



E-SERVICE QUALITY, ONLINE CUSTOMER REVIEWS, AND PURCHASE INTENTION AS THE MODERATING ROLE OF PURCHASE DECISION

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Abstract

The existence of technology has caused a change in people's spending patterns, where initially, shopping was carried out in person, but now it can be done online. To increase the number of buyers, increasing the e-service quality for online sellers is necessary. This research will examine the influence of e-service quality, online customer reviews, and purchase intention as the moderating role of purchase decisions. This research will be carried out using a quantitative approach. The data analysis method used is the Structural Equation Model (SEM) analysis method with SmartPLS3 software. This research then finds that e-service quality and online customer reviews significantly affect purchase intention. Then purchase intention has a significant effect on the purchase decision. Lastly, e-service quality and online customer reviews affect purchase intention, which affects purchase decisions.

Keywords: E-Service Quality, Online Customer Review, Purchase Intention, Purchase Decision.

Abstrak

Adanya teknologi menyebabkan terjadinya perubahan pola belanja masyarakat, dimana pada awalnya belanja dilakukan secara langsung, namun kini dapat dilakukan secara online. Untuk meningkatkan jumlah pembeli, diperlukan peningkatan kualitas layanan elektronik bagi penjual online. Penelitian ini akan menguji pengaruh kualitas layanan elektronik, ulasan pelanggan online, dan niat membeli sebagai peran moderasi terhadap keputusan pembelian. Penelitian ini akan dilakukan dengan menggunakan pendekatan kuantitatif. Metode analisis data yang digunakan adalah metode analisis Structural Equation Model (SEM) dengan software SmartPLS3. Penelitian ini kemudian menemukan bahwa kualitas layanan elektronik dan ulasan pelanggan online berpengaruh signifikan terhadap niat pembelian. Kemudian niat pembelian berpengaruh signifikan terhadap keputusan pembelian. Terakhir, kualitas layanan elektronik dan ulasan pelanggan online mempengaruhi niat pembelian, yang mempengaruhi keputusan pembelian.

Kata Kunci: Kualitas E-Service, Review Pelanggan Online, Niat Membeli, Keputusan Pembelian.

INTRODUCTION

Over the last ten years, there has been a considerable surge in the development of the local and international e-commerce industry. One of the driving forces behind the growth of e-

commerce is the Covid-19 epidemic, which has limited in-person and present human social interaction. As a result, people have gradually started to migrate away from buying goods directly from shops or offline rather than through e-commerce. They are free to do this whenever and whenever they want. According to the e-marketers market research institute, 3.6 billion people using the internet globally in 2018 will access it at least once a month.¹

The expected ranking of consumer internet access from 2013 to 2018 is given below based on the data: India, Brazil, China, the United States, Japan, and Indonesia. Due to these significant advances in e-commerce, online information technology has emerged alongside publicly available data science to support the increasing number of online product reviews (also known as "Online Customer Reviews") that consumers post on online stores or social media platforms. These customer reviews are called "Online Customer Reviews" (OCR); according to a poll conducted by the Indonesian Internet Network Operators Association (APJII) in 2016, 132.7 million internet users in Indonesia, or 52% of the country's total population.²

China, the United States, India, Brazil, Japan, and Indonesia are expected to have the most internet users between 2013 and 2018, according to the data. Due to this significant development of e-commerce, the rise of online information technology and publicly accessible data science to support the increasing quantity of online product reviews (Online Customer Reviews) posted on commerce sites or social media platforms by consumers and reviews from these customers, we know as Online Customer Reviews (OCR). According to a 2016 survey conducted by the Indonesian Internet Network Operators Association (APJII), the number of internet consumers in Indonesia increased to 132,7 million, or 52 percent of the country's total population.³

The data obtained by the Kompas team shows that 5 top marketplaces dominate Indonesia. Indonesia's most popular online stores and marketplaces include Lazada, Tokopedia, Bukalapak, Blibli & Shopee. Shopee is a customer-to-customer (C2C) e-commerce platform that Indonesians of various groups and ages love. The development of Shopee e-commerce in Indonesia has been very rapid since it was first launched in Indonesia in December 2015 until now, where based on data for 2021, Shopee ranks as the top C2C e-commerce service in Indonesia above Tokopedia, Lazada, Bukalapak, and Blibli with Its application visitor numbers reach 834.52

¹ Nanda, Anupam, Yishuang Xu, and Fangchen Zhang. "How Would the COVID-19 Pandemic Reshape Retail Real Estate and High Streets through Acceleration of E-Commerce and Digitalization?." *Journal of Urban Management* 10.2 (2021): 110-124.

² Mariani, Marcello M., and Satish Nambisan. "Innovation Analytics and Digital Innovation Experimentation: The Rise of Research-Driven Online Review Platforms." *Technological Forecasting and Social Change* 172 (2021): 121009.

³ Rosário, Albérico, and Ricardo Raimundo. "Consumer Marketing Strategy and E-Commerce in the Last Decade: A Literature Review." *Journal of theoretical and applied electronic commerce research* 16.7 (2021): 3003-3024.

million visitors per month, far behind its rival, Tokopedia in second place, which has 244.34 million visitors per month. Shopee is also an e-commerce platform that supports developing MSMEs in Indonesia engaged in the C2C business category.

On e-commerce platforms, online customer evaluations (Online Customer evaluations) enable consumers to evaluate and compare alternatives prior to making a purchase. Additionally, online customer evaluations (Online Customer evaluations) can be collected rapidly and play a crucial role in the purchasing decisions of consumers. Online Customer Reviews allow consumers to collect views from other consumers about a product and know product quality better before making the right purchasing decision. Therefore Online Customer Reviews indirectly become a significant factor in consumer decision-making to purchase the product they want. When customers can provide feedback, they feel more involved. This feedback can occur through criticism, praise, or suggestions, giving customers a sense of community.⁴

Service quality, both directly (offline) and indirectly (online), is essential in achieving business success, especially during the golden period of growth in the E-commerce world as it is today. Apart from the Online Customer Review factor, service quality or e-service quality is an important matter which is the main point for determining the success or failure of a business. Online service quality is the level of service on e-commerce sites that can be evaluated based on work performance that is dependent on capabilities, responsiveness, placement availability, and site services that strive to meet customer expectations. According to Tjiptono and Chandra, the quality of an online service consists of seven components: effectiveness, dependability, fulfillment, privacy, responsiveness, compensation, and contact. Before and after transactions, service quality can be divided in e-commerce. Griffin identifies the following five services as indispensable for purchasers: (1) Reliability: the ability to deliver what has been promised in a precise and reliable manner; (2) Assurance: the knowledge and courtesy of employees and their ability to convey trust and confidence; (3) Embodiments: the physical facilities, equipment, and appearance of personnel; (4) Empathy: the level of care and individual attention given to customers; (5) Responsiveness: the willingness to assist clients and provide prompt service. These five dimensions of e-service quality are utilized to measure the e-service quality variable in this study.⁵

By increasing internet penetration & e-commerce business in Indonesia, where one of the most significant retail sales, one of the consumer considerations in purchasing decisions is influenced by online customer reviews. Some experts have recognized the role and influence of

⁴ Liang, Ruxia, and Jian-qiang Wang. "A Linguistic Intuitionistic Cloud Decision Support Model with Sentiment Analysis for Product Selection in E-commerce." *International Journal of Fuzzy Systems* 21 (2019): 963-977.

⁵ Xin, Baogui, Yaru Hao, and Lei Xie. "Strategic product showcasing mode of E-commerce live streaming." *Journal of Retailing and Consumer Services* 73 (2023): 103360.

online customer reviews, where consumers always follow “useful” reviews. Similar studies examine the effect of online customer reviews on purchase intensity. The research explains that three empirical studies test whether rating formats on online customer reviews can influence consumer purchase intentions differently. The results support the feelings-as-information theory and show that online ratings presented in an average (vs distribution) format result in higher purchase intentions due to increased smoothness of online purchase processing. There is also a similar study discussing the impact of online reviews on product sales by Peide Liu and Fei Teng; it discusses the possibility of choosing a product through online reviews, in which the article states that customers apply big data from reviews to understand performance better. As a result, the products they are interested in before making a purchase transaction assist customers in thoroughly evaluating alternative products through a quantitative review of online product reviews.⁶

Apart from online customer reviews, e-service quality is also one of the supporting factors that influence customers’ desire to buy, according to a research journal. With growing internet penetration, virtual services are crucial in B2B, B2C, and C2C retail businesses. Through the internet, various service providers for retail businesses are available for B2B, B2C, and C2C. In every business, the output of service quality can only be evaluated when service providers and customers are separated through several conditions and norms, as shown in research. In addition, there is also research discussing the impact of online reviews on e-commerce sales in India, which Mitsun S. Ullal, Christi Spulbar, and Ramona Birau mentioned. This article conveys that product reviews are very important for implementing online marketing strategies that can influence customer purchasing decisions. Product reviews influence how customers understand and interpret product information and reveal that online reviews positively influence purchase decisions and can significantly impact e-commerce sales in India.⁷

There is also similar research that discusses the effect of online reviews on product sales, which is analyzed in the topic of sentiment discussed by Xiaolin Li, Chaojiang Wu, and Feng Mai, where the article illustrates that the numerical ratings of online product reviews and textual reviews influence each other in selling a product. Products, where a business analytic strategy is needed for online vendors to drive sales of their products. They also emphasized online product

⁶ Yunus, Mukhlis, Jumadil Saputra, and Zikri Muhammad. "Digital marketing, online trust and online purchase intention of e-commerce customers: Mediating the role of customer relationship management." *International Journal of Data and Network Science* 6.3 (2022): 935-944.

⁷ Khan, Mukaram Ali, Syed Sohaib Zubair, and Maria Malik. "An Assessment of E-Service Quality, E-Satisfaction and E-Loyalty: Case of Online Shopping in Pakistan." *South Asian Journal of Business Studies* 8.3 (2019): 283-302.

reviews related to the sales potential of a product. On the other hand, reviews highlighting certain aspects of a product can substantially influence product sales.⁸

In e-commerce, e-service quality encompasses all levels of communication between the consumer and the website of the service or product provider, as well as the operations that result from that communication. With the rapid development of e-commerce in Indonesia, to increase the intensity of purchases from businesspeople in e-commerce, it is necessary to understand the relationship between the quality of electronic services and online customer reviews, which influence the purchase intention of customers and subsequently aid in the process of determining buying decisions.⁹

LITERATURE REVIEW

A. E-Service Quality

E-service quality is an overall evaluation of a service resulting from comparing company performance with customers' general understanding of the company's role in an industry where it should perform. Lewis and Booms define service quality as a measure of how well the service delivered meets customer expectations and add that providing quality service is adjusting the services provided consistently to customer expectations. E-service quality can also be interpreted as the extent to which a company facilitates its customers in efficient search, purchase, and delivery of products according to the customer's expectations. With the increasing use of e-service channels in various industries, many companies or service providers have recognized the importance of the e-service quality factor. Therefore the e-service quality factor has become one of the main factors to be considered in business activities.¹⁰

According to Lupiyoadi, the factor that determines the level of success and quality of a company is the business capacity to offer services to clients. Business success in offering its clients the best service, achieving high market share, and increasing profits. Service quality is a customer's assessment of a product or service's superiority or features.¹¹

The development of effective service quality, according to Lupiyoadi, occurs via an information system network. There are five instructions for doing so, which are described below. (1) Measuring the number of customer service expectations. Companies must be able to quantify

⁸ Li, Xiaolin, Chaojiang Wu, and Feng Mai. "The effect of online reviews on product sales: A joint sentiment-topic analysis." *Information & Management* 56.2 (2019): 172-184.

⁹ Batrisyia, Dalili, and Minto Waluyo. "Analysis of the Effect of E-Services Quality on Customer Satisfaction and Repurchase Decisions on E-Commerce Shopee." *Inovbiz: Jurnal Inovasi Bisnis* 10.2 (2022): 128-135.

¹⁰ Balinado, Justine Roy, et al. "The Effect of Service Quality on Customer Satisfaction in an Automotive After-Sales Service." *Journal of Open Innovation: Technology, Market, and Complexity* 7.2 (2021): 116.

¹¹ Naini, Nurul Fitrianis, et al. "The Effect of Product Quality, Service Quality, Customer Satisfaction on Customer Loyalty." *Journal of Consumer Sciences* 7.1 (2022): 34-50.

the magnitude of client expectations for the services they provide; (2) Determine where information quality is concerned. Companies must be able to determine the importance of the quality of information to be attained, for example, by emphasizing the quality of information in management decision processes pertaining to anticipated service enhancements; (3) Knowledge of the customer's recommendation. Companies must be able to hear and comprehend product/service recommendations from customers; (4) Connecting service performance to the company's output. Companies are expected to connect service performance to organizational objectives; (5) Reach every employee. The application of information systems to the quality of service must include all members of the organizational hierarchy. The system should be designed so that all employees, irrespective of their hierarchical positions, receive pertinent information.¹²

According to Goetsch Davis, the definition of quality is a dynamic state that meets or exceeds expectations and is connected with goods, services, people, processes, and the environment. The level of customer satisfaction in internet banking will be influenced by service quality, claims Parasuraman.¹³

E-Service Quality or E-ServQual is a new variant of the Service Quality (ServQual) standard. E- ServQual was created to evaluate a service offered on the Internet network. E-Service Quality is the expansion of a website's capacity to facilitate browsing, purchasing, and distribution activities in an effective and efficient manner. According to Ho and Lee, there are four e-service quality measurement dimensions: Information Quality, Website Functionality, Customer Relationship, and Responsiveness and Fulfillment. In the meantime, based on the dimensions of service quality, there are four dimensions of Electronic-Service Quality (E-S-Qual), including:

1. Efficiency: ease and speed in accessing the site.
2. Fulfillment: all kinds of transactions can be completed as expected.
3. System Availability: all kinds of technical functions available can run smoothly.
4. Privacy: provide security and guarantee of individual/personal data.¹⁴

B. Online Customer Review

Peer-to-peer product evaluations posted by customers on company or third-party websites. In general, online customer reviews are an evaluation of a product or service in the form of numeric, star ratings or narrative comments that are believed to be honest, impartial, and

¹² Lestari, Mulianda, and Wahyono Wahyono. "The Influence of Celebrity Endorser and Online Promotion on Purchase Decision through Brand Image." *Management Analysis Journal* 10.2 (2021): 198-211.

¹³ Li, Feng, et al. "Customer satisfaction with bank services: The Role of Cloud Services, Security, E-Learning and Service Quality." *Technology in Society* 64 (2021): 101487.

¹⁴ Ruanguttamanun, Chutima, and Jindarat Peemanee. "Causal Relationship between e-Service Quality, Online Trust and Purchase Intentions on Lazada Group, An Asia's Leading E-commerce Platform." *Journal of Distribution Science* 20.1 (2022): 13-26.

exhaustive based on the information provided by the seller. So that online customer reviews can be used as a complement to official product descriptions and can be an additional source of information for customers in purchasing decisions. In addition, online customer reviews also aim to influence customer intentions to shop online, resulting in increased product or service sales. This is because online reviews often drive customer motivation in online transactions, which provokes sales volume, namely an increase in reviews. This leads to greater customer awareness.¹⁵

Online customer reviews are also facilities provided to customers to freely comment and write down their opinions regarding the quality of products or services received by these customers in online purchase transactions. These online customer reviews also play a positive role. This influences other potential customers to assess a product or service that attracts their attention so that potential customers can find out earlier about the value of the product or service by looking at customer reviews online before deciding to make a product or service purchase transaction.¹⁶

Therefore, this online customer review dramatically influences the growth of prospective customer trust and significantly influences the emergence of purchase intentions from the prospective customer for the products or services offered on the Shopee e-commerce platform. In this study, online customer review is one of the independent variables, which will be a benchmark for supporting factors to see their influence on the formation of purchase intentions from customers, which will influence purchasing decisions from prospective customers in Shopee e-commerce.¹⁷

The online customer review dimensions described in Zhang include the following:

1. Source credibility, namely the credibility of the source related to the perception of the recipient of the information on the source's expertise and the trustworthiness of the information.
2. Argument quality, also known as argument quality, refers to the persuasiveness of the argument affixed to the information message.

¹⁵ Haddara, Moutaz, et al. "Exploring Customer Online Reviews for New Product Development: The Case of Identifying Reinforcers in the Cosmetic Industry." *Managerial and Decision Economics* 41.2 (2020): 250-273.

¹⁶ Borrego, Ángel, and Maite Comalat Navarra. "What Users Say about Public Libraries: An Analysis of Google Maps reviews." *Online Information Review* 45.1 (2021): 84-98.

¹⁷ Maskuroh, Nihayatul, et al. "Social Media as a Bridge to E-Commerce Adoption in Indonesia: A Research Framework for Repurchase Intention." *International Journal of Data and Network Science* 6.1 (2022): 107-114.

3. Perceived quantity of reviews, namely the perceived number of reviews related to volume, measures the total number of reviews.¹⁸

Based on the above dimensions, customer reviews can obtain indicators online: a) Reliable review sources; b) Experienced reviewers; c) Reliable review sources; d) Reviews provide relevant information about the product; e) Reviews provide complete information about the product; f) The information in the reviews is reassuring; g) The total number of reviews contained on a product; h) The quantity of information in a review.¹⁹

C. Purchase Intention

Purchase intent refers to a consumer's cognitive plan or desire to acquire particular products or services. Purchase intent can be determined by inquiring about the likelihood of purchasing the advertised product. Purchase intent is the respondent's propensity to act prior to making a purchase. There is a distinction between actual purchases and purchase tendencies, according to Meskaran. Purchases are actual purchases made by consumers, whereas purchase tendencies are consumers' intentions to make future purchases. Fishbein and Ajzen believe that purchase intention can be used as a predictor of consumer consumption behavior, as a proxy for subjective awareness, or as a predictor of customer purchase probability. This purchase intention can also indicate a positive correlation between purchase intention and actual purchase by measuring the likelihood of a customer purchasing a specific product or service.²⁰

The relationship between purchase intent and service quality exists because service quality is a predictor of purchase intent. Numerous studies demonstrate this, including Ha's finding that service quality has the most significant direct influence on purchase intention. Lee and Huang also stated that service quality has a positive and substantial effect on purchase intent. Choudhury found that perceived service quality strongly influences customer purchase intentions.²¹

¹⁸ Verma, Deepak, et al. "A meta-analysis of antecedents and consequences of eWOM credibility: Investigation of moderating role of culture and platform type." *Journal of Business Research* 154 (2023): 113292.

¹⁹ González-Rodríguez, M. Rosario, et al. "The Impact of eWOM Source Credibility on Destination Visit Intention and Online Involvement: A Case of Chinese Tourists." *Journal of Hospitality and Tourism Technology* 13.5 (2022): 855-874.

²⁰ Ho Nguyen, Hai, et al. "Understanding Online Purchase Intention: The Mediating Role of Attitude towards Advertising." *Cogent Business & Management* 9.1 (2022): 2095950.

²¹ Nguyen, Huu Thai Thinh, Ninh Nguyen, and Simon Pervan. "Development and Validation of a Scale Measuring Hotel Website Service Quality (HWebSQ)." *Tourism Management Perspectives* 35 (2020): 100697.

D. Purchase Decision

Purchasing decisions are a person's decision to choose certain products or services a company introduces. Various internal and external factors can influence this purchase decision. Internal factors that influence include trust in the product of interest, knowledge of the use of the product, encouragement of the product as a lifestyle factor, and so on. At the same time, external factors include customer culture, customer organization, and customer social class. Because of this, various service providers realize that it is crucial to maintain good relations with their customers to ensure the continuous growth of these products in the market.²²

Purchasing decisions encourage consumers to identify needs, generate choices, and have specific products and brands. Purchasing decisions include where to buy the product, which brand or model when to purchase, how much money to spend, and which payment method. The author will discuss the purchase decision as the dependent variable in this article. Purchasing decisions become a benchmark for determining customer thoughts in assessing a product/service based on product reviews and online service quality circulating in the market. This can determine whether online product reviews and e-service quality will influence and be taken into consideration to create a sense of desire to buy, which will later determine customer purchasing decisions for a product/service and determine how customers determine which items to buy or preferred to buy based on a comparison of online product reviews and e-service quality provided by sellers on products/services that are being sold online on the Shopee e-commerce platform.²³

According to Kotler & Armstrong, purchase decisions can be identified through various indicators as follows:

1. Product Selection

Consumers can determine what products to buy; usually, they buy products with value. Companies must focus on their product choices and the alternatives consumers consider to attract purchasing decisions.

2. Brand Selection

Consumers can make decisions about which brand to buy. Each brand has its differences; consumers usually choose the brand they like the most. In this case, the role of the brand is significant for the company, where consumers will more easily choose a brand with a good reputation.

²² Hanaysha, Jalal Rajeh. "Impact of Social Media Marketing Features on Consumer's Purchase Decision in the Fast-Food Industry: Brand Trust as a Mediator." *International Journal of Information Management Data Insights* 2.2 (2022): 100102.

²³ Dubbelink, Sanne Ichelle, Carolina Herrando, and Efthymios Constantinides. "Social Media Marketing as a Branding Strategy in Extraordinary Times: Lessons from the COVID-19 Pandemic." *Sustainability* 13.18 (2021): 10310.

3. Dealer Selection

The consumer must decide which dealer to visit. There are two product distributor choices: offline dealers (in the form of conventional shops) and online distributors (in the form of e-commerce and e-marketplaces). Every consumer is different in determining a dealer, which can be due to easy access, low-price offers, complete inventory, convenience in shopping, and so on.

4. Purchase Amount

Consumers are able to choose the quantity of a product to purchase at a given time. Because the number of consumer purchases can vary, the company must arrange the number of products it will offer.

5. Time Of Purchase

Consumers can decide when to purchase, and the timing of purchases can vary; for example, there are weekends, early months, and so on.

6. Payment Method

Consumers can decide what payment method to use after deciding to buy. Companies offer many payment methods in line with technological developments, such as debit, credit cards, bank transfers, etc.²⁴

From the explanation above, it can be concluded that the purchase decision is an act of consumers, individuals, groups, and organizations to choose, buy and use a product after going through various alternative evaluations.

RESEARCH METHOD

This study employs quantitative research methodologies because the data analysis is quantitative or statistical. Causal research is conducted, explaining the relationship between independent variables. This study investigates whether independent variables (service quality and Online Customer Reviews) and mediating variables (purchase intention) have an effect on the dependent variable (purchasing decision). This study used the survey method with snowball sampling and a Google form that was distributed via the Whatsapp application to collect data. Data analysis techniques are methods used to process collected data to become informed so that the characteristics of the data can be understood and helpful in solving problems, especially problems related to research. In this study, the authors processed data using the Structural Equation Model (SEM) analysis method with SmartPLS3 software. The structural Equation

²⁴ Tjahjono, Ernesto Jose, Lena Ellitan, and Yuliasti Ika Handayani. "Product Quality and Brand Image Towards Customers' Satisfaction through Purchase Decision of Wardah Cosmetic Products in Surabaya." *Journal of Entrepreneurship & Business* 2.1 (2021): 56-70.

Model (SEM) is an analytical technique that allows simultaneous testing of a series of relationships. This relationship is built between one or more independent variables with one or more dependent and intervening variables.

RESULT AND DISCUSSION

A. Outer Model Analysis Testing

Outer model analysis testing is part of the measurement technique in SEM (Structural Equation Modeling) analysis which is used to evaluate the quality of construct measurements or latent variables used in statistical models that are processed using SEM analysis using SmartPLS 3 tools by calculating using the PLS Algorithm. The outer model refers to the measurement of latent variables with indicators that are directly measurable. In testing the outer model analysis, researchers evaluate the validity and reliability of the indicators used to measure latent variables. Validity refers to the extent to which the indicators used can measure latent variables accurately, while reliability refers to the extent to which the same indicator is consistent in measuring latent variables in various conditions and times. In testing this outer model, the authors carried out several stages of testing, including convergent validity testing; average variance extracted (AVE) test; discriminant validity testing; and reliability testing.

Convergent validity testing was carried out with 222 respondents. This test used the results of analysis outer loading obtained from the SmartPLS 3 program for each latent variable from the independent, intervening, and dependent variables used in this study so that the convergent validity test results will be obtained. The interpretation of the results obtained must be above 0.7 so that it can be said that the variable meets the convergent validity requirements, which can be used to measure the main variable. In the analysis process, several variable measurement items are excluded from the calculation results, and this is due to the value outer loading that the variable measurement item is <0.7 , so it becomes invalid. Therefore, each variable's measurement items that meet the validity requirements are readjusted and taken.

AVE testing was also carried out on 222 respondent data. In this test, the variable can be considered accurate if the AVE value is greater than 0.50 ($AVE > 0.50$). This is used to measure the accuracy of each indicator, each indicator in the construct captured by these variables has a higher level of accuracy than the variance caused by measurement errors. The results of the AVE test can be seen in Table 1 below:

Table 1. Average Variance Extracted (AVE) Test Table

	Average Variance Extracted (AVE)
E-Service Quality	0.692
Online Customer Review	0.667
Purchase Decision	0.626
Purchase Intention	0.564

The results of this analysis show that the variable e-service quality, online customer reviews, purchase decision, and purchase intention all have an AVE value > 0.50 . This shows that all of these variables are accurate, and one can be sure that the variance caused by measurement has a larger value than the variance caused by errors. As an example can be taken from the value of AVE e-service quality has an AVE value of 0.692 which means the magnitude of the variation in the ESQ1, ESQ2, ESQ3, and ESQ4 measurement items contained by the variable e-service quality by 69.2%.

Measurement Discriminant validity can be done in several ways, in this study, the authors used three ways to confirm the test results discriminant validity-his. The methods used include the Heterotrait-Monotrait (HTMT), Formell-Lacker, and Cross-Loading methods. Markdiscriminant validity reveals the amplitude of the correlation between each construct's indicators and the indicators of other block constructs. A measurement model has discriminant validity, which is favorable, if the correlation between the construct and the indicators is greater than the correlation between the indicators and indicators from other block constructs.

The HTMT value in each pair of variables is less than 0.9 ($HTMT < 0.9$), then evaluate discriminant validity with HTML fulfilled. The variance shared by the variable is higher for each measurement item than for the other variable items. Evaluation discriminant validity with HTML fulfilled. The value on the diagonal axis in the Formell-Lacker method is the root value of AVE. The AVE root of each variable must be greater for the measurement item of the variable itself compared to other measurement items. Thus the discriminant test validity for the correlation variable can be fulfilled. Therefore based on the results of this analysis table as a complete evaluation, discriminant validity is fulfilled. Testing Cross-loading is an evaluation test of discriminant validity at the item level of measurement. Each item of measurement of the variable must have a higher correlation with the measured variable compared to other variables. Overall, each item in the test results table above has a higher correlation with the variable it measures, so evaluate discriminant validity by method cross-loading fulfilled.

Furthermore, reliability testing of the variables will be carried out to describe the consistency of the indicators used to measure the construct. Where in this test, the authors used two methods to measure the level of reliability of each construct variable, including using the Composite Reliability (CR) measurement method with its interpretation that if the indicator has a CR value > 0.70 , then the indicator is considered to have high consistency for measuring the construct. In addition to strengthening the reliability measurement of each indicator, the authors also use Cronbach's Alpha measurement method, where with the interpretation that Cronbach's Alpha value of the indicator variable is > 0.60 , the indicator can be considered reliable. The following is a table of reliability measurements from the Composite Reliability (CR) method and also Cronbach's Alpha which can be seen in Table 2 below:

Table 2. Multicollinear Testing (VIF Value)

	Cronbach's Alpha	Composite Reliability
E-Service Quality	0.851	0.899
Online Customer Review	0.733	0.800
Purchase Decision	0.850	0.893
Purchase Intention	0.741	0.838

Overall the measurement value of reliability using the CR method has a value of > 0.7 , it can be interpreted that each measurement indicator has a high consistent value concerning its construct, this is also confirmed by its Cronbach's Alpha value which as a whole has a value of $> 0,6$ so that all the measurement indicators can be assessed as reliable.

B. Testing the Analysis of the Inner Model/Structural Model

The inner/structural model forecasts the causality relationship (causality relationship) between latent variables or variables that cannot be measured. The structural model (inner model) defines the cause-and-effect relationship between latent variables based on the theory's substance. On the structural test model (interior model), employ procedural assistance. SmartPLS3's Blindfolding and Bootstrapping features. The relationship between latent constructs was examined by conducting tests on the structural model. In testing the structural model, the authors carry out several stages of testing, including testing the path coefficient, testing R Squared, testing the Stone Giesser Value (Q Square), testing the Goodness of Fit Index (GoF Index), and testing the partial effect (F Square).

Testing Path Coefficient This is done to see the significance of the relationship between constructs/variables. This can be seen from the path coefficients, which describe the relationship's

strengths between the constructs. The directional signs in the path follow the hypothesized theory. Significance can be seen in the path coefficient analysis's T-test or P value. The results of the path coefficient analysis can be seen in Table 3 below:

Table 3. Path Coefficient Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
E-Service Quality-> Purchase Intention	0.209	0.210	0.071	2.960	0.003
Online Customer Review -> Purchase Intention	0.511	0.505	0.079	6.452	0.000
Purchase Intention -> Purchase Decision	0.761	0.771	0.031	24.507	0.000

Based on the table of the results of this test, it can be interpreted that e-service quality has a significant influence on purchase intention of (0.209) with a T statistics value ($2.96 > 1.96$) or a P value close to 0 ($0.03 < 0.05$). Any changes that are in e-service quality will significantly affect purchase intention. Next, you can see the variables online customer reviews have a significant influence on purchase intention of (0.511) with a T statistics value ($6.452 > 1.96$) or a P value close to 0 ($0.00 < 0.05$). Any changes that are in online customer reviews will significantly affect purchase intention. In addition, variable purchase intention has a significant influence on purchase decision of (0.761) with a T statistics value ($24.507 > 1.96$) or a P value close to 0 ($0.00 < 0.05$). This means that any changes that are in purchase intention will significantly affect the purchase decision.

This R Square test is conducted to ensure that the statistical model can provide accurate and reliable results in explaining the relationship between latent variables in the model. According to Chin, the criteria that can be used to determine the R Square value include an R Square value of 0.19, considered weak; an R Square value of 0.33, considered moderate; and an R Square value of 0.67, considered strong. The results of the R Square test can be seen in Table 4 below:

Table 4. R Square Test Results

	R Square	R Square Adjusted
Purchase Decision	0.580	0.578
Purchase Intention	0.419	0.414

Based on these results, it can be seen that the overall R Square value of both the purchase decision and purchase intention variables has an R Square value in the range $0.33 < X < 0.67$, so the category of R Square is included in the moderate R Square value category. So it can be concluded that the indicators of Purchase Decision and Purchase Intention can be relied upon in explaining the relationship between latent variables in the model.

Q Square measures how accurately the model predicts endogenous (dependent) variables using data not used in model development. Q Square measures the difference between the observed value and the value predicted by the SEM model on data not used in the model development (out-of-sample). The smaller the difference, the more accurately the model predicts new, never-before-seen data. A high Q Square value indicates that the model has good predictive quality and is reliable. So basically, the value of Q Square illustrates the predictive relevance/fit of the relevance of the model structurally with the interpretation that the value of Q Square > 0 describes the model as having good predictive relevance, while Q Square < 0 illustrates that the model has a value of poor predictive relevance. The table showing the Q Square value in this study can be seen in Table 5 below:

Table 5. Test ResultsQ Square

	SSO	SSE	Q ² (=1-SSE/SSO)
E-Service Quality	888.000	888.000	
Online Customer Review	444.000	444.000	
Purchase Decision	1110.000	720.489	0.351
Purchase Intention	888.000	700.818	0.211

Based on the results of this test, it can be seen that the Q Square values of Purchase Intention and Purchase Decision are 0.351 and 0.211, both of which are greater than 0, so it can be concluded that the structural model of this study has good predictive relevance.

In forming a model, it is almost certain that it ends with testing the model's suitability with the research data that is owned. Testing the Goodness of Fit Index or evaluating the fit and goodness of this model aims to compare the research model that the author examined with the suitability of the research data that the author has. According to Tenenhau, the value range of the GoF Index is divided into three categories where if the GoF Index value ranges from 0.00 – 0.24, then it is considered a small category; if it is in the range of 0.25 – 0.37, then it is considered a moderate category; whereas if it is ranged from 0.38 to 1.00, then it is considered a high category. The value of this GoF Index can be calculated using the root formula of the average AVE multiplied by the root of the average R Square value. Based on this formula, the authors try to

calculate and categorize the GoF Index contained in this study. From the results of these calculations, where the value of the GoF Index is 0.5642, which means it is in the range of 0.38 – 1.00, it can be concluded that the value of the GoF Index is included in the high category, which means that the level of goodness/fit of this research model is relatively high.

The F square test aims to determine the effect of a variable measurement item on the level of the structural variable being measured to determine the level of influence of the measurement item. According to Hair, the influence categories based on the results of the F Square analysis can be divided into three categories, namely the results of F Square (0.02 – 0.14) are low influences, (0.15 – 0.34) are moderate influences, and (> 0.35) is high influence. The results of the F Square analysis can be seen in Table 6 below:

Table 6. F Square Test Results

	E-Service Quality	Online Customer Review	Purchase Decision	Purchase Intention
E-Service Quality				0.053
Online Customer Review				0.320
Purchase Decision				
Purchase Intention			1.379	

Based on the results of the analysis obtained, it can be concluded that e-service quality influences the structural level purchase intention is low with a value of f square (0.053). Then online customer reviews influence the structural level purchase intention is medium with a value of f square (0.320). As for variables, purchase intention influence the structural level purchase decision is the height with a value of f square (1.379)

C. Testing the Research Model Hypothesis

Testing the research hypothesis is testing the truth or validity of a hypothesis or research assumption using empirical data. The purpose of testing the hypothesis is to determine whether there is a significant difference or relationship between the variables in the study. In this study, testing the hypothesis of the research model was carried out by looking at the three results of the analysis of the bootstrapping method, namely the values of the Path Coefficient, Specific Indirect Effect, and Total Effect. The results of the analysis can be seen in Table 7, Table 8, and Table 9 below:

Table 7. Path Coefficient Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
E-Service Quality -> Purchase Intention	0.209	0.210	0.071	2.960	0.003
Online Customer Review -> Purchase Intention	0.511	0.505	0.079	6.452	0.000
Purchase Intention -> Purchase Decision	0.761	0.771	0.031	24.507	0.000

Based on the table of Path Coefficient test results, it can be seen that e-service quality has a significant influence on purchase intention with a statistical T value ($2.96 > 1.96$) or a P value close to 0 ($0.03 < 0.05$). Any changes that are in-service quality will significantly affect purchase intention. Next, you can see the variables online customer reviews have a significant influence on purchase intention with a statistical T value ($6.452 > 1.96$) or a P value close to 0 ($0.00 < 0.05$). Any changes that are in online customer reviews will significantly affect purchase intention. In addition, variable purchase intention has a significant influence on purchase decisions with a statistical T value ($24.507 > 1.96$) or a P value close to 0 ($0.00 < 0.05$). This means that any changes that are in purchase intention will significantly affect the purchase decision.

Table 8. Specific Indirect Effect Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
E-Service Quality -> Purchase Intention -> Purchase Decision	0.159	0.162	0.055	2.867	0.004
Online Customer Review -> Purchase Intention -> Purchase Decision	0.389	0.390	0.068	5.725	0.000

Based on the output results, it can be seen that e-service quality has a significant indirect influence on purchase decisions through intervening variables purchase intention with a statistical T value ($2.867 > 1.96$) or a P value close to 0 ($0.004 < 0.05$). Any changes in e-service quality will significantly affect purchase decisions through purchase intention. In addition, it can also be seen that online customer reviews have a significant indirect influence on purchase decisions through intervening variables of purchase intention with a statistical T value ($5.725 > 1.96$) or a P value

close to 0 ($0.000 < 0.05$). Any changes in online customer reviews will significantly affect purchase decisions through purchase intention.

Table 9. Total Effect Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
E-Service Quality -> Purchase Decision	0.159	0.162	0.055	2.867	0.004
E-Service Quality -> Purchase Intention	0.209	0.210	0.071	2.960	0.003
Online Customer Review -> Purchase Decision	0.389	0.390	0.068	5.725	0.000
Online Customer Review -> Purchase Intention	0.511	0.505	0.079	6.452	0.000
Purchase Intention -> Purchase Decision	0.761	0.771	0.031	24.507	0.000

Based on the output results, it can be seen that e-service quality has a significant indirect influence on purchase decisions with a statistical T value ($2.867 > 1.96$) or a P value close to 0 ($0.004 < 0.05$). Any changes in e-service quality will significantly affect purchase decisions through purchase intention. Besides that, e-service quality also has a significant direct influence on purchase intention with a statistical T value ($2.960 > 1.96$) or a P value close to 0 ($0.003 < 0.05$). This means any changes in e-service quality will significantly affect purchase intention.

From variables of online customer reviews, it can also be seen that online customer reviews have a significant indirect influence on purchase decisions with a statistical T value ($5.725 > 1.96$) or a P value close to 0 ($0.000 < 0.05$). Any changes in online customer reviews will significantly affect purchase decisions through purchase intention. Apart from that, variables online customer review also has a significant direct influence on purchase intention with a statistical T value ($6.452 > 1.96$) or a P value close to 0 ($0.000 < 0.05$). This means any changes in online customer reviews will significantly affect purchase intention.

From the intervening variables, namely purchase intention can also be seen that purchase intention has a significant direct influence on purchase decision with a statistical T value ($24.507 > 1.96$) or a P value close to 0 ($0.000 < 0.05$). This means any changes that are in purchase intention will significantly affect the purchase decision.

Based on the hypothesis test, it can be concluded that hypothesis 1, which states that “E-Service Quality has a significant positive influence on Purchase Intention”, is correct and acceptable. Besides that, hypothesis 2, which states that “Online Customer Reviews have a

significant positive influence on Purchase Intention”, is true and acceptable. And also, hypothesis 3, which states that “Purchase Intention has a significant positive influence on Purchase Decision”, is true and acceptable.

CONCLUSION

This study found that E-Service quality significantly affects purchase intention, with an AVE (Average Variance Extracted) result of 0.692. In this test, the variable can be considered accurate if the AVE value is greater than 0.50 ($AVE > 0.50$). The Online Customer Reviews significantly affect purchase intention, which result is AVE (Average Variance Extracted) 0.667. In this test, the variable can be considered accurate if the AVE value is greater than 0.50 ($AVE > 0.50$). Furthermore, Purchase intention significantly affects purchase decisions, which results in an AVE (Average Variance Extracted) of 0.626. In this test, the variable can be considered accurate if the AVE value is greater than 0.50 ($AVE > 0.50$). Finally, E-service quality and online customer reviews affect purchase intention, which affects purchase decisions, resulting in an AVE (Average Variance Extracted) of 0.564. In this test, the variable can be considered accurate if the AVE value is greater than 0.50 ($AVE > 0.50$).

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