The effect of e-commerce service quality on customer satisfaction, trust and loyalty

Fajar Pasaribua*, Warsani Purnama Sarib, Tapi Rondang Ni Bulanc and Widia Astutyd

aUniversitas Muhammadiyah Sumatera Utara, Indonesia
bUniversitas Medan Area, Indonesia
cUniversitas Harapan Medan, Indonesia
dUniversitas Muhammadiyah Sumatera Utara, Indonesia

ABSTRACT

This study aims to explain the effect of service quality on satisfaction, service quality on trust, service quality on loyalty, satisfaction on loyalty and trust on loyalty. The population in this study are all consumers who have made transactions at an Indonesian marketplace, Shopee.co.id. The number of respondents used as a sample is 300 respondents. The results showed a significant influence between variables in the four interaction effects, namely service quality on satisfaction, service quality on trust, satisfaction with loyalty, and trust in loyalty. Meanwhile the insignificant effect was service quality on loyalty, the results of the total effect calculation also showed that Trust is a mediating variable between service quality and loyalty. marketing stimuli that can be carried out include maintaining cash on delivery services to increase customer trust, optimizing customer satisfaction through service improvement, providing more organized information so that consumers are easier and more comfortable in transacting, providing a 'tracking order' stage for customers, so that customers can monitor the progress of product orders. For further research, it is hoped that it can develop more variables under study and make comparisons of other e-commerce both in Indonesia and internationally.

Keywords:
Service quality
Customer satisfaction
Customer trust
Customer loyalty

1. Introduction

The development of digital marketing has now entered a new phase which is marked by the application of a marketing system that is oriented towards changing the behavior of potential consumers (Rumondang et al., 2020). The rapid growth of digital marketing cannot be separated from the presence of the internet as the main tool in sending business information with the aim of stabilizing the performance of online marketing activities. The internet provides a real time shopping channel today as an alternative to meet consumer needs with fast responsiveness. Therefore, marketers need to build a deeper understanding of consumer perceptions or buyer behavior when consumers buy online (Sudaryono, 2016). Several factors are indicated to be able to influence changes that occur in consumer behavior, including consumer experience, ease of obtaining products, competitive prices, product quality and several other factors that can influence them (Sudirman et al., 2020).

One of the current trends that has drastically changed consumer behavior is online shopping with E-Commerce (Chandra & Dadang, 2013; Fang et al., 2016). The use of E-Commerce applications has now become one of the trending phenomena for people who like to shop for their daily needs online. According to a data report from the Asian Nikkei Review, the growth of E-Commerce users in Indonesia in 2017 reached 11 million people and in 2018 the number of E-Commerce users in Indonesia increased by 35 million users (Are & Setyorini, 2019). Shopping through E-Commerce is one of the things that is very popular with people today for the reason that shopping becomes easier and more practical wherever and whenever. Armed with mobile
devices and an internet network, every need that you want to buy can be fulfilled properly without having to make direct contact with the seller of the product (Fang et al., 2016).

Currently, one of the most popular marketplaces for online shopping in Indonesia is Shopee. The Shopee platform is an application in the form of a special stall for online buying and selling of a product by using mobile device access that is connected to the internet (Rerung, 2018). The presence of Shopee as an online shopping application has made it easy for users to do online shopping activities. This is proven by the use of the Shopee marketplace which continues to increase from the number of users every year. Based on the results of the E-Commerce mapping released by iprice.co.id, Shopee managed to maintain its first position as the top E-Commerce for ten consecutive quarters according to the ranking on the PlayStore. In addition, the Shopee platform is one of the most visited ECommerce platforms in 2020.

Based on the results of the E-Commerce mapping released by iprice.co.id, Shoppe is ranked first as e-commerce that has advantages from various aspects (https://iprice.co.id/insights/mapofecommerce). The success of the Shopee application as an E-Commerce platform that is most in demand by users today indicates that consumers are currently more interested in Shopee online shopping because of the many features that benefit consumers and other factors that are considered to provide added value for consumers. This indicates that the development and increase in the use of the Shopee marketplace cannot be separated from the consumer experience using Shopee, other consumer references after using Shopee and user satisfaction after using Shopee. Indeed, the success of some well-known E-Commerce can be attributed partly to their ability to maintain customer loyalty (Zhang et al., 2016). For example, the success of Amazon.com, a leading online bookselling site, for example, is associated with a high level of customer loyalty with 66% of purchases made by repeat customers (The Economist, 2000). The purpose of this study is to find out Shopee.co.id's service quality that affects customer satisfaction, to know Shopee.co.id's service quality that affects customer trust, to understand service quality at Shopee.co.id that affects customer loyalty and to understand service quality to customers. Customer satisfaction and trust so that it affects Loyalty.

2. Literature Review

2.1. E-commerce

According to Laudon & Traver (2014), trade through online buying and selling sites or better known as E-Commerce is defined as a business activity that enables digitally to conduct commercial transactions between organizations and individuals. Digitally allows all transactions that occur through digital media. Commercial transactions include the exchange of value (e.g., money) across organizations or individuals in exchange for products or services. The exchange of value is very important to understand the boundaries of E-Commerce where without exchange of value, no trade takes place. Nanehkaran (2013) stated that there are many classifications of electronic commerce and there are many different methods for characterizing these groups. Academics define a number of frameworks for classifying electronic commerce but each wishes to illustrate them, forming a unique perspective. The main differences of the classification of electronic commerce are Business-to-Business (B2B), Business-to-Consumer (B2C), Consumer-to-Consumer (C2C), Consumer-to-Business (C2B) and Mobile Commerce (M-Commerce).

Subatri (2012) showed that electronic commerce/e-commerce is marketing, buying, selling, either goods or services through an electronic system such as television, internet, websites, and other computer networks. E-Commerce usually uses electronic funds transfer, automatic inventory management system, electronic data exchange and automatic data collection system. According to Rerung (2018), E-Commerce can be interpreted as an arena/place for transactions or information exchanges that occur between sellers and buyers in cyberspace. According to Turban et al. (2015), Electronic commerce (EC) is the use of the Internet and intranets to buy, sell, transport, or trade data, goods, or services. This is done through an electronic system in the form of a web.

2.2. Service Quality

Akbar & Parvez (2009) stated that traditionally, service quality has been conceptualized as the difference between customer expectations regarding the service to be received and the perception of the service received. Parasuraman et al. (1988) identified five dimensions of service quality (namely reliability, responsiveness, assurance, empathy, and physical evidence) that link certain service characteristics to consumer expectations, which are tangibles (physical facilities, equipment and appearance of personnel), empathy (caring, individual attention), assurance (knowledge and courtesy of employees and their ability to convey trust and confidence), reliability (the ability to perform the promised service and accuracy), and responsiveness (willingness to help customers and provide prompt service).

Quality of service is a must that must be done by the company in order to be able to survive and still get customer trust (Kotler & Keller, 2011). Tjiptono & Gregorious (2016) define service quality as a measure of how well the level of service provided is able to match expectations (customer expectations). Based on this definition, service quality is determined by the company's ability to meet customer needs and desires in accordance with customer expectations. In other words, the main factors that affect service quality are the service expected by the customer (expected service) and service perception (perceived service).
(Kasmir, 2005). So, the quality of service is how far the difference is between the expectations and reality of customers for the service they receive.

Service quality can be interpreted as an effort to fulfill the needs and desires of consumers and the provision of delivery in balancing consumer expectations (Basu & Handoko, 2000). Service quality can have many positive effects on the consumer decision process (Kotler & Armstrong, 2012). Service quality can increase customer satisfaction and retention (Peter & Olson, 2010). Service quality provides a strategic advantage for companies as competitors will find it difficult to imitate their service quality standards. The assessment of good or bad service quality is closely related to the satisfaction or dissatisfaction of the users of the goods or services. Between service quality and satisfaction are closely related even though both have different meanings and concepts (Assauri, 2013).

2.3. The Effect of Service Quality on Customer Satisfaction

Over the past few years there has been a high emphasis on service quality and customer satisfaction in business. Sureshchandar et al. (2002) identified that there is a strong influence between service quality and customer satisfaction, emphasizing that they are conceptually different constructs from the customer's point of view. Spreng and Mackoy (1996) also show that service quality leads to customer satisfaction when working on the model developed by Oliver (1997). Research conducted by Ribbink et al. (2004) revealed that this relationship also exists in the e-commerce industry.

H1: Service quality in the e-commerce industry has a positive effect on customer satisfaction.

2.4. The Effect of Service Quality on Customer Trust

Customer trust itself is a product of superior customer service (Reichheld & Sasser, 1990). The theoretical reason for this goes back to Nazar & Syahram (2011) explanation that trust is built when the trusted party behaves in a socially acceptable manner in accordance with what is expected of the trusted party, and conversely, trust decreases when the trusted party does not behave accordingly without good reason. Since service quality is something that customers generally expect that vendors provide them with high-quality services that should build customer trust, recent research studies report that it is also with customers from online vendors (Supranto, 2001).

In other words, the trust approach views trust as a direct psychological enabler of online business by reducing tremendous social uncertainty, the second approach emphasizes risk-inhibiting consequences (Blaze et al., 1999). Undoubtedly, there are such risks in the online environment, as there is trading activity, except that these risks are further mentioned online because customers are not involved with human agents and cannot because they rely on cues, such as body language and intonation to judge whether the vendor is trustworthy (Sularto, 2004). Trust, psychologically reduces the threat that others may engage in opportunistic behavior, and reduces the perception of risk. The inherent risk itself inhibits online activity (Jarvenpaa et al., 2000).

H2: E-commerce service quality has a positive effect on customer trust.

2.5. The Effect of Service Quality on Customer Loyalty

In various studies the relationship between service quality and customer loyalty preferences has been investigated by Wahyuni and Praninta (2021). Their study focused on repurchase intention and repurchase elements as well as willingness to recommend. In his study, service quality did not appear to have a significant (positive) effect on repurchase intention, while there was a positive relationship between service qualities and repurchase intention and willingness to recommend (Baker et al., 1994; Shin et al., 2013).

H3: Service quality perceived by customers has a positive influence on customer loyalty.

2.6. The Effect of Trust on Customer Loyalty

A number of researchers have suggested that trust is the basis in developing customer loyalty (Kassim & Abdullah, 2010; Tomlinson et al., 2002). The importance of trust in explaining loyalty is also supported by authors Singh & Sirdeshmukh (2000). However, in a market lack of trust with suitable alternatives may result in negative loyalty (Srinivasan et al., 2002). Prabowo et al. (2013) have shown that there is a strong positive effect of trust on customer loyalty in the case of the telecommunications sector.

H4: Trust has an influence on customer loyalty.

2.7. The Effect of Satisfaction on Customer Loyalty

Previous research such as Wibowo (2021), have found a positive correlation between customer satisfaction and loyalty. A number of studies in the service sector have also empirically validated the relationship between satisfaction and behavioral
intentions such as customer retention and word of mouth. Kai et al. (2011) has added that one of the true conditions of customer loyalty is total satisfaction.

**H5:** Customer satisfaction has a positive influence on customer loyalty.

2.8. Theoretical Framework

To facilitate the understanding of hypotheses in research, a framework of thought is developed. Based on the literature review and previous research that has been described above, a framework is developed to describe the relationship between service quality, satisfaction, trust and loyalty as the variables to be tested (Fig. 1).

3. Research Methods

The population in this study are all people who have made transactions or purchases at Shopee.co.id. In this study the sample used amounted to 300 respondents. Thus, consideration of the quality aspects of the respondents is prioritized and aspects of the minimum eligibility criteria in analyzing data according to statistical methods. The sampling technique was purposive sampling with the following criteria: having made a transaction or purchase at Shopee.co.id at least 2 times; desire to repurchase Shopee.co.id products; respondents have the opportunity to fill out the questionnaire once, and respondents are free to accept or reject the survey.

4. Results and Discussion

The validity test was carried out with the Amos 18 program and all indicators in this study resulted in estimated values with C.R. greater than twice the standard error. So, it can be concluded that the indicators of the research variables used are valid, so they are appropriate to be used as instruments in measuring service quality, satisfaction, trust and loyalty. Meanwhile, the reliability test with the limit value used is 0.70 (Nunnally & Bernstein, 1994). All variables in the study showed construct reliability > 0.70.

Based on the results of the normality test, it was obtained that univariately indicated a normally distributed variable because it had a C.R value < 2.58 and none had a C.R skewness and a C.R. kurtosis > 2.58. The multivariate normality test is 2.798 which indicates that the data in this study are normally distributed in a multivariate manner. Based on the results of the outlier test, it can be seen that the outlier indication is still acceptable (no observation value has a probability value <0.05). So, it can be said that in this study there were no observations that experienced outlier problems.

As shown in Fig. 2, the chi-square value must be fit (probability value > 0.05) met with a probability value of 0.802 > 0.05, and accompanied by other model fit measurements that have been declared fit. Overall or the whole of the six goodness of fit measurements the model is declared fit.

Furthermore, causality analysis was conducted to determine the relationship between variables. In this study, it is hoped that with causality testing can determine the effect that occurs between exogenous variables and endogenous variables. The complete results of each relationship will be described in Table 2.

| Variable | Estimate | S.E. | C.R. | P  |
|----------|----------|------|------|----|
| Trust    | 0.897    | 0.201| 5.015| 0.000|
| Satisfactio | 0.994   | 0.207| 5.496| 0.000|
| Loyalty  | -0.915   | 0.582| -1.689| 0.081|
| Loyalty  | 0.902    | 0.383| 2.203| 0.041|
| Loyalty  | 0.611    | 0.258| 2.017| 0.039|
Based on the results of the causality test summarized in Table 2, it is found that the relationship between service quality and trust has a significant positive effect with the acquisition of a C.R value of 5.015, an estimate value of 0.897 and a probability value of 0.000 < 0.001. The results showed that the relationship between service quality has a significant positive effect on satisfaction with the acquisition of a C.R value of 5.496, an estimated value of 0.994 and a probability value of 0.000 < 0.001. The results of causality testing which are summarized in Table 2, the relationship between service quality and loyalty does not have a significant relationship, because the significance value has a probability value of 0.081 > 0.05 (significance level 5%). Based on the results of causality testing, the relationship between trust and loyalty has a significant relationship, this can be seen in the acquisition of a C.R value of 2.144 and an estimated value of 0.902 and a probability value of 0.041 < 0.05. Based on the results of the causality test contained in Table 2, the relationship between satisfaction and loyalty has a significant positive effect with the acquisition of a C.R value of 2.017, an estimated value of 0.611 and a probability value of 0.039 < 0.05.

Based on Table 3, it shows the path coefficient value either directly or indirectly between variables. In this study, there are 4 direct influence paths. The results of the analysis show that of the four relationship paths that have the highest coefficient value, the relationship between service quality and satisfaction is 0.994. Meanwhile, the indirect effect which has the highest path coefficient value is service quality on loyalty of 1.287.

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From the results of the causality model in Fig. 3, it can be concluded that service quality has a significant effect on satisfaction and trust, as well as the influence of satisfaction on loyalty and the influence of trust on loyalty, in contrast to service quality on loyalty. This shows that service quality does not have a significant effect on loyalty. Meanwhile, seen from the indirect effect of service quality on loyalty, it shows a positive influence. This happens because of the mediating variables (satisfaction and trust) that affect the service quality path to loyalty (Madjid, 2013; Brilliant & Achyar, 2013). From the calculation of the total effect, it is found that the mediation variable trust has a higher value than the satisfaction variable, thus indicating that the indirect effect of the service quality variable on consumer loyalty is mediated by the trust variable.
5. Conclusion

The results of testing the structural model hypothesis in this study show that of the five hypotheses, four are accepted and one is rejected. Service quality has a significant effect on increasing satisfaction. The services provided by Shopee.co.id are proven to increase customer satisfaction, including by always following current trends, so that consumers feel happy and feel satisfied with the services provided by Shopee.co.id. Service quality has a significant effect on increasing trust. Services provided to customers by Shopee.co.id include providing contacts and chat fields available on the site so that it will make it easier for users to communicate, proven to increase customer trust in this site.

Service quality does not have a significant direct effect on increasing loyalty. Based on the results of this study indicate that statistically, the services provided by Shopee.co.id cannot increase customer loyalty directly, but the indirect effect test results between service quality and consumer loyalty show a significant effect between the two and statistical results show that the variable mediation trust dominates the path of influence between service quality and loyalty. Satisfaction has a significant effect on increasing loyalty. The results of the study prove that customer loyalty will increase along with the increase in consumer satisfaction with Shopee.co.id, if the customer is satisfied with the services provided by Shopee.co.id then there is a positive possibility that consumers will prefer this site compared to others. Trust has a significant effect in increasing loyalty. Customer trust in the Shopee.co.id site will increase customer loyalty, if the customer is willing to provide personal information to Shopee.co.id then the positive possibility is that the customer will intend to continue using this site.

Limitations in this study include the limited contact data of respondents other than email. Suggestions that can be given by researchers are to include the level of suitability of the product on the web with the original product and for further research it is hoped that it can complement the limitations of this study, including developing variables and making comparisons between e-commerce.

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