

Antecedents of Customer Loyalty: Study from the Indonesia's Largest E-commerce*

Mohamad RIZAN¹, Ika FEBRILIA², Agus WIBOWO³, Rianti Dea Rizky PRATIWI⁴

Received: July 30, 2020 Revised: August 23, 2020 Accepted: September 03, 2020

Abstract

This study examines the effect of service quality and perceived value on customer loyalty with the intervening role of customers' satisfaction in the e-commerce industry. The research method uses a quantitative research design with a survey model. The sample used in this study is Tokopedia consumers who live in DKI Jakarta and have done online shopping at Tokopedia at least twice in the last six months. All variables used were reliable and valid and met the research requirements. The object of this research were the 200 customer respondents who had made purchases on the largest e-commerce platform of Indonesia, Tokopedia. Data analysis was done by using SPSS and Structural Equation Modeling (SEM). The results show that: first, the service quality and perceived value affect customer satisfaction positively. Second, there is a mediating effect of customer satisfaction on the relationship between service quality and perceived value on customer loyalty. Third, service quality and perceived value directly affect customer loyalty positively but insignificantly. The result implies that the role of customer satisfaction is significant in creating loyalty. In the e-commerce industry, good quality and perception could positively influence customers but not necessarily form loyalty. For that, e-commerce players should pay a lot of attention on customer satisfaction.

Keywords: Service Quality, Perceived Value, Customer Satisfaction, Customer Loyalty, E-commerce

JEL Classification Code: E44, F31, F37, G15

1. Introduction

The development of digitalization in industries has grown at a rapid pace globally in the recent times. The development of technology has provided many conveniences for people

in carrying out their daily activities. Activities like shopping, financial transactions, traveling, sending goods, and looking for information, is now more accessible. The development of computer technology and network infrastructure has revolutionized the use of the internet. This phenomenon has led to the development of business through the internet known as e-business. Electronic transactions done on an e-business is known as e-commerce. The existence of e-commerce has also made an impact in Indonesia. With the development of e-commerce now sellers can sell their products on e-commerce platforms such as Tokopedia, Zalora, Bukalapak, Lazada, Shopee and other stores.

Indonesia is a country which has witnessed a relatively fast growth in e-commerce. Merchant Machine, a British research institute, released a list of 10 countries with the fastest growing e-commerce industry in the world, and Indonesia was found to be the leader among these countries. The growth of e-commerce in Indonesia in 2018 reached up to 78 percent (wearesocial.com, 2019). Moreover, one of the largest e-commerce sites, Tokopedia is in Indonesia. Tokopedia is the number one e-commerce in Indonesia with the highest number of visits per month, with 65,953,400 visits and over 90 million users active every month.

*Acknowledgements:

We are grateful to anonymous reviewers and editor of the journal for their valuable comments and suggestions in an effort to improve the quality of the article.

¹First Author and Corresponding Author. Faculty of Economics, Universitas Negeri Jakarta, Indonesia [Postal Address: Jl. Rawamangun Muka Jakarta Timur, DKI Jakarta, 13220, Indonesia] Email: mohamadrizan72@unj.ac.id

²Faculty of Economics, Universitas Negeri Jakarta, Indonesia. Email: ikafebrilia@unj.ac.id

³Faculty of Economics, Universitas Negeri Jakarta, Indonesia. Email: agus-wibowo@unj.ac.id

⁴Faculty of Economics, Universitas Negeri Jakarta, Indonesia. Email: rianti@unj.ac.id

© Copyright: The Author(s)

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<https://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

However, if one looks at other aspects of the assessment, it turns out that Tokopedia has second place for the App Store Rank, and third place for the Playstore Rank, the first position was successfully occupied by its business competitor, Shopee (iprice.co.id, 2020). Valuation on the App Store and Play Store applications is an essential for e-commerce platforms to build brand equity. According to Tadelis (2006), one shaper of the reputation of the online marketplace platform is the online rating and online review. The decline is understood to be a result of decreased customer loyalty caused by decreased customer satisfaction with Tokopedia services (Kussusanti, 2019).

The decrease in the level of customer satisfaction is allegedly due to a decrease in the quality of Tokopedia services digitally. Paying attention to the quality of services provided to customers becomes important because it dramatically influences the customer's assessment of a brand or company. According to Spreng and Mackoy (1996), since dealing with customer satisfaction, service quality has become a matter of much consideration in marketing topics. The perception of favorable service quality leads to increased customer satisfaction. In other words, there is a relationship between customer satisfaction and service quality.

High-quality service will result in customer satisfaction. Customer service needs to exceed customer expectations so that customers feel satisfied and are loyal to the company's services rather than to that of competitors. This is also in line with previous research conducted by Gounaris, Dimitriadis, and Stathakopoulos (2010), Rita, Oliveira, and Farisa (2019), and Ningsih, Haryono, and Sawitri (2019). In addition to service quality, perceived value is thought to be another essential thing that can affect customer satisfaction. Some previous studies also considered that to attract more consumers, it is essential to develop the perceived value to the customer (Chang & Wang, 2009; Parasuraman et al., 2005).

There are many ways in which companies can build a positive perception of value. Tokopedia, as one of the major e-commerce companies, has also maximized this, which is evident in Tokopedia's position as an e-commerce platform with a high reputation. However, there are several issues related to values that Tokopedia still faces. Some of them are related to the development of Tokopedia's loyalty program, which is still low, that is only 0.01% and product quality compared to the price, which is still in the bottom (dailysocial.id, 2018). Value is interpreted as an overall assessment by customers about the usefulness or utility of a product as well as about the assessment of products based on the perception of what is received and what is paid or given (Parasuraman & Grewal, 2000).

Based on this definition, researchers can argue that the perceived value of customers will contribute to loyalty to the company and minimize the possibility of customers

switching to alternative products. Perception of good value offered by brands and companies can be one important factor why customers choose a specific company and be loyal to them rather than its competitors. El-Adly (2019). With service quality and high perceived value, customers are expected to feel satisfied and choose the company's products rather than competitors' products. The existence of satisfaction leads to customers buying behavior which creates a sense of loyalty and the customer tends to re-choose the company's products.

This paper seeks to complement several previous studies with a focus to examine the effect of service quality and perceived value on customers' loyalty with customer satisfaction as an intervening factor.

2. Literature Review

2.1. Customers' Loyalty

According to Lovelock (2016), loyalty is an old expression that has traditionally been used to describe enthusiastic devotion to a country, a certain cause, or a human being. Loyalty in the business context is a depiction of the customer's willingness to continue to patronize any specific company and its products and services in the long run, and prefer it in a particular context, and recommend it to friends and colleagues (Lovelock, 2016). Then in the context of e-commerce or e-store, customer loyalty predisposes buying behavior. Chang and Chen (2009) explain that theoretical support generally emphasizes the dimensions of loyalty and repeat purchase behavior to predict the level of repurchase. However, it is considered insufficient because it cannot distinguish between true customer loyalty and false customer loyalty (Nguyen, 2020).

For this reason, in their research, Chang and Chen (2009) define customer loyalty as the preferred attitude of customers towards e-commerce sites or e-stores and a tendency of customers to repeat buying behavior. According to Pareira et al. (2016), current research assumes customer loyalty as a representative of the intention to repurchase or make a return visit on a specific site. Researchers later described customer loyalty in e-commerce terms or online customer loyalty as loyalty to the site, conducting transactions through the site, and recommending the site to others (Suhartanto et al., 2019).

2.2. Customers' Satisfaction

Customer satisfaction, according to Kotler and Keller (2016), is said to be a feeling of pleasure or disappointment of an individual, which results from comparing the performance or the results felt from shopping online in connection with an expectation. While quoted from Rizan et al. (2019), Consumer satisfaction is a special relationship

originating from the effect of a series of meetings between discrete services or transactions, such as searching, buying, and continuing to use products in a platform or online vendor for a specified period.

Kotler et al. (2001) also explain that satisfaction is a feeling of pleasure or disappointment someone has after comparing the performance obtained with current expectations. Some of Kotler's other definitions are to assess satisfaction as a function of the comparison of perceived performance and expectation. According to Kotler (2011), if the performance obtained is lower than expectations, consumers will feel dissatisfied. If the performance obtained is the same as expectations, consumers will feel satisfied. If the performance obtained exceeds expectations, consumers will feel very satisfied (delighted).

2.3. Quality of Service

To get customer satisfaction and achieve their loyalty, companies must be able to provide services in these research services with good quality. Companies must be able to see what customers want and meet the quality of services sold according to the needs sought. According to Kotler et al. (2001), product quality (services or goods) is the ability of a product to carry out its functions, which encompass durability, reliability, strength, ease of use, and product repairs, as well as other valuable features.

According to Tjiptono (2002), service quality is the level of expected excellence and control over elective excellence, so that customer desires are fulfilled. So it can be concluded that the two main factors that influence the quality of service for customers are the expected service and the service received. In this study, the dimension used to measure indicators use E-SERVQUAL model. The seven dimensions used are (1) efficiency, (2) availability, (3) fulfillment, (4) privacy, (5) responsiveness, (6) compensation, and (7) contact. Parasuraman, Zeithaml, and Malhotra (2005)

2.4. Perceived Value

Kotler and Keller (2016) explain customer perceived value as a comparison between overall customer assessments of the benefits received with the costs needed to obtain these benefits. Kotler and Keller (2016) also explained that perceived value is the difference from what customers get from what is offered, what the market or service provider provides, and what customers pay for the benefits they want to enjoy. Gallarza, Artega, and Gil (2019) formulate the dimensions of perceived value into five groups that are also used in this study: 1) Functional value (the relationship between attributes, usefulness benefits) 2) Social value (social benefits or symbolic benefits) 3) Emotional value (benefits emotional experience or benefits) 4) Epistemic

value (benefits derived from curiosity) 5) Conditional value (benefits of certain situations).

This study aims to determine the effect of service quality and perceived value on customer loyalty with the intervening role of customers' satisfaction with the e-commerce industry. It synthesized prior empirical findings and relevant theories to develop a logical relationship between the variables. There are four proposed hypotheses that can be summarized in the following research model (Figure 1).

Customer satisfaction is a sign of customers believing in the probability or ability of services to be able to provide positive feelings or effects (Pereira et al., 2016). Previous literature has confirmed that there is a significant relationship between service quality and customer satisfaction. The research of Kresnamurti et al. (2020), in which the sample was 200 hotel customers in Jakarta, found a significant positive effect of service quality offered on customers' satisfaction. Then, according to research on website and online shopping, Kuo (2009) found that customer satisfaction on the internet and e-commerce industry is the total response of consumers to all experiences felt. In this research, customer satisfaction is defined as total customer consumption when using the service.

H1: Service quality affects customer satisfaction.

Research shows perceived value is different from customer satisfaction in several ways, first in the concept components that make up both (Kotler & Keller, 2009). Both customer satisfaction is conceptualized as unidimensional arrangements or constructs, while the perceived value in research is shown as multidimensional values. Third, perceived value is the value that brings customers to various stages of the purchase, including the level before the purchase. In contrast, customer satisfaction only affects the level after the purchase or use of the product (Sweeney & Johnson, 1999). The study indicated that perceived value could be the cause of customer satisfaction. Several previous studies have also shown that perceived value has a positive effect and is directly the cause of customer satisfaction (Gallarza & Gil, 2019; Konuk, 2019).

H2: Perceived value affects customer satisfaction.

Customer satisfaction is considered to act as an antecedent (cause) of loyalty and arises from previous consumption experiences (Chang & Chen, 2008). Other research shows that satisfaction is the cause of loyalty, where an increase in satisfaction can also cause an increase in customer loyalty (Reichheld & Scheffer, 2000). Other studies also show that customer satisfaction has a significant and positive effect directly on customer loyalty. The research shows that delighted customers will have the characteristics of being more loyal, buying more, talking good things about the

company, and comparing services with competitors a little. (El-Adly & Eid, 2016; Rizan, Warokka, & Listyawati, 2014).

H3: *Customer satisfaction affects customer loyalty.*

Chang et al. (2014) shows that service quality is a particular assessment factor of the services offered by companies. Loyalty to individual services will bring customers to buy back desirable behavior. While other studies show, customer loyalty is determined by customer experience of service quality (Pee et al., 2018). The relationship between the two implies that the role of service quality perceived by customers will also influence their loyalty to the product or company. Whereas in the e-commerce industry, excellent service quality is the expectation of customers when shopping online (Suhartanto et al., 2019). This study also found the effect of service quality on customer loyalty.

H4: *Service quality affects the customer loyalty.*

In previous studies, there were many direct and positive influences between customer perceived value and customer loyalty (Chen & Tsai, 2008; El-Adly & Eid, 2016). Seen in the El-Adly (2016) study, which researched the retail service industry, it was found that perceived value significantly affected loyalty. Another research also argues that when customer perceived value decreases, customers will start to make product consumption changes to other company brands, which indicates a decrease in customer loyalty (Cristobal, Flavian & Guinaliu, 2007).

H5: *Perceived value affects customer loyalty.*

Service quality has been proven to have a significant influence on both customer satisfaction and customer loyalty (Parasuraman, Zeithaml, & Berry, 1985). According to Caruana (2002), its role as a mediating or intervening variable, customer satisfaction has been shown to have a

positive and significant relationship with customer loyalty based on research conducted by Zeithamal and Berry (1985). The literature on services reporting empirical results suggests customer satisfaction as an intervening variable that mediates the relationship between service quality and customer loyalty (Taylor & Baker, 1994).

H6: *Service quality affects the customer loyalty through customer satisfaction as intervening.*

In addition to being directly related to customer loyalty, other research indicates that the relationship between customer perceived value and customer loyalty is better explained by presenting customer satisfaction as a mediating or intervening variable (Lee & Lin, 2005). Research conducted by Lee and Lin (2005) found that customers who make purchases online have a high perceived value to the company, and the role of customer satisfaction is explained as a better variable in interpreting those values. Other research also states that customer perceived value has an indirect effect on customer loyalty (Adly & Eid, 2016) (see Figure 1).

H7: *Perceived value affects the customer loyalty through customer satisfaction as intervening.*

3. Research Methods and Materials

This research uses an approach with quantitative methods. The design of this research is to use descriptive and causal types (Malhotra, 2010). The sample used in this study is Tokopedia consumers who live in DKI Jakarta and have done online shopping at Tokopedia at least twice in the last six months. The validity conducted using the Pearson Product Moment Correlation technique and for reliability using the Cronbach Alpha technique with SPSS 22. Meanwhile, the analysis using SEM (Structural Equation Model) using LISREL software version 8.8.

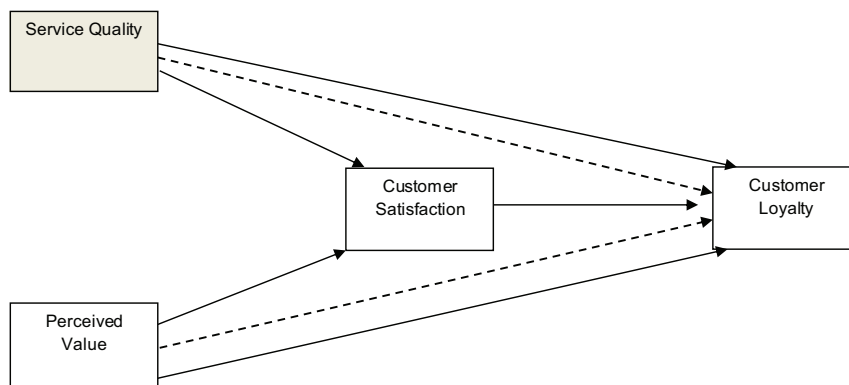


Figure 1: Research Model

The number of samples taken in this study was 145 respondents. However, the size of the sample chosen was as many as 200 people with consideration given to reducing the errors (Hair et al., 2011). Analysis conducted using 5% significance for r-table values is 0.138, and for reliability, a test is it appears to be > 0.6. All variable statuses are valid and reliable if they meet the requirements.

3.1. Validity and Reliability Test

Test the validity of this study using the Pearson test. Pearson values are considered valid if the r values are greater than the r-table. The r table in this study with a

significance of 5% and the number of samples 200 is 0.1388. Furthermore, to test reliability, researchers used the Cronbach’s Alpha test of each variable. If the Cronbach’s Alpha value is less than 0.6 then it can be said to be unfavorable, if 0.7 then it can be accepted, and if the value of 0.8 can be said to be good (Ghozali & Latan, 2012) (see Table 1).

Based on Table 1, it can be seen that all r values for each indicator are greater than 0.318. So it can be concluded that each research indicator is valid. Results in Table 2 it can be seen that the Cronbach’s Alpha value of each variable is more than 0.6 and is more than 0.8 so it can be said to be reliable (see Table 2).

Table 1: Validity Test Results

Variable	Indicator	R-values	r-table 5% (n=200)	Information
Service Quality (X1)	SQ1	0.615	0.1388	Valid
	SQ2	0.626	0.1388	Valid
	SQ3	0.537	0.1388	Valid
	SQ4	0.706	0.1388	Valid
	SQ5	0.611	0.1388	Valid
	SQ6	0.682	0.1388	Valid
	SQ7	0.654	0.1388	Valid
	SQ8	0.718	0.1388	Valid
	SQ9	0.622	0.1388	Valid
	SQ10	0.650	0.1388	Valid
	SQ11	0.614	0.1388	Valid
	SQ12	0.721	0.1388	Valid
Perceived Value (X2)	PV1	0.739	0.1388	Valid
	PV2	0.737	0.1388	Valid
	PV3	0.722	0.1388	Valid
	PV4	0.723	0.1388	Valid
	PV5	0.736	0.1388	Valid
	PV6	0.776	0.1388	Valid
Customer Satisfaction (Y)	CS1	0.795	0.1388	Valid
	CS2	0.835	0.1388	Valid
	CS3	0.836	0.1388	Valid
	CS4	0.798	0.1388	Valid
	CS5	0.805	0.1388	Valid
Customer Loyalty (Z)	CL1	0.759	0.1388	Valid
	CL2	0.750	0.1388	Valid
	CL3	0.816	0.1388	Valid
	CL4	0.764	0.1388	Valid
	CS4	0.798	0.1388	Valid
	CS5	0.805	0.1388	Valid

Table 2: Reliability Test Results

Variable	Cronbach's Alpha	Information
Service Quality (X1)	0.876	Reliable
Perceived Value (X2)	0.872	Reliable
Customer Satisfaction (Y)	0.833	Reliable
Customer Loyalty (Z)	0.887	Reliable

3.2. Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is an analysis that aims to identify the relationship between variables by conducting a correlation test (Table 3). This test is also to confirm whether the model is built as hypothesized. This research uses first order confirmatory factor analysis, because the software used is LISREL. This used to test the construct of each variable to get a model that matches the index criteria (Hair et al., 2011).

Service Quality. In the instrument test results, the service quality variable has 12 indicators. After processing the model in the first order construct, no indicators are wasted, but adjustments are made to the recommended value of LISREL to produce a good Goodness of Fit Indices value. In this case, the test result indicated that the service quality variable model produces acceptance. The result of the model fitness test with all criteria are accepted. Result of testing product quality variable consist of GFI 0.94; RMSR 0.01; RMSEA 0.00; AGFI 0.91; TLI/NNFI 1.00; CFI 1.00.

Perceived Value. In the instrument test results, the perceived value variable has 6 indicators. After processing the model in the first order construct, no indicators are wasted, but adjustments are made to the recommended value of LISREL to produce a good Goodness of Fit Indices value. In this case, the test result shows that the perceived value variable model produces are acceptable. The result of the model fitness test with all criteria are accepted. Result of testing product quality variable consists of GFI 0.98; RMSR 0.01; RMSEA 0.00; AGFI 0.93; TLI/NNFI 1,00; CFI 1.00.

Customer Satisfaction. In the instrument test results, the variable customer satisfaction has 5 indicators. After processing the model in the first order construct, no indicators are wasted. All results look valid because the value of each indicator is above 0.5 and the goodness of fit test is good. In this case, the test result showed that the customer satisfaction variable model produces are acceptable. The result of the model fitness test with all criteria are accepted. Result of testing product quality variable consist of GFI 0.99; RMSR 0.00; RMSEA 0.02; AGFI 0.97; TLI/NNFI 1.00; CFI 1.00.

Customer Loyalty. In the instrument test results, the variable customer satisfaction has 6 indicators. After processing the model in the first order construct, no indicators are wasted. All results look valid because the value of each indicator is

above 0.5 and the goodness of fit test is good. In this case, the test result shows that the customer loyalty variable model produces is acceptable. The result of the model fitness test with all criteria are accepted. Result of testing product quality variable consist of GFI 0.97; RMSR 0.01; RMSEA 0.04; AGFI 0,94; TLI/NNFI 1,00; CFI 1,00 (see Table 3).

3.3. Test for Direct and Indirect Effects.

Direct and indirect influence tests are carried out to determine whether there are direct or indirect influences between the independent variables and the dependent variables tested. If the t-value on the structural equation results is > 1.96 , then there is a significant influence between variables and vice versa, then if it is positive then the resulting effect is unidirectional. In this case, service quality and perceived value are independent variables, customer loyalty is a dependent variable and customer satisfaction is a mediating variable.

Based on the results of data analysis (Table 4), the variable service quality (X1) has a direct effect of 0.38 on customer satisfaction (Y), the perceived value (X2) has a direct effect of 0.53 on customer satisfaction (Y). Furthermore, customer satisfaction (Y) has a direct effect of 0.51 on customer loyalty (Z). Service quality variable (X1) on customer loyalty (Z) has a direct effect of 0.47 and an indirect effect of 0.19. While the variable perceived value (X2) on customer loyalty (Z) has a direct and indirect effect of 0.27 (see Table 4).

4. Results and Discussion

Figure 2 shows the results of the structural model equation, which answers the seven hypotheses of this study. The first hypothesis, service quality affects customer satisfaction. According to Figure 2 and Table 4, service quality variable (X1) to customer satisfaction (Y) has a standardized total effects value of 0.38 and t-value $2.62 > 1.96$. So the first hypothesis that service quality affects customer satisfaction can be accepted. The relationship between the two variables is significantly positive. These results are in line with research by Rita, Olivera, and Farisa (2019), and Ningsing et al. (2019), which found that service quality has a positive and significant effect on customer satisfaction.

Table 3: First Order Construct

Items	Goodness of Fit Indices	Cut-off Value	Result	Model Evaluation
Service Quality	Chi Square	<3	0.01	Perfect Fit
	GFI	≥ 0.90	0.94	Fit
	RMSR	<0.05	0.01	Good Fit
	RMSEA	≤ 0.08	0.00	Close Fit
	AGFI	≥ 0.90	0.91	Good Fit
	TLI/NNFI	≥ 0.90	1.00	Good Fit
	CFI	≥ 0.90	1.00	Good Fit
Perceived Value			0.06	Perfect Fit
			0.98	Fit
			0.01	Good Fit
			0.00	Close Fit
			0.93	Good Fit
			1.00	Good Fit
			1.00	Good Fit
Customer Satisfaction			0.5	Perfect Fit
			0.99	Fit
			0.00	Good Fit
			0.02	Close Fit
			0.97	Good Fit
			1.00	Good Fit
			1.00	Good Fit
Customer Loyalty			0.08	Perfect Fit
			0.97	Fit
			0.01	Good Fit
			0.04	Close Fit
			0.94	Good Fit
			1.00	Good Fit
			1.00	Good Fit

Table 4: Structural Equation Model

Hypothesis	Dependent Variable		Independent Variable	Standardized Total Effects	t-values	Interpretation
H1	Customer Satisfaction	←	Service Quality	0.38	2.62	Positively significant
H2	Customer Satisfaction	←	Perceived Value	0.53	3.70	Positively significant
H3	Customer Loyalty	←	Customer Satisfaction	0.51	3.05	Positively significant
H4	Customer Loyalty	←	Service Quality	0.47	1.50	insignificant
H5	Customer Loyalty	←	Perceived Value	0.27	0.02	insignificant
H6	Customer Loyalty	Customer Satisfaction	Service Quality	0.19	2.22	Positively significant
H7	Customer Loyalty	Customer Satisfaction	Perceived Value	0.27	2.24	Positively significant

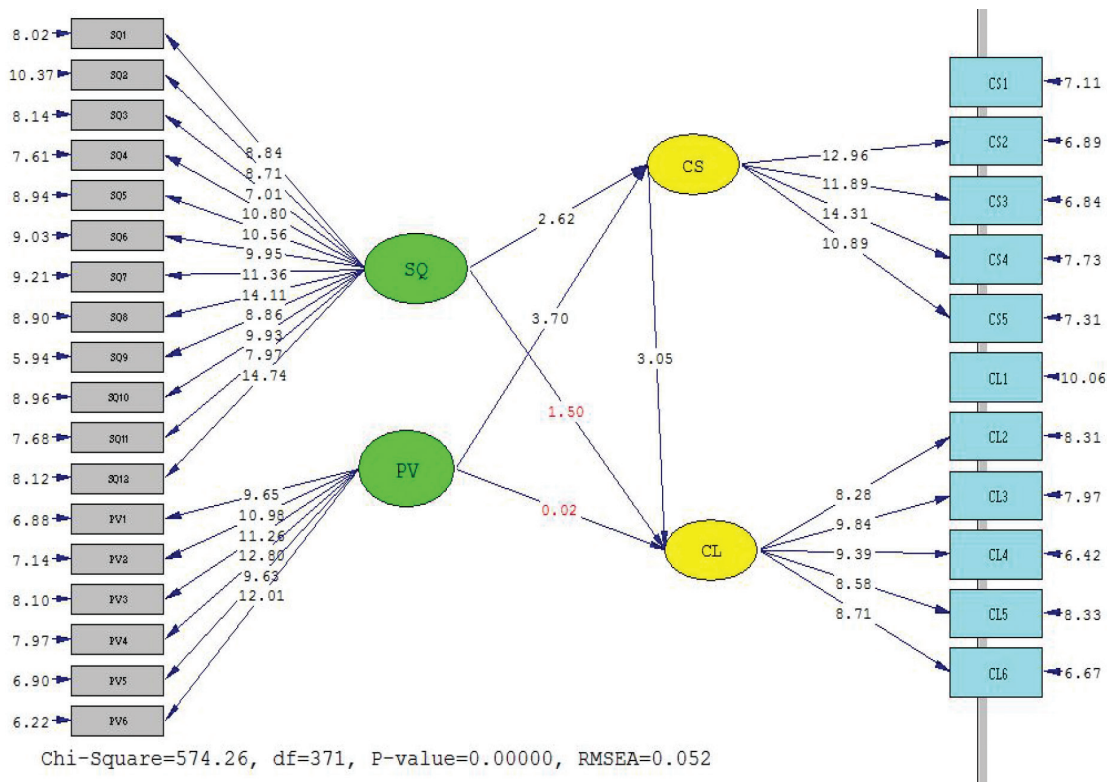


Figure 2: Structural Equation Model Results

The second hypothesis, perceived value affects customer satisfaction. According to Figure 2 and Table 4, the variable perceived value (X2) on customer satisfaction (Y) has a standardized total effects value of 0.53 and a t-value of 3.70 > 1.96. So that the second hypothesis perceived value affects customer satisfaction can be accepted. The relationship between the two variables is significantly positive. These results are in line with research by El-Adly (2019) and Konuk (2019), which states that perceived value has a positive and significant effect on customer satisfaction. By studying the hospitality industry, El-Adly (2019) found that a good reputation on perceived value can support customer satisfaction and encourage their desire to reuse the services.

The third hypothesis, customer satisfaction, affects customer loyalty. According to Figure 2 and Table 4, the variable customer satisfaction (Y) to customer loyalty (Z) has a standardized total effects value of 0.51 and a t-value of 3.05 > 1.96. So the third hypothesis is that customer satisfaction can affect customer loyalty. The relationship between the two variables is significantly positive. These results are supported by research by Pereira, Salgueiro, and Rita (2016), Wahab et al. (2016), which states that customer satisfaction has a positive and significant effect on customer loyalty.

The fourth hypothesis, service quality affects customer loyalty. According to Figure 2 and Table 4, service quality variable (X1) to customer loyalty (Z) has a standardized total effects value of 0.47 and t-value 1.50 > 1.96. So the fourth hypothesis of service quality affects customer loyalty can be accepted. The relationship between the two variables is positive but not significant. The results also support Suhartanto et al. (2019) research, which states that the effect of service quality on customer loyalty directly is not significant. The study explained that the significant influence between the two variables then exists through other variables (intervening), which also affects the service quality. Meanwhile, for this study, researchers guess that the results are positive not significant because, in the e-commerce industry, loyalty is not a natural conduct just because the services were excellent. Each component of loyalty is functional if represented by more than one factor. It is proven by the customer satisfaction factor that leads the service quality to loyalty.

The fifth hypothesis, perceived value affects customer loyalty. According to Figure 2 and Table 4, the variable perceived value (X2) to customer loyalty (Z) has a standardized total effects value of 0.27 and a t-value of 0.02 > 1.96. So the fifth hypothesis perceived value affects

customer loyalty can be accepted. The relationship between the two variables is positive but not significant. These results are also in line with Rasheed and Abadi's (2014) study, which states that the effect of perceived value on customer loyalty directly is positive. However, in this study, the results are different from the Tankovic and Benazic (2018) research, which found that perceived value has a significant effect on customer loyalty. Tankovic and Benazic (2018) study explained that perceived value has a significant influence on the loyalty attitude, but has a minimal effect on behavioral loyalty. While in this study, the researcher found that perceived value has a positive but insignificant effect on the overall customer loyalty dimension, both attitude loyalty and behavioral loyalty.

The sixth hypothesis of this study, service quality affects customer loyalty through customer satisfaction as intervening. Our results show that service quality (X1) to customer loyalty (Z) through customer satisfaction (Y) has a standardized total effect value of 0.19 and $t\text{-value } 2.22 > 1.96$. So the sixth hypothesis service quality affects customer loyalty through customer satisfaction as intervening can be accepted. The relationship between the two variables is significantly positive. These results are in line with the study of Wen and Fang (2014), which states that customer satisfaction can mediate service quality on customer loyalty on e-commerce sites. Another literature of service also found that the empirical result suggests customer satisfaction as an intervening variable which mediates the relationship between service quality and customer loyalty (Taylor & Baker, 1994).

The last hypothesis of this study, perceived value affects customer loyalty through customer satisfaction as intervening. Our result study shows that perceived quality (X2) to customer loyalty (Z) through customer satisfaction (Y) has a standardized total effects value of 0.27 and $t\text{-value } 2.24 > 1.96$. So the seventh hypothesis perceived value affects customer loyalty through customer satisfaction as intervening can be accepted. The relationship between the two variables is significantly positive. These results are in line with the research of Wang and Prompanyo (2020), which states that customer satisfaction can mediate the perceived value of customer loyalty on e-commerce sites. The study explained that perceived functional value, procedural value, and social value have a significant favorable influence on customer loyalty through customer satisfaction.

5. Conclusions

This study examines the effect of quality service and perceived value on customer loyalty and customer satisfaction. This study also examines the mediating role of customer satisfaction between service quality and perceived value relationship on customer loyalty. By using 200 samples of online shopping customers of the largest e-commerce

website in Indonesia and proposing seven hypotheses, this current research proposes some results.

The first hypothesis which says that service quality affects customer satisfaction can be accepted. Service quality has a total direct effect of 0.38 on customer satisfaction. Where the effect formed is a significant positive. The second hypothesis, perceived value affects customer satisfaction can be accepted. Perceived value has a total direct effect of 0.53 on customer satisfaction. Where the effect formed is also significant positive. Then the third hypothesis is that customer satisfaction (Y) affects customer loyalty (Z) can be accepted. Customer satisfaction has a total influence of 0.51 on customer loyalty. Where the effect formed is a significant positive. The fourth hypothesis that service quality affects customer loyalty can be accepted. Service quality has a total direct effect of 0.47 on customer loyalty. Where the effect formed is not significantly positive.

The difference result showed on the fifth hypothesis; perceived value influences customer loyalty can be accepted. Perceived value has a total direct effect of 0.27 on customer loyalty. Where the effect formed is positive but not significant. The sixth hypothesis, service quality affects customer loyalty through customer satisfaction, can be accepted. Service quality has a direct effect on customer loyalty of 0.47 and an indirect effect on 0.19. Where the effect formed is a significant positive. The last hypothesis is that perceived value influences customer loyalty through customer satisfaction. Perceived value has a direct and indirect effect on customer loyalty of 0.27. Where the effect formed is a significant positive.

Based on the results of the study, there are some practical suggestions and theoretical suggestions that can be taken for further research as well as for the implications of company-related policies. Some of these suggestions are such as improving the quality of service in the form of error minimization. Furthermore, Tokopedia must also pay more attention to meeting customer expectations so that satisfaction and loyalty can be increased. Then further research is suggested to be able to use other variables that can affect customer loyalty, such as Relationship Marketing, according to Rizan et al. (2014) and Product Customization, according to Chang and Chen (2008). It is recommended because another factor could explain more details about the relationship between each component and could provide more data for identifying the significant effect.

References

- Caruana, A. (2002). Service Loyalty the Effects of Service Quality and the Mediating Role of Customer Satisfaction. *European Journal of Marketing*, 36(7/8), 811-828.
- Chang, H. H., & Chen, S. W. (2008). The impact of customer interface quality, satisfaction and switching costs on e-loyalty:

- Internet experience as a moderator. *Computers in Human Behavior*, 24(6), 2927–2944. <https://doi.org/10.1016/j.chb.2008.04.014>.
- Chang, H. H., & Chen, S. W. (2009). Consumer perception of interface quality, security, and loyalty in electronic commerce. *Information and Management*, 46(7), 411–417. <https://doi.org/10.1016/j.im.2009.08.002>.
- Chang, H. H., Wang, Y.-H., & Yang, W.-Y. (2009). The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value. *Total Quality Management & Business Excellence*, 20(4), 423–443. doi:10.1080/14783360902781923.
- Chen, C.F., & Tsai, M.H. (2008). Perceived value, satisfaction, and loyalty of TV travel product shopping: Involvement as a moderator. *Tourism Management*, 29(6), 1166–1171.
- Cristobal, E., Flavián, C., & Guinalíu, M. (2007). Perceived e-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality*, 17(3), 317–340. <https://doi.org/10.1108/09604520710744326>.
- El-Adly, M. I. (2019). Modelling the relationship between hotel perceived value, customer satisfaction, and customer loyalty. *Journal of Retailing and Consumer Services*, 50(4), 322–332. <https://doi.org/10.1016/j.jretconser.2018.07.007>.
- El-Adly, M. I., & Eid, R. (2016). An empirical study of the relationship between shopping environment, customer perceived value, satisfaction, and loyalty in the UAE malls context. *Journal of Retailing and Consumer Services*, 31, 217–227. <https://doi.org/10.1016/j.jretconser.2016.04.002>.
- Gallarza, M. G., Arteaga, F., & Gil-Saura, I. (2019). Customer value in tourism and hospitality: Broadening dimensions and stretching the value-satisfaction-loyalty chain. *Tourism Management Perspectives*, 31, 254–268. <https://doi.org/10.1016/j.tmp.2019.05.011>.
- Ghazali, I., & Latan, H. (2012). *Partial Least Square: Concepts, Techniques, and Applications Using the SmartPLS 2.0 Program*. Semarang, Indonesia: Diponegoro University Publishing Agency.
- Gounaris, S., Dimitriadis, S., & Stathakopoulos, V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping. *Journal of Services Marketing*, 24(2), 142–156. <https://doi.org/10.1108/08876041011031118>.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–151.
- Gong, T., & Yi, Y. (2018). The effect of service quality on customer satisfaction, loyalty, and happiness in five Asian countries. *Psychology and Marketing*, 35(6), 427–442. <https://doi.org/10.1002/mar.21096>.
- Konuk, F. A. (2019). The influence of perceived food quality, price fairness, perceived value and satisfaction on customers' revisit and word-of-mouth intentions towards organic food restaurants. *Journal of Retailing and Consumer Services*, 50(March), 103–110. <https://doi.org/10.1016/j.jretconser.2019.05.005>.
- Kotler, P., Armstrong, G., Saunders, J., & Wong, V. (2001). *Principles of Marketing*. Harlow, UK: Prentice Hall Europe.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). New York, NY: Pearson Education Limited.
- Kresnamurti, A., Rivai, P., Rizan, M., & Wibowo, A. (2020). The Effect of Service Quality and Servicescape on Behavioural Intention Intervening with Customer Satisfaction. *International Journal of Innovation, Creativity and Change*, 12(12), 244–261.
- Kuo, Y. F., Wu, C. M., & Deng, W. J. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computers in Human Behavior*, 25(4), 887–896. <https://doi.org/10.1016/j.chb.2009.03.003>.
- Kussusanti, S., Tjiptoherijanto, P., Halim, R. E., & Furinto, A. (2019). Informational justice and post-recovery satisfaction in e-commerce: The role of service failure severity on behavioral intentions. *Journal of Asian Finance, Economics and Business*, 6(1), 129–139. <https://doi.org/10.13106/jafeb.2019.vol6.no1.129>.
- Lovelock, C., & Wirtz, J. (2016). *Services marketing: people, technology, strategy* (8th ed.). New York, NY: Pearson.
- Malhotra, N. K. (2010). *Marketing Research an Applied Orientation*. Upper Saddle River, NJ: Pearson Education Inc.
- Ningsih, E. R., Haryono, T., Sawitri, H. S. R., & Harsono, M. (2019). Measuring Perceived e-Services Quality on Satisfaction of Islamic Saving and Credit Cooperatives. *Addin*, 13(1), 181. <https://doi.org/10.21043/addin.v13i2.5793>.
- Nguyen, D. T., Pham, V. T., Tran, D. M., & Pham, D. B. T. (2020). Impact of Service Quality, Customer Satisfaction and Switching Costs on Customer Loyalty. *Journal of Asian Finance, Economics and Business*, 7(8), 395–405. <https://doi.org/10.13106/jafeb.2020.vol7.no8.395>.
- Parasuraman, A., Zeithaml, V. A., & Malhotra. (2002). Service quality deliver through web site: A critical review of extant knowledge. *Journal of Academy of Marketing Science*, 30(4), 362–375.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41–50.
- Pereira, H. G., Salgueiro, M. F., & Rita, P. (2016). Online purchase determinants of loyalty: The mediating effect of satisfaction in tourism. *Journal of Retailing and Consumer Services*, 30, 279–291. <https://doi.org/10.1016/j.jretconser.2016.01.003>.
- Rasheed, F. A., & Abadi, M. F. (2014). Impact of Service Quality, Trust and Perceived Value on Customer Loyalty in Malaysia Services Industries. *Procedia - Social and Behavioral Sciences*, 164(August), 298–304. <https://doi.org/10.1016/j.sbspro.2014.11.080>.

- Reichheld, F. F., & Scheffer, P. (2000). E-loyalty: Your secret weapon on the web. *Harvard Business Review*, 78(4), 105-113.
- Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), e02690. <https://doi.org/10.1016/j.heliyon.2019.e02690>.
- Rizan, M., Mukhtar, S., Nurani, V., Astuti, R. D., & Wibowo, A. (2019). The influence of service quality and perception of large financing margin on financing application decisions and their impact on customer satisfaction. In: K. S. Soliman (Ed.), *Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020* (pp. 2446-2457).
- Rizan, M., Warokka, A., & Listyawati, D. (2014). Relationship marketing and customer loyalty: Do customer satisfaction and customer trust really serve as intervening variables? In: *Proceedings of the 21st International Business Information Management Association Conference, IBIMA 2013: Vision 2020: Innovation, Development Sustainability, and Economic Growth* (pp. 1285–1295). <https://doi.org/10.5171/2014.724178>.
- Spreng, R. A., & Mackoy, R. D. (1996). An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing*, 72(2), 201-214.
- Suhartanto, D., Helmi Ali, M., Tan, K. H., Sjahroeddin, F., & Kusdiby, L. (2019). Loyalty toward online food delivery service: The role of e-service quality and food quality. *Journal of Foodservice Business Research*, 22(1), 81–97. <https://doi.org/10.1080/15378020.2018.1546076>.
- Sweeney, J. C., Soutar, G. N., & Johnson, L.W. (1999). The role of perceived risk in the quality-value relationship: A study in a retail environment. *Journal of Retailing*, 75, 77–105.
- Tadelis, S. (2016). Reputation and feedback systems in online platform markets. *Annual Review of Economics*, 8, 321-340.
- Tankovic, A. C., & Benazic, D. (2018). The perception of e-servicescape and its influence on perceived e-shopping value and customer loyalty. *Online Information Review*, 42(7), 1124–1145. <https://doi.org/10.1108/OIR-12-2016-0354>.
- Tjiptono, F. (2002). *Service Management*. Yogyakarta, Indonesia: Andi Offset
- Taylor, S. A., & Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70, 163–178.
- Parasuraman, A., & Grewal, D. (2000). The impact of technology on the quality-value loyalty chain: A research agenda. *Journal of the Academy of Marketing Science*, 28(1), 168–174
- Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL: A multiple item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-233.
- Wahab, N. A., Hassan, L. F. A., Shahid, S. A. M., & Maon, S. N. (2016). The Relationship between Marketing Mix and Customer Loyalty in Hijab Industry: The Mediating Effect of Customer Satisfaction. *Procedia Economics and Finance*, 37(16), 366–371. [https://doi.org/10.1016/s2212-5671\(16\)30138-1](https://doi.org/10.1016/s2212-5671(16)30138-1).
- Wang, L., & Prompanyo, M. (2020). Modeling the Relationship between Perceived Value, e-satisfaction, and e-loyalty. *Management Science Letters*, 10(2020), 2609-2616. <https://doi.org/10.5267/j.msi.2020.3.032>
- Wen, C., & Fang, J. (2014). The role of E-quality within the consumer decision making process. *International Journal of Operations and Production Management*, 34(12). <https://doi.org/10.1108/IJOPM-07-2013-0352>.
- Yang, Z., & Peterson, R. T. (2004). Customer perceived value, satisfaction, and loyalty: The role of switching costs. *Journal of Psychology & Marketing*, 21(10), 799-822. <https://doi.org/10.1002/mar.20030>