

## The E-Service Quality of E-Commerce Websites: What Do Customers Look For?

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### ABSTRACT

*The introduction of information technology has changed the way people deal with businesses especially when buying products. People can select and buy their desired products at any time and anywhere using an e-commerce website. They can easily pay using credit cards or mobile payment options on the e-commerce website. The e-commerce website plays a vital role in determining customer satisfaction and loyalty to a business. However, e-commerce developers face difficulties with the features of e-commerce websites. The features impact the e-commerce business greatly where it should satisfy the customers' needs. To gain a better understanding of this, this research was carried out to identify the components of e-service quality in the e-commerce business and develop an e-service quality model for e-commerce websites. This research was conducted using the qualitative method through a semi-structured interview. The research result presents the findings from the interview session with eight customers who have experience in purchasing products or services through the e-commerce business. Nine components of e-service quality have been identified which are fulfilment, responsiveness, availability, ease of use, assurance, website design, credibility, reliability, and accessibility. The results obtained from this research could be used by the e-commerce website developer to recognize the areas of improvement and components of e-service quality in the e-commerce business. This research also benefits by contributing to a general knowledge of the e-service quality field and enhances the future understanding of e-service quality components in the e-commerce business.*

**Keywords:** Customers' Loyalty, Customers' Satisfaction, E-Service Quality, E-Commerce, SERVQUAL

### INTRODUCTION

The development of technology has made it convenient for people in doing a transaction of goods or services. It was accompanied by the development of electronic commerce (e-commerce) business among entrepreneurs and customers. The ease of Internet access was used by the people to carry out an online transactions because it offers many advantages to the customers, for example, the customers do not have to walk into the store to see the products or services and they can also make their purchase

during odd hours. They also can easily compare the prices of the products or services with another provider. The transaction is also easier because it is 24 hours service and everything could be done online. Brick-and-mortar stores are slowly but surely closing down because of the rise of e-commerce (Quora, 2017).

During the last decade, companies have created their presence on the Internet by adopting advanced web technology in their business (Aladwani & Palvia, 2002; Dwivedi et al., 2021). This presence supports traditional business activities as well as additional prospects for doing business-to-customer e-commerce transactions as a result of using the web as a new channel (Swaid, 2007). Business-to-customer e-commerce refers to transactions between a company and its end customers (Nanehkaran, 2013) and uses the Internet as a retail market channel and in the case of information, as a product or service delivery channel (Drigas & Leliopoulos, 2014). Companies in an e-commerce setting aim to deliver products and services to their customers via the Internet. Through the Internet, businesses are able to develop a relationship with customers even though they have never seen, met, or spoken to each other (Kassim & Abdullah, 2010). The relationship that exists in cyberspace can be rewarding for both parties. The Internet allows for considerably more connection and personalization between businesses and consumers (Kassim & Abdullah, 2010). There is several popular e-commerce in Malaysia such as Shopee Malaysia, Lazada, Food Panda, Zalora, Mudah.my, 11street Malaysia, Lelong Malaysia and Fashion Valet (Isa, 2020). The existence of social media such as Facebook, Twitter, and Instagram also offers great support to the development of e-commerce sites.

Additionally, the key component to a successful e-commerce business is the quality of its services. The quality management approach must be holistically contributed by its systems, staff, and suppliers. Without these components, e-commerce businesses will not be able to deliver the expected level of service quality to satisfy their customers. The general understanding that e-service quality is a determinant of competitive advantage and an element in a firm's long-term success has fueled the growth of e-service quality as a strategic problem (Parasuraman et al., 2005). Importantly, the effective management of e-service meets to deliver and maintain high quality to increase customer satisfaction and customer loyalty (Cho & Menor, 2010; Kim et al., 2009).

E-commerce promotes open communication and an effective interactive environment in which information and products can be exchanged by providers and customers. Information technology and the Internet are fast evolving, and they are largely regarded as a primary driver of increased use of e-commerce services in Malaysia and around the world. Customers are increasingly choosing to buy goods and services online since they can usually find lower deals in a more convenient manner (Chen & Chang, 2003). Due to technological advancements, many businesses have learned that creating a website is no longer a huge challenge. However, operating without mistakes and managing all linked operations might be difficult. Customer support must ensure how well a service is delivered and how well it works (Katz, 2001). Successful e-commerce businesses understand that the key to avoiding these issues is not just having a website and inexpensive costs, but also having high standards for the quality of electronic services (Zeithaml, 2002). According to Smith and Chaffey (2005), customers expect certain standards from an online store, with product quality, service quality, and site quality being at the top of the list. Service quality in the e-commerce sector has become widely recognized as an efficient strategy to establish and preserve competitive advantage during the last two decades (Zeithaml, 2002; Wu et al., 2018; Kalia & Paul, 2021), a strategic issue for long-term success (Parasuraman et al., 2005), and the main factor of customer satisfaction and loyalty (Jalil et al, 2021; Gummerus et al., 2004; Ribbink et al., 2004).

However, the service quality issues in e-commerce have been continuously researched as customer behaviour and needs keep changing. During this pandemic time, it was reported that an overwhelming 94% of Malaysians are happy working from home, and the majority are not missing going to the movies or shopping at retail outlets thus opening more opportunities for e-commerce (Birruntha, 2020).

Cox and Dale (2001) and Van Riel et al., (2001) have argued that there is a need to learn more about how consumers evaluate e-services. Online services are more intangible thus making them harder to evaluate. Unlike customers in physical stores, online customers are more likely to rely on recommendations from experienced customers before they purchase (Wu et al., 2018). Kalia and Paul (2021) show that the mechanisms that generate e-commerce consumer satisfaction are not fully understood by merchants, and the quality of electronic services is an important component of e-commerce.

One of the previous research projects has focused on the quality of electronic services (e-service quality) because of the widespread adoption and use of internet technologies in trade, which differ from traditional businesses in terms of interaction and transaction methods (Santos, 2003; Kurt & Atrek, 2012; Carlson & O’Cass, 2011). The high growth rate and ease of access make it attractive for many researchers to embark on and raise the importance of research into e-services quality (Vatolkina et al., 2020). Customer support in e-commerce goes a long way in an industry where clients can move their business elsewhere in the blink of an eye. The e-commerce industry receives a lot of complaints and worries. When these complaints go unnoticed, the business’s standard of quality suffers, and the company’s reputation suffers. As a result, e-commerce website developers must examine this issue because it has a significant impact on the e-commerce industry. Thus, the goal of this study is to investigate the e-service quality components of businesses and model the e-service quality components of businesses so that e-commerce website developers can improve their website design and subsequently improve customer satisfaction.

## **LITERATURE REVIEW**

The following section discusses the literature used as a basis of this research. It discusses the concept and history of e-commerce, and also the concept and measures of e-service quality.

### **The Concept of E-Commerce**

E-commerce refers to business transactions or Internet management activities. E-commerce business processes include the distribution, purchasing, sale, marketing, and service of a product or service via the internet (Zulkifli et al., 2014). It translates all business activities that were previously conducted manually into electronic business activities involving the Internet, computer and information technology, and communications. Due to the widespread use of e-commerce models and apps in today’s business environment, a new trend known as dynamic e-commerce has evolved to advance e-commerce applications by simplifying web business interaction (Chen et al., 2003; Gajendra and Wang, 2014). E-commerce is quickly expanding and provides great potential for businesses. The current e-commerce trend is being facilitated by a few factors such as the Internet, payment gateway, analytics, social media, autonomous vehicles and 3D printing (Jain & Arya, 2021). Before developing marketing tactics, multinational enterprises should assess the potential implications of cultural context on consumer views toward e-seller loyalty (Lu et al., 2013). A customer’s desire to keep a relationship with a firm is determined by his or her view of the benefits of a high-quality service that provides a steady stream of value (Patterson et al., 2006). According to Tan et al. (2007), the definition of service quality should incorporate both service satisfaction and delivery considerations.

### **The History of E-Commerce**

In the 1970s, the term “electronic commerce” referred to electronic data exchange for the electronic transmission of commercial documents including purchase orders and voice messages (Nanehkaran, 2013). During the evolution of this industry, the phrase "electronic commerce" was

coined to describe the trading of products and services over the internet. Many well-known scholars predicted that this form of “web-based business” would soon become a major business in the global economy when the World Wide Web was initially published as a full web in 1994, but it took four years for HTTP protocols to become widely available to consumers (Nanehkaran, 2013). The first electronic trade was formed in the United States and a few European countries in 1998. These company kinds arose as a result of the rapid expansion of new and amateurish websites. Electronic commerce quickly spread over the majority of cities in America, Europe, and East Asia in 2005. (Nanehkaran, 2013). Some argue that electronic commerce dates back before the Internet, but due to the high costs of this business model, only businesses, financial institutions, and corporations could use it (Nanehkaran, 2013). However, when the Internet became more widely used and the structure of electronic commerce changed, this type of business evolved into an industrial form and a unique business case for a certain group. The new e-commerce trend has now spread in numerous directions. The e-commerce marketplace is no longer just an online marketplace for people to buy and sell things, but it has also become even more so as e-commerce has evolved, from being extremely local to incorporating artificial intelligence and even providing intangible products and services like GST enforcement and short-term loans. With the introduction of technologies that advance at light speed, the consumers’ potential view is on the point of complete transformation. For the next generation of e-commerce patterns, it will undoubtedly focus on consumer services increased across the Internet of Things (IoT), data processing, logistics, artificial intelligence, personalisation, and hyper-local area. Examine some of the latest developments in e-commerce in both established and emerging countries to gain traction in the coming years (Jain & Arya, 2021).

## **The Concept of E-Service Quality**

The quality of electronic services is the key determinant of Internet retail success or failure. Since today’s products and services are entirely digital and distributed over the Internet, the most visible instrument for information technology, The Internet helps an electronic service to rise to the forefront of technology priorities by allowing customers to interact with it (Santos, 2003a) (Voss, 2003). Today, the most successful e-tailers have realized that high e-service quality is needed to increase the competitive advantage in the online market (Yang & Jun 2002; Zeithaml, Parasuraman, and Malhotra, 2002). Therefore, online customers expect a higher level of electronic service quality when they buy online. As e-commerce grew, e-service quality became a main area of research in the present era (Lee & Lin, 2005). Zeithaml et al. (2002) defined e-service quality as the degree to which a website facilitates efficient and successful shopping, purchase, and delivery of items and services. Other researchers also defined e-service quality as a customer’s experience with the service provider by using a particular electronic channel without human involvement. According to Rita et al. (2019), e-service quality measurements contain four dimensions: website design, customer service, security/privacy, and fulfilment. Additionally, the Internet has been considered the main channel for e-service delivery (Lu et al., 2010; Parasuraman et al., 2005; Sousa and Voss, 2006). Therefore, e-service quality has been considered one of the most crucial aspects of e-commerce as consumers’ perceived e-service quality is the key to success in the e-commerce business (Shankar & Datta, 2020).

## **Measuring the E-Service Quality**

Service quality refers to the subjective judgement of a customer’s satisfaction with the service they are receiving is whether it meets or exceeds their expectations (Parasuraman et al., 1988). Every service context is different, hence a scale tailored to that context is needed to assess e-service quality. In another setting, the metric that is relevant in one context may not be suitable for gauging e-service quality in another. As a result, significant metrics of service quality in various e-service contexts must be identified (Shankar & Datta, 2020). The most common approach to measure service quality is the SERVQUAL model introduced by Parasuraman et al. (1985). This model is still popular and currently

used in many studies. In the online business context, many researchers modified SERVQUAL into several models (Rita et al., 2019).

The SERVQUAL model was created using a combination of a theoretical and empirical study on traditional service quality. The SERVQUAL instrument, which is frequently used, has five dimensions:

- Tangibles: Appearance of physical facilities, equipment, personnel, and communication materials.
- Reliability: Ability to perform the promised service dependably and accurately.
- Responsiveness: Willingness to help customers and provide prompt services.
- Assurance: Knowledge and politeness of employees and their ability to deliver trust and confidence.
- Empathy: Caring and individualized attention provided to customers.

The SERVQUAL model has been used in the context of e-commerce service (Barnes & Vidgen, 2002; Sullivan & Walstrom, 2001). Throughout the years, the SERVQUAL model was reworded, dropped, or added to measure the quality of e-service (Li et al., 2002; Shankar & Datta, 2020). Therefore, several scales were developed in various e-service contexts to measure consumers' perceived e-service quality (e-SQ). SITEQUAL (Yoo & Donthu, 2001), website service quality (WebQual) (Loiacono et al., 2002), eTailQ (Wolfinger & Gilly, 2003), and E-S-QUAL (Parasuraman et al., 2005) were major e-SQ measurement scales developed in the new millennium. Academic study, on the other hand, has discovered that relevant components of service quality in traditional stores cannot simply be applied to e-commerce (Parasuraman & Grewal, 2000; Parasuraman et al., 2005). A modified and enlarged version of the SERVQUAL model, according to the researchers, should be utilised to meaningfully measure e-service quality (Lee and Lin, 2005; Van Riel et al., 2001) since e-service is quite different from traditional service. The increasing use of e-commerce in organizations has been recognized as the importance of measuring and monitoring the quality of e-services in the virtual world. Most researchers develop adapted scales of e-service quality based on modifying the SERVQUAL model. Zeithaml (2000) proposes a scale of 7-dimensional e-service quality with the modification of the traditional SERVQUAL to adapt the developed scale to the e-service.

## **METHODOLOGY**

This study used a qualitative approach to explore the components of e-service quality in the e-commerce industry. The qualitative approach was chosen because it is more appropriate for capturing expressive information that cannot be represented by quantitative data. The data was collected from the respondents using a semi-structured interview. The semi-structured interview includes numerous essential questions that assist in defining the areas to be investigated, which are the elements of e-service quality. It also permits the researcher to deviate to expand on an idea or response. This interview approach is most commonly utilised by interviewers who want more detailed information from respondents. The respondents were selected using purposive sampling and have used at least one of the e-commerce websites before. Thematic analysis was used to analyse the data acquired throughout the investigation. Thematic analysis is suited for research that attempts to determine employing interpretations and will provide data analysis with organised components. Qualitative research necessitates a thorough comprehension of a collection of various components and data. As a result, the researcher can gain a better understanding of a topic by applying thematic analysis (Marks & Yardley, 2004).

## **RESULTS AND DISCUSSIONS**

The following section explains the results and findings of the interview carried out in this research. The components are based on respondents' experience using e-commerce websites such as Zalora, Lazada,

Shopee, and Hermo. From the data, nine components of e-service quality in the e-commerce business were found. Details of the analysis are presented in the following section.

## **Analysis and Findings of the Components of E-service Quality in the E-commerce Business**

This section reports the findings of this research based on data collected and analysed. The first component found is fulfilment. All respondents mentioned this component. Respondent 1 reported the misinformation about the delivery process. Respondents 2, 3, 4, and 8 said companies fulfil the promise about the delivery service by providing fast delivery. Then, respondents 5, 6, and 7 said the delivery services are too long. They are entitled to a refund for any order cancellation after making payment.

The second component reported is the ease of use. Respondents 1, 2, 3, 6, 7, and 8 have mentioned that the websites are easy to use and place an order. Respondents 1 and 3 said the websites are easy because the products are categorized based on the product line. While respondents 2, 6, 7, and 8 indicated that the websites are easy to use and navigate because they can easily find the products they are looking for. The third component is responsiveness. Responsiveness is also mentioned by all respondents. According to respondent 1, Zalora responded with an apology for the inaccurate delivery service. Respondent 2 states that Lazada solves and gives a fast feedback to the customer. Respondent 3 said that the e-commerce companies untimely respond to the customers' inquiries. While respondent 4 praised Shopee for being responsive to customer needs. Respondent 5 mentioned that Shopee responds to the customer during working hours only. Respondent 6 also mentioned that they sometimes respond and sometimes do not satisfy the customer. Respondent 7 said Hermo usually gives slow responses to her inquiries. Lastly, respondent 8 said that Lazada had responded and solved a customer problem.

The fourth component is availability. Respondents 1, 2, and 6 agreed that the availability of the websites is good, it does not lag, smooth and stable during the period of accessing them. Meanwhile, respondents 4, 5, 7, and 8 mentioned that websites usually crash, lag, and are not smooth. The fifth component is assurance. Respondents 1, 4, 5, 6, and 7 brought up this component in their interview. Respondents 1 and 8 expressed their insecurity about making payments through online banking. On the other hand, respondents 4, 5, 6, and 7 feel safe with online banking payments. The sixth component is credibility. Respondents 3, 6, and 7 mentioned that they trust the companies' websites because the e-commerce companies are honest and do not deceive the customer.

The seventh component is the website design. Respondent 3 said that the website design is appealing and well-organized. While respondents 4, 5, and 8 added that the websites are interesting to look at. Respondent 6 mentioned the website design is systematic and easy to use for an online transaction. Respondent 7 indicated that the website designs are neat and systematic, so it is easy for the customer to use. The eighth component is reliability. Only respondent 3 mentioned this component. He said the company must be truthful about the details of the product. The final component is accessibility. Respondent 4 said that Shopee has poor accessibility because of low internet bandwidth and is not capable to serve customer requests.

Based on the findings in the data analysis above, the data on components of e-service quality in the e-commerce business is translated into a set of framework models as illustrated in Figure 1 below. The explanation of each component of e-service quality is explained in Table 1 below.

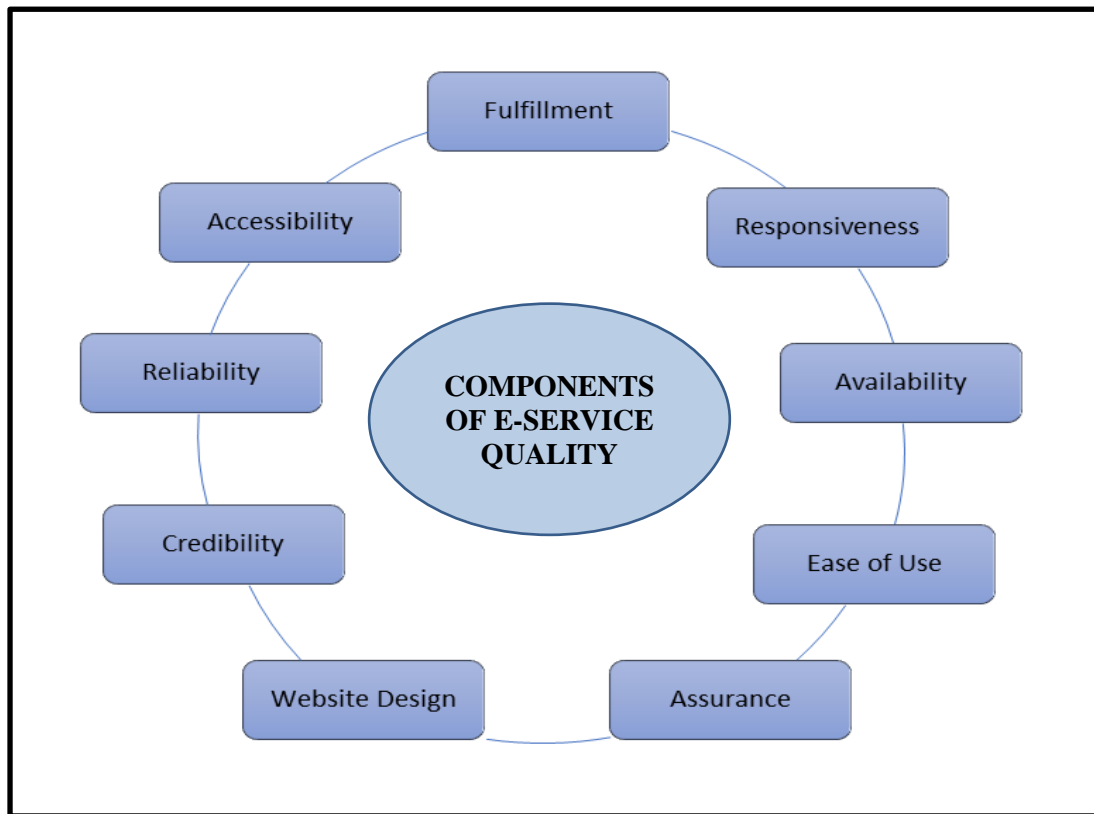


Figure 1: Components of E-Service Quality of E-Commerce Website

Table 1: Definition of Components of E-Service Quality

NO.	COMPONENTS	DEFINITION
1.	Fulfillment	The extent to which the site fulfils its promises about order delivery and the availability of items. The previous study stated that fulfilment is one of the most important factors in assessing the quality of an online shop, as service promises and accurate order fulfilment are elements of customer satisfaction or dissatisfaction (Yang & Fang, 2004; Shankar & Datta, 2020).
2.	Responsiveness	Responsiveness can be defined as the ability to handle complaints effectively and the speed of the service. According to Janda et al (2002), customers expect retailers on the Internet to respond quickly to their requests. A fast response can help customers to solve their problems and decide promptly to fix the issues. The following aspects of responsiveness components include timeliness of service: a) immediate mailing of a transaction slip; b) rapid customer callback; c) prompt service (Parasuraman et al. 1988; Shankar & Datta, 2020).
3.	Availability	System availability can be defined as the site's correct technical functioning. At the point when customers buy from an online shop or they are simply surfing, work issues like non-working buttons or missing connections, disappoint the customer and can lead to an exit. Thus, the retailer loses the chance to improve client loyalty (Wachter, 2002; Shankar & Datta, 2020).
4.	Ease of Use	Ease of use can be defined as the extent to which the website is easy to navigate and is well structured. In the evaluation of an electronic service choice, several researchers found ease of use or effort to be a critical factor (Betson, 1985). The ease of use is linked to an easy-to-remember URL, well-organized, well-structured,

NO.	COMPONENTS	DEFINITION
		and easy-to-follow catalogue, site navigability, and concise and understandable content, terms, and conditions (Santos, 2003; Shankar & Datta, 2020).
5.	Assurance	The degree to which the website conveys trust and confidence. According to Gefen and Straub (2004), an increase in customer confidence will increase the extent of customer purchasing intentions and it is easier for companies to retain customers. The main reasons why people don't buy online are linked to online security, policy, company reliability, and website technology (Chen & Barnes, 2007). Security means the service must be safe and risk-free which can include physical security, financial security, and confidentiality (Shankar & Datta, 2020).
6.	Website Design	The extent to which the website interface is well designed and visually appealing. The website provides customers with the beginning point to gain trust. Therefore, the design of the website should fulfil the following attributes to attract customers to make online purchases easily with good navigation and useful information: a) well organized and attractive website; b) consistent and standardized navigation; c) well-organized appearance of a user interface; d) fast download (Shankar & Datta, 2020).
7.	Credibility	Credibility is keeping its service promises and to fulfill the exact system requirements agreed with the customer. The service provider must be honest and trustworthy (Parasuraman et al., 1985; 1988). Credibility is an evaluation that can be carried out before using a service and has the same impact in e-commerce. Generally, a customer will only conduct an e-commerce transaction after receiving some kind of recommendation from external sources, whether through advertising or social media (Shankar & Datta, 2020).
8.	Reliability	Reliability represents the level to which service and quality can be maintained. Santos (2003) refers to reliability as the ability to act on the promised service accurately and consistently, including the frequency of website updates, timely response to customer requests, and online purchase and billing accuracy. The following reliability traits can enable customers to recognize the consistency and credibility of the e-service company: a) Company being truthful about its offering; b) The online service always correct; c) Keeping service promise; d) Keeping promotion promise (Shankar & Datta, 2020).
9.	Accessibility	Accessibility determines whether the websites can fulfil the request. Accessibility can be referred to as the ability of a customer to buy a wide variety of products from all over the world via a specific online retailer (Janda et al., 2002). Poor lined site quality and accessibility damage the overall quality of the e-service (Santos, 2003). In addition, long waiting times for downloading a website or poor download speeds due to access lags, transmission lags or server lags can cause users to be irritated (Janda et al., 2002; Shankar & Datta, 2020).

## CONCLUSIONS

Over the last decade, the usage of e-commerce websites as a means of purchasing products and services has increased. The number of internet retailers has constantly expanded, thanks to e-commerce websites that allow customers to perform transactions over the Internet, while revenues from online shopping have gone through a considerable growth rate. Companies are increasingly relying on online services because they are more convenient, interactive, cost-effective, and provide customers with a high level of customization and personalization. Furthermore, the number of clients who prefer to buy goods and services online is steadily increasing, since they can frequently discover cheaper rates more conveniently. Therefore, e-commerce website developers must consider the required components in their website to ensure customers satisfaction and loyalty. There are several contributions made through this research. Firstly, this research contributes new knowledge to the e-commerce website developer. E-commerce website developers can refer to this research as a foundation to improve their e-service



quality and provide excellent services to the customer. The research has identified nine components of e-service quality. They are fulfilment, responsiveness, availability, ease of use, assurance, website design, credibility, reliability, and accessibility. From here, the e-commerce website developer may identify the areas that need to be improved and components of e-service quality in the e-commerce business. The second contribution is the contribution to general knowledge of the e-service quality field and an enhancement of the future understanding of e-service quality components in the e-commerce business. With the discovery of the e-service quality components in e-commerce which was acquired from customers' point of view, it is hoped to path a way for developers of an e-commerce website to develop a better quality website to increase customer satisfaction in the future.

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