Analysis of the Effect of Service Quality on Customer Loyalty and Satisfaction Using Expectation Confirmation Model and Servqual

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Abstract:

he application of technology that can be used to support the buying and selling transaction system is e-commerce. The purpose of this study is to determine user perceptions of service quality and identify factors that have the greatest influence on user satisfaction and loyalty. The number of samples in this study were 315 respondents who were e-commerce users for at least one year. Sampling was carried out using purposive sampling technique. The data analysis process is carried out based on the PLS-SEM approach with SmartPLS software version 3.3.3. The model used is a combination of the ServQual model with the Expectation Confirmation Model (ECM). Overall, this study found that users' perceptions of service quality are dissatisfied with reliability and tangibels services. Of the 5 hypotheses accepted, the factors that influence satisfaction are assurance and the factors that influence customer loyalty are reliability, tangibels, assurance and satisfaction.

Keywords: E-commerce, Service Quality, User Satisfaction, Customer Loyalty

Introduction

In today's world, the importance of information and communication technology is growing across a range of human endeavors. E-commerce is a technological application that may be used to assist the system of buying and selling things. E-commerce is the practice of purchasing and selling goods electronically between businesses and between customers, using the internet as a middleman. Current active internet users in Indonesia are 171.26 million as of June 2019 (Azizah et al., 2021).

GlobalWebIndex statistics show that Indonesia became the nation with the most e-commerce adoption in the world in 2019. This is clear from the numerous, advantageous e-commerce solutions that are now accessible in Indonesia. During 2018 there were transactions made by 13,485 e-commerce businesses in Indonesia with a

transaction value of 24,821,916 with a total of 17.21 trillion rupiah, which means that during 2018 each e-commerce business made an average of 1,841 transactions with an average transaction value of Rp. 694,000 (E-Commerce Statistics, 2019). The rise in e-commerce transactions is also inextricably linked to government initiatives to promote digital adoption among the populace and to continue accelerating fintech growth (Famiyeh et al., 2018).

Shopee ranks first in e-commerce players in Indonesia based on the frequency of user visitors in the third quarter of 2020, reaching 96.5 million visitors. In second place is Tokopedia with 85 million, in third place is Bukalapak with 31.4 million. Furthermore, Lazada with 22.7 million and so on. The average monthly webpage traffic for the third quarter of 2020 were gathered from a website called Similar Web. The list of online retailers can be found on the iDEA (Indonesian E-commerce Association) website (Izogo & Ogba, 2015).

In the midst of increasingly strong business competition, what needs to be considered is customer loyalty. To get a new user, a company or organization costs five times more than the cost of retaining an old user. In addition, a 25% increase in profits can be done by increasing customer retention by 5%. This shows that a sense of loyalty from customers is very meaningful for an organization or company, especially e- commerce.

Based on a survey conducted by Alvara Strategic Research in 2019, Bukalapak received the highest loyalty value in the e-commerce sector with a loyalty value of 69.42 beating Tokopedia which has the highest number of visitors (iPrice, 2019) with a loyalty value of 68.27 which puts it in fourth place. In second place is occupied by Lazada with a loyalty value of 69.26, then in third place is occupied by OLX with a loyalty value of 69.06. Meanwhile, that e-commerce gets a loyalty value of 67.55 which puts it in fifth place. This value illustrates that the number of visitors to an e-commerce site in Indonesia does not affect the user's sense of loyalty to an e-commerce.

In retaining customers, service quality is crucial. To gain a competitive advantage, companies must have superior service. Service quality is a key strategy to increase the level of customer satisfaction and loyalty. If E-Commerce is able to provide service quality that matches customer expectations or expectations, e-commerce will have a positive perception in the eyes of customers. A situation of dissatisfaction occurs when a customer has used the purchased product or service and feels that the product performance does not match expectations or expectations. Dissatisfaction can lead to a negative attitude towards the company or organization which causes reduced repeat purchases, brand switching, and various kinds of complaint behavior (Kotler & Amstrong, 2010).

The results of crawling data from Twitter show that complaints submitted by customers to the Official Twitter account include those related to systems that experience errors / interruptions, product delivery, responses provided by the e-commerce, product orders, refunds, payments and others. The complaint data obtained is based on interactions that occur both from customers to social media e-commerce and vice versa. Furthermore, based on observations made by researchers, there are 7,228,822 reviews given for the e-commerce application on the Play Store.

The impact of e-service quality on e-satisfaction and e-loyalty has been the subject of some related studies. The findings demonstrated that online shoppers' e-satisfaction was positively and significantly impacted by all e-servive quality aspects (Lee et al., 2011; Lovelock & Wirtz, 2007). Online shoppers' e-satisfaction is most strongly impacted by responsiveness and service quality. Customers' online contentment has a positive and significant impact on their online loyalty and the viability of online shop websites. Furthermore previous researcher concluded that which has a significant effect on user satisfaction, namely the variable perceived usefulness to continued intention (Mahmood et al., 2018). Furthermore, in another previous research, service quality dimensions such as empathy, assurance, responsiveness, and tangibles are very important to customers.

Literature Review

Quality is a measure to assess whether a good or service has a meaningful or less meaningful use value or a good or service is in accordance with the wishes or not. With quality human resources and quality processes, it will produce quality products or services. Quality is one of the crucial indicators to win market competition. So that when an organization has been able to produce quality products or services, the organization can already realize satisfaction for customers (Maidah et al., 2019). Quality can be defined as a dynamic condition related to products, services, human resources, processes, and the environment that meet or exceed expectations. Based on this definition, quality is the relationship between products and services provided to consumers that are expected to meet consumer satisfaction. Service quality is a suitability that measures the difference between reality and the expectations of customers for the services they receive. There are two factors in measuring service quality, namely service performance and service expected by customers. Service quality is measured through response, trust and

empathy. So service quality is the company's ability to adjust the difference between reality and customer expectations (Martini et al., 2018).

Being satisfied is a state of mind that is determined by the experiences had. A product's traits or attributes that give a level of consumer enjoyment relating to satisfying consumer consumption demands are assessed as being satisfied (Pandiangan et al., 2022). Quality, service, and value are factors that can contribute to customer satisfaction. Providing excellent customer value is the secret to winning over repeat business. Customer value is the customer's evaluation of all advantages and all expenses necessary to accept a certain offer (Qutaishat, 2012). Total customer cost refers to a collection of expenses incurred when evaluating, obtaining, and utilizing a good or service. As a product seller, you must be aware of the variables that affect customer satisfaction because it is strongly influenced by consumer perceptions and expectations (Sabir et al., 2014). In Latin, the word satisfaction means "good enough, adequate," while the verb facio means "to do or make."

Consumer loyalty refers to a consumer's dedication to a product, retailer, or supplier based on particularly favorable characteristics in repeated purchases. This indicates that a mix of customer contentment and complaints lead to brand loyalty. Loyalty is the steadfast commitment of a consumer to repeatedly re-subscribe to or buy a certain product or service, despite the possibility of behavioral changes brought on by the situation and marketing efforts. Customer loyalty is a commitment made by a customer to a company, retailer, or supplier that is based on a positive outlook and is demonstrated by regular repeat purchases (Sarker & Uddin, 2017).

According to prior research, brand awareness positively affects the link between service quality and customer satisfaction, and customer satisfaction positively affects customer loyalty. Service quality also positively affects customer satisfaction (Setyawati et al., 2021). According to a study done by a previous researcher, all aspects have a positive and substantial impact on e-customer satisfaction, and e-customer loyalty also has a positive and significant impact on e-customer satisfaction (Shankar & Jebarajakirthy, 2019). Based on previous researcher, in their research results show the need for a mechanic to provide individual care in caring for car owners, therefore, it is important for mechanics to pay special attention to customers and treat them with care. Customers like to have their automobiles serviced in a highly responsive setting by professionals who exhibit knowledge and civility. Customers place a high value on the workshop's look, its furnishings, and its instructions (Suyoto & Tannady, 2022).

According to earlier studies, reliability, privacy, and security are factors in the EBSQ dimensions that promote client loyalty to online banking (Tannady et al., 2022). With the exception of website design, the initial trust in e-banking mediates the effects of EBSQ aspects on client loyalty. Between customers who are highly involved and those who are not, beginning trust has a different mediating effect (Tannady & Purnamaningsih, 2023). Previous researcher explain that the hypothesis is that there is a positive influence on the relationship between the independent and dependent variables with a strong influence. Meanwhile, the significance test shows that three of the four independent variables, namely coin rewards (X1), delivery services (X2), monthly events (X4), have a significant effect on the dependent variable, namely user loyalty (Y). Meanwhile, the application pay variable (X3) has an insignificant effect on user loyalty (Y).

Methodology

This research uses a quantitative approach with a combined analysis method. The number of samples in this study were 315 respondents who were e-commerce users for at least one year. Sampling was carried out using purposive random sampling technique. The data analysis process was carried out based on the PLS-SEM approach with SmartPLS. The model used is a combination of the ServQual model with the Expectation Confirmation Model (ECM). This research uses a questionnaire for each variable studied to collect data, and uses interviews and literature studies to strengthen the arguments in the research (Widarjono, 2015). Before conducting research, the questionnaire was tested first and it was found that all items were valid with reliability meeting the threshold value of 0.700.

Results

At the testing stage, the structural model analysis (inner model) aims to analyze factors along with testing the research hypothesis that has been determined. The path coefficient coefficient of determination (R^2) and t-test, which are performed using the bootstrapping method, as well as the effect size (f^2), are the first two stages of

testing for the structural model analysis (inner model), followed by the tests for predictive relevance (Q2) and relative impact (q2), which are performed using the testing method while blindfolded (Hair et al., 2017).

Based on the calculation of the path coefficient value of 7 hypotheses, there are three hypotheses that have a value below 0.1, namely RB → SF (-0.076), TB → SF (0.094) and TB →CL (-0.235), which means that this hypothesis has an insignificant effect. The coefficient of determination test shows that CL and SF have medium values. This means, AR, RB and TB explain a medium (0.679) variance of CL. Furthermore, AR, RB and TB also explain the medium (0.656) variance of SF.

Based on the results of the t test that has been carried out, it can be seen that there are two paths in the rejected hypothesis relationship, namely Reliability -> Satisfaction with a t-test value (0.983) and Tangibels -> Satisfaction with a t-test value (1.155) because they have a t-test value below 1.96, so both hypotheses are rejected. While in the f test, the AR → SF path relationship (1.791) has a large effect size value so that it can be said that this hypothesis has a large influence on the model structure. Then SF → CL has a medium effect value. While the 5 paths RB → SF, TB → SF, RB → CL, TB → CL, AR → CL have a small influence.

Based on the results of the Predictive Relevance (Q2) test, it shows that the Q2 value of the two dependent variables in this study has a value above zero, which means that it has a predictive relationship. Based on the Relative Impact (q2) test, it shows that there is a path relationship AR → SF (0.965) has a large relative impact value. Then SF → CL has a medium influence value. While the 5 paths RB → SF, TB → SF, RB → CL, TB → CL, AR → CL have a small influence.

Discussion

Based on the results of the t-test on the structural analysis of the model, it shows that H1, namely the RB → SF relationship, is rejected. besides that, it is also evidenced by the results of the path coefficient (β) value of -0.076, which means that the RB → SF hypothesis has an insignificant relationship and based on the value of f2 and q2 also has a small influence value. It can be said that the admin's sincere interest in solving customer problems, providing services at the specified time, telling when the service will be carried out and providing good service from start to finish which is an indicator of reliability does not have a significant effect on satisfaction. The existence of reliability owned by e-commerce does not affect customers to get a sense of satisfaction that matches their expectations. This is in line with previous research.

Based on the t-test results in the structural analysis of the model, it shows that H2, namely the TB → SF relationship, is rejected. However, based on the results of the path coefficient (β) value of 0.094, which means that the RB → SF hypothesis has a significant relationship and based on the f2 and q2 values, it also has a small effect value. It can be said that the modern and latest equipment used by the couriers, the attractiveness of online stores in the e-commerce, and convenient operating hours for delivering ordered packages which are indicators of tangibels do not have a significant effect on satisfaction. The existence of tangibels owned by the e-commerce does not affect customers to get a sense of satisfaction that matches their expectations. This is in line with the finding that customers can stick with an organization even predicting they are dissatisfied because they feel they have no choice. In addition, it is also in line with previous research.

Based on the t-test results on the structural analysis of the model, it shows that H3, namely the AR → SF relationship, is accepted. It can be said that assurance has an influence on satisfaction. In addition, it is also evidenced by the results of the path coefficient (β) value of 0.806, which means that the AR → SF relationship has a significant positive effect and based on the value of f2 and q2 also has a large influence value. Thus it can be said that the company's reputation is guaranteed, customers trust employees, customers feel safe when receiving services and the competence (ability) of employees in the field of services provided which is an indicator of assurance is able to influence and have a significant relationship to the satisfaction variable. This means that assurance that is good and in accordance with customer expectations can give the impression of satisfaction and a pleasant experience for customers. This is in line with previous research.

Based on the t-test results in the structural analysis of the model, it shows that H4, namely the SF → CL relationship, is accepted. It can be said that satisfaction has an influence on customer loyalty. In addition, it is also evidenced by the results of the path coefficient (β) value of 0.520, which means that the SF → CL relationship has a significant positive effect and based on the f2 and q2 values it also has a moderate (medium) effect value. Thus it can be said that suitability, performance, completeness of features and feelings of satisfaction with services which are indicators of satisfaction are able to influence and have a significant relationship to customer loyalty variables.

This means that the satisfaction felt by customers can give a pleasant impression to customers so that a sense of loyalty to the organization will arise such as giving positive word of mouth, recommending to others, continuing to use and making it the first choice in the future. This is also in line with research.

Based on the t-test results on the structural analysis of the model, it shows that H5, namely the RB → CL relationship, is accepted. It can be said that reliability has an influence on customer loyalty. In addition, it is also evidenced by the results of the path coefficient (β) value of 0.333, which means that the RB → CL relationship has a significant positive effect and based on the f2 and q2 values, it also has a small effect value. It can be said that the admin's sincere interest in solving customer problems, providing services at the specified time, telling when the service will be performed and providing good service from start to finish which is an indicator of reliability has a significant effect on customer loyalty. This means that good reliability and according to customer expectations will create a sense of loyalty from customers so that customers will provide positive word of mouth, recommend to others, continue to use and make it the first choice in the future. This is in accordance with previous research.

Based on the t-test results in the structural analysis of the model, it shows that H6, namely the TB → CL relationship, is accepted. It can be said that tangibels have an influence on customer loyalty. However, based on the results of the path coefficient (β) value of -0.235, which means that the TB → CL relationship has an insignificant effect and based on the f2 and q2 values also has a small effect value. It can be said that the modern and latest equipment used by the couriers, the attractiveness of online stores in the e-commerce, and convenient operating hours to deliver ordered packages which are indicators of tangibels have an effect on customer loyalty. This means that the existence of tangibles that are good and in accordance with customer expectations will generate a sense of loyalty from customers so that customers will provide positive word of mouth, recommend to others, continue to use and make it the first choice in the future. This is in accordance with previous research.

Based on the t-test results on the structural analysis of the model, it shows that H7, namely the AR → CL relationship, is accepted. It can be said that assurance has an influence on customer loyalty. However, based on the results of the path coefficient (β) value of 0.306, which means that the AR → CL relationship has a significant positive effect and based on the value of f2 and q2 also has a small effect value. It can be said that the company's reputation is guaranteed, customers trust employees, customers feel safe when receiving services and the competence (ability) of employees in the field of services provided which is an indicator of assurance is able to influence and have a significant relationship with the customer loyalty variable. This means that with good assurance and in accordance with customer expectations, it can create a sense of loyalty from customers so that customers will provide positive word of mouth, recommend to others, continue to use and make it the first choice in the future. This is in accordance with previous research.

Conclusion

Based on the results of research on analyzing the effect of service quality on user satisfaction and loyalty using the servqual method and the Expectation Confirmation Model (ECM), it can be concluded as follows: (a) Based on two rejected hypotheses, users' perceptions of service quality are dissatisfied with reliability and tangibels services. This is related to complaints experienced by the users who tend to feel that the quality of service provided is still not good according to the results of crawling data from Twitter which shows complaints submitted, among others, related to product delivery, the response provided by the e-commerce, product ordering, refunds, payments and others. So that the results of this study do not affect users and their satisfaction as the users. If this is considered properly, then it can increase user satisfaction.(b) Based on the results of data processing in this study, the factors that influence satisfaction are assurance and the factors that influence customer loyalty are reliability, tangibels, assurance and satisfaction (mediating variables).

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