

CHAPTER I

INTRODUCTION

1.1 Background

The improvement in technology and information are running rapidly resulting in various significant changes, one of which is in the field of Economics. Currently, buying and selling activities are not only done offline but also online. Utilizing technological developments, especially the internet, helps a lot of changes in buying and selling activities that can be done anytime, anywhere, and without being limited by space and time. Because of these advances, a term called *e-commerce* emerged.

In the buying and selling process, there are business actors or producers as well as buyers or consumers. Consumers and producers are the most important subjects in the world of the economy, almost all sectors of the economy are filled with consumers and producers. Both parties carry out core activities in the economic sector. Consumers carry out consumption activities in the form of buying products or other. In carrying out their activities, consumers show a behavior that is a differentiator in addition to the activities they carry out as well as producers. Consumers are participants in the economy who engage in consumption activities. where a person purchases or makes use of goods or services. As it goes about its business, it will undoubtedly exhibit the behavior that is more commonly referred to as consumer behavior.

Kotler and Keller (2012) argue that *consumer behavior* is how a person, individually or in groups, considers, chooses, buys, uses, and evaluates a product

to meet their needs. *Consumer behavior* can be understood as the fundamental principle for consumers to make a purchase decision for a product. With the trend of online shopping in e-commerce, of course, the role of the consumer and producer is also not spared.

One idea that has done well in the online environment is e-commerce or online shopping. Many parties, including buyers, sellers, and producers, can benefit from using this method. As opposed to the traditional shopping notion, the idea of shopping online offers several advantages and conveniences. Because sellers do not need to operate a physical store, the idea of an online store or e-commerce can save operational costs significantly in addition to speeding up the transaction process. Online product sales are one way that the internet encourages the growth of trading activity. Because there are presently website services that can offer online purchasing or trading services, this sale is possible in the world of the internet. This system is referred to as e-commerce. Producers' usage of e-commerce can advance their business in several ways, from marketing to ordering to handling sales transactions. The development of an increasingly advanced business world and an increasing level of competition raise the awareness of entrepreneurs to work harder in managing their companies. Good and widespread marketing is a factor in increasing the company's sales results. Therefore, good coordination between marketing and sales is needed.

E-commerce, according to Gao in the Encyclopedia of Information Science and Technology from 2005, is a practice that involves using computer networks to conduct commercial transactions and corporate interactions. This kind of

marketplace is one of Indonesia's recent developments in e-commerce. Different businesses or sellers interact with customers in the marketplace. The term "marketplace" can be understood as the use of electronic data and applications in the invention, distribution, and ideas of pricing for goods and services to accommodate exchanges that meet the needs of both individuals and organizations (Strauss, 2001).

Every year, economic transactions through the *marketplace* continue to increase significantly, especially after the COVID-19 virus entered Indonesia. This is because online shopping is seen as a solution to get cheaper prices and safer transactions due to the lack of physical contact. Currently, more and more businessmen in Indonesia are selling on the *marketplace*, not only by SMEs but many big brands who enter and sell in the online *marketplace*. The inclusion of various big brands in the *marketplace* is certainly one of the factors for the escalation trend of online shopping in Indonesia. Various groups are considered to be very familiar with the term online shopping and also the term *marketplace*. Moreover, various *marketplace* applications have been designed in such a way, so that they can be accessed not only by iOS users but also by Android users.

According to research conducted by iPrice, the data for the first - fourth quarter of 2021, which was taken in January 2022, is based on data on the average total visits on the desktop and mobile web in the research taken from the traffic figures of each *e-commerce* website and or *marketplace* located in SimilarWeb, shows that there are 11 most visited *e-commerce* sites and or *marketplaces* in Indonesia.



Figure 1.1 List of Popular Marketplaces in Indonesia

Source : iPrice, 2022

Based on Figure 1.1, Tokopedia is the first most visited *marketplace* in Indonesia with 149.61 million visitors. Then in the second position, there is the Shopee with a total of 131.89 million visits. In third position, Bukalapak with a total of 29.88 million visits. Then followed by Lazada at number four, with the number of visits not much different from Bukalapak, which was 28.58 million. In fifth place is the blibli with 17.51 million visits. Followed by the Orami with 10.28 million visits. Then Bhinneka with 6.08 million visits. Continued with Ralali.com with 5.26 million visits. As for JD.ID with a total of 3.67 million visits. Followed by Zalora with a total of 3.02 million visits. And in the last position, there is Sociolla with a total of 2.08 million visits.

Of the several popular *marketplaces* listed in the table above, one that is well-known among the Indonesian people is Shopee. Shopee entered Indonesia in December 2015. The achievements of Shopee can be seen in its success in carrying out promotions in a relatively short time. Shopee continuously enhances its functionality by introducing features that make it simpler for both merchants and buyers to complete transactions. Numerous MSMEs and well-known brands have registered in the market thanks to the various features that are offered. The various products offered are very diverse, ranging from fashion, cosmetics, food, and household appliances, to electronic goods.

The marketing strategy carried out by Shopee also greatly impacts its popularity which continues to increase. Some of the marketing strategies that have been carried out are doing marketing by following trends so that they are more easily recognized and entered into the community. The second is choosing the right media for promotion, in which the shopee company itself focuses on mobile users or mobile phone applications. The third strategy is, Shopee offers relatively cheap prices compared to its competitors. Shopee is also consistent in providing various promos which is one of the driving factors for someone to shop. Another strategy is to have a clear target market, where initially shopee itself focuses more on female consumers with various backgrounds and ages who are also very diverse. Women are considered more impulsive in online shopping. However, now Shopee is starting to expand its target market, targeting men. The things that are done are by holding a promo called "men sale". In addition, men are also considered to prefer practical things, so Shopee also innovates in terms of the payment system by holding a

Shopee COD system which is considered to be able to support men in shopping online.

There are so many features in the Shopee application that make it easier for sellers and consumers to make transactions. Various innovations that are continuously carried out by Shopee are also added values that make Shopee users continue to increase. Some of the advantages of Shopee are, it has many promos and free shipping, it has fun game features and prizes, the price of goods is relatively cheap, the goods offered are very varied ranging from local brands to big brands, has many features in the payment system, so that consumers can choose which payments are suitable for consumers, such as payments via ATM transfers, through minimarkets such as Alfamart and Indomaret, using shopee pay, shopee pay letters, and also shopee COD.

Snapcart research institute initiated a survey (January, 2018) which obtained that the millennial generation dominates online shopping consumers, namely as much as 50%, with an age range of 25-34 years. And when combined with Generation Z with an age range of 15 – 24 years, there is 80% of shoppers belong to the younger generation. The characteristics of the millennial generation or Generation Z who are very attached to their lives with technology are one of the ways used by various *e-commerce* and *marketplace* companies to carry out promotions by utilizing various technological advances and social media. This is considered effective because so much information related to *e-commerce* and *marketplaces* is coming from digital media. Shopee's target market is for the general public, both men and women. Still, based on a survey conducted by the Snapcart

research institute, which states that the majority of the age of *e-commerce* and *marketplace* consumers are in the 15-34 years range, the author will conduct research with a population that will be taken from shopee users in Semarang with an age range of 15 – 34 years old, without gender limitation (female/male).

A person's interest in making online transactions depends on various factors. The level of service provided by online media as a means of carrying out online transactions or buying and selling processes is very important. Electronic media in the form of websites created specifically for buying and selling transactions now makes it easier for vendors and buyers to get involved. The user's mobile application can then be used to access e-commerce services such as conducting transactions or marketing activities. According to Demirkan et al. (2011), the ability of a product to provide functional performance to customers and be reliable, easy to maintain and repairable is a measure of its service quality.



Figure 1.2 Shopee Marketplace Case

Source : DetikNews, 2021

Some of the problems experienced by shopee, one of which is related to a decrease in courier wages, which causes couriers to go on strike. In addition, shopee also removed features in the selection of shipping services for consumers. These two things become a problem that is interrelated and very detrimental to the consumer, because with these problems, the goods ordered by consumers will experience delays in arrival. These problems will certainly be an assessment and consideration for shopee consumers in making purchases. As a *marketplace*, shopee should consider convenience from the consumer's point of view, not only focusing on the interests of the company where the purpose of the loss of choice in shipping services is considered to be aimed at suppressing the distribution process or cutting the supply chain in the hope that it will not provide added value (Value added activity).

E-service quality, as described by Zeithaml et al (2009:115), is the degree of a website to make shopping, buying, and delivery become efficient and effective. According to Lasyakka (2015), Demirkan et al. (2011), and Parasuraman et al. (2005), service capability to provide useful performance when they buy, purchase, and deliver to clients using electronic media is known as e-service quality.

E-service quality plays a crucial part in generating value for customers when they shop online. Consumers' perceptions of the value of a service, its features, and its advantages as experienced through an online store are evaluated. E-service quality is described by Parasuraman and Malhotra (2002) as an electronic-based service that is utilized to provide effectiveness and efficiency so goods and services can be shopped, purchased, and delivered optimally.

Behind the popularity of online shopping, there are still many internet users who are afraid to do online shopping. One of the factors that underlie this is that there are still rampant cases of cybercrime. The results of the Cybersecurity Exposure Index (ICE) survey in 2020 stated that Indonesia is one of the countries at high risk for cybercrime cases globally. According to the findings of a survey carried out by the Cybersecurity Exposure Index (ICE) in 2020, Indonesia's cybercrime index hit 0.62. The average number across the globe is only close to 0.54. This indicates that Indonesia has a higher rating than the average country worldwide. According to McLeod and Schell (2004), if the security system of the e-commerce infrastructure is still lacking, there is a very big potential for crime in the form of fraud, credit card theft, unlawful transfers of funds from specific accounts, or the like. Therefore, security in online shopping services must be

continuously improved. One of the efforts that can be made by e-commerce service websites to reduce the risk of cybercrime is to implement an e-security seal system.



Figure 1.3 Shopee Marketplace Case

Source : Uzone.id, 2021

The fraud case occurred through a WhatsApp message with the mode of change in the delivery service so that the consumer had to fill in a link that caused the user's Shopee Pay pin to be exposed. This is an assessment for other consumers in shopee security guarantees.

Another example of a case caused by the weakness of the Shopee application, of is the experience of one Shopee user where the person bought a product at one of the shops in Shopee. The order was made on July 21 with order number: 190722005612SNT, and receipt number: 050111558211713, the shipping service was chosen by JNE, but the receipt number was not in the tracking.

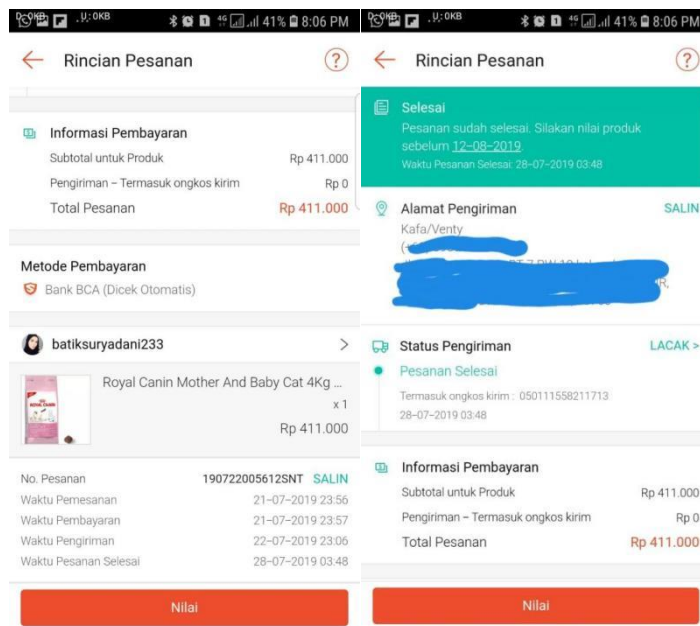


Figure 1.4 Shopee Marketplace Case

Source : mediakonsumen.com, 2019

On the shopee application, it only says "sent" without any travel tracking details. Then on July 28, the description on the shopee application changed to "accepted" even though the account owner had not received the item. And in the system there is also information that the funds have been forwarded to the seller before confirmation from the consumer and in less than 1x24 hours.

As per the provisions of Shopee regulations, funds will be forwarded if there is no confirmation 1 x 24 hours. The excuse from Shopee is that it's by the system, but Shopee should be able to track the delivery status of the item. This case is considered to be one of the weaknesses of the shopee system because with this, fraud committed by the seller will be easier to occur.

E-security seals are icons or logos that help customers trust website warranties and have an impact on their decision to make an online transaction (Mauldin and McCord, 2002). *E-security seals* are viewed in several earlier studies

as third-party guarantees that are supported by third-party organizations or third parties acting as privacy or security seals on a website. According to the results of previous research regarding the influence of e-security seals on purchase decisions conducted by Hanif Danang Prasetyo (2017), it shows that the E-Security Seals variable has a good and significant influence on purchase decisions. Increasing the level of purchasing decisions can be done with improved *e-security seals* or security facilities. These results support the results of previous research that trust and e-security seals have a strong influence on online purchase intentions (Feriyal Rosita: 2015).

Shopee is one of the online shopping services that has a good level of security. Regarding user security in transactions, shopee collaborates with trusted bank partners, so that the transaction system has been standardized by Bank Indonesia and the Financial Services Authority. In addition, one of the services provided by shopee called shopee pay also received permission from Bank Indonesia in August 2018, this effort is made to ensure additional security and convenience for consumers in the shopee application. Various shopee user privacy policies have also been made in writing and can be accessed on the shopee official website.

A problem can occur when there is a gap between expectations and reality. The problems that often arise from Shopee's online shopping services are found by many sellers in Shopee's *e-commerce*. Many sellers are inactive and there are even cases where the seller sends items that are different from the items promoted on the seller's account. This is what causes many consumers to complain to the shopee.

This is one of the problems that can reduce the level of consumer confidence in making transactions on *e-commerce* shopee services. In overcoming these problems, Shopee has a customer service team consisting of a team in charge of dealing with fraud or fraud, a team that handles disputes or disputes.

This is also supported by a prior study by Pratiwi (2023), who looked at the effect of *e-service quality* on consumer shopping selections. Based on the results of the hypothesis testing, it is known that *e-service quality* affects buying choices. This can be taken to mean that the consumer's decision related to purchasing a product from the online store will raise the better the e-service quality that is implemented. On the other hand, the consumer's decision related to purchasing a product from the online store will be lessened if the *e-service quality* that is applied is inappropriate or poor.

E-service quality is crucial in establishing a sense of value in the context of online purchases. By contrasting the advantages that customers receive from a service offered by the business with the costs they incur to acquire products, perceived value plays a part in customer assessment.

According to the description that has been given, the researcher intends to conduct a study with the title "**The Influence of *E-Service Quality* and *E-Security Seals* on *Purchase Decisions* (Study on Customer Shopee in Semarang)**".

1.2 Formulation of the Problem

Every company certainly has a desire to always increase its sales. According to the survey, Shopee is currently in second place after Tokopedia as a popular marketplace in Indonesia. Several cases and problems that occurred in the shopee

company became a problem that could reduce the company's reputation. The safety and comfort of consumers is very important. This will be a consideration for consumers in purchasing decisions. The problem that occurs is probably due to the low quality of service and security at shopee. As a new company, of course Shopee has the desire to be the best marketplace among its competitors. In addition to focusing on business development, shopee must also continue to pay attention to things that cause fraud that can cause harm to its consumers.

The problem that Shopee is experiencing is related to asking customers to make a purchase, so with this background, the research challenge can be stated as follows:

1. Is there any influence of *e-service quality* on the *purchase decisions* of the customer in the shopee marketplace?
2. Is there any influence of *e-security seals* on the *purchase decisions* of the customer in the shopee marketplace?
3. Is there any influence of *e-service quality* and *e-security seals* on the *purchase decisions* of the customer in the shopee marketplace?

1.3 Objective

In conducting research, it is necessary to have boundaries so that research can run as expected, so that the research objectives must be known as a basis so that research does not lose its direction. According to the explanation that has been described, here are the research objectives that are determined:

1. To determine the influence of *e-service quality* on *purchase decisions* for customers in the shopee marketplace.

2. To determine the influence of *e-security seals* on the *purchase decisions* of customers in the Shopee marketplace.
3. To determine the influence of *e-service quality* and *e-sucurity seals* on *purchase decisions* of customer in the shopee marketplace.

1.4 Research Use

This research is expected to have some benefits, they are:

1. For Academics

It is expected that this research can develop insights, increase knowledge, and be used as a reference for further research on consumer behavior in making purchasing decisions, especially those related to e-service quality and e-security seals.

2. For Researchers

By doing this research, it is expected that this research can improve insights and knowledge of researchers, especially in terms of consumer behavior regarding purchasing decisions, especially those related to e-service quality and e-security seals.

3. For Companies

The results of this research can be utilized as a study or input for related companies, namely in this study a shopee company in solving a problem or in carrying out business development, so that the company can carry out an evaluation and make a policy so that it can continue to compete among its competitors.

4. For Other Parties

The results of this study are expected to provide useful information and can provide ideas for other similar researchers and can become knowledge for consumers.

1.5 Theoretical Framework

1.5.1 Consumer Behavior

1) Definition of Consumer Behavior

Schiffman and Kanuk (2008) described consumer behavior as the process where people decide to allocate time, money, and effort they have to consume things. Consumer behavior is the study that observes people, groups, and organizations in choosing, purchasing, utilizing, and discarding experiences, ideas, services, and products so their desires and requirements can be fulfilled, according to Kotler and Keller (2008). Additionally, according to Griffins Sopiah and Sangadji (2013), consumer behavior encompasses all behaviors including those that are taken before, during, and after purchases as well as all psychological processes that influence these behaviors.

Individuals or organizations can behave as consumers, and they can play a variety of roles in consumer behavior, including initiators, influencers, buyers, payers, and users. According to Engel, Blackwell, and Miniard (1994), consumer behavior includes all pre- and post-purchase decision-making processes as well as the actual buying, using, and selling of goods and services.

2) Factors influencing Consumer Behavior

Several factors influence consumer behavior as pointed out by Kotler and Armstrong (1996), they are:

a. Cultural Factors

Cultural factors have the greatest impact on any consumer behavior.

Culture is at the root of human desires and behavior. Culture is the set of

fundamental desires, behaviors, perceptions, and values that a person acknowledges from family and their close surroundings.

b. Social factors

Social elements including family, small groups, and consumers' social roles and status can play a part in their consumer behavior. Numerous little groups that have direct influence over human behavior have a significant impact. A group is defined as two or more individuals working together to accomplish either common or individual goals.

c. Personal Factors

In addition to personal traits, such as age and life stages, work, lifestyle, as well as personality and self-image, consumer behavior is also influenced by the phases of a family's life cycle and by stations in the individual's life.

d. Psychological factors

Four psychological factors motivation, perception, knowledge, and belief affect consumer behavior as well. A need must be compelling enough to entice someone to seek out a solution to meet it. The act of selecting, organizing, and interpreting input data to build a meaningful picture of the outside world is known as perception.

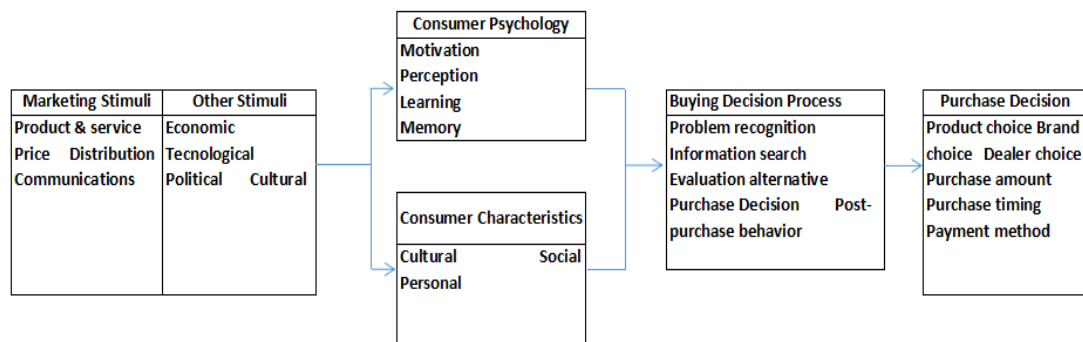


Figure 1.5 Model of Consumer Behavior

Source : diction.id

Consumer behavior model according to Kotler quoted from the book *Consumer Behavior in the Digital Era (2020)* by Nana Triapnita Nainggolan, explains that product, price, promotion, and place are marketing stimuli. Other stimuli are events that have significant power in influencing the consumer's adaptation environment, such as cultural, political, technological, and economic. The combination of marketing and other stimulus is included in the buyer's black box, which allows them to accept the stimulus as a whole. After receiving the stimulus in the black box, consumers then respond in the form of purchase amount, purchase timing, dealer choice, brand choice, and product choice.

1.5.2 E-Commerce

1) Definition of E-Commerce

E-commerce, according to Kotler and Armstrong (2009), is a channel that a person can access online or using a computer and a modem. Therefore, e-commerce is a means for both consumers and businesspeople to transact business online through the use of computers

and modems. The process starts with producers giving customers information services to help them make decisions. From this comprehension, it can be inferred that e-commerce is the large-scale, transportation-based exchange of goods between sellers and buyers of different commodities, where physical business activities such as buying and selling have been replaced by an electronic machine (internet)-assisted communication (Rahmawan, 2006).

E-commerce is a form of electronic business that centers on conducting commercial transactions through the internet, facilitating the exchange of goods or services. These transactions can occur between two entities or organizations, referred to as business-to-business (B2B), or directly between businesses and consumers, known as business-to-customer (B2C) Hartman (2000).

2) Classification of Internet Business E-Commerce

In the e-Commerce strategy, Kotler (2007) says there is a division or classification of internet business according to the parties involved in the sales transaction, namely:

- a. Business-to-business (B2B) is an online trade transaction carried out between businesses, companies or organizations.
- b. Business to Consumer (B2C) is an online trade that is carried out between companies selling to individual consumers, commonly called retail (retail).
- c. Consumer to Consumer (C2C) is an online trade that is carried out between consumers.

- d. Consumer to Business (C2B) is an online sales transaction that occurs when an individual sells a product or service to a company.

1.5.3 E-Service Quality

1) Definition of E-Service Quality

E-service quality is a result of the notion of service quality implemented in online systems. According to Puriwat and Tripopsakul (2017), a company's competitive edge and core strength are its services, which ensure business continuity.

E-service quality, as defined by Chasee et al. (2013), is a broader category of service quality with internet media that connects sellers and buyers to carry out shopping operations successfully and effectively. E-service quality, as defined by Zeithaml et al. (2009), is the degree where the website is able to make its users shop, buy, and deliver efficiently and effectively. The author can infer from the numerous criteria given above that an effective and efficient way of enabling purchasing and distribution activities is to provide consumers with an e-service of high quality.

2) Classifications of E-Service Quality

E-Service Quality, as defined by Zeithaml (2009), is a service offered by Shopee to customers who are Shopee users in the residents of Semarang as a result of the website's capacity to support shopping and distribution operations that are successfully carried out by Shopee marketplace users. The level of Shopee user happiness, with variations of satisfied and

unsatisfied, will be measured in terms of e-service quality. These indicators are used by the measuring device:

- 1) Privacy (Zeithaml et al, 2009:116), providing assurances regarding the safety of the website and the protection of user information data.
- 2) Reliability (Zeithaml et al, 2009:116), concerning the technical performance of the specified site, particularly the extent to which the site is accessible and operating correctly.
- 3) Fulfillment (Zeithaml et al, 2009: 116) involves the precision of service commitments, the availability of product inventory, and the timely delivery of products as pledged.
- 4) Efficiency (Zeithaml et al, 2009:116), customers' capacity to locate product-related information and navigate the website effortlessly, ensuring easy entry and exit with minimal exertion.

3) Classifications of E-Service Quality

E-Service Quality According to Tjiptono (2012) has 4 characteristics that is:

a. Intangibility

Physical goods can be seen, touched, and felt with the five senses, whereas services are acts, actions, experiences, processes, performances, or businesses that are abstract and cannot be owned (non-ownership).

b. Varied (Heterogeneity)

Services vary greatly in form, quality, and types depending on who, when, and where they are generated, making them variable or heterogeneous because they are non-standardized outputs. The cooperation or client participation during service delivery, employee morale/motivation in serving customers, and the workload of the business are the three aspects that affect variability in service quality.

c. Inseparability

Services are commonly generated, marketed, and utilized simultaneously and in the same location, in contrast to goods, which are typically produced, sold, and consumed in separate instances and locations. The distinctive characteristic in the marketing of such services lies in the unique interaction between the service provider and the customer. Both have an impact on the outcomes of the service concerned.

d. Not Durable (Perishability)

A service must be perishable to be considered a perishable good that cannot be saved for later use, sale, or return. Service providers frequently run into challenging issues because of the erratic and shifting nature of service demand. As a result, service providers devise techniques to better manage their operations by modifying supply and demand.

1.5.4 E-Security Seals

1) Definition of E-Security Seals

E-Security seals are included in the idea of digital security, which includes all initiatives made to protect the security of hardware, software, and the numerous types of information data they include. Digital security is an endeavor to adhere to the criteria set out by digital security principles, which are later related to the quality of an e-service as it relates to the security of a marketplace in preserving consumer personal data and fostering consumer confidence.

According to Kimmerly and McCord (2002), e-Security Seals are indications, emblems, or symbols that have been assigned by outside parties as a reliable representation of warranties for the benefit of consumers.

E-Security Seals, according to Mauldin and Arunachalam (2002), are icons or logos that provide authority to the Website's consumer promises and have an effect on consumers' intent to make online purchases. E-Security Seals, also known as online security seals, are viewed as third-party guarantees supported by third-party organizations or third parties when used as privacy or security seals on a website in several studies on the subject.

Online consumers can examine a website's details to assess the safety and security of personal information, such as credit card numbers and ID details. The presence of an identifiable security seal

on the website serves as a standard assurance, allowing consumers to differentiate the legitimacy and credibility of the site.

Consumers may examine the legitimacy and reputation of a website by clicking on its emblem online, which lowers the risk of any transaction and dispels customer mistrust. Additionally, customers can learn more about the rules or norms governing the usage of electronic security seals as well as the expiration dates for e-vendors.

E-Security Seals or security seals have reportedly been developed, and standards or principles have subsequently been formed, according to Odom et al. (2002) program, enabling customers to tell trustworthy Websites from unreliable ones. Due to the perceived uncertainty and danger in the virtual environment, McKnight et al. (2002) proposed that consumers who are serious about making transactions should consider something when conducting virtual transactions with e-vendors. Furthermore, 92 percent of internet marketers agree with Jarvis (2000) that consumers will engage in more transactions if they feel more secure about the privacy policies that apply to websites.

2) Classifications of E-Security Seals

There are three general classifications of E-Security Seals as described by Kimmerly and McCord (2002), namely:

- 1) Privacy

E-Security Seals ensures that vendors disclose and comply with the regulations related to privacy.

- 2) Process.

E-Security Seals ensure that vendors agree and comply with assessor standards for internal business processes.

- 3) Technology (security)

E-Security Seals or Electronic Security Seals signify the use of third-party technology to create security and reliable arrangements for handling payments (VeriSign/ Norton Secured).

1.5.5 Purchase Decision

- 1) Definition of Purchase Decision**

Consumers establish brand ratings and develop buy intentions during the evaluation stage, according to Kotler and Armstrong (2008: 181). Generally speaking, the purchasing decision is to acquire the most chosen brand, but two things can cause the purchase intention and decision to diverge. The first element is how other people act. The ability of the buyer to follow his desires is diminished since desire can be influenced by the closest factor, by persons who have been trusted, or by those who have significant importance to the customer. Unexpected situational factors make up the second factor. Consumers' buying

intentions may be influenced by elements like income, price, and anticipated product advantages. However, unforeseen circumstances can alter one's plan to buy.

A purchase decision is made after considering at least two alternative options and deciding whether to buy or not to buy. When consumers make a choice, other options must be offered. It is necessary to seek out or receive several types of information while making a purchasing decision (Kanuk, 2008).

According to Peter and Olson (2013), the purchase decision process is used to put all the information that customers have learned into practical consideration values while deciding between two or more options, allowing them to choose one product.

The process through which consumers choose which brand to purchase is called a purchase decision. The most popular brand will be purchased by consumers, but two variables can affect whether they make the purchase, namely other people's attitudes and unforeseen circumstances. If consumers are forced to postpone or cancel purchases or switch to other alternative options, their buying intentions may shift (Kotler, 2008).

Conclusion: Purchase Decision is a stage in a process where customers make purchases based on the integration of all the knowledge they possess to become the value of consideration when choosing between two or more available alternative products.

2) Dimensions of Purchase Decision

According to Swastha & Irawan (2012) Purchase Decision has six dimensions as follows:

- 1) Product type decisions, namely the situation when the product has different types.
- 2) Brand decision, namely the state when customers compare with other brands.
- 3) The choice of the vendor, specifically when the buyer feels at ease with the seller who is knowledgeable about the goods he sells.
- 4) The choice of the number of goods is based on the customer's comfort level with the vendor and the availability of the product inventory.
- 5) Time of purchase decision, namely the situation when the customer chooses the right time to make a purchase.
- 6) The decision on how to pay, namely the situation when the customer chooses the payment method according to his wishes.

1.5.6 Previous Research

Previous research is used as a reference for the author in conducting this research. Several studies support the research that will be carried out by the author, namely as follows:

Table 1.1 Previous Research

No	Title/Author	Variable	Result
1	Analysis of E-Service Quality and Quality Information on Trust and Impact on Purchase Decision on Consumer Tokopedia / Vera Agustina Rotua Sinurat, Mochammad Mukti Ali (2020)	1) E-Service Quality 2) Quality Information 3) Trust 4) Impact 5) Purchase Decision	E-Service Quality has a positive impact on Purchase Decision
2	The Effect of E-Service Quality and Price on Online Purchase Intention during Covid-19 / Rifqi Irawan, Selfi, Reni Dian Octaviani, Ratna Suminar (2020)	1) E-Service Quality 2) Price 3) Purchase Intention	E-Service Quality gives a positive impact on Purchase Intention
3	Effect of E-Service Quality on Purchase Decision (Go-Jek case study in Bandung) / Cantika Puspa Firdausya, Dede Oktini (2019)	1) E-Service Quality 2) Purchase Decision	E-Service Quality has a positive impact on Purchase Decision
4	Pengaruh E-Service Quality dan E-Security Seals terhadap E-Satisfaction melalui Keputusan Pembelian konsumen E-Commerce / Hanif Danang Prasetyo (2016)	1) E-Service Quality 2) E-Security Seals 3) E-Satisfaction 4) Keputusan Pembelian	E-Service Quality and E-Security Seals have a positive effect on E-Satisfaction through Purchase Decision
5	Pengaruh Kepercayaan (trust) dan E-Security Seals terhadap Minat Pembelian konsumen secara online / Ferriyal Rosita (2015)	1) Kepercayaan (trust) 2) E-Security Seals 3) Minat Pembelian (purchase decision)	Trust and E-Security Seals have a positive impact on Purchase decision

1.6 The Relation Between Research Variables

1.6.1 Relation Between E-Service Quality and Purchase Decision

Hoffman (2006) defines E-Service as an electronic service that is connected via the internet and can help with tasks, transactions, or problem-solving. According to Anggraeni and Yasa (2012), the concept of e-service quality is the degree to which a website can enable sales, purchases, and delivery of both goods and services. Kotler and Armstrong claim that buying decisions are a component of consumer behavior, in which people, groups, and organizations select, acquire, or employ goods, services, or concepts to meet their needs and desires (Haque, 2020).

The aspects of a purchasing decision, according to Kotler and Armstrong (Khafidin, 2020), include the product, brand, retailer, time of buy, quantity of purchase, and time of payment. In light of the current theory, it can be said that e-service quality, which is defined as the capacity to facilitate the dimensions of purchase decisions, has a favorable link to purchasing decisions.

1.6.2 Relation Between E-Security Seals and Purchase Decision

E-Security Seals, according to Kimmery and McCord (2002), are signs, symbols, or logos that are assigned by outside parties as a reliable representation of warranties to support and foster consumer confidence and website security. Customers believe that using a web guarantee seal can give them with one type of guarantee. Kotler and Armstrong claim that purchase decisions are a component of consumer behavior, which is how people,

groups, and organizations select, acquire, or employ goods, services, or concepts to meet their desires and needs (Haque, 2020).

According to a study by Prasetyo (2016) and Rosita (2015), e-security seals have a substantial impact on consumers' decisions to make online transactions.

1.7 Hypothesis

To explain facts or occurrences or to provide a potential response to a research issue, a hypothesis is a notion or guess that has not been proven, is currently unproven, or is only tentative or transitory (Zikmund, 1997). These are the hypotheses put out in this study:

H1 : *E-Service quality* has a positive effect on purchase decisions

H2 : *E-Security seals* have a positive effect on purchase decisions

H3 : *E-Service quality* and *E-Security seals* have a positive effect effect on purchase decisions

Based on the description above, the influence of E-Service Quality and E-Security Seals on Purchase Decisions for Shopee customers can be described by the following hypothesis model:

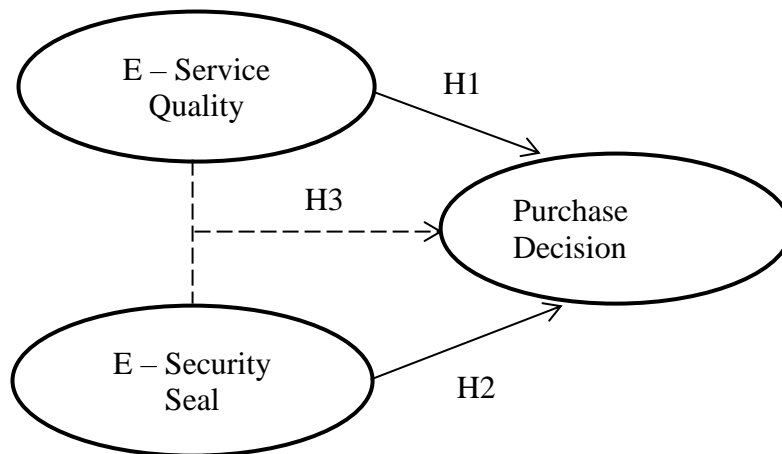


Figure 1.6 Hypothesis Model

1.8 Concept Definition

Concept definition is the stage of explaining the limitation of understanding of the things observed. The definition of the concept of each variable in this study is as follows:

1.8.1 E-Service Quality

E-service quality, as described by Zeithaml et al. (2009), is the degree to which a website makes shopping, buying, and delivery efficient and effective.

1.8.2 E-Security Seals

E-Security Seals, also known as electronic security seals, are indications, logos, or signals that are set by outside parties to reflect reliable warranties for the benefit of consumers (Kimmery and McCord, 2002).

E-security seals are icons or logos that help customers trust website warranties and have an impact on their decision to make an online transaction (Mauldin and McCord, 2002).

1.8.3 Purchase Decisions

According to Schiffman and Kanuk (2008), deciding to buy something or not is the process of choosing between two or more alternatives. When a consumer makes a choice, other options must be offered.

Purchase decisions are the selection, acquisition, use, and disposal of experiences, ideas, services, and goods by individuals, groups, and organizations so the needs and desires they have can be satisfied (Kotler & Armstrong, 2016).

1.9 Operational Definition

The operational definition is an indication of how a variable is measured. The operational definition of variables from this research are:

1.9.1 E-Service Quality

E-Service Quality is a service offered by Shopee to customers who are marketplace users in Semarang. It refers to the site's capacity to allow effective and efficient shopping and distribution activities carried out by marketplace users. The level of Shopee user happiness, with variations of satisfied and unsatisfied, will be measured in terms of e-service quality.

These indicators are used by the measurement device:

1) Privacy (Zeithaml et al, 2009)

In the form of assurances regarding how secure the website is and how user data is protected.

2) Reliability (Zeithaml et al, 2009)

Related to the technical operation of the contested website, in particular the extent to which the website is accessible and operating as it should

3) Fulfillment (Zeithaml et al, 2009)

includes product availability, service commitments being kept, and products being delivered on schedule.

4) Efficiency (Zeithaml et al, 2009)

Customers should be able to easily visit and quickly leave a website and get information about things there.

1.9.2 E-Security Seals

E-Security Seals is a guarantee for shopee users in Semarang or consumers in online transactions. The warranty provided is a security guarantee backed by a third party as a privacy or security seal on the website. For the marketplace, the *E-Security Seals* are one of the important things in making online transaction decisions. The measuring instrument used uses the following indicators:

1) Privacy (Kimmery dan McCord, 2002)

Privacy on Electronic Security Seals ensures that vendors disclose compliance with privacy regulations regarding user data on systems.

2) Process (Kimmery dan McCord, 2002)

The processes at E-Security Seals ensure that vendors agree and comply with assuro standards for internal business processes

3) Technology/System Security (Kimmery dan McCord, 2002)

Technology / security system in E-Security Seals indicates the use of third-party technology to create security and create a reliable order in the handling of payments.

1.9.3 Purchase Decision

Purchase decision is the executed action by shopee consumers in the people live in Semarang (both individuals, groups and organizations) to decide an action related to choosing, buying and using a product after so many observations of choices offered and determining a brand choice that is considered the most preferred. At the time of making purchasing decisions, there are several dimensions of consumer purchase decisions. There are several indicators of purchase decision as pointed out by Kotler & Armstrong (2016), they are:

1) Product selection (Kotler & Armstrong, 2016)

Customers can discern which products hold value for them and decide what to purchase, prompting companies to concentrate on the array of product options they offer and the alternatives consumers contemplate to attract purchasing decisions.

2) Brand Choice (Kotler & Armstrong, 2016)

When making purchasing decisions, consumers have the autonomy to choose a particular brand based on its unique attributes. Since each brand possesses distinctive qualities, consumers typically opt for the brand that aligns with their preferences. Consequently, the diverse range of brand choices available assists consumers in finding the specific item they desire.

3) Choice of dealer (Kotler & Armstrong, 2016)

When selecting a dealer, the consumer is faced with a choice between two types of product distributors: offline dealers represented by traditional brick-and-mortar stores, and online distributors operating through e-commerce platforms and marketplaces. Several factors in determining this are easy access, offering relatively cheaper prices, complete inventory, and convenience in shopping.

4) Purchase quantity (Kotler & Armstrong, 2016)

Consumers will make decisions about how many products to buy, so companies must prepare the number of products offered, so that they can meet the needs of consumers who buy a product in different quantities from one another.

5) Time of purchase (Kotler & Armstrong, 2016)

Consumers can make decisions about when they have to make purchases, so a service that has no time limit will make it easier for consumers.

6) Payment methods (Kotler & Armstrong, 2016)

Consumers can make decisions about what payment method to use after deciding to buy.

Table 1.2 Research Variable and Operational Definitions

Variable	Indicator	Items
E-Service Quality (X1) e-service quality is defined as the extent to which a website accommodates shopping, purchasing and delivery effectively and efficiently (Zeithaml et al, 2009: 115)	1) Privacy	Shopee can maintain users' data Shopee maintains user's personal information in the transaction process
	2) Reliability	Shopee is able to handle problems well Shopee provides the appropriate service
	3) Fullfillment	Shopee services and products are appropriate Shopee has alignment between delivery information in the application and website with the reality
	4) Efficiency	Shopee application and website are easy to operate Information on the Shopee application and website is easy to get through its features
E-Security Seals (X2) E-Security Seals or electronic security seals are signals, symbols or logos set by third parties as representations of credible guarantees to support consumers (Kimmery and McCord, 2002)	1) Privacy	Shopee provides online transaction security
	2) Process	Shopee provides security in the payment process
	3) Technology / System Security	Shopee has a data protection guarantee

Variable	Indicator	Items
		Shopee has a partnership with trusted bank partners
		Guarantees that there is no fraud at the shopee
Purchase Decision (Y)	1)Product Selection	Various product choices
Consumer purchase decisions are the study of how individuals, groups, and organizations in selecting, buying, using, and disposing experiences, ideas, services, and so their needs and desires can be fulfilled (Kotler & Armstrong, 2016)	2) Brand Choice	Many choices of brands at Shopee
	3) Choice of Dealer	There are many sellers at Shopee
	4)PurchaseQuantity	Large quantity
	5) Time of Purchase	Purchase service without time limit
	6) Payment Method	Shopee provides many choices of payment methods

1.10 Research Method

1.10.1 Research Type

The researcher employs a quantitative method and the explanatory research type. One form of study that can be distinguished by its objective is explanatory research. Explanatory study focuses on explaining how two or more symptoms, phenomena, or variables are related to one another. When you wish to understand why a particular circumstance or condition may exist or what factors affect its occurrence, you employ explanatory research. Clarity of the relationship between the current variables will be

sought in this form of explanatory study. This study demonstrates the pattern, direction, nature, shape, and strength relationships that exist between two or more variables. Researchers must formulate a hypothesis as a first premise to explain the correlations between the variables under investigation.

This research has a correlation that focuses on the influence of the *E-Service Quality* (X1) variable and the *E-Security Seals* (X2) variable on the *Purchase Decision* (Y) variable. *E-Service Quality* and *E-Security Seals* are independent variables, and *Purchase Decision* is the dependent variable.

1.10.2 Population and Sample

1. Population

In the meantime, according to Sugiyono (1997), population refers to a broad category comprising elements or entities possessing distinct qualities and quantities, chosen by researchers for examination and enabling the derivation of inferences. To set a restriction on what can be researched, researchers need to comprehend the population.

People in Semarang who have participated in transactions for at least the past six months make up the population of this study. According to a survey by the SnapCart Research Institute, the majority of marketplace users and consumers are between the ages of 15 and 34. This age range is also included in the millennial

generation's age range, which makes up the majority of marketplace users by an 80% margin.

2. Sample

Sugiyono (2008) claims that the sample represents a subset of the population's features. The utilization of samples drawn from the population is important in this situation since researchers can't examine the complete population in a big population due to barriers including a lack of resources, time, and energy. Additionally, the sample will be used to draw conclusions that will then be applied to the entire population.

Cooper and Emory (1998) state in their book on business research methods that "the basic formula for determining sample size in non-probability sampling assumes that the population is unlimited" when discussing how to determine the sample size.

Based on the theory above, the sample of respondents in this study was 100 people from all shopee *marketplace* users who were in the age range of 15 - 34 years and a people in Semarang.

1.10.3 Sampling Technique

To conduct research, sampling techniques are required. The population or sample, which is a crucial component of a study, is closely tied to the sampling technique. Purposive sampling, which is a sampling carried out by certain goals and considerations, is a non-probability sampling strategy employed in this study. By using this technique, the

researcher can evaluate the research participants. A subject that is assumed to be typical of a certain demographic can be selected by a researcher implicitly.

This study also employs accidental sampling, which is sample selection by chance. When a respondent meets the requirements, they can be included as a respondent in the study. One of the considerations for respondents in this study was whether they were a woman or a guy between the ages of 15 and 34 who had used the Shopee marketplace. By speaking with the respondent personally, the researcher will ascertain whether the sample meets the predetermined sample criteria or not. Following are the traits of respondents that make good samples:

1. Men or women who are in the age range 15 - 34 years
2. Reside and are citizens of Semarang
3. Using the shopee application for at least 1 year
4. Willing to fill out a questionnaire related to the research conducted
5. Active transactions at shopee for at least the last 6 months

1.10.4 Types and Sources of Data

1. Data Type

The information or explanations provided in numbers or the form of numbers are considered to be quantitative data kinds, or data that can be directly measured or quantified. The objective of the quantitative research approach is to test the hypotheses that have been employed by examining populations or research samples,

collecting data using research instruments, and analyzing data with SPSS (Sugiyono, 2017). The results of the Shopee consumer survey in Semarang serve as the study's quantitative data. The type of data used is the assessment of women or men according to predetermined criteria regarding the factors of *E-Service Quality* and *E-Security Seals* on purchasing decisions on the shopee *marketplace*.

2. Data Source

a. Primary data

Primary data is the kind of information that is gathered during the study directly from persons, objects, or sources (Tambunan, 2021). The findings of surveys given to Shopee customers in Semarang provided the study's main data.

b. Secondary Data

Indirectly collected data is referred to as secondary data (Tambunan, 2021). The study's secondary data came from journals, books, and earlier studies. This information is the outcome of recording in the form of tables, diagrams, and other shopee marketplace-related items.

1.10.5 Measurement Scale

When used in research, the measuring scale has the function of providing a way to establish the duration of the brief interval that has been established in the unit of measurement. The measuring scale's objective is to convert the qualities of the empirical data into a format that allows for analysis by

academics. The grading of empirical data by predetermined criteria or procedures is the main focus of the measurement scale. The variables that will be assessed in this study are variables, and each variable contains indicators that will be utilized as statement items in the future. As a result, a measuring scale is required. The Likert scale was employed in this study to examine participants' attitudes, views, and perceptions toward social phenomena (Sugiyono, 2009).

The scoring given to measure purchasing decisions uses a Likert Scale, as follows:

- a. Score 5 if the respondent strongly agrees
- b. Score 4 if the respondent agrees
- c. Score 3 if the respondent quite agrees
- d. Score 2 if the respondent does not agree
- e. Score 1 if the respondent strongly disagrees

1.10.6 Data Collection Techniques

- a. Questionnaire: a survey of several data by asking online questions to female or male Shopee consumers aged 15 - 34 years.
- b. Interview: in the form of a survey of several data by asking questions directly to female or male Shopee consumers aged 15 - 34 years.
- c. Library Studies: This study uses data collection techniques by reviewing books, journals, and articles related to research.

1.10.7 Data Processing Techniques

After the data is obtained, it is processed and then presented in the form of tables for analysis purposes. The data processing includes:

a. Editing

After the data has been gathered, this procedure is completed. The editing process is used to ensure that the questionnaire's answers were appropriately completed. Additionally, the editing procedure tries to obtain accurate responses so that the findings are correctly addressed.

b. Coding

This is the procedure of assigning a specific code to the numerous questionnaire responses to put them into the same category. Coding is done to make the responses of respondents easier to handle in SPSS and to facilitate analysis.

c. Scoring

The Likert scale is one method for calculating the score when delivering this score or assessment. Because each variable is measured using several indicators, scoring is necessary.

d. Tabulating

A helpful table will appear as a result of carefully and consistently sorting the responses, adding them up, and calculating the results. It is hoped that the reader will be able to properly see the research's findings with the help of this grouping.

1.10.8 Research Instrument

The research instrument, according to Sugiyono (2009), is a device used to measure the observed natural and social phenomena. This study used a questionnaire as its instrument or measuring device, which had questions for the research respondents to answer. The previously created theoretical construction serves as the foundation for creating the questionnaire. The theoretical foundation is then used to construct indicators, which are then turned into question items with a Likert scale for scoring.

1. Validity Test

Validity is derived from the word validity, which denotes the degree to which a measuring device is accurate and accurate in performing its size function (Azwar 1986). The purpose of the validity test is to ascertain the reliability of the data collection tool. If it is legitimate, it can be used to measure the variables that are needed to be measured and vice versa. According to Ghozali (2009), a questionnaire is deemed to be legitimate if the r count is more than the r table (r count $>$ r table), and invalid if the r count is lower than the r table.

Another indicator of a test's high validity is whether it fulfills its intended purpose of measurement or produces precise and accurate measurement results. A test is said to have low validity if the results it generates are unrelated to the goal of the measurement. The aspect of measurement precision is the flip side of the validity concept. A valid

measuring device has great precision and can perform its measurement function accurately. The ability to recognize minute variations in the properties it measures is what is meant by accuracy in this context.

The validity test is calculated by the *product moment* correlation formula:

$$r = \frac{n \sum XY - (\sum X) (\sum Y)}{\sqrt{(n \sum (X)^2 - (\sum X)^2) (n \sum (Y)^2 - (\sum Y)^2)}}$$

With information:

r = Product moment correlation coefficient

N = Number of respondents

Y = Total score of items tested for validity

X = Score of items tested for validity

2. Reliability Test

The consistency of measurement is the definition of dependability (reliability) (Walizer, 1987). According to Sugiharto and Situnjak (2006), reliability entails the concept that the instruments utilized in research for data collection can be trusted as effective tools, capable of uncovering factual information in the field.

Ghozali (2009), dependability serves as a technique for evaluating a survey, acting as an indicator for a variable or construct. If a respondent consistently provides the same response to a statement over time, the questionnaire is deemed to be reliable. The reliability of a test is characterized by its level of stability, consistency, predictability, and accuracy.

High-reliability measurements are those that can yield trustworthy results. A reliability test is used to determine whether or not an instrument can be trusted. Reliable tools will also yield reliable results. No matter how many times the data is collected, if it is accurate, it will remain the same. Sumadi Suryabrata (2004: 28) claims that dependability demonstrates the degree to which the assessment outcomes obtained using this technique may be believed. The measurement results need to be trustworthy in the sense that they need to be consistent.

Reliability is calculated by *Cronbach's Alpha* formula:

$$r_i = \frac{k}{k-1} \left\{ 1 - \frac{\sum Si^2}{St^2} \right\}$$

With information:

k = Mean Square between subjects

$\sum Si^2$ = Mean square of error

St^2 = Total Variance

A construct or variable is said to be reliable if it gives a Cronbach Alpha value > 0.60.

1.10.9 Analysis Techniques

In this study, a quantitative analysis methodology was applied as an analytical method. The gathering of quantitative research data through the use of various tests and questionnaires is known as quantitative analysis. A form of analysis called quantitative analysis uses numbers that may be calculated or measured. The outcomes of the average variance are highlighted by the quantitative approach. The quantitative approach is

viewed as inductive and exploratory. The key to reliability is to quantify it (Sekaran & Bougie, 2016).

Quantitative data analysis strategies concentrate more on using mathematics and statistical analysis to test a theory, measurement, and hypothesis. The most common quantitative data collection techniques are surveys, experiments, and observations, among others. The goal of quantitative analysis is to quantify the influence of changes in one or more other events. To do this, statistical analysis tools are used.

Data analysis utilizing a quantitative data technique is known as quantitative analysis. In this type of analysis, calculations are made using statistical tests (SPSS) and measurements that state the numbers that have been organized in tables.

1. Multiple Regression Test

A regression model called multiple linear regression includes multiple independent variables. Ghozali (2018) employed multiple linear regression analysis to ascertain both the magnitude and direction of the impact exerted by the independent variable on the dependent variable. Multiple linear regression's general equation is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_n X_n + e$$

With information:

Y = Dependent variable or response variable

X = Independent variable or predictor variable

α = Constant

β = Slope or Coefficient estimate

2. Correlation Coefficient Test

The r value of the correlation analysis results can be used to determine the correlation coefficient test, which measures the strength of the association between two variables. A guide is utilized to explain the correlation coefficient's value. Sugiyono (2009) provides the following recommendations for determining the degree of the relationship/correlation coefficient between these variables:

Table 1.3 Guidelines in Determining the Closeness Between Variables

Interval Nilai R	Interpretation
0,00-0,199	Very low correlation
0,20-0,399	Low correlation
0,40-0,599	The correlation is quite strong
0,60-0,799	Strong correlation
0,80-1.000	Very strong correlation

Source : Sugiyono, 2009

3. Coefficient of Determination Test

By determining the coefficient of determination, the regression can then be continued (Sugiyono, 2009:185). The percentage of contribution between variables is calculated using the coefficient of determination. The evaluation of the coefficient of determination involves assessing the model's ability to elucidate the collective impact of independent variables on the dependent variable, as indicated by the adjusted R-square value (Ghozali, 2016).

$$KD = (r^2) \times 100\%$$

With information:

KD = Coefficient of Determination

r = Correlation coefficient

To determine how much the endogenous factors could simultaneously explain the exogenous variables, the coefficient of determination test was used. The prediction model of the suggested research model is better a higher the r^2 value. The coefficient of determination (r^2) test is used to estimate and forecast how much or how significant a contribution the independent variables' combined influence will have on the dependent variable. The coefficient of determination ranges from 0 to 1, and when it approaches 1, it signifies that the independent variable offers almost all the necessary information to predict the dependent variable.

The ability of the independent factors to explain the dependent variable, however, is fairly limited if the value of r^2 is increasing less

(Ghozali, 2016). Chin (1998) categorizes the strength of the r-Square value as robust when surpassing 0.67, moderate if falling between 0.33 and 0.67, and feeble if ranging from 0.19 to 0.33.

Adjusted r² can be used to determine how much of an impact E-Service Quality and E-Security Seals have on purchase decisions. If adjusted r² is near to zero, the chosen variable from E-Service Quality and E-Security Seals is not able to explain the purchase decision variable. The chosen factors, such as E-Service Quality and E-Security Seals, can therefore effectively describe the Purchase Decision variable if adjusted r² is close to 1. This means that the coefficient of determination is used to calculate the proportion of the Purchase Decision that is affected by the E-Service Quality and E-Security Seals variables. Changes in Purchase Decisions are influenced by changes in E-Service Quality and E-Security Seals that are several percent higher or lower than the baseline.

4. The t

The t-test serves as an examination of individual partial regression coefficients, aiming to establish whether the independent variable (X) has a distinct impact on the dependent variable (Y).

The significance of the association between the variables was determined using the t-test. Does the Purchase Decision depend on the *E-Service Quality* and *E-Security Seals*. The following steps are used: How to calculate t according to Sugiyono (2009)

$$t = \frac{r\sqrt{(n-2)}}{\sqrt{1-r^2}}$$

With information:

$t = t\text{-test}$

$n = \text{number of respondents sample}$

$r = \text{number of correlations}$

(note: t-table for error rate 5% and $N=100$)

a. The basis for decision-making are:

By comparing t-table and t-count:

- 1). If $t\text{-test} > t\text{-table}$, then H_0 is rejected and H_a is accepted
- 2). If $t\text{-test} < t\text{-table}$, then H_0 is accepted

5. The F

The F test is used to determine whether the overall regression coefficient has an impact on the dependent variable, according to Prawoto, et al. (2016). The F test findings are deemed significant if the Sig value is more than 0.05. According to Sahir (2022), the F test is used to ascertain the combined (simultaneous) impact of the independent factors on the dependent variable. The independent variable significantly affects the dependent variable if $F_{\text{count}} > F_{\text{table}}$ and significance value is less than 0.05.

The reference for the f test is as follows.

- 1) If $F_{\text{count}} < F_{\text{table}}$ then H_0 is accepted and H_a is rejected
- 2) If $F_{\text{count}} > F_{\text{table}}$ then H_0 is rejected and H_a is accepted

According to Sahir (2022), the simultaneous test formula is as follows:

$$F = \frac{\frac{R^2}{k}}{(1-R^2)(n-k-1)}$$

With information:

R : Multiple correlation coefficient

k : Total of independent variables

n : Total of sample members