loyalitas Terhadap Brand. *Jurnal Mitra Manajemen*, 3(5), 628-637.
- Shin, H. W., Fan, A., & Lehto, X. (2021). Peer-to-peer accommodation: A meta-analysis of factors affecting customer satisfaction and loyalty. *International Journal of Tourism Research*, 23(4), 581-596.
- Sigit, K. N., & Soliha, E. (2017). Kualitas produk dan kualitas layanan terhadap kepuasan dan loyalitas nasabah. *Jurnal Keuangan dan Perbankan*, 21(1), 157-168.
- Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung : Alfabeta, CV
- Sunarsi, D. (2020). Pengaruh Bauran Pemasaran Dan Kualitas Pelayanan Terhadap Kepuasan Konsumen Pada Giant Dept Store Cabang BSD Tangerang. *E-Mabis: Jurnal Ekonomi Manajemen dan Bisnis*, 21(1), 7-13.
- Sundari, A., & Syaikhudin, A. Y. (2021). Manajemen ritel (Teori dan strategi dalam bisnis ritel). Lamongan: Academia Publication.

- Suryani, S., & Rosalina, S. S. (2019). Pengaruh Brand Image, Brand Trust, Dan Kualitas Layanan Terhadap Keputusan Pembelian Ulang Dengan Kepuasan Konsumen Sebagai Variabel Moderating Pada Startup Business Unicorn Indonesia. *Journal of Business Studies*, 4(1), 41-53.
- Tjiptono, F. (2019). *Strategi Pemasaran Prinsip & Penerapan*. Edisi 1. Yogyakarta: Andy.
- Vasić, N., Kilibarda, M., & Kaurin, T. (2019). The influence of online shopping determinants on customer satisfaction in the Serbian market. *Journal of theoretical and applied electronic commerce research*, 14(2), 70-89.
- Vinzi, V. E., Chin, W. W., Henseler, J., & Wang, H. (2010). *Handbook of partial least squares* (Vol. 201, No. 0). Berlin: Springer.
- Yuan, L. S., Jusoh, M. S., Yusuf, D. H., & Ghani, M. R. A. (2020). The Relationship between Product Quality, E-Service Quality and Brand Image on Customer Satisfaction: Preliminary Investigation in Perlis. *International Journal of Business and Management*, 4(5), 43-54.