

CONSUMER BEHAVIOUR | RESEARCH ARTICLE

The Role of Service and Product Quality on Customer Loyalty

Received: December 10, 2021

Accepted: February 16, 2022

*Corresponding author: Agus Taufik, Mercu Buana University, Jakarta, Indonesia

E-mail: agus.taufiks@gmail.com

Additional information is available at the end of the article

Agus Taufik^{1*}, Sugeng Santoso², Muhamad Irfan Fahmi³, Faqih Restuanto⁴, Steven Yamin⁵

Abstract: Coffee shops are today's businesses with good and competitive prospects in providing customer satisfaction and building customer loyalty. This study aims to analyze the relationship between service quality and product quality on customer satisfaction and loyalty, the relationship between customer satisfaction and customer loyalty, and the relationship between product and service quality and customer loyalty mediated by customer satisfaction. The study was conducted using quantitative methods, sampling a questionnaire to 100 customers of Coffee Shop. The study was conducted in August 2021. Meanwhile, to analyze the relationship between variables, using partial least squares (PLS). Based on the study results, it can be concluded that service quality directly affects customers, especially customer satisfaction. Product quality also affects customer satisfaction and loyalty and vice versa. However, service quality did not directly affect customer loyalty. Meanwhile, mediation through customer satisfaction and product quality indirectly affects customer loyalty.

Keywords: customer satisfaction, customer loyalty, product quality, service quality

JEL Classification: L10, L15, L66



Agus Taufik

ABOUT THE AUTHORS

Agus Taufik is a Bachelor of Agricultural Cultivation, Padjadjaran University Bandung, Indonesia. His areas of specialization are Financial Controller and Project Development and Improvement in oil palm plantation company, Jakarta, Indonesia. He can be contacted via his email: agus.taufiks@gmail.com

Sugeng Santoso is an Associate Professor at the Faculty of Economy and Business, Mercu Buana University, Indonesia. He awarded as The Best Performing Lecturer on Magister Program of Mercu Buana University Academic Year 2019-2020. His areas specialization includes creative food startup and industrial cluster. He can be reached via sugeng.santoso@mercubuana.ac.id.

Muhammad Irfan Fahmi graduated from Trisakti University. His areas of specialization is online business, Jakarta, Indonesia. He can be contacted via his email: irfanfahmi699@gmail.com

Faqih Restuanto graduated from Trisakti University. His areas of specialization are road traffic accident insurance and public transportation, Jakarta, Indonesia. He can be contacted via his email: restukabrut@gmail.com.

Steven Yamin is graduated from Mercu Buana University majoring in Management. His areas of specialization Logistics Department in the food and beverage business, Jakarta, Indonesia. He can be contacted via his email: stevenyamin14@gmail.com

PUBLIC INTEREST STATEMENT

One of the demands faced by the coffee shop business is how to retain existing customers by giving them satisfaction in the form of service quality and product quality as well as building customer loyalty. Through this research, it was revealed that in running a coffee shop business, it is very important to continue to improve the quality of services and products. Our findings show that service quality has no direct effect on customer satisfaction, while product quality has a significant direct effect on customer satisfaction. For customer satisfaction, it has a direct effect on customer loyalty. Through the mediation of customer satisfaction, service quality does not have an indirect effect on customer loyalty, while product quality has an indirect effect on customer loyalty.



1. Introduction

In Indonesia, coffee production and sales play an important role. Indonesia is a producer and exporter of world coffee, where Indonesian coffee can penetrate abroad, such as civet coffee and Mandailing coffee. In 2016, world coffee production touched 9.2 million tons, and Indonesia could produce 689.000 tons of coffee beans (Zarwinda & Sartika, 2018). Coffee also plays a role as a source of foreign exchange which occupies the fourth position after palm oil, rubber, and cocoa. In 2012, of Indonesia's total annual coffee bean production, 70 percent was exported, mainly to Japan, South Africa, Europe, and the United States.

The culture of drinking coffee has been passed down since the Dutch era. In the past, it was the elderly who used to consume coffee, but recently coffee consumption has changed and led to people's lifestyles, especially among modern young people. Many coffee enthusiasts indicate this among young people and the spread of various coffee shops that offer various types of coffee.

The coffee shop business is very competitive to present the best quality in service and products sold to satisfy customers and gain customer loyalty. As a result, few coffee shops have sprung up, but few have closed due to the intense business competition. According to Redata, Kezia, Solaiman, and Santoso (2021), business actors must continue to innovate to survive in business. There are various forms of innovation in business, including product innovation, internal systems or work processes, new ways, and ideas.

Service quality is one of the primary weapons to maintain prestige value by providing more satisfaction to customers to dominate the market, so it will be easy to enter the industry and provide excellent opportunities for companies to survive in the competition (Ali, Dey & Fileiri, 2015). According to Suhud, Allan, Wibowo, Sabrina, and Willson (2020), product quality can generally affect prestige, intention to switch, intention to buy more than once, company service quality, customer loyalty, and finally, customer satisfaction.

Customer satisfaction will be created when appropriately met expectations to satisfy customers' loyalty. Nevertheless, as Sari, Prayogi, Jufrizen, and Nasution (2020) stated, the results of their research show that customer satisfaction on customer loyalty is significant. Customer loyalty is a commitment made by a company to reach its customers while making them addicted to the company's products and making competitors look normal in the eyes of customers. Therefore, customer loyalty is essential in maintaining the company's business continuity. Moreover, the effort that must be spent to get customer loyalty can be through the company's high-quality products and services (Panjaitan, 2017).

A coffee shop gathering for young people, namely Coffee Shop XXY, was established in Tangerang, Banten, in 2019. Coffee Shop XXY, previously called Classic Coffee Corner, changed its name to Coffee Shop XXY in 2020. Besides serving coffee as its flagship, Coffee Shop XXY carries a different concept and atmosphere from other coffee shops to attract customers. Another attraction of Coffee Shop XXY is its classical values which are well-preserved thanks to the design and interior of the shop that presents a classic atmosphere. Distinctive vintage gray walls and classic furniture in various corners, antique plates in the corners, or rows of classic doors that are neatly arranged as displays, add to the impression of antiquity and authenticity of Coffee Shop XXY. As a coffee shop that sells the concept of a classic feel and atmosphere, many customers do not just come to enjoy their coffee but also look for space for instagramable photos.

Based on the explanation above, the researcher is interested in researching Coffee Shop XXY. However, before this research was carried out, the researcher conducted an in-depth discussion with the owner of Coffee Shop XXY, including formulating the questionnaire for the customers. The purpose of this study was to determine the correlation of service quality and product quality to customer satisfaction and loyalty, the correlation of customer satisfaction to customer loyalty, and the correlation of product and service quality to customer loyalty mediated by customer satisfaction.

2. Literature Review

2.1 Service Quality

Service quality is one of the primary weapons to maintain prestige value by providing more satisfaction to customers to take over the market in competition, that way it will be easy to enter the industry and provide an excellent opportunity for the company to survive in the competition (Ali, Dey & Fileiri, 2015). Moreover, many companies rely on the service quality provided to these consumers in maintaining their business continuity (Gorondutse & Hilman, 2014). Therefore, a coffee shop needs to have good service quality to achieve customer satisfaction. Especially in today's modern times, the need for this coffee is increasing and causing intense competition between coffee shops. This is unavoidable so that more advantages are needed to survive amid competition. Five indicators can be used, according to Parasuraman, Zeithaml, and Berry (1985), to measure the level of success of the service quality itself, which are 1) reliability, 2) tangible, 3) assurance, 4) empathy, and 5) responsiveness.

Based on the previous research carried out by Kartikasari and Albari (2019), service quality has a positive effect and is significant on customer satisfaction; improving the quality of good service will result in customer satisfaction. The immense contribution of service quality to customer satisfaction has also been proven in Suryadharma and Nurcahya (2015), which concretely has a very significant contribution to customer satisfaction. Furthermore, based on the research findings conducted by Laetitia, Alexandrina, and Ardianto (2021), service quality significantly influences customer satisfaction.

2.2 Product Quality

According to Kotler and Armstrong (2018), product quality is the specific capacity of a product to show its usefulness, including the time of the product, reliability, ease of use and repair, and other values. Moreover, the product is the most important thing that customers see after making a purchase, either goods or services to be enjoyed. Therefore, the company always pays attention to the quality of the products owned by the company so that the product in customers' eyes has the impression of a quality product. Tjiptono and Chandra (2012) stated that it is necessary to create quality products to create customer satisfaction. Consumers' perceived suitability for product quality is because they prefer the right product from what they want or need.

Kotler and Armstrong (2018) stated that product quality is a feature of a product/service based on its competence to provide satisfaction for explicit or implicit customer needs or desires. It is known that generally, the quality of this product can influence prestige, intention to switch, intention to buy more than once, company service quality, customer loyalty, and finally, customer satisfaction (Suhud, Allan, Wibowo, Sabrina & Willson, 2020). However, in other research has been found by Aldi, Surti & Mohamad (2020), product quality has not influenced and is not significant to satisfaction at Kedai Kopi Mustafa. This means that coffee shop customers do not have to get good quality products to get their satisfaction. So that is why the quality of the product is one of the essential aspects that should not be left behind in this research.

2.3 Customer Satisfaction

Satisfaction is a customer's comment about the review point of view because of the mismatch of expectations before and after using the product. For this reason, customer satisfaction will be created when expectations can be appropriately met. It ends with the coffee shop's loyalty from customers who get satisfaction (Heri, 2017). Sari, Prayogi, Jufrizen, and Nasution (2020) said that if the point at which customer satisfaction increases customer performance ratings, customer satisfaction is positive, and it is crucial for the increase and, in the end, made loyalty.

According to Kotler and Armstrong (2018), customer satisfaction is happiness or sadness after comparing the expectations obtained. If expectations do not match, disappointment will arise. Nevertheless, on the other hand, if expectations exceed

expectations, there will be feelings of being very happy and satisfied. Of course, after consumers consume these products, satisfaction arises. Julianto, Amnilis, and Gusriati (2021) concluded that customer satisfaction significantly affected coffee consumer loyalty. Bellinda, Dolorosa, and Kurniati (2020) stated that customer satisfaction has a positive and significant effect on customer loyalty.

2.4 Customer Loyalty

Customer loyalty can generally occur after customers feel very positive about a product or service used and felt by Rosalina, Qomariah, and Sari (2019). According to Kotler and Keller (2016), customers will usually be loyal or persist with the choice of the same company in consuming its products after the customer feels delighted. Loyalty refers to customers' high level of positive brand evaluation, seen from customer buying activities. Customer loyalty can be seen by the attitudes and behavior of customers and the level of purchase and voluntarily giving positive feedback on the company's products/services to others.

When a person becomes a loyal customer, he or she will show repeated buying behavior and voluntarily inform others of the preferred product. Almost overall, the difficulties felt by cafe and restaurant managers in increasing customer loyalty, as researched by Atmaja and Yasa (2020), said that improving service quality can maximize customer loyalty. Therefore, to get satisfaction and increase customer loyalty, companies need to create above-average service quality so that satisfaction occurs seriously, and in the end, customers will become loyal (Furoida & Maftukhah, 2018).

Customer loyalty is a commitment created by the company to reach its customers while making them addicted to its products and making competitors look normal in customers' eyes. Therefore, customer loyalty is essential to maintain the company's business continuity. Moreover, the effort that must be spent to get customer loyalty can be through the company's high-quality products and services (Panjaitan, 2017). In their research, Gunawan, Fathorrahman, and Handoko (2019) concluded that it had been found that there is an indirect contribution of product quality to customer loyalty through customer satisfaction.

3. Conceptual Framework

Based on the empirical studies that have been reviewed above and previous research that has been stated previously regarding the importance of the customer loyalty variable than in several aspects to achieve loyalty, according to the research, it is necessary to have a relationship between service quality, product quality, customer satisfaction, especially in this study, researchers are interested in making customer satisfaction (Figure 1). Therefore, a mediating variable to conceptualize and explain the influence of the independent variables in this study is service quality and product quality on the dependent variable, which is customer loyalty. Researchers are interested in researching further by describing the research and framework as follows:

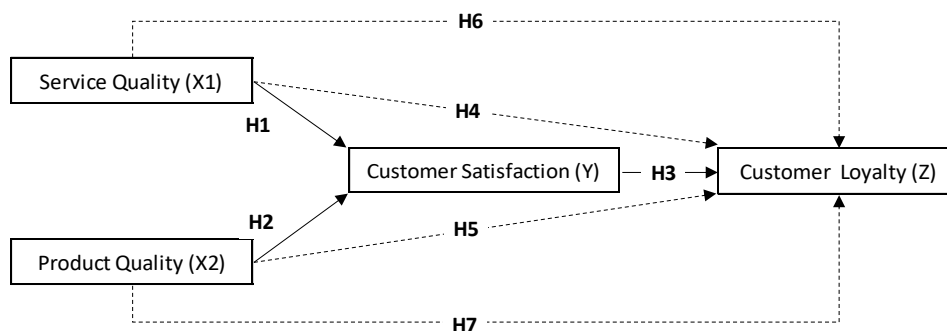


Figure 1. Conceptual framework

Hypothesis:

- H1: Service quality has a direct influence on customer satisfaction.
- H2: Product quality has a direct influence on customer satisfaction.
- H3: Customer satisfaction directly affects customer loyalty.
- H4: Service quality directly affects customer loyalty.
- H5: Product quality has a direct influence on customer loyalty.
- H6: Customer satisfaction indirectly influences customer loyalty, which mediates service quality.
- H7: Customer satisfaction, which mediates product quality, indirectly influences customer loyalty.

4. Methods

4.1 Participants

The number of respondents is 100 Coffee Shop XXY customers and to process and analyze data using PLS. The respondents or samples in this study are consumers who come to Coffee Shop XXY to eat or drink there, and these consumers have enjoyed Coffee Shop XXY products more than once.

4.2 Measurement

Primary data sources obtained from respondents' responses to the online questionnaire use the google form, accessed using a QR code or via the google form link. Closed questions were made using a Five-Point Likert scale, where 1 point indicates a strongly disagree attitude and 5 points indicate a strongly agree attitude towards the questions on each indicator. This study uses the SEM-PLS model in the data processing. Table 1 provides the operational definition of the variables used in this study.

Table 1. Operational variables

Variables	Dimensions	Symbol	Question Item
Service Quality (Parasuraman et al., 1985)	Reliability	X1.1	Employees serve well
		X1.2	Employees serve quickly
	Responsiveness	X1.3	Employees serve accurately
		X1.4	Employees pay good attention
	Assurance	X1.5	Employees behave politely
		X1.6	Employees can answer questions well
	Empathy	X1.7	Employees provide special services
		X1.8	Employees treat customers personally
	Tangible	X1.9	Good looking employees
		X1.10	Coffee Shop XXY physical equipment is adequate
Product Quality (Hanaysha, 2016)	Taste	X2.1	Tasteful products
	Healthy Option	X2.2	Clean meal
	Diversity of choice	X2.3	Various products
	The presentation of food	X2.4	Interesting product
	Temperature	X2.5	Coffee temperature right
	Freshness	X2.6	Refreshing product
Customer Satisfaction (Wang & Lo, 2002)	Satisfaction as fulfillment	Y1	Satisfactory products and services
	Satisfaction as ambivalence	Y2	Willing to wait even though the service is a bit long when it is crowded

Table 1. Operational variables (cont...)

Variables	Dimensions	Symbol	Question Item
Customer Loyalty (Griffin, 2002)	Regular repurchase	Z1	Quite often buy Coffee Shop XXY's products
	Buy other products	Z2	Willing to buy other Coffee Shop XXY's products
	Willing to recommend to others	Z3	Willing to recommend Coffee Shop XXY to others
	Loyalty	Z4	I do not easily switch to other coffee products

The research model design is presented in Figure 2, which explains two research variables, namely the independent and dependent variables. The research conducted has determined that the independent variables are service quality (X1) and product quality (X2), and the dependent variable is customer satisfaction (Y) and customer loyalty (Z).

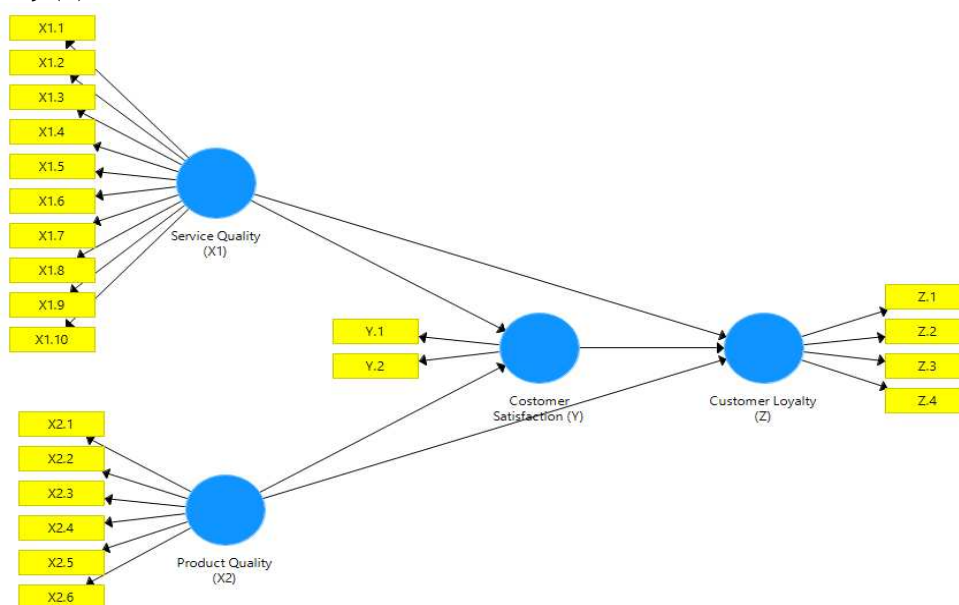


Figure 2. SEM-PLS Model

4.3 Analysis

The study uses quantitative methods, analyzing the relationship of each variable, using PLS to analyze the data obtained, and questionnaires using a Likert scale to determine attitudes and opinions of individuals or groups on social events.

1. Evaluating the Outer Model

An outer model means determining the size used to evaluate the validity and reliability of the model. Through the literacy of the solving procedure, the measurement model parameters (convergence validity, discriminant validity, multiple reliability, and Cronbach's alpha) are obtained, and the R^2 value is an indicator of the precision of the prediction example (Abdillah & Hartono, 2015).

2. Evaluation of the Inner Model

The coefficient of determination (R^2) wants to determine the size of the latent dependent variable, which is clarified through the latent independent variable. R^2 squared values of 0.75, 0.50, and 0.25 indicate if the model is robust, moderate, or weak (Ghozali, 2016).

5. Findings

5.1 Respondent Characteristics

From 100 respondents, it is known that most Coffee Shop XXY customers are adults who have worked, with professions as private employees or civil servants, both male and female. Details of customer profiles of Coffee Shop XXY by age, namely customers with an age range of 31-50 years are the most respondents (60%), followed by ages 21-30 years 35 percent and the rest are aged 15-20 years (5%). Most of the respondents' professional characteristics were private employees, which reached 48 percent, followed by civil servants 18 percent, students 16 percent, entrepreneurs 10 percent, housewives 5 percent, and others 3 percent. Coffee Shop XXY customers by gender are relatively balanced, of which 57 percent are male and 43 percent female.

5.2 Outer Model Evaluation

Ghozali (2016) said that researching the first stage can develop a measurement scale to contain a value of 0.5 to 0.6 as a good value. So, a loading factor limit of 0.60 was used in this study. Based on Table 2, the overall loading factor weighs more than 0.60. Therefore, all constructs are considered valid and follow the validity with a loading factor of more than 0.60.

Table 2. Convergent validity

Variable	Indicator	Outer Loading
Service Quality (X1)	X1.1	0.778
	X1.2	0.813
	X1.3	0.916
	X1.4	0.784
	X1.5	0.944
	X1.6	0.902
	X1.7	0.895
	X1.8	0.903
	X1.9	0.861
	X1.10	0.893
Product Quality (X2)	X2.1	0.757
	X2.2	0.769
	X2.3	0.784
	X2.4	0.809
	X2.5	0.735
	X2.6	0.785
Customer Satisfaction (Y)	Y1	0.656
	Y2	0.891
Customer Loyalty (Z)	Z1	0.786
	Z2	0.859
	Z3	0.762
	Z4	0.831

The above results indicate that all indicators have met the requirements of convergent validity. Convergent validity is also assessed by AVE (Average Variance Extract), which explains that if the model has an AVE value of more than 0.5, The convergent validity category is relatively high. After eliminating the loading factor, which is less than 0.6, the model has an AVE value (Table 3).

Table 3 shows that for each construct in the model, the AVE value is above 0.5. This shows that the data of this study meet the two convergent validity requirements (convergent validity). Therefore, the combination of the outer loading assessment and the AVE test showed that this study was valid for convergence and fulfilled the requirements to proceed to the following procedure.

Table 3. Average variant extracted (AVE)

Variables	AVE	Remark
Service Quality (X1)	0.758	Valid
Product Quality (X2)	0.598	Valid
Customer Satisfaction (Y)	0.612	Valid
Customer Loyalty (Z)	0.657	Valid

To examine the study model with good discriminant validity, two procedures need to be carried out: the results of cross loading and Fornell-Larcker criteria. The first method is the measurement of cross loading needs to show if the indicators of each construct need to be of higher value than indicators in other constructs (Table 4).

Table 4. Cross loading

Variables	Indicator	X1	X2	Y	Z
Service Quality (X1)	X1.1	0.778	0.314	0.171	0.218
	X1.2	0.813	0.448	0.321	0.362
	X1.3	0.916	0.484	0.402	0.461
	X1.4	0.784	0.52	0.392	0.362
	X1.5	0.944	0.387	0.312	0.502
	X1.6	0.902	0.406	0.232	0.364
	X1.7	0.895	0.368	0.232	0.443
	X1.8	0.903	0.409	0.354	0.55
	X1.9	0.861	0.365	0.312	0.502
	X1.10	0.893	0.368	0.232	0.364
Product Quality (X2)	X2.1	0.474	0.757	0.513	0.518
	X2.2	0.53	0.769	0.478	0.296
	X2.3	0.447	0.784	0.458	0.348
	X2.4	0.457	0.809	0.5	0.337
	X2.5	0.184	0.735	0.702	0.153
	X2.6	0.206	0.785	0.891	0.302
Customer Satisfaction (Y)	Y1	0.41	0.404	0.656	0.345
	Y2	0.206	0.785	0.891	0.302
Customer Loyalty (Z)	Z1	0.297	0.285	0.279	0.786
	Z2	0.364	0.3	0.279	0.859
	Z3	0.444	0.313	0.296	0.762
	Z4	0.453	0.432	0.403	0.831

The results of the cross-loading test show that the cross-loading value of each item on its construct is more than the value of loading with other constructs. Through that description, it can be concluded that there is discriminant validity without any problems. All indicators with a higher correlation coefficient with each construct will be compared with the correlation coefficient of indicators in the constructing block to other columns.

The second procedure for further testing is the Fornell Larcker criterion (Table 5). To obtain good discriminant validity through a study model, the AVE root in the construct needs to be higher than the relationship between the construct and other latent variables. Based on the results of the Fornell Larcker criterion in this study, it can be concluded that the data is considered if all variables have a higher value than other variables in one column.

Table 5. Fornel-larcker criterian

Variable	X1	X2	Y	Z
Service Quality (X1)	0.871			
Product Quality (X2)	0.471	0.773		
Customer Satisfaction (Y)	0.352	0.799	0.783	
Customer Loyalty (Z)	0.493	0.42	0.396	0.81

The quality of service (X1) is observed in the table above, worth 0.871 or higher than other variables in one column. Product quality (X2) is worth 0.773 or has a higher value than the service quality in one column. As is the case with customer satisfaction (Y1) has a value of 0.783, which exceeds the value of customer satisfaction with service quality and product quality. Customer loyalty (Z1) also has a value of 0.81 above loyalty with satisfaction, product, and service quality. On that basis, according to the explanation in the table, it is concluded that the data model tested in this study follows the requirements or characteristics that show evidence if the construct in the model has discriminant validity and is the initial stage before testing the hypothesis after going through various stages of testing.

The acceptable detailed composite reliability values in exploratory studies range from 0.60 to 0.70 (Abdillah & Hartono, 2015). Based on the study results, it can be concluded that the overall reliable construct, including composite reliability or Cronbach's alpha, is worth more than 0.70. On that basis, all variables in this research model have internal consistency reliability. Based on the previous data, it is concluded that this study has convergent validity, discriminant validity, and internal consistency reliability, which are both good.

5.3 Evaluation of the Inner Model

Path coefficient test shows a positive or negative relationship between variables. This path coefficient test uses the PLS Algorithm technique. The description in Table 6 shows that almost all relationships between variables are positive, except for the relationship between service quality (X1) and customer satisfaction (Y), which is negative. The most significant construct relationship is between product quality (X2) and customer satisfaction (Y) 0.814.

Table 6. Path coefficient

Variable	X1	X2	Y	Z
Service Quality (X1)			-0.032	0.385
Product Quality (X2)			0.81	0.083
Customer Satisfaction (Y)				0.194
Customer Loyalty (Z)				

The structural model test. The assessment stage of the study model using PLS begins by looking at the R-square in each latent dependent variable. The higher the R square value, the better the prediction model for the proposed study model. Attached is the R-square estimation result using SmartPLS (Table 7).

Table 7. R-square

Variables	R-square	R-square adjusted
Customer Satisfaction (Y)	0.640	0.632
Customer Loyalty (Z)	0.302	0.280

From the calculation results above, the R-Square value is 0.640 for customer satisfaction. This means that the value of the influence of service quality and product quality is 64 percent on customer satisfaction, and the remaining influence is on other variables outside the study. Then the R-Square value is 0.302 for Customer Loyalty. This means that the value of the influence of service quality and product quality is 30.2 percent on customer loyalty, and the remaining influence is on variables outside the study. The observed values are obtained by the model and the estimated indicators. A Q2 value greater than 0 indicates that the model has predictive relevance, and a Q2 value smaller than 0 means the model has no predictive relevance. This is in line with Ghazali (2014).

The results obtained from Table 8, predictive relevances, show that the Q-Square value is 0.335 for customer satisfaction and 0.157 for customer loyalty above 0, which means the model has predictive relevance or has a good observation value. To validate the

model as a whole, it uses the Goodness of Fit (GoF) index, which was introduced by Tenenhaus et al. (2004) and can be referred to as the GoF index.

Table 8. Results predictive relevance

Variable	SSO	SSE	Q ² (=1-SSE/SSO)
Service Quality (X1)	1.000.00	1.000.000	0.000
Product Quality (X2)	600.000	600.000	0.000
Customer Satisfaction (Y)	200.000	133.049	0.335
Customer Loyalty (Z)	400.000	337.242	0.157

The basis for hypothesis testing is the value contained in the output path coefficients. This hypothesis testing technique uses the Bootstrapping technique. The following is the estimated output-table for testing the structural model (Table 9).

Table 9. Path coefficient

	Original Sample (O)	T-statistic	P Values
Service Quality (X1) → Customer Satisfaction	-0.032	0.274	0.785
Product Quality (X2) → Customer Satisfaction	0.814	10.979	0.000
Customer Satisfaction (Y) → Customer Loyalty	0.194	1.077	0.282
Service Quality (X1) → Customer Loyalty (Z)	0.385	2.612	0.009
Product Quality (X2) → Customer Loyalty (Z)	0.083	0.367	0.714

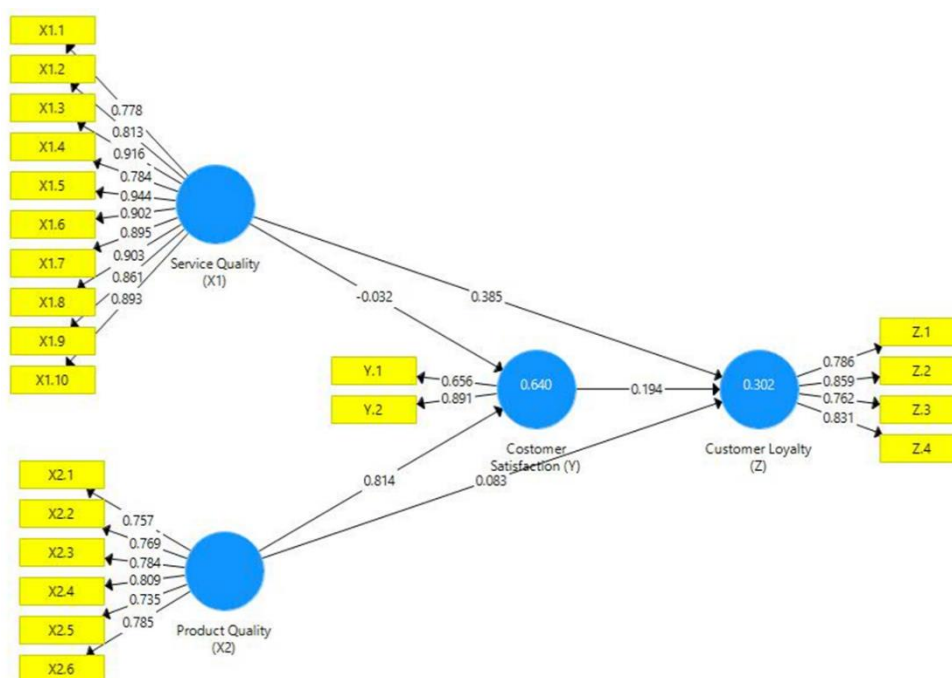


Figure 3. Outer Model Construct Result

The significance figure to support the hypothesis of a study can compare the value between the t-table and the t-statistic (Abdillah & Hartono, 2015). The results of the t-statistic must exceed the value of the t-table to support the hypothesis. For example, the 95 percent confidence level (alpha 95%) means that the t-table exceeds 1.961 from the two-tailed hypothesis. Tests with the bootstrap technique are intended to avoid abnormal problems in research data.

Tabel 10. Hypothesis indirect effect

	Original Sample (O)	Sample Mean (M)	Standard Definition (STDEV)	T-statistic (O/STDEV)	P Values
X1 -> Y -> Z	-0.006	-0.002	0.032	0.194	0.846
X2 -> Y -> Z	0.158	0.145	0.151	1.046	0.296

According to Tables 9 and Table 10, it can be seen that from the seven existing hypotheses, all hypotheses are supported, which is indicated by the t-statistic value that is greater than the t-table. Almost all hypotheses show a positive effect, except for the first and sixth hypotheses, with a negative beta coefficient. The first hypothesis means that service quality directly affects customer satisfaction. For hypothesis 6, service quality does not indirectly affect customer loyalty with customer satisfaction as a mediating variable.

6. Discussions

This study aims to determine what factors can create customer satisfaction and loyalty at Coffee Shop XXY by analyzing the relationship between service quality and product quality on customer loyalty. Focus on the importance of getting customer loyalty because customer loyalty here can maintain the company's business continuity in the long term by establishing good relationships with customers. Several factors can affect loyalty itself. This study found that each of the three variables, namely service quality, product quality, and customer satisfaction, influenced customer loyalty. According to previous research by Anggraeni, Retnoningsih, and Muhaimin (2019), customer satisfaction and customer loyalty have a positive and significant meaning.

From the research that has been done, it is known that service quality has an indirect and negative effect on customer satisfaction. In contrast, the product quality variable has a direct and significant effect on customer satisfaction, and customer satisfaction directly affects customer loyalty. This is in line with the research of Kusumasasti, Andarwati, and Hadiwidjojo (2017); Shin, Hwang, Lee, and Cho (2015); Kartikasari and Albari (2019), meaning that it can be said that product service quality can indeed increase loyalty, but not as much as the influence of product quality and customer satisfaction. Other studies that are in line with this research are the research of Carranza, Díaz, and Consuegra (2018), Tripayana (2020), Kartikasari and Albari (2019) that customer satisfaction has a significant positive effect on customer loyalty. In this case, product quality and customer satisfaction at Coffee Shop XXY have great power to gain customer loyalty.

Coffee Shop XXY has served customers well but needs to be continuously improved. At Coffee Shop XXY has used experienced staff. Low waiting times will make customers have a good relationship with the company in the long term to return to the coffee shop and make it comfortable for customers. Customers so that when they return to the store for a cup of coffee, they will be happy and satisfied. This is in line with previous research in the Maftukhah (2018), Widayan (2018), and Widayanti (2016) studies, as well as research conducted by Siswandi, Muharam, and Hannan (2019), with the finding that an increase in service will provide an increase in loyalty.

Then here, Coffee Shop XXY has obtained customer satisfaction through research on product quality variables with a positive and significant effect on customer satisfaction. This means that the quality of the coffee shop's products is good, and in the end, the customers are satisfied. Coffee Shop XXY has also met expectations and received appreciation from customers by getting this satisfaction, so they will not think twice

when returning to the store to enjoy their products. This is reflected in the coffee shop customers who are always busy arriving and with the advantages provided by the store through the products they offer. These quality products have been proven through this research. Similar to previous research (Lee, Moon, & Song, 2018), which found the meaning of a positive and significant influence between product quality on customer satisfaction. According the resulting study of Afnina and Hastuti (2018) also found the meaning of a positive and significant influence between product quality on customer satisfaction.

Nevertheless, it is not directly proportional to the quality of the product; in this case, the service quality of Coffee Shop XXY does not affect customer satisfaction, so here, the service quality of Coffee Shop XXY is still unable to meet customer expectations. Therefore, the customers do not get satisfaction from the quality of service provided by Coffee Shop XXY. However, following previous research by Dhisasmito and Kumar (2020) in several trendy coffee shops in Jakarta, service quality with its five dimensions has a positive contribution and meaning to customer satisfaction.

Our research also found a positive indirect effect of product quality on customer loyalty but not significant with customer satisfaction as a mediator. This is line Kusumasasti, Andarwati, and Hadiwidjojo (2017), which shows that product quality did not significantly affect customer loyalty through customer satisfaction as a mediator.

This research has been attempted and carried out following scientific procedures. However, it still has limitations, namely, firstly, the number of respondents is only 100 people; although it is representative, it is still not enough to describe the actual situation. Second, the research object is only focused on one place and is carried out on the spot, where this survey can also be done through social media. Furthermore, in collecting data, the information provided by respondents through questionnaires sometimes does not show a valid opinion.

7. Conclusions

Based on the results of research conducted, researchers can conclude that service quality affects customer satisfaction indirectly, while product quality directly and significantly affects customer satisfaction. This illustrates that the products provided can affect customer expectations. Furthermore, the quality of service and product quality directly affect customer loyalty; the better the service and the quality of the products provided affect customer loyalty. Likewise, with customer satisfaction directly affecting customer loyalty, it can be seen here that customer satisfaction is essential in building loyalty.

Product quality has a positive indirect effect on customer loyalty through the mediation of customer satisfaction. In comparison, service quality negatively affects customer loyalty through the mediation of customer satisfaction, which illustrates that other variables influence customer loyalty.

8. Recommendations

Coffee Shop XXY is advised to ask for customer feedback and conduct research regularly to find out what customers want and improve service quality and product quality, which will impact customer satisfaction and loyalty. For further research, it is possible to add variables outside of the research that is here because seen from some of the results outside of our research variables, and it turns out that outside the quality of service, product quality is like the atmosphere of a coffee shop which may influence customer satisfaction and customer loyalty.

Citation information

Cite this article as Taufik, A., Santoso, S., Fahmi, M. I., Restuanto, F., & Yamin, S. (2022). The role of service and product quality on customer loyalty. *Journal of Consumer Sciences*, 7(1), 52-66. doi: <https://doi.org/10.29244/jcs.7.1.68-82>.

References

- Abdillah, W., & Hartono, J. (2015). *Partial Least Square (PLS): Alternative, Structural Equation Modeling (SEM) in business research (Partial Least Square (PLS): Alternatif, Structural Equation Modeling (SEM) dalam penelitian bisnis)*. Yogyakarta: CV Andi Offset.
- Ali, F., Dey, B. L. & Fileiri, R. (2015). An assessment of service quality and resulting customer satisfaction in Pakistan International Airlines: Findings from foreigners and overseas Pakistani customers. *International Journal of Quality & Reliability Management*, 32(5), 486-502. doi: <https://doi.org/10.1108/IJQR-07-2013-0110>
- Anggraeni, Y., Retnoningsih, D., & Muhaimin, A. W. (2019). The influence of satisfaction on consumer loyalty of Sumawe Coffee Malang. *Agricultural Socio-Economics Journal*, 19(1), 19-25. doi: <https://doi.org/10.21776/ub.agrise.2019.019.1.3>
- Atmaja, G. K. K., & Yasa, N. N. K. (2020). The role of customer satisfaction in mediating the influence of price fairness and service quality on the loyalty of low-cost carriers customers in Indonesia. *International Research Journal of Management, IT and Social Sciences*, 7(5), 149-159. doi: <https://doi.org/10.21744/irjmis.v7n5.984>
- Bellinda, B., Dolorosa, E., & Kurniati, D. (2020). Aming Coffee customer satisfaction and loyalty: Experiential Marketing (Kepuasan dan loyalitas pelanggan Aming Coffee: Experiential Marketing). *Jurnal Bisnis dan Akuntansi*, 22(2), 335-346. doi: <https://doi.org/10.34208/jba.v22i2.760>
- Carranza, R., Díaz, E. & Martín-Consuegra, D. (2018). The influence of quality on satisfaction and customer loyalty with an importance-performance map analysis: exploring the mediating role of trust. *Journal of Hospitality and Tourism Technology*, 9(3), 380-396. doi: <https://doi.org/10.1108/JHTT-09-2017-0104>
- Dhisasmito, P. P., & Kumar, S. (2020). Understanding customer loyalty in the coffee shop industry (A survey in Jakarta, Indonesia). *British Food Journal*, 122(7), 2253-2271. doi: <https://doi.org/10.1108/BFJ-10-2019-0763>
- Afnina, & Hastuti, Y. (2018). Effect of product quality on customer satisfaction (Pengaruh kualitas produk terhadap kepuasan pelanggan). *Jurnal Samudera Ekonomi dan Bisnis*, 9(1), 21-30. doi: <https://doi.org/10.33059/jseb.v9i1.458>
- Furoida, F., & Maftukhah, I. (2018). The influence of service quality and store atmosphere on customer loyalty. *Management Analysis Journal*, 7(2), 163-170. doi: <https://doi.org/10.15294/maj.v7i2.23337>
- Ghozali, I. (2014). *Structural Equation Modeling (SEM), an alternative method with Partial Least Square (PLS) (4th Edition) (Structural Equation Modeling (SEM), metode alternatif dengan Partial Least Square (PLS) (Edisi 4))*. Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, I. (2016). *Multivariate analysis application with program (Edisi 8) (Aplikasi analisis multivariate dengan program (Edisi 8))*. Semarang: Badan Penerbit.
- Gorondutse, A. H. & Hilman, H. (2014). Mediation effect of customer satisfaction on the relationships between service quality and customer loyalty in the Nigerian foods and beverages industry: Sobel test approach. *International Journal of Management Science and*

- Engineering Management*, 9(1), 1-8.
doi:
<https://doi.org/10.1080/17509653.2013.812337>
- Griffin, J. (2002). *Customer Loyalty: How To Earn It, How to Keep it*. Kentucky: McGraw Hill
- Gunawan, T., Fathorrahman, F., & Handoko, Y. (2019). The mediating effect of customer satisfaction on the effect of product quality and store atmosphere on customer loyalty (Efek mediasi kepuasan pelanggan atas pengaruh kualitas produk dan store atmosphere terhadap loyalitas pelanggan). *Jurnal Manajemen dan Kewirausahaan*, 7(2), 189-204. doi: <https://doi.org/10.26905/jmdk.v7i2.3347>
- Hanaysha, J. (2016). Testing the effects of food quality, price fairness, and physical environment on customer satisfaction in fast food restaurant industry. *Journal of Asian Business Strategy*, 6(2), 31-40. doi: [10.18488/journal.1006/2016.6.2/1006.2.31.40](https://doi.org/10.18488/journal.1006/2016.6.2/1006.2.31.40)
- Heri, H. (2017). Analysis the effect of service quality, customer value, customer satisfaction and customer trust on corporate. *Journal of Business and Management*, 19(6), 38-46. doi: [10.9790/487X-1906013846](https://doi.org/10.9790/487X-1906013846)
- Julianto, A. R., Amnilis & Gusriati. (2021). Analysis of the factors that influence the loyalty of coffee consumers during the new normal at a coffee shop in the city of Padang (Analisis faktor-faktor yang mempengaruhi loyalitas konsumen kopi pada masa new normal di coffee shop kota Padang). *Jurnal Research Ilmu Pertanian*, 1(1), 94-100. doi: <https://doi.org/10.31933/jrip.v1i1.396>
- Kartikasari, A., & Albari, A. (2019). The influence of product quality, service quality and price on customer satisfaction and loyalty. *Asian Journal of Entrepreneurship and Family Business*, 3(1), 49-64. <https://perwiraindonesia.com/ajefb/index.php/jurnalAJEFB/article/view/36>
- Kotler, P., & Armstrong, G. (2018). *Principle of marketing (17th Edition)*. New Jersey: Pearson Prentice Hall.
- Kotler, P., & Keller, K.L. (2016). *Marketing Management (15th Edition)*. New Jersey: Pearson Prentice Hall, Inc.
- Kusumasasti, I., Andarwati, A., & Hadiwidjojo, D. (2017). The effect of product and service quality on coffee shop customer loyalty (Pengaruh kualitas produk dan layanan terhadap loyalitas pelanggan coffee shop). *Jurnal Ekonomi Bisnis*, 22(2), 123-129. doi: <http://dx.doi.org/10.17977/um042v22i2p123-129>
- Laetitia, S. I., Alexandrina, E., & Ardianto, S. F. (2021). The effect of product quality and service quality on customer satisfaction at Tanamera Coffee Pacific Place (Pengaruh kualitas produk dan kualitas pelayanan terhadap kepuasan pelanggan Tanamera Coffee Pacific Place). *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 5(1), 1699-1721. doi: <https://doi.org/10.31955/mea.vol5.iss1.pp1699-1721>
- Lee, W. S., Moon, J., & Song, M. (2018). Attributes of the coffee shop business related to customer satisfaction. *Journal of Foodservice Business Research*, 21(6), 628-641. doi: <https://doi.org/10.1080/15378020.2018.1524227>
- Panjaitan, H. (2017). Impact of satisfaction and customer engagement as intervening variable on customer loyalty: Study at XL Resto & Cafe Surabaya Indonesia. *International Journal of Business and Management Invention*, 6(9), 41-48.
- Parasuraman, A. P., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50. doi: <https://doi.org/10.1177/002224298504900403>
- Rosalina, M., Qomariah, N., & Sari, M. I. (2019). Impact of promotion, price and product quality on consumer

- loyalty Oppo Smartphone (Dampak promosi, harga dan kualitas produk terhadap loyalitas konsumen Oppo Smartphone). *Jurnal Penelitian IPTEKS/Science and Technology Research Journal*, 4(2), 161-174. doi: <https://doi.org/10.32528/ipteks.v4i2.2455>
- Redata, L., Kezia, R., Solaiman, K. H., Santoso, S. (2021). Correlation analysis of community assistance on creative economy actors' innovation and meeting consumer needs: A case study on the empowered Tangerang community and Tangerang culinary creative economy actors. *Business Management Journal*, 16(1), 1-19. doi: <http://dx.doi.org/10.30813/bmj>.
- Sari, M., Prayogi, M., Jufrizen, J., & Nasution, M. (2020). Building customer loyalty based on e-service quality by mediating customer satisfaction (study on online grab-car transportation in the city of Medan) (Membangun loyalitas pelanggan. *Jurnal Manajemen, Strategi Bisnis dan Kewirausahaan*, 14(2), 218 - 235. doi: <https://doi.org/10.24843/MATRIK:JMBK.2020.v14.i02.p07>
- Shin, C. S., Hwang, G. S., Lee, H. W., & Cho, S. R. (2015). The impact of Korean franchise coffee shop service quality and atmosphere on customer satisfaction and loyalty. *The Journal of Business Economics and Environmental Studies*, 5(4), 47-57. doi: <https://doi.org/10.13106/EAJBM.2015.VOL5.NO4.47>
- Siswandi, F., Muharam, H., & Hannan, S. (2019). The effect of service quality on customer satisfaction and customer loyalty (Pengaruh kualitas layanan terhadap kepuasan pelanggan dan loyalitas pelanggan). *Jurnal Pustakawan Indonesia/ Indonesian Librarian Journal*, 18(1), 42-53. doi: <https://doi.org/10.29244/jpi.18.1.42-53>
- Suhud, U., Allan, M., Wibowo, S. F., Sabrina, E., & Willson, G. (2020). Measuring customer satisfaction of a café and coffee shop colony at a traditional market. *Journal of Foodservice Business Research*, 23(1), 78-94. doi: <https://doi.org/10.1080/15378020.2019.1686897>
- Suryadharma, I., & Nurcahya, I. (2015). The influence of service quality on customer satisfaction at Bintang Pesona Hotel in East Denpasar (Pengaruh kualitas pelayanan pada kepuasan pelanggan Hotel Bintang Pesona di Denpasar Timur). *E-Jurnal Manajemen*, 4(4), 930-942. Retrieved from <https://ojs.unud.ac.id/index.php/Manajemen/article/view/11433/8605>
- Tripayana, S., & Pramono, J. (2020). Product quality, service, and customer loyalty where satisfaction as an intervening variable in SMEs start-up tourism Kombuchi Brewing Co., Bali (Kualitas produk, pelayanan, dan loyalitas pelanggan dimana kepuasan sebagai variabel intervening pada UKM start up pariwisata Kombuchi Brewing Co, Bali). *JEMAP*, 2(2), 182-195. doi: <https://doi.org/10.24167/jemap.v2i2.2266>
- Tjiptono, F. & Chandra, G. (2012). *Strategic Marketing (Second Edition) (Pemasaran Strategik (Edisi Kedua))*. Yogyakarta: Andi.
- Wang, Y., & Lo, H. P. (2002). Service quality, customer satisfaction and behavior intentions: Evidence from China's telecommunication industry. *Info*, 4(6), 50-60. doi: <https://doi.org/10.1108/14636690210453406>
- Zarwinda, I., & Sartika, D. (2018). Effect of temperature and extraction time on caffeine in coffee (Pengaruh suhu dan waktu ekstraksi terhadap kafein dalam kopi). *Jurnal Lantanida*, 6(2), 180-191. doi: <https://dx.doi.org/10.22373/lj.v6i2.3811>