

## THE INFLUENCE OF E-SERVICE QUALITY ON E-CUSTOMER LOYALTY THROUGH E-SATIFCATION AS A MEDIATION IN INDONESIAN E-COMMERCE

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### *Abstract*

*This research aims to determine the effect of e-service quality on e-customer loyalty mediated by e-satisfaction among e-commerce users in Indonesia. The sample of this research was 100 respondents. Data was collected using a questionnaire that has been tested for validity and reliability. The data analysis technique used is descriptive analysis using SEM Amos 22. The results of the research show that there is a significant direct influence between e-service quality on e-satisfaction and e-customer loyalty among e-commerce users. There is a partial influence of the mediating impact of e-satisfaction between e-service quality on e-satisfaction and e-customer loyalty on e-commerce users. This shows that customer satisfaction can be built through good service so that customers do not switch to competitors.*

**Keywords:** E-Service Quality, e-Satisfaction, e-Loyalty, e-commerce.

### INTRODUCTION

The rapid development of online business is thanks to web-based services that offer many benefits and conveniences for buyers and is supported by appropriate advances in web innovation. The advantages of web-based business services include ease of use, improved customer management, and reduced transaction costs. The existence of electronic activities has led to the emergence of a web-based online lifestyle in society. For example, shopping activities that previously could only be done in physical stores are now done online. The online shopping system is not based on the user's age and can be used by all age groups. Consumers no longer need to visit a shop when they want a product or service, and can order products or services from their smartphone, making it easier for consumers to choose the product or service they want from anywhere. (Lova and Budaya, 2023). Likewise with business, many businesses are implementing digital systems, especially online retail services, as a business strategy to maintain customer loyalty. Maintaining customer loyalty in the context of digitalization cannot

be separated from the website. A website is a collection of pages containing information in the form of digital data in the form of text, images, videos, audio files and other animations, which are delivered via an Internet connection. In the context of e-commerce, Internet e-commerce allows consumers to quickly and easily find solutions, search for information, and complete transactions. (Mohseni et al., 2018). Social media is also not immune from these changes, social media according to Kaplan and Haenlein (2022) is a group of internet-based applications that use Web 2.0 technology which allows the creation and exchange of user-generated content. Social media that connects people in cyberspace, both for personal and work purposes.

Even though the online market has developed rapidly in recent years, consumer trust in e-commerce platforms is still a big challenge in developing countries like Indonesia. This is mainly because the need for more trust and increasing security and privacy concerns in the online shopping environment prevent customers from completing transactions completely online. Along with the development of e-commerce, trading activities between business entities and consumers are also increasing. As we know, developments in information technology open up new business opportunities thanks to e-commerce. Many digital wallets have developed, including Gopay, Ovo, Dana, Doku, Just Link, Shope Pay, etc. which are developing E-commerce as an alternative to electronic payments. E-commerce is increasingly popular because it is seen as a new option for online payments while browsing social networks. When it comes to payments, e-commerce allows customers to pay easily on their smartphones. Therefore, it is not surprising that e-commerce is the choice of Indonesian people to make payments via social networking platforms or e-commerce.

Based on similar web data on KataData (KataData accessed in 2024), Shopee is the e-commerce marketplace category that received the most website visits in Indonesia throughout 2023, from January to November. In December 2023, the Shopee website had a total of around 2.3 billion visits, far exceeding its competitors. In the same period, the Tokopedia site received around 1.2 billion visits and the Lazada site 762.4 million visits.

In that period, the BliBli site received 337.4 million visits and the Bukalapak site 168.2 million visits. Apart from being superior in terms of quantity, the Shopee site also recorded the highest growth rate in visits. From January to December 2023, Shopify site visits increased by 41.39% (year-to-date/current year). In contrast, visits to Tokopedia decreased 21.08% (ytd), Lazada decreased 46.72% (ytd), and Bukalapak decreased 56.5% (ytd). Shopee's competitor with an increase in positive visits was only Bligli which rose 25.18% (in the same period).

To reduce competition in the online market and build customer loyalty, several marketing experts have conducted research on online shopping loyalty which proves that loyalty is greatly influenced by e-commerce shopping satisfaction based on the company's own services. Studying the relationship between e-service quality, e-trust, e-satisfaction, and e-loyalty in this context helps explain local business challenges and practices that influence customer perceptions. Previous research findings by Kaya et al (2019) e-service quality plays a very important role in customer satisfaction and loyalty, this can be seen from research findings Kaya et al (2019) that e-service quality has a direct and indirect influence on satisfaction in

increasing loyalty. This research was also developed by Lova and Budaya (2023) and also found that there were direct and indirect influences from the role of e-satisfaction in mediating e-service relationships. quality on e-customer loyalty. To match customer expectations with actual e-service delivery, it is important to understand customer perceptions of e-service quality. Although e-commerce is increasingly important in Indonesia, further research specific to this context is needed. This study fills this gap by comprehensively investigating the factors influencing e-satisfaction and loyalty of online shoppers in Indonesia, thereby responding to the urgent need for local knowledge

### **E-Service Quality**

E-service quality as "the extent to which a website facilitates efficient and effective shopping, purchasing and delivery-recovery service quality is the company's response to alleviating customer dissatisfaction due to failure to serve customers with the aim of maintaining customer relationships (Lova and Haryono, 2023). A previous study by Zeithaml et al (2018) reveals four dimensions that customers use to assess e-service quality such as Efficiency, Fulfillment System availability and Privacy.

In the customer's view, the presence of electronic services has a significant impact on customers' lives when they carry out various activities on the website, such as searching for information, searching for and selecting the products they need, making purchases, and sharing e-service quality feedback because of its potential for satisfaction. Satisfaction is closely related to customer attitudes and intentions, is part of customer behavior, and directly influences their positive behavioral intentions. Previous literature has confirmed the view that e-service quality has a positive impact on satisfaction (Gounaris et al, 2010; Udo et al, 2010; Blut et al., 2015; Thaichon and Quach, 2015; Rita et al, 2019; Lova, 2021; Lova and Budaya 2023, Lova and Haryono, 2023)

Improving e-service quality increases customer satisfaction, retention, and ultimately increases customer loyalty to the brand (Olaleye et al., 2021). Quality customer service gives your customers the opportunity to become loyal. Satisfied customers will happily recommend your company to others and will likely want to return to the company. Businesses can invest in quality e-commerce services, high-quality e-commerce can attract customers back to e-commerce., This is supported by the results of research conducted by Kaya et al (2019) and Lova and Haryono (2023) which states that e-service quality is significant to loyalty.

By considering the magnitude of the impact of E-service quality on E-satisfaction and e-loyalty from online purchases, we propose:

H1: E-service quality has a positive effect on e-satisfaction and e-loyalty.

## **E-Satisfaction**

E-satisfaction is defined as a person's feelings of pleasure or disappointment about previous online experiences (including browsing experiences and purchasing experiences) with e-commerce websites resulting from comparing the perceived performance (or results) of a product or service with expectations (Lova and Budaya, 2023)

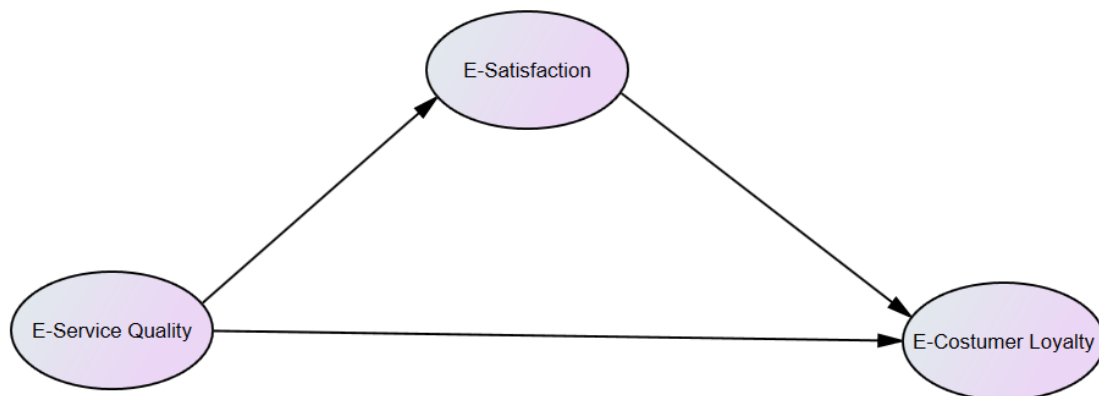
In the context of e-commerce, there is significant empirical support for a positive relationship between satisfaction and constructs related to e-loyalty, such as site stickiness, repurchase intention, and continuity intention. In the e-commerce environment, satisfaction refers to “a customer's satisfaction with previous purchasing experiences with a particular e-commerce company. Due to the increasing importance of e-service delivery, customer satisfaction must be assessed through continuous monitoring and adjustment of quality services (Jameel et al., 2021) . Lacking strong customer satisfaction, consumers will not be loyal to the service provider. Digital marketing experts believe that e-satisfaction is one of the factors that influences customer loyalty using electronic services (Lova, 2021; Lova and Budaya, 2023; Pereira et al, 2016; Tandon et al, 2017; Kaya et al., 2019; and Giao et al.).

H2: E-satisfaction has a positive effect on e-loyalty.

## **E-Loyalty**

E-loyalty is a customer's positive attitude towards making another purchase, returning to an online retail site or company website, or recommending a product or service to a friend or colleague. e-loyalty can be influenced by customer satisfaction factors. Customer satisfaction is a measure of the gap between expectations and reality received or felt by customers. Through experience and habits, consumers become satisfied with the quality of the product and brand while providing convenience. Part of loyalty such as buying products regularly can be based on experience accumulated over time. E-loyalty is the result of a process that begins with access to high-quality e-services, combined with trust to increase customer satisfaction, and ultimately leads to e-loyalty. Increasing customer loyalty not only results in increased sales and profits for your company, but also turning customers into brand advocates. In the context of online commerce, previous research (Khan et al., 2019; Khan et al, 2020; Gull et al, 2020; Lova, 2021; Lova and Budaya, 2023) shows that e-service quality is an important driver of satisfaction and e-commerce. e-loyalty. There are seven direct effect research hypotheses presented in the diagram from Figure 1.

**Figure 1. Conceptual Framework Model**



**Figure 1. Conceptual Framework**

Online shopping factors such as e-service quality are important in the relationship between online shopping and online consumer loyalty, and e-satisfaction plays a mediating role between these factors. Consumer satisfaction with e-commerce services contributes to user loyalty. In the context of online payments, satisfaction is an important secondary factor in quality online purchases (Pereira et al., 2016). Previous research argues that good relationships are built only when buyers are satisfied and trust their relationship with the online service provider Lova and Budaya (2023), Overall consumer satisfaction with the online payment experience has a positive impact on consumer loyalty towards e-commerce services in online shopping transactions, in the current study, we suggest:

H3: E-satisfaction plays a role in mediation e-service quality towards e-loyalty.

## **METHODS**

In the context of rapidly developing e-commerce currently dominating the global market, such as the emergence of market places, social commerce, etc. E-commerce has the ability to support transactions in payment relationships, allowing internet users to use online shopping services with various types of payment services offered by their providers. Therefore, the author made this e-commerce consisting of Gopay, Ovo, Dana, Link Aja, and Shopee Pay as a reference and reference object and research population. The sample for this research consists of online buyers (Gopay, Ovo, Dana, Link Aja, and Shopee pay users use these services to purchase goods and services repeatedly at least twice).

The sampling used in this research is a purposive sampling technique, namely the researcher determines the sample with certain considerations (selection of sampling units) by selecting a certain number of people who are considered to provide the required data. In determining the sample size, the researcher uses multivariate theory, namely the number of question items x 20 (Hair et al., 2019). For this reason, the sample in this research is 14 question items x 20, so that the sample in this research is 280 respondents who were distributed via questionnaires to E-commerce consumers voluntarily within one month to support this research

data. This research was analyzed using structural equation modeling (SEM) using Amos 22. Measurements from previous studies were adopted. Table 1 describes the sources of the measures adopted.

The standard procedure for developing measures to be applied whenever necessary involves the use of multi-item indices of reliability and unidirectionality. E-service quality is measured with 4 items developed by (Al-dweeri et al., 2019; Lova and Haryono, 2023). and e-customer loyalty is assessed using 4 items developed by (Madariaga et al, 2019; Lova and Culture, 2023), E-satisfaction was assessed using 3 items developed by (Lova and Culture, 2023) which can be seen in Table 1.

The psychometric properties of the measures were assessed using confirmatory factor analysis (CFA). The scoring model is classified by Amos 22 with the highest probability. As a step to perfect the scale, a CFA standard loading estimate is carried out, if the factor loading value exceeds 0.50 then the measurement accuracy can be verified (Ghozali, 2016).

**Table 1: Validity and reliability statistics of convergent dimensionality**

Constructs and items	Standard. factor loading	CR (Skew)	AVE	CR	Sources (The previous research)
<b>E-Service Quality</b>			0.85	0.90	Al-dweeri et al (2019); Lova and Haryono, 2023)
This e-commerce enables me to complete a transaction quickly	0.80	0.01			
This e-commerce does not share my personal information with other sites	0.90	0.07			
This e-commerce quickly delivers what I order	0.90	-0.03			
This website is ready and willing to respond to customer needs	0.85	0.09			
This E-commerce enables me to complete a transaction quickly	0.90	1.09			
<b>E-Satisfaction</b>			0.80	0.85	Lova and Budaya (2023)
Statified with the offerings at this e-commerce	0.95	-1.23			

Satisfied with the purchases at this e-commerce	0.90	-1.09		
Satisfied with the products at this e-commerce	0.95	0.012		
<b>E-Customer Loyalty</b>			0.97	Madariaga et al (2019; Lova and Budaya (2023)
Encourage friends to visit e-commerce	0.90	1.00	0.90	
Say positive things about e-commerce	0.95	-1.12		
Visit this e-commerce in the next few times	0.90	1.10		
Recommend this e-commerce to someone else	0.90	1.22		

**Notes: X<sup>2</sup> /df: 389.92, P: 0.073, RMSEA: 0.004, GFI: 0.993, AGFI: 0.990, TLI: 0.991, CFI:0.990**  
 Source: Amos 22.

## RESULTS AND DISCUSSION

Table 1 describes each indicator or aspect that forms each latent variable which shows good results, especially with an average total respondent performance (TCR) above 70% and a high standardized loading factor where each indicator is greater than 0.50 (Lova , 2021). After completing the measurements, the path relationships in the research model were analyzed using structural equation models. AMOS 22 is used for data analysis because the proposed research model includes a system of equations simultaneously with several indices. GoF index shows a good fit with the data Chi-Square: 389.92, P: 0.073, RMSEA: 0.004, GFI: 0.993, AGFI: 0.990, TLI: 0.991, CFI: 0.990 With these results it can be said that the latent variable construct indicator latent variable construct has shown good results, so that all website quality manifest variables are declared valid. Apart from that, the normality test results in Table 1 show that most of the critical ratio (CR) values for skewness are in the range of  $\pm 2.58$ , with these results. In this case it can be confirmed that the data used in this research is normally distributed.

**Table 2: Hypothesis Test**

Variable	Estimate	S.E	CR	P
E-Service Quality ---> E Satisfaction	,532	,104	3,933	***
E Satisfaction ---> E Customer Loyalty	-,163	,066	-4,888	***
E-Service Quality ---> E Customer Loyalty	,538	,113	4,913	***

Source: Amos 25

From table 2 it can be concluded that e-service quality has a direct significant effect on e-satisfaction, the results of testing the relationship between each variable directly show a CR value of 3.933 greater than 1.96 ( $3.933 > 1.96$ ) with a probability smaller than 0.05 ( $0.00 < 0.05$ ), so the better the service provided by e-commerce, the more likely users are to feel satisfied. The results of this study are in line with the research results Ashiq and Hussain (2023) Lova (2021), Lova and Budaya (2023), Rita et al (2019), Blut et al (2015), Kaya et al (2019) and Kitapci et al (2014), show that e-service quality can influence e-satisfaction. Thus, research H1 is supported

Apart from that, from table 2 it can also be concluded that e-service quality has a significant direct effect on e-customer loyalty. The results of testing the relationship between each variable directly show a CR value of 4,913 which is greater than 1.96 ( $4,913 > 1.96$ ) with a probability smaller than 0.05 ( $0.00 < 0.05$ ), so that the higher the e-commerce service, the more loyal the customers tend to be. The results of this study are in line with the results of research (Ashiq and Hussain, 2023; Lova., 2021; Lova and Haryono, 2023; Oliveira et al., 2017; Kaya et al., 2019) which shows that e-service quality can influence e-loyalty. Thus, research H1 is supported

From table 2 it can also be concluded that e-satisfaction has a direct significant effect on e-customer loyalty. The results of testing the relationship between each of these variables directly show a CR value of -4,888 which is greater than -1.96 ( $-4,888 > -1.96$ ) with a probability smaller than 0.05 ( $0.014 < 0.05$ ), so that customers who are increasingly dissatisfied with what is provided by e-commerce will make customers less loyal. The results of this study are in line with the results of research (Ashiq and Hussain, 2023; Lova and Culture, 2023; Pereira et al., 2016; Tandon et al, 2017; Kaya et al., 2019 and Giao et al, 2020) which shows that e-satisfaction can influence customer satisfaction. loyalty Thus, research H3 is supported



**Table 3: E-satisfaction as a mediator of E-loyalty**

<b>Standardized</b>	<b>Direct Effects</b>	<b>Indirect Effect E-satisfaction as mediation</b>	<b>Results</b>
E service quality --> E-loyalty	0.100	-0.012	Partial mediation

Source: Amos 25

From table 3, the standardized direct effect estimation parameters show that there is a direct influence of e-service quality on e-loyalty of 0.1. greater than the indirect influence of e-service quality standards on e-loyalty indirectly through e-satisfaction of -0.012. So it can be concluded that e-service quality has a partial influence (partial mediation) on e-loyalty through e-satisfaction. This is also proven by the influence of e-service quality on e-satisfaction and e-loyalty in hypotheses H1 and H2.

## CONCLUSION

The aim of this research is to provide a comprehensive literature review to answer the questions posed in this research. Research on e-commerce and payment methods in Indonesia is collected and analyzed. Based on the research results, the following conclusions can be drawn: It is known that loyalty and e-customer satisfaction are determined by e-service quality. The results of this research have many implications for research and practice. Based on this research, researchers can obtain selected types of variables to analyze loyalty in the adoption and use of digital methods as well as consumer behavior towards payments. The proposed research propositions and models are presented and can be tested with further research using primary data. Additionally, this study highlights important limitations of this research and identifies fruitful future research directions. Based on the proposed model, e-commerce companies can focus on the loyalty predictive factors they want to implement, such as efficiency, fulfillment, system availability, privacy, and security, to meet customers' needs and desires. This will help increase the use of e-commerce. The results of this research will help policy makers and e-commerce service providers to better understand their e-commerce services and satisfy their customers. Furthermore, the results of this research can be used to suggest appropriate strategies to promote e-commerce adoption in other countries.

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