


# The Role of Electronic Service Quality on E-Commerce Services Towards Customer Loyalty

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**Abstract**— This study examines the quality of electronic services e-servqual and its impact on electronic service quality, customer loyalty through reuse intention, and word of mouth. The internet has become a bridge or connection that forms an extensive network in the exchange of information, enabling fast data transfer. With the internet, there are no longer boundaries between devices connected to the internet gateway in the global market. The presence of the internet in this global market allows individuals to communicate with others without limitations of time, distance, or boundaries. This has resulted in innovations in the ever-changing and increasingly modern world of transactions. The internet's presence in the global market has fostered communication without knowing boundaries, time, or distance. The impact of globalization enables businesses to expand both domestically and globally. Traveloka is a digital business application that caters to various needs in a location. The method used in this study is quantitative and employs purposive sampling. A total of 251 respondents, who are users of the Traveloka application, were processed using SmartPLS. The results indicate that all indicators of the six dimensions of the E-Servqual variables significantly and positively influence electronic customer satisfaction. One dimension, user-friendliness, has a more significant impact. Additionally, electronic customer satisfaction affects reuse intention and word of mouth. The data required for this study could be better because nearly half of the respondents are teenagers or adults who have used the Traveloka application for less than three years.

**Keywords**— Electronic Service Quality (e-servqual), e-Customer Satisfaction, Reuse Intention, Word-of-Mouth, e-Commerce

## I. INTRODUCTION

The internet has become a bridge or connection that has formed an extensive network in exchanging information, making it possible to transfer data quickly. With the internet, there are no boundaries between connected devices to an internet gateway connection. Various fields utilize the internet network to facilitate use and expand its reach. One of the fields is commercial via the internet in the global market (Santi et al., 2020). The presence of the internet in this global market allows one

person to communicate with other parties without boundaries, time, and distance and results in the development of innovation in the ever-changing and increasingly modern world of transactions (Shabbir et al., 2016). This, of course, affects a person's lifestyle in socializing by utilizing modern innovations, such as online transactions via the internet. The internet has changed people's buying habits and made it easy at the buying stage to find price information and even product/services (Fazria and Rubiyanti 2019).

According to, Işoraitè and Miniötienè (2018), e-commerce is a technology that benefits society by increasing sales and using relevant businesses and services that society needs. They are making transactions more accessible, such as buying and selling goods, bargaining, and providing information on goods/services between one party and another. This makes it easy for business people to use technology to improve their company's performance and revenue. E-commerce can also be interpreted as a gathering place for sellers and buyers through dare, with many shop pages with various products. Not only goods and service offerings can also enter the realm of e-commerce. Many business models offer their services with various models and types of services. Such as offering transportation services, expeditions, to booking hotel rooms. Not infrequently, a service can have various services and not just be fixated on one product or need. This is undoubtedly a business model that utilizes the digital world, which can make it easier for people to access goods and services. One business used in the digital world covers various needs in one place, namely Traveloka. This e-commerce company serves several needs of its users, such as hotel, plane, and train ticket booking services, recreation areas, etc. In addition, Traveloka provides several options for its users at the lowest prices or according to their wishes. This helps the community in their daily activities by using technology to create an easy and practical community culture, (Widayat et al., 2021).

Several awards were received in 2021 due to Traveloka's overall success. Traveloka won the Best in Future of Intelligence and Best in Future of Connectedness categories at the IDC Future Enterprise Awards (2021). This honors is granted to the corporation because it is thought to be able to run the business by maximizing the efficiency of its operations, workforce, and digital infrastructure. Additionally, Traveloka can

leverage data analytics and get suggestions and assistance from all parties to serve as the cornerstone for all decisions. Traveloka's dedication to providing its customers with the most incredible experience is demonstrated by this award (Purnama and Putri, 2021).

According to a Databoks survey (2022), Traveloka is the most popular e-commerce for travel in Indonesia for consumers as of March 2022, with 7.2 million visits. The services provided by Traveloka to its consumers are in the form of booking hotel tickets or transportation online. Service quality can be called e-service or electronic service quality in the online industry or e-commerce. Customer assessment is only done directly through the level of customer satisfaction in the application, and there is no assessment with other methods. This means that a comprehensive assessment of the services offered by e-commerce in the digital world can be evaluated using e-servqual, (Putri et al., 2022). Customer satisfaction for a business can lead to the intention to reuse and engage customers through word-of-mouth, especially in e-commerce, (Al-Adwan et al., 2022). Thus, customer loyalty refers to the relationship between the customer and the company and products and services supported by positive satisfaction after using them, (Urdea et al., 2021).

According to similarweb.com data (2022), while using online travel ticket purchasing services or hotel reservations, among other services, Traveloka has seen a growth in the number of visitors per month. This type of user loyalty to Traveloka results from contentment with the company's services. The relationship between customers and businesses and the goods and services supported by customers' positive satisfaction after using them is referred to as customer loyalty, Urdea et al. (2021). Thus, especially in the context of e-commerce, customer happiness for businesses can result in the goal of repurposing and involving people through word-of-mouth, Al-Adwan et al. (2022).

Service quality can be called e-service or electronic service quality in the online or e-commerce industry. That is, an overall assessment of the services offered by e-commerce in the digital world can be evaluated using e-servqual (Fazria & Rubiyanti, 2019).

Several studies have been conducted to determine the quality of Internet services, such as Internet banking users, Bhatti et al. (2020). However, there needs to be more evidence to find electronic customer satisfaction and loyalty using internet service quality dimensions in other e-commerce. Other studies on user habits for online shopping transactions Leung (2020), however, have yet to be able to investigate the effect of online services on other e-commerce and need to examine other factors, such as website quality (Leung, 2020). According to Raza et al. (2020), customer satisfaction is a feedback response from individuals, such as feeling satisfied or disappointed with products or services that have been received and consumed by these consumers. E-satisfaction is the result of individual responses about the benefits of online, how to trade/transaction, website design, security, and services. E-loyalty is an intention that arises from individuals to

return to consume or use goods and services from online websites, (Raza et al., 2020)

There are numerous sorts of measurement tools available, including SEQUAL. The difference between the service expected and the customer's impression of the actual. Service supplied can be used to define service quality. In the past, service marketing and business development researchers have paid close attention to service quality (Shabbir et al., 2016). Additionally, conceptualization and measuring scales have received much attention.

In its change, service quality in the scope of information technology has undergone many evaluations, including using traditional measuring tools, (Shabbir et al., 2016). Internet users, especially consumers of online goods/services, actively participate in providing these services by contributing their energy and time, (Shabbir et al., 2016). Online shopping can also affect quality and customer satisfaction, (Bressolles et al., 2014). Traditionally, quality is defined as the company's profit from a comprehensive consumer assessment, and electronic service quality is the effectiveness of shopping through the website, including purchasing or delivering goods/services. Related literature on e-service quality indicates that the website needs to help find information, make decisions, and order products or services. Research in this area is increasingly exploring other aspects related to the ease of website access and user interaction, (Bressolles et al., 2014). Research on the quality of electronic services has also been carried out by, (Khan et al., 2019). Then the results are significant in determining how successful a business is with its consumer experience with creative visuals. In addition, this study combines two models of e-service quality by Ou et al. (2018) and has been refined by Raza et al. (2020); electronic service quality has six dimensions, namely site organization, reliability, responsiveness, user-friendliness, personal need, efficiency are significantly related to electronic customer satisfaction. Based on the literature review, the following hypotheses are presented.

H1. Electronic Service Quality has a significant and positive effect on Electronic Customer Satisfaction

The findings show that "electronic service quality" is a connecting variable between the dimensions of electronic service quality and electronic customer satisfaction and reuse intention (Blut et al., 2015). All aspects have a significant positive impact on each other. According to (Raza et al., 2020), a study in the banking sector analyzed the impact of electronic service quality on customer satisfaction and customer loyalty. The results show a significant positive relationship between electronic customer satisfaction and customer loyalty. In addition, the research of Slack, Raza et al. (2020) shows that customer satisfaction drives loyalty, so it has a positive influence between customer satisfaction and repurchase intentions and between customer satisfaction and positive words. In addition, Kasiri et al. (2017) suggested that satisfied customers are more likely to become loyal, repurchase, and provide positive word of mouth. Based on

the literature review, the following hypotheses are presented:

H2. Electronic Customer Satisfaction has a significant and positive effect on Reuse Intention

H3. Electronic Customer Satisfaction has a significant and positive effect on Word of Mouth

A study was conducted in which data was collected from online shopping users residing in Pakistan and concluded that electronic service quality plays a crucial role in electronic customer satisfaction and customer loyalty, (Khan et al., 2019). Finally, electronic customer satisfaction and customer loyalty in shopping depend on electronic service quality (Bressolles et al., 2014). Based on the literature review, the following hypotheses are presented:

H4. electronic service quality significantly and positively affects reuseintention.

H5. Electronic Service Quality has a significant and positive effect on Word of Mouth

## II. METHODOLOGY

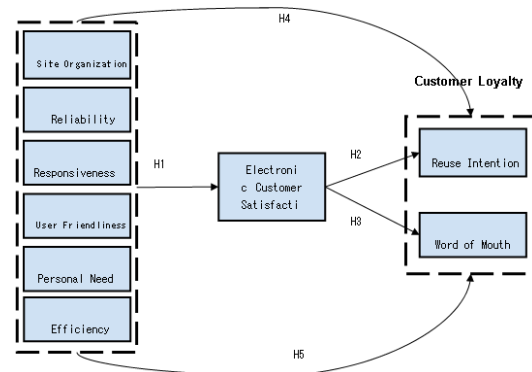
### A. Research Stage

This study builds on earlier work that examined the quality of electronic services and was published in 2020 under the title "Internet Banking Service Quality, Satisfaction, and Electronic Customer Loyalty: A Modified E-SERVQUAL Model" by Syed Ali Raza, Amna Umer, Muhammad Asif Qureshi, and Abdul Samad Dahri. To investigate the service quality aspects of Internet banking and their effects on electronic customer satisfaction and customer loyalty, this study surveyed 500 customers at Bank Pakistan.

According to the research, the six aspects of the quality of an electronic service have a positive and significant impact on customer loyalty and a favorable and enormous impact on customer satisfaction. This study's findings suggest that service quality is significant because customers can evaluate an online store before using it. Although consumer loyalty was investigated in the study by Raza et al. (2020), the factors influencing customer loyalty were not examined. In order to examine the variable of customer loyalty in electronic services, researchers modified the Slack et al. research model (2020). Based on this, experts contend that word-of-mouth and reuse intention are two elements affecting client loyalty.

The goal of Slack et al. (2020), "The Effect of Supermarket Service Quality Dimensions and Customer Satisfaction on Customer Loyalty and Disloyalty Dimensions," was to ascertain the impact of the servqual dimension. In addition, the sig value of Bartlett's test of Sphericity shows that all indicators of each variable are correlated with each other. In addition, factor loading shows that the results of this accuracy analysis are said to be valid if they all meet the requirements.

Customer satisfaction, the effect of service quality, and customer satisfaction dimensions on reuse intention, word of mouth, complaining behavior, and price sensitivity. According to a survey of 480 supermarket patrons, patron loyalty, including the propensity to return and word of mouth, is positively impacted by customer satisfaction. The following describes the research's model of Picture1:



Picture 1. Research Model

In this study, the researcher uses quantitative methods because this study uses numerical calculations to determine the significance value of the hypothesis so that conclusions can be drawn. Furthermore, this study uses descriptive to describe the results of the percentage of data that has been collected from the collection of questionnaires or questionnaires. In the first stage, several research variables will be analyzed with SPSS, namely with validity, using the Kaiser Mayer Olkin (KMO) value criterion. The Keyser-Meyer-Olkin (KMO) measure of sampling adequacy is a guideline for assessing the suitability of reasonably correlated factor analysis.

### B. Sample and data collection

According to Syahza et al. (2021), the population is a broad range of objects and individuals with specific qualities and characteristics that researchers study and draw. According to Syahza et al. (2021), the sample is a small part of the number and characteristics of a population. The sampling method used is a purposive sampling technique which does not allow the entire sample population to be homogeneous. The type of non-probability sampling is selected according to the criteria of the researcher, (Syahza et al., 2021). According to Jiménez-Castillo and Sánchez-Fernández (2019), the sampling in this study is five times the number of question indicators for each variable, so there are no less than 145 and no more than 290 respondents.

Researchers will then re-elect them according to several characteristics, namely the WHO adult age group, aged 18 years and over. In this study, the target respondents to be measured are active users of Traveloka services throughout Indonesia.

C. *Research instrument design*

The questionnaire consists of several parts: the first part consists of demographic characteristics (8 questions); the second part consists of the first set of questions regarding the independent variables, namely electronic service quality consisting of Site Organization (SO), Reliability (REL), Responsiveness (RESP), User-Friendliness (USFR), Personal Need (PENE), Efficiency (EFFE) (20 questions); and the last part is a series of questions about the dependent variable, namely e-customer satisfaction (ECS), Reuse Intention (R.I.) and word of mouth (WOM) (9 questions). All responses to items were measured on a 5-point Likert scale, of which 1 represents "Strongly Disagree", 2 "Disagree", 3 "Neutral", 4 "Agree", and 5 "Strongly Agree".

III. RESULT AND DISCUSSION

There were 251 respondents in all who took part in this poll. They are Traveloka customers who have purchased air travel within the previous 12 months. The interviewees ranged in age from 18 to over 42 years old and, had educational backgrounds ranging from SMA to S3, were both men and women. This is so because the respondents in the study were Traveloka users who had used the app, and app users were drawn from all kinds of backgrounds. Regarding the respondents who participated in this survey under the following conditions Table 1:

Table 1. Demographic Profile of Participants

Characteristics Demographics	Category	Frequency	Percentage
Age	18-23 Year	65	25,90%
	24-29 Year Old	145	57,77%
	30-35 Year Old	21	8,37%
	36-41 Year Old	11	4,38%
	Over 42 Year	9	3,59%
	Education	H.S.	43
Diploma		71	28,29%
UG		125	49,80%
P.G.		11	4,38%
Doctor		1	0,40%
Monthly Income	<2.000.000	42	16,73%
	2.000.000		
	3.500.000	37	14,74%

A. *Reliability and Validity Test*

The first order and second-order validity tests were the two models used in this study to conduct the validity test. All variables were found to meet the convergent validity minimum limit based on the findings of the validity and reliability tests. These findings suggest that

the data collecting tool accurately captures each variable, with good scores for all items on the outer loading, AVE, Cronbach's Alpha, and C.R. It can be claimed that the test variables meet convergent validity, so SEM analysis can move further without the requirement to reduce the number of variables.

In the first order stage, all dimensions of the E-Servqual variable have exceeded the value of 0.7. So with this value, all variables meet Composite Reliability and Cronbach Alpha criteria and have shown good reliability conditions. The result of reliability first order is in Table 2.

Table 2. Result of reliability first order

	Cronbach's alpha	Compositereliability
E-Servqual	0.963	0.964
Electronic CS	0.879	0.884

At the second order stage, all variables have exceeded the value of 0.7. So, with these values, all variables have met the Composite Reliability and Cronbach Alpha criteria and have shown good reliability conditions. The result of reliability second order is given in Table 3.

Table 3. Result of reliability second order

	Cronbach's alpha	Compositereliability
E-Servqual	0.963	0.963
Efficiency	0.883	0.884
Personal Need	0.841	0.841
Reliability	0.862	0.865
Responsiveness	0.886	0.893
Site Organization	0.910	0.910
User Friendliness	0.895	0.901

B. *Hypothesis Analysis Result*

All hypotheses been processed through the SmartPLS software are acceptable and can be made in the analysis result in Table 4.

Table 4. Analysis result

Path	T- values	P values	Conclusion	
ESE -> ECS	0.835	30.462	0.000	Accepted
ECS ->RI	0.440	5.733	0.000	Accepted
ECS -> WOM	0.384	4.992	0.000	Accepted
ESE ->RI	0.425	5.568	0.000	Accepted
ESE -> WOM	0.442	5.661	0.000	Accepted

## IV. CONCLUSION

Based on the results of the analysis that has been discussed, the results that can be drawn from this study are that the E-Servqual variable has six dimensions whith measurements that are significant, and all indicators have a positive and significant effect on electronic customer satisfaction. For the Electronic Customer Satisfaction variable, it influences Reuse Intention. The Electronic Customer Satisfaction variable influences the Word of Mouth.

This study offers user-side viewpoints on the Traveloka application. It may be utilized as inspiration for the e-commerce sector, particularly Traveloka, to enhance the caliber of online services, enhance the user experience, and grow the user base of the Traveloka application. Many findings in this research can be used as information for Traveloka, which can be used as material for service improvement and application user satisfaction. This will undoubtedly affect the increase in the company's business value. Based on the findings for the e-servqual factor, user-friendliness has the most significant impact on customer satisfaction. The company will find it simpler to draw the attention of its users, both new and those who have been using the program for a long time, with the desire of users to receive application access that is quick, available anywhere, and easy to use for anyone. Users will therefore be happy with the services offered by Traveloka. Other aspects of e-servqual, however, also offer valuable metrics that businesses may use.

Traveloka must offer the most effective online services or lower pricing to keep its customers. As a result, users of the Traveloka application may feel happy and decide to use it again and tell others about their excellent experiences 2. Traveloka must offer the most effective online services or lower pricing to keep its customers. As a result, users of the Traveloka application may feel happy and decide to use it again and tell others about their excellent experiences.

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