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CUSTOMER SATISFACTION AND CUSTOMER LOYALTY

Case Online Shopping through Shopee.com (B2C)

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1. Introduction

1.1. Research introduction

The increase of e-commerce has revolutionized the way consumers shop and has created new opportunities for businesses to reach customers. Online shopping has become increasingly popular, as it provides consumers with the convenience of shopping from the comfort of their own homes and access to a wider range of products at competitive prices. Shopee Mall, as one of the leading online shopping platforms in the region, has played a key role in this transformation and has become a popular choice for consumers looking to purchase products online.

Customer satisfaction with products or services is the most important issue of every business. In today's context, with the advancement in technology, E-commerce has now become popular and indispensable for people in daily life. Instead of spending time going to the shop and carrying the goods back home, with just a few simple steps on a computer or mobile with an Internet connection, consumers can buy whatever they need, even buy goods abroad with fast and accurate delivery service. Especially, when there are many competitors, the study of the satisfaction of services/products provided to customers of each business is extremely necessary to retain existing customers as well as attract potential customers.

For retailers, the advantage of opening an online store is huge compared to traditional sales because it saves costs of renting, advertising, and marketing. With a large customer base, customers can easily access to the company's products anytime, anywhere without having to communicate with company employees because all information directly related to the product is regularly updated online.

The aim and objective of the research is to explore the factors which influence to customer satisfaction and customer loyalty. Besides, the findings of this research will be valuable for Shopee.com and other e-commerce platforms, as they will provide insights into how to improve customer satisfaction and customer loyalty. The results of this research will also be relevant to researchers and academics, as they will contribute to the ongoing academic discourse on customer satisfaction and customer loyalty in the context of online shopping. Stemming from those actual needs, I - the author chose the topic “CUSTOMER SATISFACTION AND CUSTOMER LOYALTY - Case Online Shopping through Shopee.com (B2C).

1.2. Conceptual framework

My research's framework is taken from the American Customer Satisfaction Index (ACSI), which developed at the University of Michigan's Ross School of Business. The ACSI model is a cause-and-effect model with indexes for drivers of satisfaction on the left side (customer expectations, perceived quality, and perceived value), satisfaction (ACSI) in the center, and outcomes of satisfaction on the right side (customer complaints and customer loyalty, including customer retention and price tolerance).

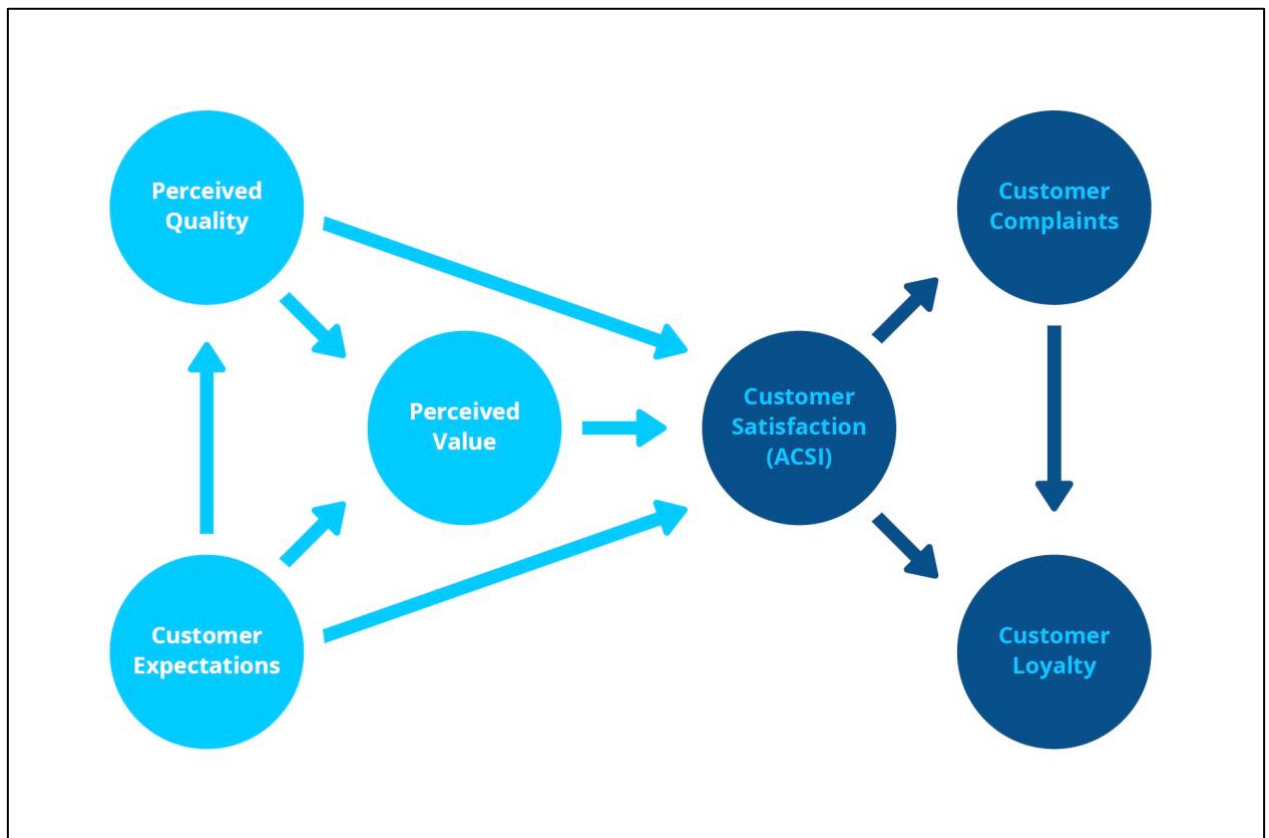


Figure 1: American Customer Satisfaction Index

Source: (American Customer Satisfaction Index, n.d.)

The customer satisfaction (ACSI) index score investigates as a weighted average of three survey questions that measure different factors of satisfaction with a product as well as service. **Customer expectations** is an examination of the customer's prospect of the quality of a company's products or services. It reflects a business's health by showing how customers react your products or services.

Perceived quality is a measure of the customer's evaluation via recent consumption experience of the quality of a company's products or services. Quality is measured in terms of both

customization the degree to which a product or service meets the customer's individual needs, and reliability, which is the frequency with which things go wrong with the product or service. **Perceived value** is a measure of quality relative to the amount of money that the buyers pay for products or services. As we can see that the products' price is very important to the customer's first purchase, it usually has a somewhat smaller influence on satisfaction for purchases again.

Customer complaints are measured as a proportion of those who directly complained about a product or service within an exact period. Satisfaction has negatively correlated with customer complaints, as the more satisfied the customers, the less likely they are to complain.

Customer loyalty combines the customer's desire to repurchase from the same supplier in the future with the likelihood to purchase a company's products or services at various price points (price tolerance). Customer loyalty is considered as the crucial element of the model as it stands as a proxy for profitability.

2. Literature Review

2.1. E-Commerce

Commerce is a traditional form of business that has been practiced for centuries (Fryer, n.d.). It involves the buying and selling of goods and services through physical store or locations, such as shops, markets, and malls. Customers can interact with the products and services they are interested in, get a first-hand experience, and make purchases directly from the sellers. Commerce provides an opportunity for local businesses to serve their communities and provides job opportunities for people.

E-commerce, on the other hand, refers to electronic commerce. It means sales deal in goods and services through the electric media and Internet. It includes a diverse range of information, technologies, and resources for Internet purchasers and vendors, such as mobile commerce and encryption for online payments. Generally, there are seven main models of ecommerce that businesses can be categorized into: Business-to-Consumer (B2C), Business-to-Business (B2B), Consumer-to-Consumer (C2C), Direct-to-Consumer (D2C), Consumer-to-Business (C2B), Business-to-Administration (B2A), Consumer-to-Administration (C2A) (Ecommerce: The History and Future of Online Shopping, n.d.).

2.2. Online Shopping

Online shopping has a rich history that dates back to the 1970s, when the first business-to-business transactions were conducted over the Internet (Doody, 1967). However, it wasn't until the mid-1990s that online shopping really took off, with the rise of e-commerce giants such as Amazon and eBay (Lufkin, 2020). Today, online shopping is a multi-billion-dollar industry, with millions of people around the world shopping online every day.

In general terms, online shopping refers to the process of buying goods or services over the Internet. It typically involves browsing an online store, selecting the desired items, and making a payment using a secure online payment system. The purchased items are then shipped to the customer's address, usually within a few days.

Online shopping has played a vital role during the COVID-19 pandemic. With lockdowns and social distancing measures in place, many people have turned to online shopping to purchase essential goods and services while minimizing their risks of exposure to the virus. One of the key differences between online shopping and traditional offline shopping is the convenience factor. With online shopping, consumers can shop from anywhere, at any time, without the need

to physically visit a store. This saves time and effort and provides greater flexibility, particularly for those with busy schedules. Offline shopping, on the other hand, typically requires a physical visit to a store, which can be time-consuming and often involves crowds and traffic.

Another key difference is the range of products and services available. Online shopping offers a much wider selection of products and services than traditional offline shopping, particularly for niche or special items. This is because online retailers can source products from around the world, whereas traditional stores are limited by their physical location and space limitations. When it comes to pricing, online shopping can sometimes be cheaper than offline shopping. This is because online retailers don't have the same overhead costs as traditional stores, such as rent, utilities, and staff wages. However, this is not always the case, and pricing can vary depending on the product and retailer.

In summary, online shopping has revolutionized the way people shop, providing a convenient and flexible alternative to traditional offline shopping. While there are some differences between the two, both online and offline shopping have their advantages and disadvantages, and consumers can choose the method that best suits their needs and preferences.

2.3. User interface

The user interface is the point at which human users interact with a computer, website, or application. The purpose of effective UI is to make the user's experience easy and intuitive, requiring minimum effort on the user's part to receive the maximum desired outcome (Team, What Is User Interface (UI)?, 2022). According to Xia Liu's research, customers are more likely to be satisfied with their experience when they are able to easily access information about a service or product online, rather than offline. Additionally, Liu's study found that the quality of the information and web design play a significant role in customer satisfaction in the Chinese context. In other words, Liu's research suggests that it is important for companies to make sure that information about their products or services is easily accessible online, and that their website is well-designed and user-friendly in order to achieve high levels of customer satisfaction in China. (Xia Liu, 2008)

2.4. Security

Another important factor affecting online shopping satisfaction is security. Customer satisfaction in e-commerce is related to the security of the system (Tongtong Geng, 2016). Consumers are concerned about the safety of their personal information and financial data when

making purchases over the Internet. Ensuring the security of the e-commerce system is essential to building trust and confidence in online Shoppers. In today's digital era, where cyber threats are constantly evolving, it's imperative for online retailers to invest in robust security measures to protect customer data and prevent fraud. A secure online shopping experience not only protects the customers' sensitive information but also instills confidence in the e-commerce platform, leading to increased customer satisfaction and loyalty.

2.5. Customer satisfaction

Customer satisfaction is the most important factor and a key goal in business environment. Customer satisfaction is defined as an overall evaluation based on the total purchase and consumption experience with the goods and services over time. (Eugene W. Anderson, 1994). Philip Kotler defined satisfaction in the book named “A framework for marketing management” as: *“A person’s feelings of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectations”* (Kotler, 2001). The level of satisfaction depends on the difference between the results received and the expectations, if the actual results are lower than the expectations, the customer is not satisfied, if the actual results match the expectations, the customer will be satisfied. If the actual result is higher than the expectation, the customer is very satisfied. Customers' expectations are formed from shopping experiences, from friends and colleagues, and from information from sellers and competitors.

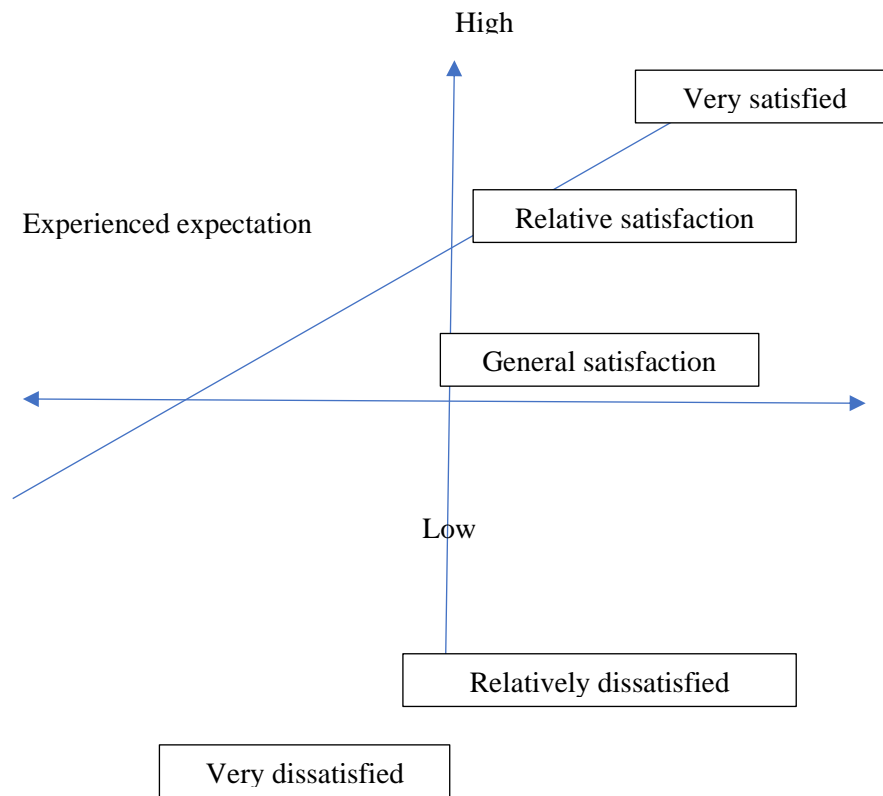


Figure 2: Customer satisfaction model

Source: Adapt from Tao 2014

According to Hansemark and Albinsson, “*satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or desire*” (Hansemark, 2004).

According to customer relationship management triangle law, we can see that: Customer satisfaction = Customer experience - Customer expectations. Most organizations generally detect customer expectations by CSI (*customer satisfaction index*) customer satisfaction analysis model (see Figure 2), it also shows that there is a negatively correlation between customer satisfaction and customer expectations. The figure reflects the distinction between customer expectation and customer experience. There are five divisions in the figure (very dissatisfied, relatively dissatisfied, general satisfaction, relatively satisfied and very satisfied).

There are two methods for companies to improve customer satisfaction: First, try to improve service levels, to improve the customer experience; second, try to effectively manage customer expectations, reducing the desired level. Obviously, the first approach is currently widely used

in the industry, and it has attained great success. In the future, companies need to maintain continuous advancement. (TAO, 2014)

2.6. Customer Loyalty

According to Cambridge Dictionary, customer loyalty is defined as “*the fact of a customer buying products or services from the same company over a long period of time*” (Cambridge Dictionary, n.d.)

According to Oliver, loyalty definition is “*a deeply held commitment to re-build and re-patronize a preferred product or service in the future despite situational influences and marketing efforts having the potential to cause switching behaviors*” (Oliver, 1999). Brand loyalty is not a simple concept. The complexity in terms of whether it should be viewed in terms of behavior or attitude. Brand loyalty is a function of attitude that should not be measured via purchase levels to account for cognitively captured consumers, habitual purchases and no, or minimal, alternative situations. (Leon G. Schiffman, 1997).

Therefore, loyalty is at the heart of a company’s achievement. To build customer loyalty, businesses need to provide high-quality products or services, offer exceptional customer service, and build strong relationships with their customers. This can involve personalized communication, loyalty programs, and other incentives to encourage customers to remain loyal to the business. By creating a positive customer experience and building strong relationships with their customers, businesses can increase customer loyalty and improve their overall success. Researchers and marketers are trying to understand the variables that determine loyalty to a company or to a product and to distinguish between brand and customer loyalty, although there is not much distinction between the two concepts.

2.7. Relation between customer satisfaction and loyalty

The customer loyalty as a result or a consequence of customer satisfaction (Fornell, 1992). There is a positive correlation, it means the more satisfied the customers, the more likely they are to be loyal than those customers are unsatisfied. One of keys finding of an article namely “Satisfaction Strength and Customer Loyalty” indicates that the result significantly describe that the convert satisfaction strength assumes a central role in translation into loyalty. (Chandrashekar, 2006)

Customers who are highly satisfied with a brand's products or services are more likely to spread positive word-of-mouth and become loyal customers, which can lead to increase sales and profitability. Satisfaction plays a key role in building trust and loyalty, and when customers have an emotional connection to a brand, it can strengthen the bond between them.

Overall, the relationship between customer satisfaction and loyalty has a direct impact on a business's profits, as satisfied customers tend to be more loyal and lead to increased revenue. Additionally, customer satisfaction acts as a mediator in the relationship between customer loyalty and service quality. (Sharma, 2020)

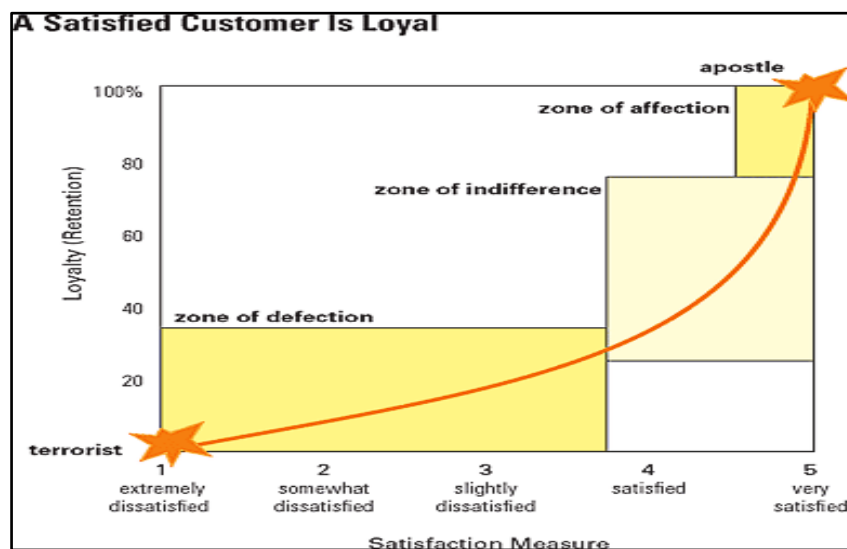


Figure 3: A Satisfied Customer Is Loyal

Source: Adapt from Harvard Business Review

We can see from the *figure 3* that the relationship exists between customer satisfaction and loyalty. Customers are divided into three zones: “zone of defection, zone of indifference and zone of affection”. This figure shows the level of customer loyalty depend on their satisfaction from a product or service. The relation between customer loyalty and satisfaction is positive correlation, it means there is a positive correlation between customer satisfaction and customer loyalty. Those who are extremely dissatisfaction are described as “terrorists”. There is no doubt to say that a dissatisfied customer will never say anything positive about this company's product or service. It is possible that these customers may discourage others or never suggest for trying this company's products or services. Highly satisfied customers are referred to as “apostles”. They are the ones who were impressed by the company's service quality and are ready to repurchase or reuse, making them more loyal. These are the type of customers who will say a good word for the company to others in their community, thereby encouraging many more to

try the company's services or products. Loyal customers are more satisfaction driven; therefore, companies must make sure their customers are highly satisfied (James L. Heskett, 2008)

2.8. Customer Satisfaction – Quality, Expectation, Value

In many articles, the relationship between Customer Satisfaction, Quality, Expectation, Value have been significantly showed. According to the result of the article “*Role of perceived value, customer expectation, corporate image and perceived service quality on the customer satisfaction*” we can see that customer satisfaction can be improved by focusing on perceived value, customer expectations, corporate image, and perceived service quality (Ali, 2015). The research results of Samaan Almasalam indicate that customer expectation has significant positive effect on customer satisfaction also perceived service quality has significant positive effect on customer satisfaction (Almsalam, 2014).

2.9. National and regional e-commerce

In Q4 2021, the average amount of time that Internet users aged 16 to 64 spend using the Internet each day on any device is 6 hours and 58 minutes, that is higher by 1% compared to the previous quarter. (REPORTS & CONTENT, 2022). The Internet enable users to search for information, online shopping, relax through social media platform like Facebook, YouTube, ...etc.



Figure 4: DIGITAL 2022: GLOBAL OVERVIEW REPORT

Source: (Kemp, 2022)

As we can see, global revenues associated with online purchases of consumer goods categories—which include groceries, fashion, electronics, and other household items – increased by more

than half a trillion US dollars during 2021 (+18 percent), reaching a total of USD \$3.85 trillion for the year as a whole. \$988.4 billion revenue came from electronics. Fashion products comes in second with \$904.5 billion. The revenue in January 2022 of furniture was \$436.8 billion; for toys, hobby, and DIY products (*for decorating or repairing your home, or making things for your home yourself, rather than paying someone else to do it for you*) was \$392.9 billion and for personal and household care was \$381.5 billion. The annual spend in food, beverage and physical media were \$ 376.6 billion, \$211.5 billion, and \$155.0 billion respectively.

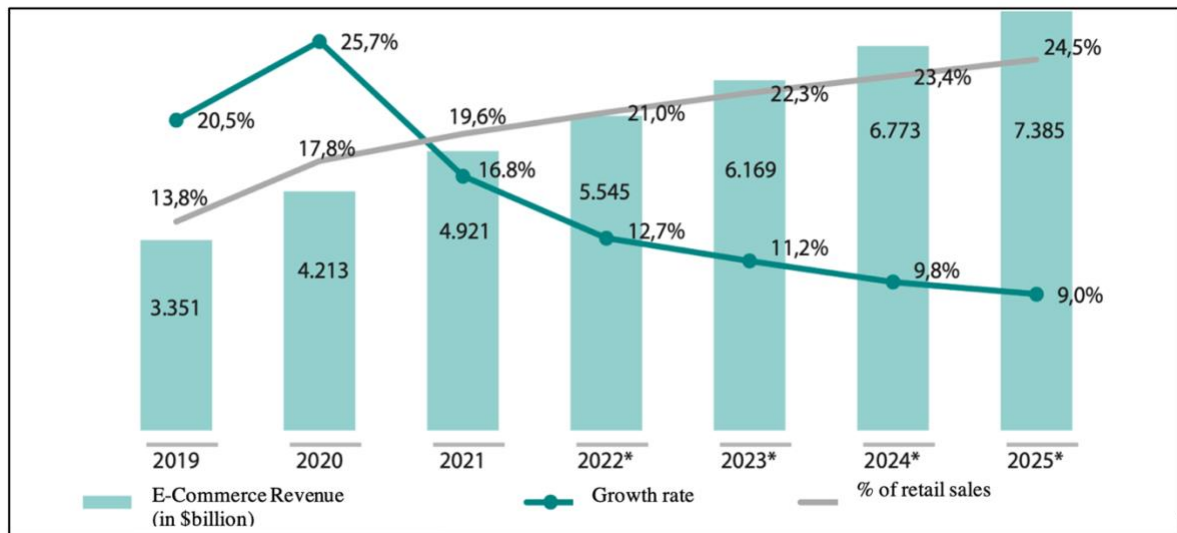


Figure 5: The scale of the B2C E-Commerce market

Source: Adapted from Southeast Asia, the home for digital transformation

The e-commerce revenue worldwide in 2019 was \$3.351 billion, corresponding to 13.8% of total retail sales. The year 2020 was a defining year for e-commerce, as the COVID-19 pandemic accelerated the shift towards online shopping. With physical stores closed due to lockdowns and social distancing measures, consumers turned to online retailers to fulfill their shopping needs. This trend was reflected in the data, as e-commerce sales worldwide grew by 25.7% in 2020, reaching a total of \$4.213 billion. After that, a remarkable decrease of approximately 16% of growth rate is predicted in the year 2025. On the other hand, the revenue continuously climb up to more than \$7.350 billion, corresponding to nearly 25% of total retail sales.

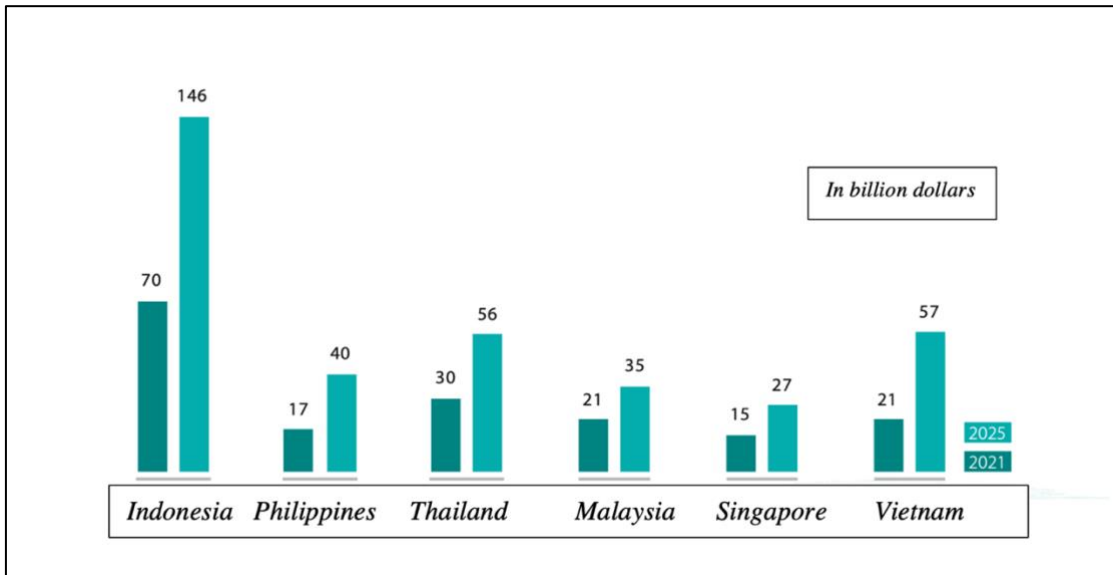


Figure 6: SEA Internet economy GMV (\$B) in 2021 and expected revenue for 2025

Source: (e-Conomy SEA: “Roaring 20s: The SEA Digital Decade”)

Revenue of Southeast Asia in the eCommerce market was \$111.30 billion in 2021 (Statista, n.d.). According to e-conomy SEA 2021 report, e-commerce is driving most of the year’s market growth and it is the biggest growth driver and could continue to be until 2025. By the year 2025, the eCommerce revenue is expected to reach \$234bn out of \$363bn of Internet economy, which includes online media, online travel, transport & food, eCommerce and digital financial service.

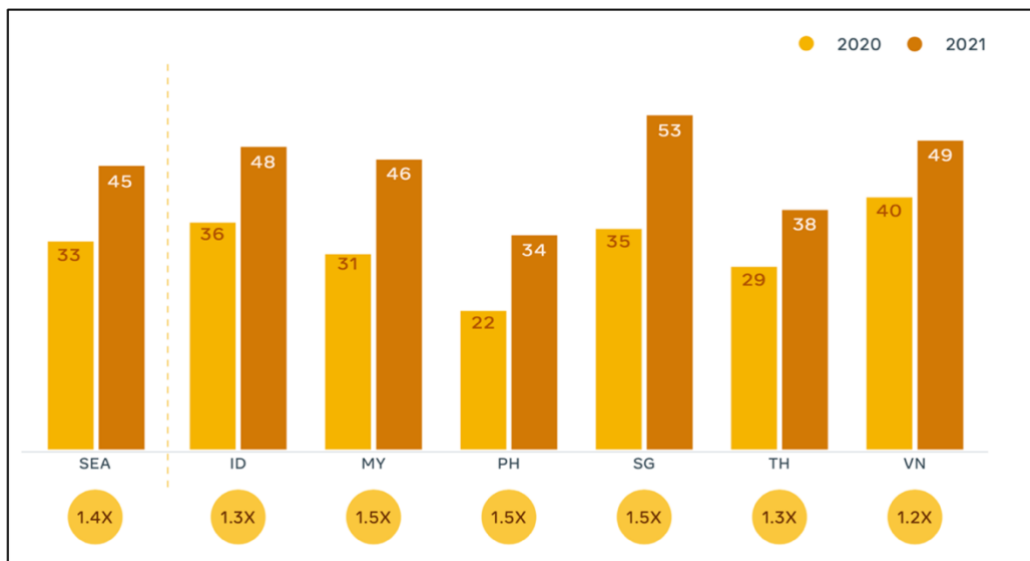


Figure 7: % responses citing online as most purchase channels

Source: (Southeast Asia, the home for digital transformation, 2021)

There has been a significant increase in the proportion of respondents who reported shopping "mostly online" in the year 2021, rising from 33% in the previous year to 45%, representing a growth of 35%. Notably, the countries with the largest increase in online shopping were Singapore, Malaysia, and the Philippines. In Indonesia, online shopping is the most popular purchase channel, with 48% of survey respondents reporting that they had made an online purchase in the past year. In Singapore, 53 % of responses citing online as most purchase channels in 2021, it was 150% higher than the previous year. Although the online Shopee rate in the Philippines saw a rapid increase of 150%, it remains at the lowest position, with only 22% in 2020 and a slightly improved rate of 34% in 2021. (Southeast Asia, the home for digital transformation, 2021)

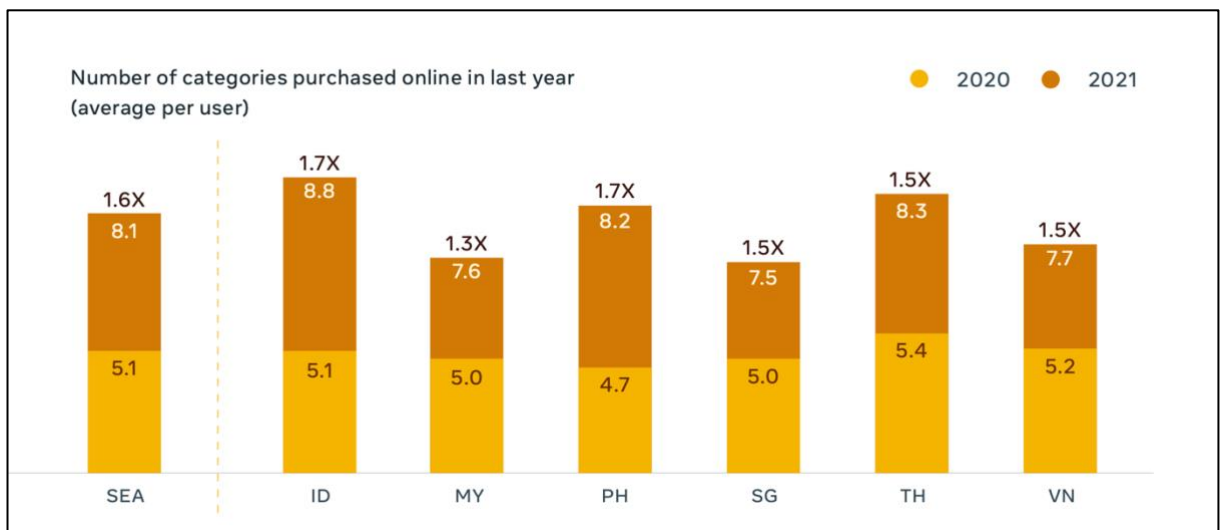


Figure 8: Number of categories purchased online in last year (average per user)

Source: Adapted from Southeast Asia, the home for digital transformation, 2021

Southeast Asia's eCommerce is evolving rapidly, and this is reflected in the changing habits of its consumers. According to recent data, not only are more people in the region shopping online, but they are also buying across a wider range of categories.

In 2020, the average number of categories that Southeast Asian consumers purchased online was 5.1. However, in 2021, this figure has risen significantly to 8.1, a 60% increase. This growth has been observed across all countries in the region, with Indonesian consumers leading the way, purchasing products across 8.8 categories. Thailand and the Philippines closely follow with 8.3 and 8.2 categories, respectively.

This increase in online purchasing across a wider range of categories is a result of various factors, including the region's growing middle class and the COVID-19 pandemic, which has accelerated the shift towards digitalization and e-commerce. Additionally, consumers in the region are becoming more accepting of the range of products available online, indicating a positive trend for businesses and online retailers in the region.

Vietnam's e-economy is significantly developing because of fast growing Internet and smart phones. According to The World Bank, there are roughly 68 million Internet users as of 2018, posting penetration rate of 70 percent (Individuals using the Internet (% of population) - Vietnam, n.d.).

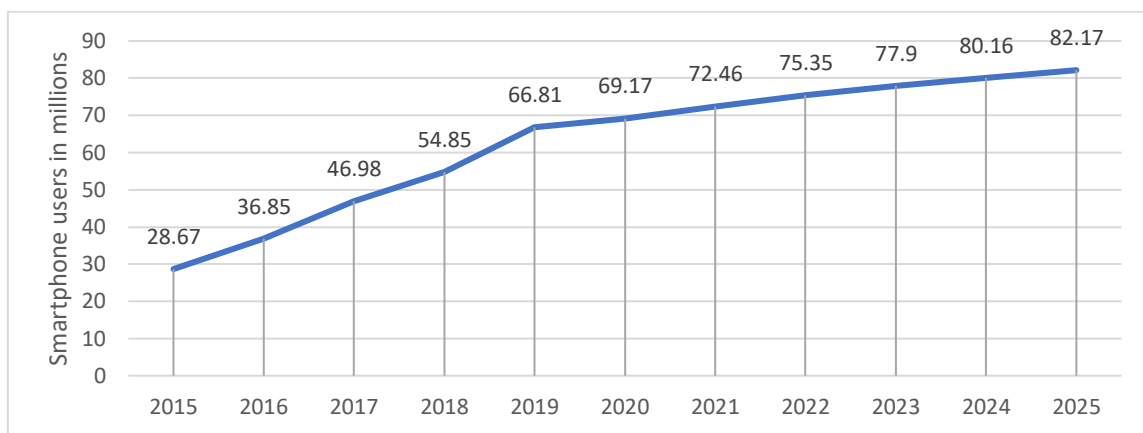


Figure 9: Forecast of the number of smartphone users in Vietnam from 2010 to 2025 (in millions)

Source: Adapted from Statista

According to Statista, a market and consumer data service provider, Vietnam's smart phone penetration is approximately 28,68m users in 2015 and is forecast to reach almost 82,17m in 2025 (Smartphone users in Vietnam 2010-2025, n.d.). The widespread availability of the Internet and smartphones has strongly supported the growth of e-commerce. (VIETNAM ECOMMERCE, 2020)

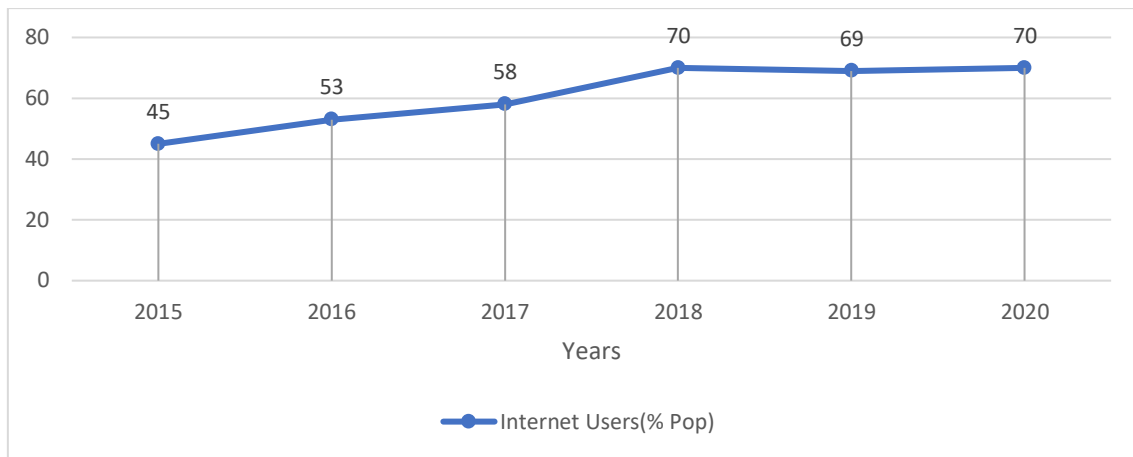


Figure 10: Vietnamese Internet Users

Source: Adapted from The World Bank

Vietnam's e-commerce market recorded a total value of \$11,5 billion in 2019, increasing by 81% compared 2015, and is forecast to reach a value of \$43 billion in 2025. Vietnam E-Commerce Association (VECOM) reported that Vietnam's E-commerce market grew at an average annual rate of 30% from 2015 to 2019 (Vietnam's e-Commerce revenue to exceed USD 15 billion this year: Association, 2020). The most popular products purchased online are clothes, consumer electronics and household appliances, books, personal care products. The most popular e-commerce operators include Tiki, Lazada, Shopee and Sendo.

3. Company profile

3.1 Introduction

Shopee, a Sea company, is one of leading online shopping platforms that originated in Singapore in 2015 before expanding internationally (Shopee, n.d.). It is the largest E-Commerce platform in Southeast Asia, serving both sellers and consumers and offering goods by major retailers and local merchants. Currently, Shopee has been present in a total of 7 Asian countries including: Singapore, Malaysia, Thailand, Taiwan, Indonesia, Vietnam, and the Philippines. The founder of Shopee is Forrest Li – who is a Chinese-born Singaporean billionaire businessman.

Shopee was developed to create an e-commerce platform to provide customers with an easy, safe, and convenient online shopping experience by the fast payment and shipping process. Besides, Shopee creates a business environment for individuals, organizations and businesses that want to promote, market, and distribute their products to customers. It is very simple, just

a few steps to register and post, describe the product, everyone can open a store on Shopee, and this is also an online business opportunity for any individual or organization.

Some notable highlights of the Shopee platform include:

Built for mobile – Shopee UI is built for mobile devices, giving users a fast and highly intuitive mobile shopping experience.

Shopee Live Chat – Users can participate in real-time chats through Shopee's built-in feature – real-time messaging capabilities.

Shopee Guarantee – Users can shop for free with Shopee Guarantee that protects users by holding payment until an order is received.

Integrated logistics/transportation system – Shopee partners with leading logistics companies for an integrated application in the logistics system application. Users can easily choose their preferred logistics provider after placing an order.

Free – for everyone to use without hidden costs. Available for free download on App Store and Google Play.

3.2 History

Shopee is an e-commerce exchange based in Singapore, owned by SEA group (formerly Garena), founded in 2009 by Forrest Li. Shopee was first introduced in Singapore. In 2015, with the orientation of being an e-commerce platform. Established in 2015, Shopee officially entered the Vietnamese market from August 2016.

- As of 2017, the platform recorded 80 million app downloads, over 5 million in Vietnam. Currently working with more than four million suppliers with over 180 million products
- In Q4, 2017, Shopee's gross merchandise value (GMV) was reported to reach US\$1.6 billion, an increase of 206% year-on-year.
- In 2015, Shopee was officially introduced in 7 markets in the region: Singapore, Indonesia, Malaysia, Thailand, Taiwan, the Philippines, and Vietnam.
- Organized the first Shopee University session
- In December 2015, the first Shopee University event was held in Taiwan. Currently, about 70,000 sellers in the region are benefiting from these events.
- Introducing Shopee Mall in all 7 markets.
- In June 2017, Shopee Mall was officially launched for the first time in Taiwan.

- Up to now, we have more than 11,000 sellers on Shopee Mall in 7 markets.
- Gross merchandise value (GMV) reached over US\$10 billion
- In 2018, Shopee's gross merchandise value (GMV) reached US\$10 billion with more than 600 million transactions on the exchange.
- Super Brand Day: In May 2018, Shopee cooperated with P&G to introduce Super Brand Day for the first time in the Indonesian market.
- Since then, continue to organize more than 70 other Super Brand Days in the region.
- Trade Representative: In November 2018, Shopee is pleased to welcome BLACKPINK as the first Brand Representative of the Region in the *12.12 Birthday Sale*. (Shopee, n.d.)

3.3 Competitors

A competitor is a business or organization that operates in the same market or industry as another business, offering similar products or services to the same target customers. Competitors compete for the same customers, resources, and market share, and often try to outperform each other in terms of quality, price, customer service, innovation, and other factors.

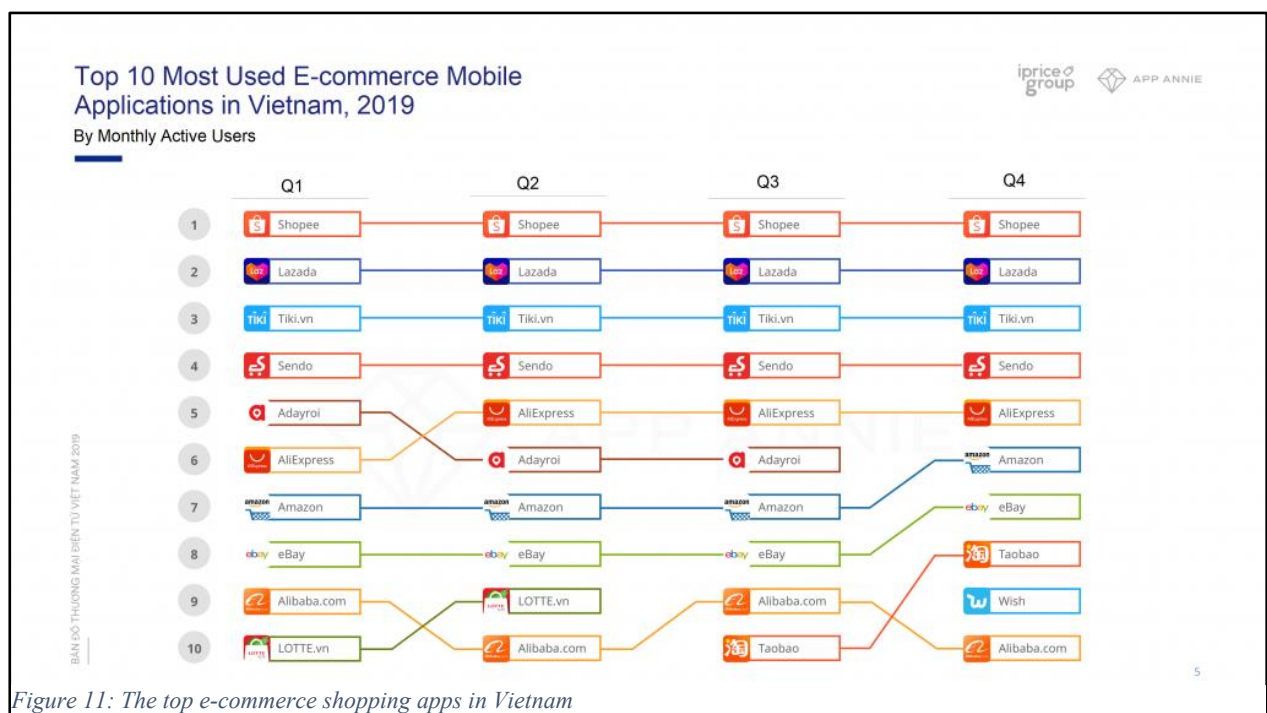


Figure 11: The top e-commerce shopping apps in Vietnam

Source: (IpriceGroup, n.d.)

The main competitors include:

Tiki stands for “Tìm kiếm & Tiết kiệm” which means “Searching & Saving”, which is the name of the Vietnamese E-commerce website. Established in March 2010, Tiki is currently the top 3 e-commerce site in Vietnam and top 6 in Southeast Asia. Tiki's beginnings were just an online book selling website. In March 2012, *CyberAgent Ventures Inc.* decided to invest in Tiki. With this investment, Tiki gradually expanded into an e-commerce platform. In June 2020, Shopee's competitor, Tiki raised about \$130 million from a funding round led by Singapore-based private equity firm *Northstar Group*.

Sendo is an e-commerce platform under the management of *Sendo Technology Joint Stock Company*. Originally, Sendo developed in September 2012 as a project of FPT Online and until May 13th, 2014, transferred to *Sen Do Technology Joint Stock Company* until now. Sendo is still under FPT Corporation. After the capital increase in May 2020, external shareholders now account for 65.05% in Sendo. Currently, FPT no longer owns many shares in SenDo – FPT is one of the largest multidisciplinary corporations in Vietnam. FPT has invited many more external shareholders, currently Sendo's capital is VND 114,169 billion. Sendo operates under the main model of B2C2C (business – to – consumer – to – consumer). The first business sells its goods and services to the end users by utilizing the services of the second business. The second business in this model provides a specific service or benefit to the first business. This service helps the first business increase its revenue, gain access to more customers, or increase operational efficiency (Team, What Is B2B2C? (With Definition, Examples And Benefits), 2022).

Lazada Vietnam is an e-commerce trading platform, providing products across a variety of categories such as furniture, tablet, smart-phones, fashion products, health care, beauty products, toys, and sportswear, etc. Lazada Vietnam was established in March 2012 which is part of Lazada Group – a multinational e-commerce group and currently has branches in Indonesia, Philippines, Singapore, Thailand, and Malaysia. The Lazada Group is again owned by Alibaba Group. Lazada is run by German director and founder Maximilian Bittner. Then Chinese billionaire Jack Ma's Alibaba Group acquired and completed the deal in early 2015.

3.4 SWOT analysis

Strengths

Strong financial resources and high market share in the e-commerce market:

- Shopee is owned by SEA Group (formerly Garena) - the most valuable startup, the corporation that owns the largest gaming platform in Southeast Asia.
- This group is invested by Tencent (the Chinese giant holds about 40% of the shares of SEA), in addition SEA also receives investment from the Pension Plan funds of Malaysia and many other Asian billionaires such as: GDP Ventures – run by the son of the richest man in Indonesia; JG Summit Holdings Inc – founded by a Filipino billionaire.
- In Vietnam, Shopee entered the market in 2016 and has experienced rapid growth when it reached the third position in the market in early 2018 and is currently leading in terms of the number of users who access.

There are many preferential policies that bring many benefits to customers:

- Providing many utilities through the App: In addition to shopping for goods, Shopee also integrates card top-ups and services. Users can make phones, data, electricity, water bills, consumer loans payment... Especially when paying with Airpay wallet, they receive many discounts.
- There are many promotions, discounts, free shipping: a late starting compared to Lazada, Shopee spends a lot of money on advertising but still finds ways to attract customers through promotional campaigns and discounts. Based on Shopee's financial statements for the first years, 90% of marketing spend is used for these campaigns. Through free shipping, flash sales and coupons for both buyers and sellers, Shopee attracts a significant number of online shoppers who come to them from different platforms.
- Shopee supports shipping costs for orders, shipping policies for sellers are extremely preferential, associated with major carriers, relatively fast delivery time, 1-4 days for inner city orders

Products on Shopee are diverse in terms of quality and price:

- Goods on Shopee are divided into 2 types of goods provided by small shops(C2C) at a competitive price and goods from Shopee Mall(B2C): genuine products, quality assurance; trusted brands open these stores to sell on Shopee.

Building a wide community of sellers and buyers.

Strong investment in Marketing and communication:

- Using the influence and celebrities as the brand's representative.
- This e-commerce platform did not hesitate to spend a huge amount of money to invite many famous influencers with a huge fan base in the entertainment industry both in Vietnam and abroad such as: Son Tung MTP, Bao Anh or even BLACKPINK, ...

Weaknesses

The problem of dumping and product quality has not been managed:

- Except for Shopee mall, Shopee has not managed the dumping problem and not controlled the quality of all products yet, so it can cause confusion for customers.

The level of competition is too high:

- Shopee is a dynamic online market with the participation of thousands of different stores. But this is also a weakness when participating in Shopee. There are too many sellers active on Shopee causing competition not small for each store. Therefore, the users are also very difficult to choose the best products.

Unresolved conflicts between customers and sellers:

- Promotions, golden hours, flash deals with “shock prices” are continuously opened by Shopee, regardless of holidays or weekdays. They attract users and shops to participate in such programs, so there are cases where the store is out of stock and the customer is canceled even though the order has been placed. Shopee does not have clear regulations on this issue, so although it cannot be concluded that Shopee is a scam, this is also a negative point of this e-commerce platform.

The users must pay for refund or products exchange.

Opportunities

The trend of online shopping is increasing rapidly:

- Shopee grew strongly despite Covid-19. By the end of the third quarter of 2020, Shopee had 62 million monthly visits, an increase of 80% over the same period. Shopee is far ahead of its Vietnamese competitors. Tiki and Lazada are 22 million and 20 million respectively, according to iPrice (iPrice, n.d.)

- With a population of more than 98 million people and a rapidly growing number of smartphone users, Vietnam is considered an attractive market for e-commerce companies like Shopee.

The amount of time Vietnamese people use the Internet is high:

- According to statistics from the Iris Marketing Agency in 2020 report, on average, 31% of Vietnamese people spend from 3 to 5 hours connecting to the Internet, 28% of users spend 5 to 7 hours daily, 17% spend less than 3 hours, and 9% spend more than 9 hours online per day (Iris Marketing Agency, n.d.). People are becoming more and more dependent on the Internet in their daily activities, as a result, shopping or selling is also gradually shifting to online form, through e-commerce platforms.

The growth rate of e-commerce in Vietnam is among the top in the world:

- Vietnam is considered the 25th largest market for eCommerce with a revenue of US\$12.8 billion in 2021, placing it ahead of Austria and behind Iran. With an increase of 35%, the Vietnamese eCommerce market contributed to the worldwide growth rate of 18% in 2021 (Ecommercedb, n.d.). With the rapid development of online business, consumers are tending to buy more and more in online market, this is a great opportunity for the development of Shopee in particular, and e-commerce platforms in general.

E-commerce is among the top industries encouraged and prioritized for development by the government.

Threats

Competitors:

- The e-commerce market is a relatively new and relatively young market in Vietnam, but the number of businesses participating in this market is quite crowded.
- With the rapid development of the current e-commerce market, the competition between Shopee (SEA Group) and other heavy weights such as Lazada (Alibaba Group), Tiki, Sendo, ... is happening very fiercely. All of them are racing to invest in expanding warehouses, accompanied by many different marketing campaigns with many payment methods and policies to support sellers and buyers to attract customers and businesses.

Logistics problem:

- One of the main obstacles facing the e-commerce sector in Vietnam is logistics, especially when it comes to delivery
- Only 34,4% of Vietnam's population is living in urban areas (GENERAL STATISTICS OFFICE OF VIETNAM, n.d.), which means a large volume of orders will be delivered to customers in remote and scattered areas.

4. Material and Method

4.1 Research objective

The objective of this thesis is to:

1. To understand the development of E-commerce in Vietnam, especially Shopee, the customer satisfaction and customer loyalty.
2. To examine the basic information about Shopee users and describe the reasons of using Shopee.
3. Investigate the linear regression:
 - a. **Simple Linear Regression**
 - i. Quality – Expectation
 - ii. Loyalty – Satisfaction
 - iii. Satisfaction – Quality
 - iv. Satisfaction – Security
 - v. Loyalty – Complaint
 - b. **Multiple Linear Regression**
 - i. Customer Satisfaction - Quality, Expectation, Value
 - ii. Loyalty – Support, Satisfaction
 - iii. Customer Satisfaction – UI, Quality, Influence
 - iv. Loyalty - Customer Satisfaction, UI, Quality, Influence

4.2 Data collection tool and data processing

With my current situation, I found that the most suitable way of collecting primary data was in form of online survey, through questionnaire. The benefit of it is that I don't have to meet the respondents in person to get the answers from them, it also reduces the time to collect the needed data. There are many online questionnaire tools, but I have chosen Google Forms (Google Form link: <https://forms.gle/ZmwzL7Y9cU9auLzi8>) as my data collection tool. The raw data, which was collected via the questionnaire, was processed by Google Forms into charts. This helps me

to get a better understanding and easier to read the general data. The relationship between components will be analyzed by using SPSS (Statistical Package for the Social Sciences). The statistical method known as regression aims to evaluate the relationship between dependent variable and one or more independent variables. There are two types of regression: simple linear and multiple linear regression. Linear regression used only one independent to predict the outcome of Y, while multiple regression has two or more independent variables to explain the outcome.

The secondary data can come from a variety of online sources, including articles, research reports, finance reports, books, conference papers, and other published material. These sources can provide me with a wealth of information on a given topic.

4.3 Construction of the survey questionnaire

The survey questionnaire is based on the American Customer Satisfaction Index and some previous research. Collecting the information from expectation, reasons, customer satisfaction and loyalty. And the last 4 questions to examine demographic information. (*See 1st Appendix*)

General information:

1. What mobile device do you use?
2. Do you use Shopee application/website?

These questions are general and aim to gather basic information about the person being surveyed. Questions 1 and 2 gather information about the person's technology usage and whether they use Shopee. These questions can provide context for the rest of the survey.

Non-users' questions:

3. What others website/ application do you use for online shopping?
4. Why not Shopee?

These questions are for people who don't use Shopee, and they aim to find out what other websites or apps they use for online shopping and why they don't use Shopee.

Users' questions:

5. How did you know about Shopee Mall?
6. What version of Shopee you are using currently?
7. What types of products from Shopee Mall that you have bought?
8. Do you follow Shopee Mall on any social media?
9. Do you think that Shopee Mall is safe and secure?
10. How did Shopee Mall meet your expectations before using it for the first time?

11. How would you rate Shopee Mall UI (user interface)?
12. How often do you complain about Shopee Mall quality and services?
13. How was the support provided by Shopee Mall?
14. How satisfying is the products' quality provided by Shopee Mall?
15. How are you satisfied with the prices of the products?
16. Does Shopee Mall have any influence in your personal life/ mood?
17. How likely are you to repurchase or suggest Shopee Mall to others?
18. Measure your overall satisfaction level?

These questions are for people who use Shopee, and they aim to gather feedback on their experience with the platform. Questions 5-8 aim to find out how the person discovered Shopee, which version they are using, what they've bought from Shopee Mall, and whether they follow Shopee on social media. Questions 9-15 gather feedback on Shopee's safety and security, whether it met the person's expectations, the user interface, complaints or issues the person may have had with the platform, product quality, and pricing. Questions 17 and 18 aim to evaluate the overall customer satisfaction and customer loyalty.

Survey demographic:

19. What is your age group?
20. What profession are you in?
21. What is your gender?
22. What is your marital status?

These questions aim to gather information about the person being surveyed, such as their age, profession, gender, and marital status.

5. Results and evaluation

The survey aims to investigate the factors that influence customer satisfaction and loyalty in the context of online shopping through Shopee Mall in Vietnam. The survey was conducted in January 2023 and received 90 responses from individuals. The survey was distributed through social media channels such as Facebook, Instagram, and Zalo, using a Google Form questionnaire included in the first appendix.

5.1 Sample composition

In my sample most respondents, 54 people or 70.1%, were between the ages of 18 and 25. The second largest group of respondents were those between the ages of 26 and 35, representing 19.5% of total respondents. In addition, only 4 respondents or 4% of the total respondents were under 18 years of age.

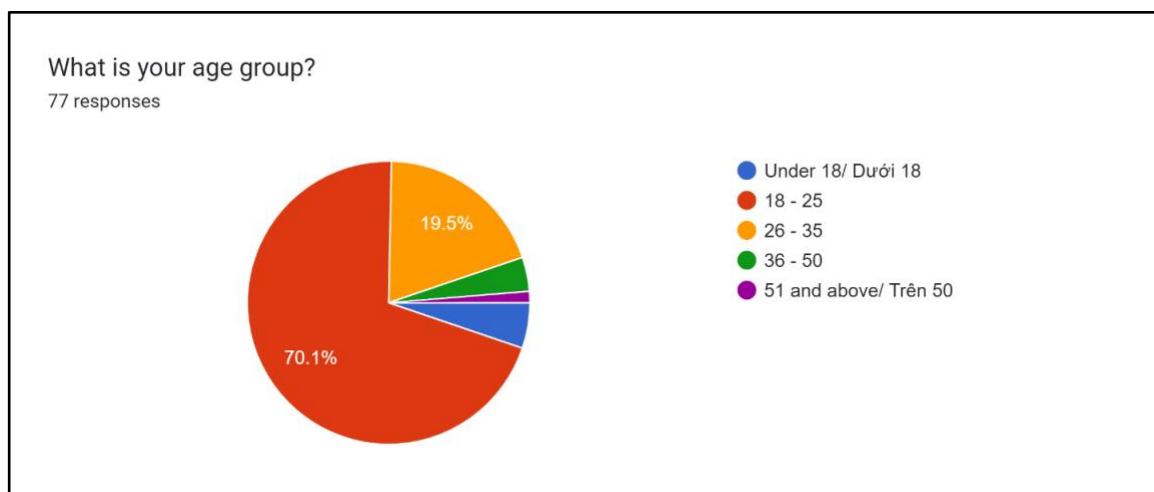


Figure 12: Age Group

Source: Own Contribution

According to this survey, 48.1% or 37 people of respondents identified as students. Additionally, 10.4% of respondents identified as employees. 11.7% of respondents were teachers. Finally, 29.9% of respondents identified as “others.” This group represents a diverse range of individuals who may not fit into the other categories. It could include people who are retired, unemployed, or engaged in other activities.

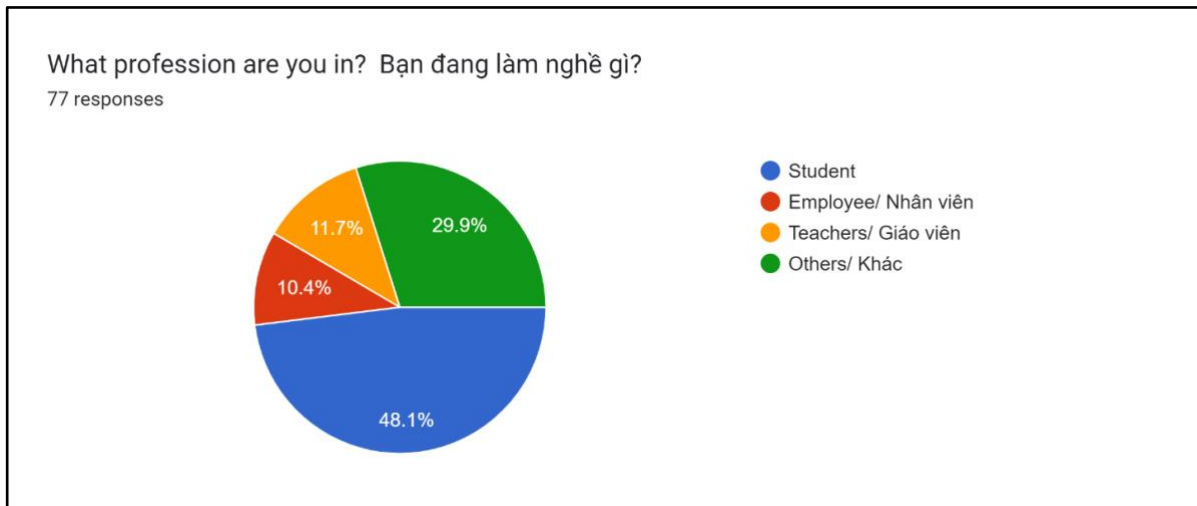


Figure 13: Employment

Source: Own Contribution

We can see that, 64.9% of respondents identified as female, 33.8% identified as male, and 1.3% preferred not to say.

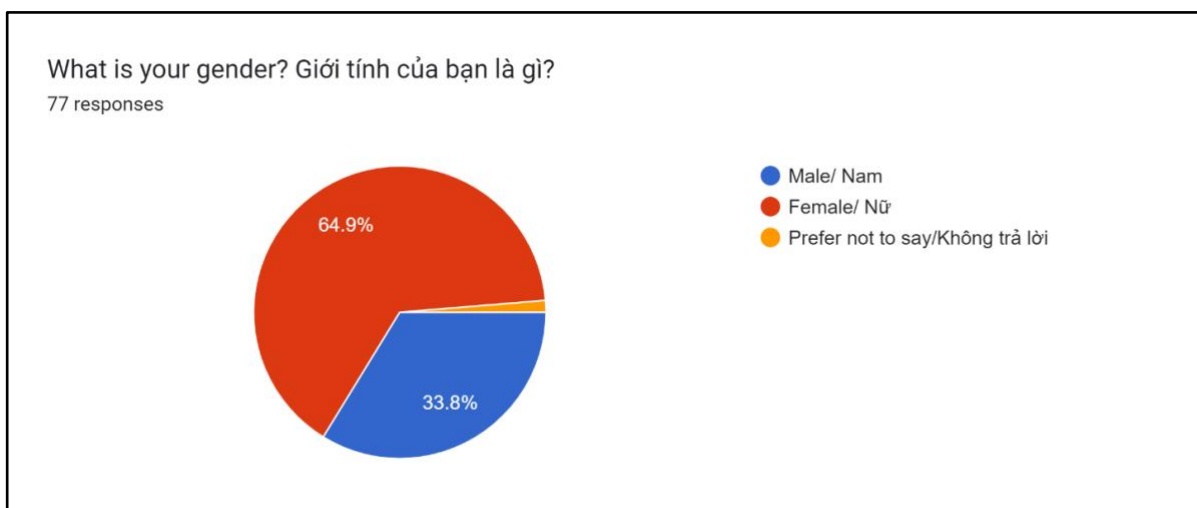


Figure 14: Gender

Source: Own Contribution

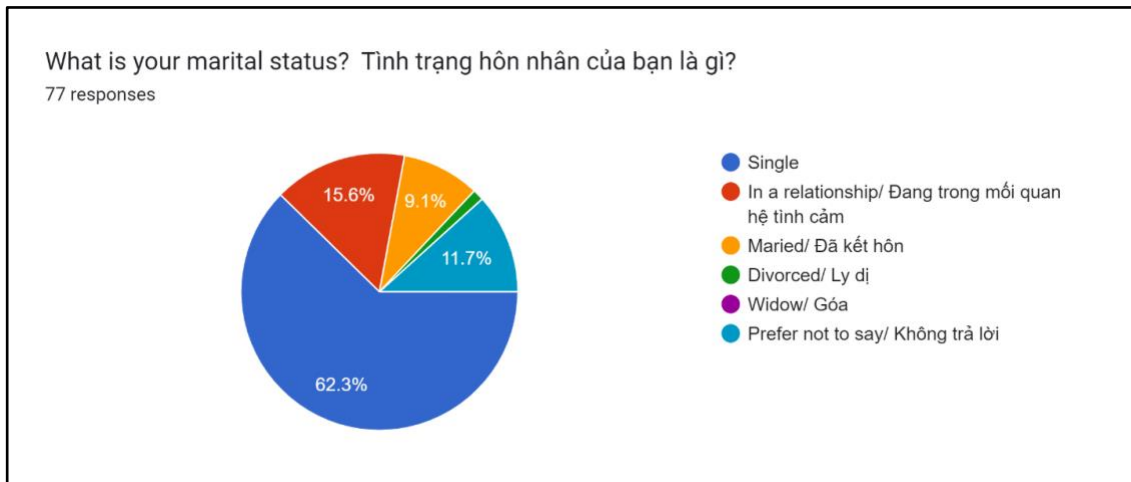


Figure 15: Marital Status

Source: Own Contribution

Based on the data provided, it appears that most respondents (62.3%) are single and 12 people identified as being in a relationship. A smaller portion (7 people, or 9.1%) are married, while an even smaller group (11.7%) have chosen not to disclose their relationship status.

5.2 Descriptive results

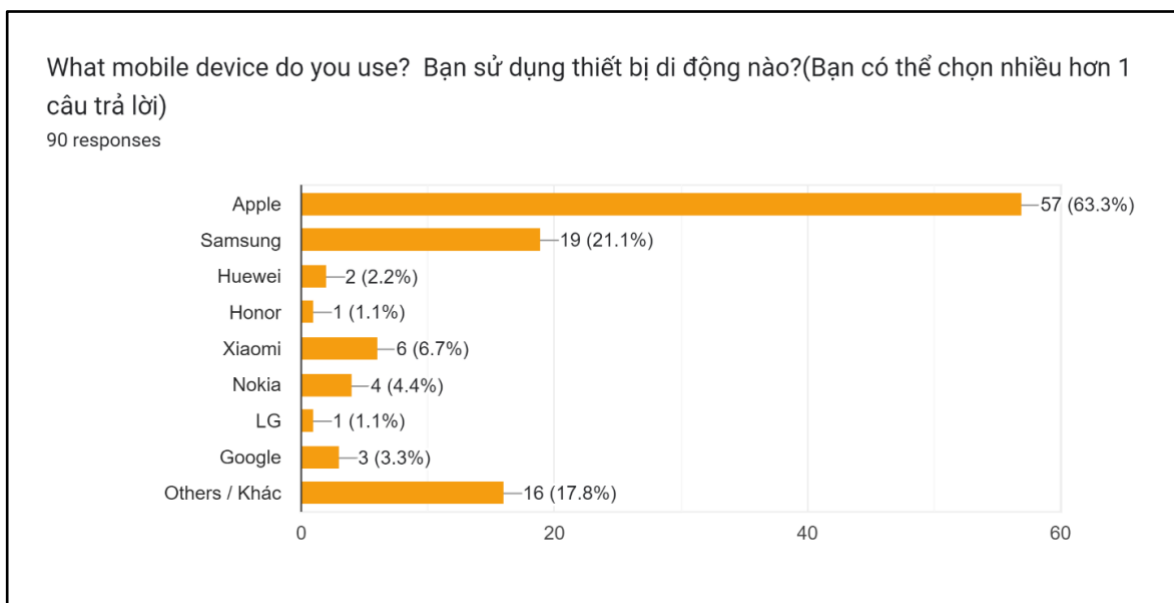


Figure 16: Mobile Devices Analysis

Source: Own Contribution

The data provided suggests that a majority of people, 63.3% (57 respondents), use Apple devices. Samsung comes in second with 21.1% of people using their devices. Huawei, Xiaomi,

Nokia, LG, and Google all have relatively low usage, with 2%, 6.7%, 4.4%, 1.1%, and 3.3% respectively. The remaining 17.8% of people use other devices not listed in the data.

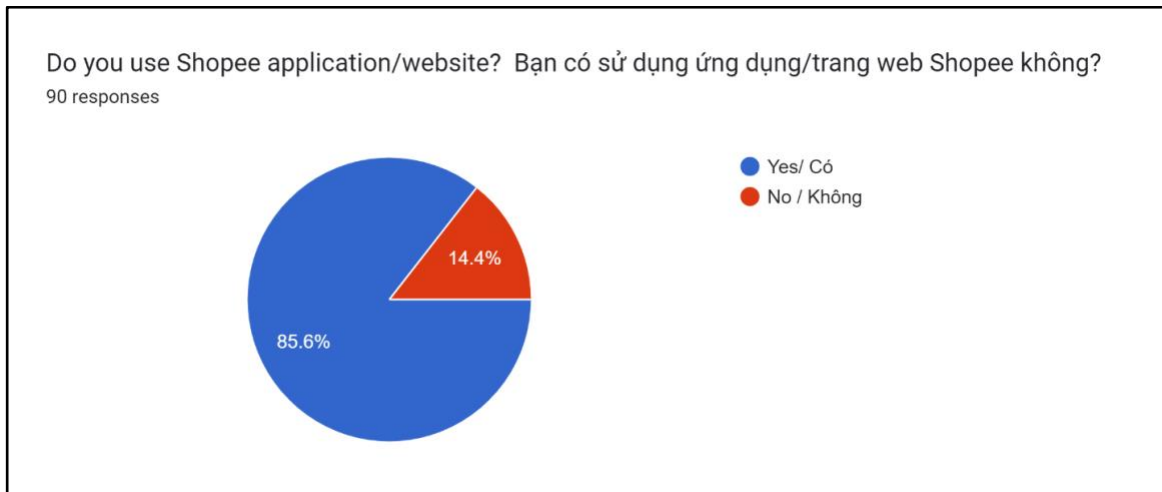


Figure 17: Shopee Mall Users

Source: Own Contribution

The data provided suggests that a majority of people, 85.6%, use Shopee Mall for their online shopping needs. This equates to 77 individuals out of the total number surveyed. On the other hand, 14.4% of people surveyed do not use Shopee Mall for their online shopping, with 13 individuals in this group.

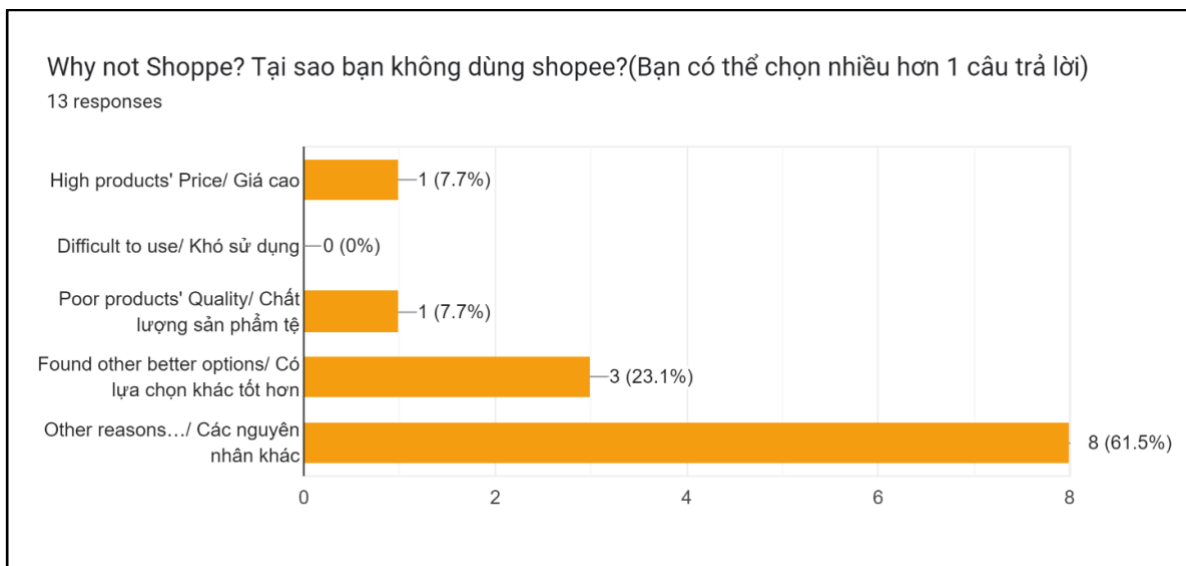


Figure 18: Reasons Why don't respondents use Shopee Mall

Source: Own Contribution

There are several reasons why respondents do not use Shopee Mall. The most common reason is the high price of products, with 7.7% of respondents citing this as the reason for not using

the platform. Another 7.7% of respondents reported poor product quality as the reason for not using Shopee Mall. A smaller percentage of respondents, 3 people, reported that they had found other better options. Lastly, 61.5% of respondents cited other reasons for not using the platform.

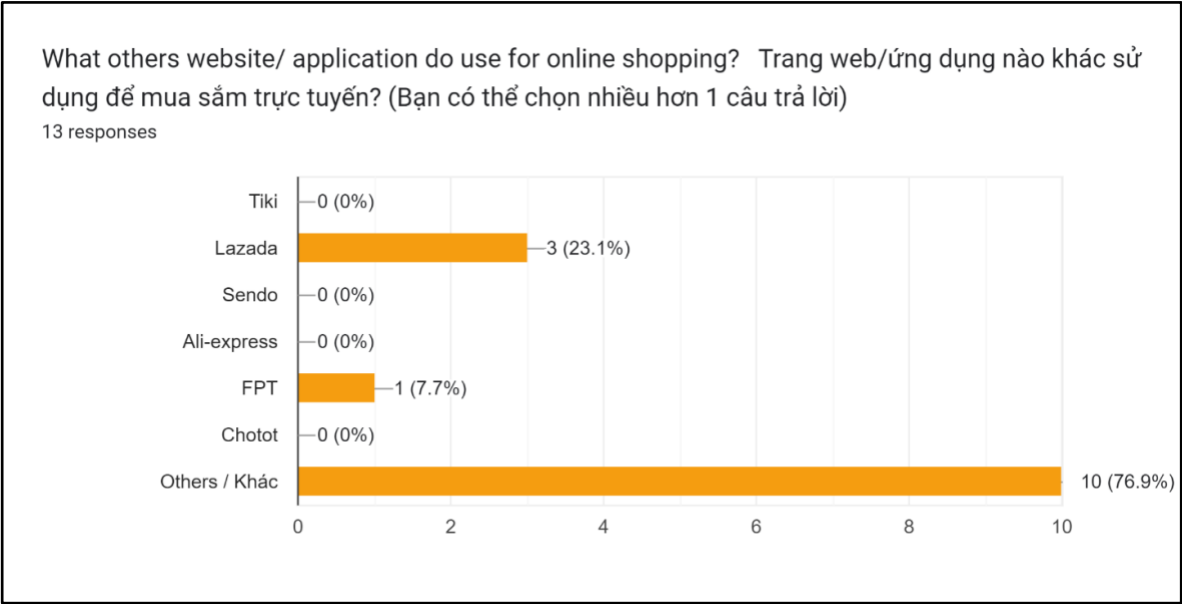


Figure 19: Other Website/ application for online Shopping

Source: Own Contribution

Online shopping has become a popular way for consumers to purchase goods and services, with many options available to choose from. One such option is Lazada, which was cited by 3 people (23.1%) as their preferred alternative to Shopee Mall. Another option is FPT, which was chosen by 7.7% of respondents. Lastly, 10 people cited “others” as their preferred alternative for online shopping.

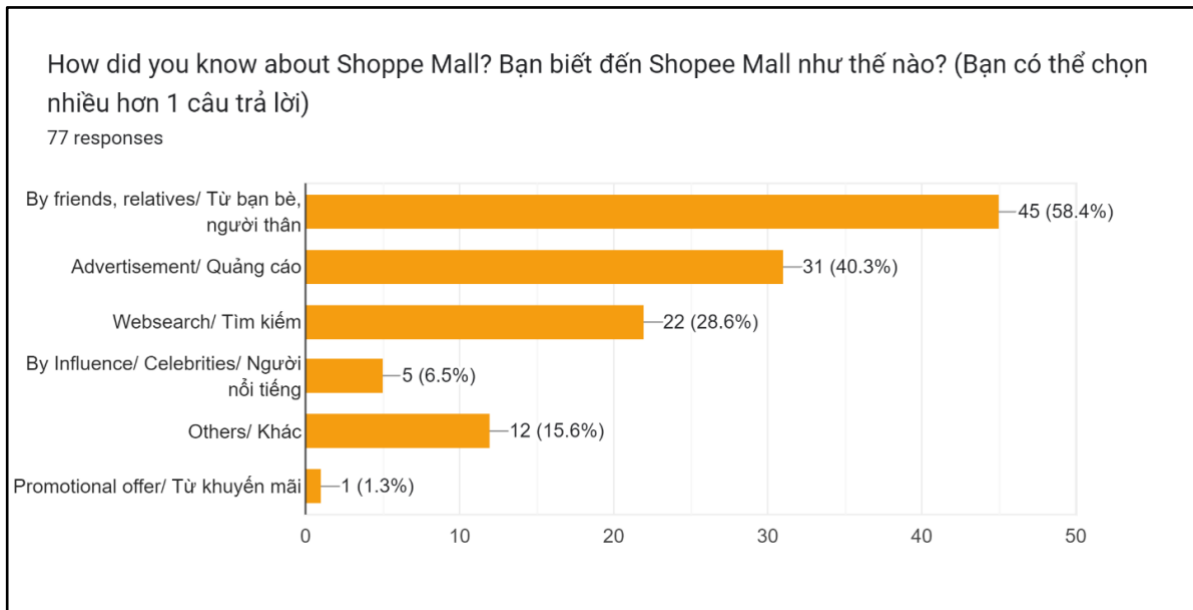


Figure 20: How Shopee users knew about Shopee Mall

Source: Own Contribution

According to a survey conducted on Shopee users, the majority of respondents (58.4%) became aware of the Shopee Mall through friends and relatives. This suggests that word-of-mouth recommendations play a significant role in the platform's popularity. Another important factor is advertising, with 40.3% of respondents saying that they found out about Shopee Mall through ads. Web searching is also a common way that people find Shopee Mall, with 28.6% of respondents saying that they discovered the platform through online searches. A small percentage of respondents (5%) found out about Shopee Mall through the influence of celebrities. Finally, 12% of respondents cited “other” reasons for finding out about Shopee Mall.

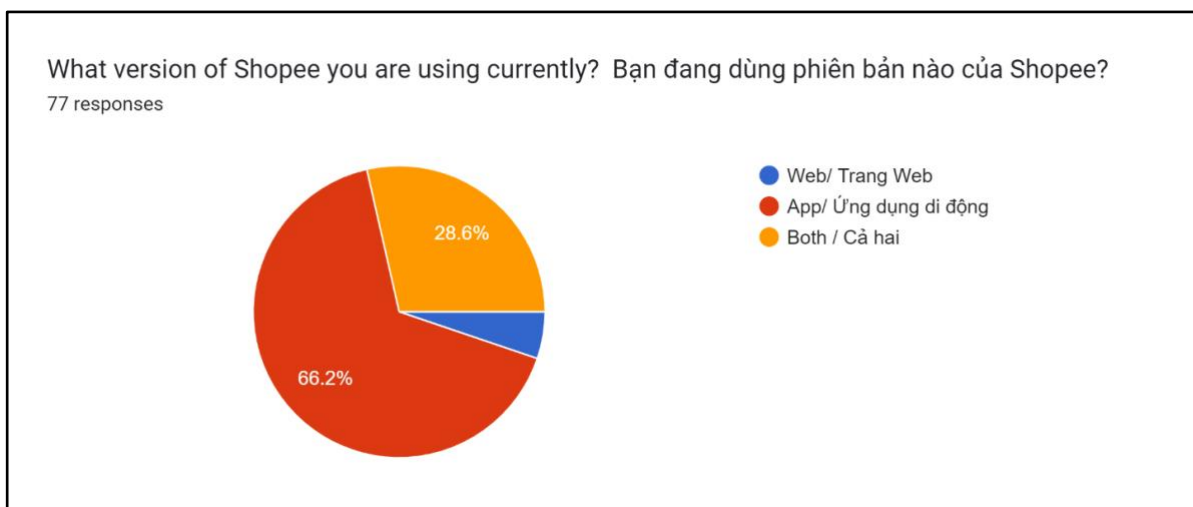


Figure 21: Shopee Mall version are using.

Source: Own Contribution

The majority of Shopee users prefer to access the Shopee Mall through the mobile app, with 66.2% of respondents choosing this option. 28.6% of respondents prefer to access the Shopee Mall through the website, while 4% of respondents use both the mobile app and the website.

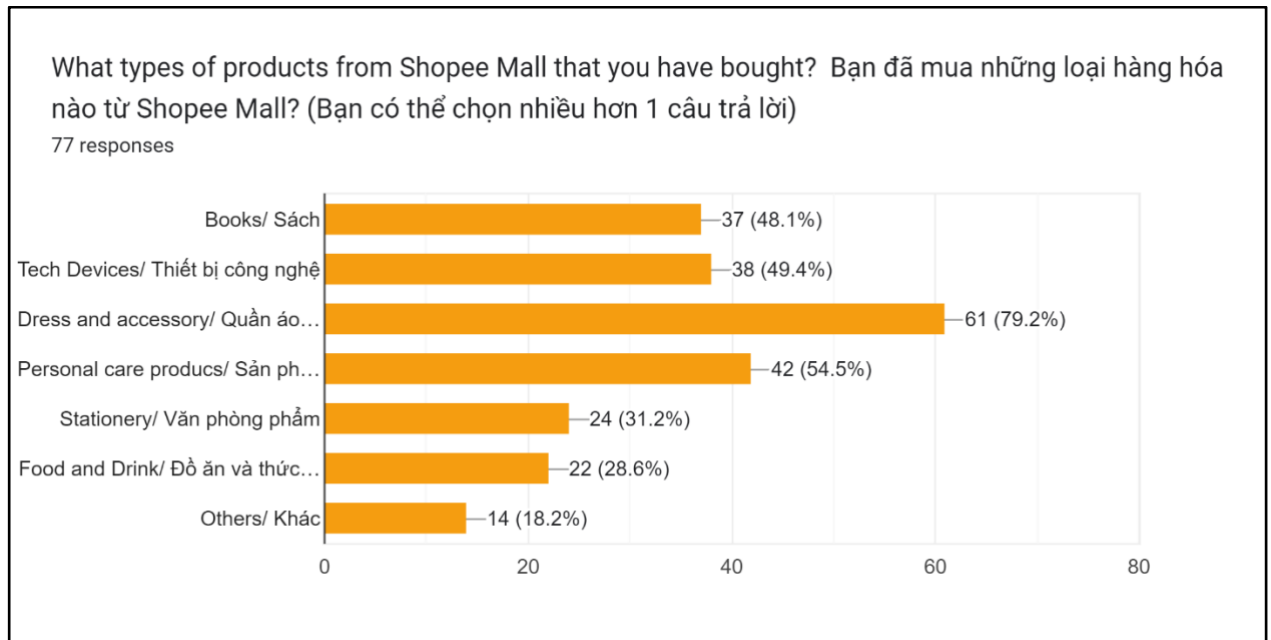


Figure 22: Products was bought in Shopee Mall

Source: Own Contribution

In the Shopee Mall, customers have a wide variety of products to choose from. Among the most popular items are books, which were bought by 37 people, representing 48.1% of total sales. Tech devices, such as smartphones and laptops, were also popular, with 38 people, or 49.4% of total sales, purchasing these items. Dress and accessories also made a significant contribution to the mall's sales, with 79.2% of customers buying these items. Personal care products, including skincare and haircare products, were also popular, with 54.5% of customers purchasing these items. Stationery, including notebooks and pens, were bought by 24 people, or a smaller percentage of total sales. Food and drink products were also relatively less popular, with only 22 people buying these items. Finally, there were other miscellaneous products that were bought by 18.2% of the customers.

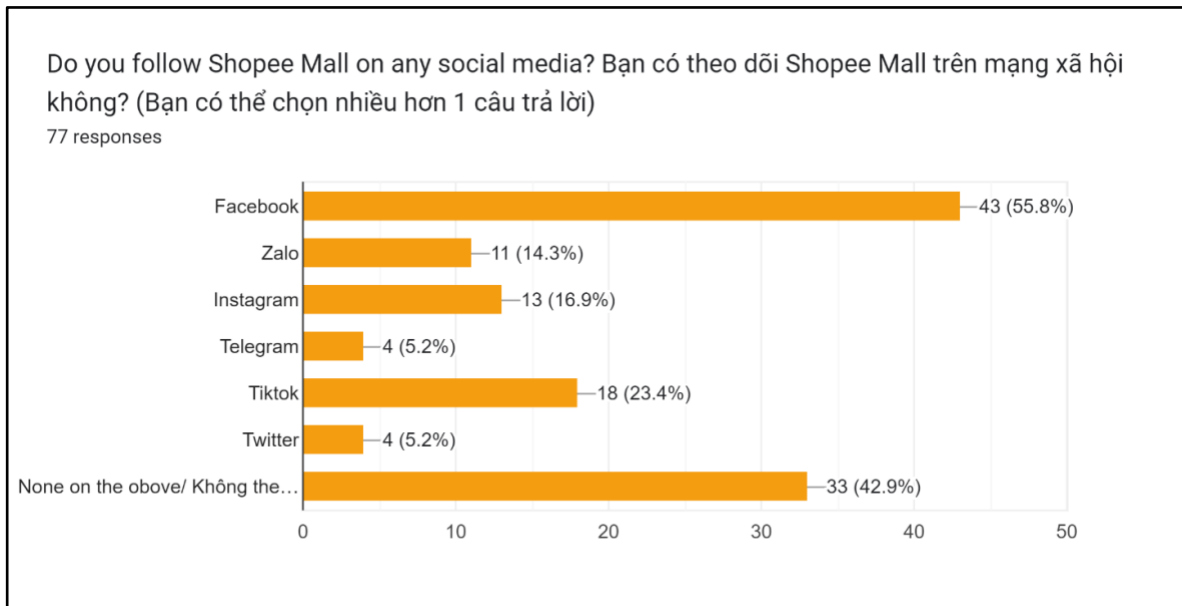


Figure 23: Number of respondents follow Shopee on social media.

Source: Own Contribution

The number of respondents who follow Shopee on social media is quite diverse. The most popular platform among the respondents is Facebook, with 43 people, or 55.8% of total respondents, following the brand on the platform. Zalo, a Vietnamese instant messaging platform, is also used by 11% of the respondents. Instagram and TikTok are also popular among respondents, with 16.9% and 23.4% of respondents following the brand on these platforms, respectively. Telegram and Twitter are less popular, with only 5.2% of respondents following Shopee on these platforms. However, a significant number of respondents, 33 people, or 42.9%, do not follow Shopee on any social media platforms.

Table 1: Basic Statistics

	Safe and Security	Expectation	UI	Complain	Support	Quality	Price	Influence	Loyalty	Satisfaction
Valid N	77	77	77	77	77	77	77	77	77	77
Missing	0	0	0	0	0	0	0	0	0	0
Mean	3.32	3.64	3.70	2.38	3.52	3.64	3.70	3.01	3.51	3.65
Median	3.00	4.00	4.00	2.00	3.00	4.00	4.00	3.00	4.00	4.00
Mode	3	3	3	1	3	4	4	3	4	4

Source: Own contribution

The provided data is the result of a survey in which 77 respondents rated their perceptions of various aspects of a product or service on a scale of 1-5. The statistics suggest that, on average, respondents slightly positive perceptions of the product or service across all the evaluated aspects, with mean ratings ranging from slightly above average to above average. For example, the mean score for “Safe and Security” was 3.32, indicating that, on average, respondents rated the product or service as slightly above average in terms of safety and security. The median score for “Expectation” was 3.00, which means that half of the respondents rated their expectations higher than 3.00 and half rated them lower. The mode, or most common score, for most of the variables was 3 or 4. The mode of “Complain” being 1 suggests that among the respondents who took the survey, the most common rating for the aspect of “Complain” was 1, which implies that they had a low level of complaints or negative feedback about this aspect of the products or services.

Table 2: Descriptive Statistics

	N	Mean	Std. Deviation	Variance
Safe and Security	77	3.32	1.312	1.722
Expectation	77	3.64	1.180	1.392
UI	77	3.70	1.077	1.160
Complain	77	2.38	1.338	1.790
Support	77	3.52	1.131	1.279
Quality	77	3.64	.986	.971
Price	77	3.70	.974	.949
Influence	77	3.01	1.391	1.934
Loyalty	77	3.51	1.242	1.543
Satisfaction	77	3.65	1.036	1.073
Valid N (listwise)	77			

Source: Own contribution

The 2. table provided displays descriptive statistics for 10 variables, which were derived from survey responses of 77 individuals regarding their perceptions of various aspects of a product or service. The variables, listed in the first column, include “Safe and Security,” “Expectation,” “UI,” “Complain,” “Support,” “Quality,” “Price,” “Influence,” “Loyalty,” and “Satisfaction.” For each variable, the table provides the sample size (N), the mean (the average score given by respondents), the standard deviation (a measure of how spread out the scores are from the mean), and the variance (the square of the standard deviation). The mean scores ranged from 2.38 (for “Complain”) to 3.70 (for “UI” and “Price”). The standard deviation values ranged from 0.974 (for “Price”) to 1.391 (for “Influence”). The variance values ranged from 0.949 (for “Price”) to 1.934 (for “Influence”).

The standard deviation is a measure of *the amount of variation or dispersion* in the data set. It tells us how far the individual values in a set are from the mean (average) of the set. A smaller standard deviation indicates that the data values are clustered closer to the mean, while a larger standard deviation indicates that the values are more spread out.

The variance is another measure of dispersion that is calculated as the average of the squared differences from the mean. Like the standard deviation, a smaller variance indicates that the data values are closer to the mean, while a larger variance indicates that they are more spread out.

For example, in the "Quality" variable, the mean score was 3.64, and the standard deviation was 0.986, which means that the data values were relatively spread out, with most of the scores falling between 4.626 and .2654. The variance for this variable was 0.971, which is the average of the squared differences from the mean.

Similarly, the standard deviation and variance for each of the other variables in the example tell us about the level of dispersion or variability in the data for each variable.

5.3 Simple Linear Regression

In this part, I will demonstrate the relationship between a couple of two variables. These couple of chosen variables base on American Customer Satisfaction Index model.

Quality and Expectations

Significance value is 0.000 which is smaller than 0.005, thus H^1 (alternative hypothesis) is accepted. H^0 (Null hypothesis) is rejected. ***I found significant relationship between Quality and Expectation*** (see appendix).

Loyalty and Complaint

Significance value is 0.749 which is greater than 0.005, thus H^1 (alternative hypothesis) is rejected.

H^0 (Null hypothesis) is accepted. There is ***no significant relationship between Loyalty and Complaint*** (see appendix).

Loyalty and Satisfaction

Significance value is 0.000 which is smaller than 0.005, thus H^1 (alternative hypothesis) is accepted. H^0 (Null hypothesis) is rejected. ***I found significant relationship between Loyalty and Satisfaction*** (see appendix).

Satisfaction – Quality

Significance value is 0.000 which is smaller than 0.005, thus H^1 (alternative hypothesis) is accepted. H^0 (Null hypothesis) is rejected. ***There is significant relationship between Satisfaction and Quality*** (see appendix).

Satisfaction - Security

Significance value is 0.000 which is smaller than 0.005, thus H^1 (alternative hypothesis) is accepted. H^0 (Null hypothesis) is rejected. ***There is significant relationship between Satisfaction and Security*** (see appendix).

Table 3: Summary of Results of Simple Linear Regression

Variables		Significant relationship
Quality	Expectation	✓
Loyalty	Complaint	✗
Loyalty	Satisfaction	✓
Satisfaction	Quality	✓
Satisfaction	Security	✓

Source: Own contribution

5.4 Multiple linear Regression

Customer Satisfaction - Quality, Expectation, Value

The equation for Satisfaction is as follows: Customer satisfaction = 0.297 + 0.381(Expectation) + 0.369(Quality) + 0.169(Price). (*See appendix*)

The equation is a mathematical representation of how overall satisfaction can be calculated based on different factors. Specifically, it suggests that satisfaction can be determined by considering three factors: expectation, quality, and price (the amount of money that the buyers pay for products or services).

The equation provides coefficients for each of these factors, which are used to weight their importance in determining overall satisfaction. In this case, the coefficient for expectation is 0.381, meaning that expectation has the greatest influence on satisfaction, followed by quality with a coefficient of 0.369, and then price with a coefficient of 0.169. The constant term, 0.297, is added to account for other factors that may affect satisfaction but are not explicitly considered in the equation. By doing so, businesses and organizations can use this equation to better understand their customers' needs and preferences, and work to improve their products or services accordingly.

Loyalty – Support, Satisfaction

The equation for Loyalty is as follows: $\text{Loyalty} = 0.074 + 0.154(\text{Support}) + 0.792(\text{Satisfaction})$. (See appendix)

The equation you provided is a linear regression model that attempts to predict an individual's loyalty based on their level of support and satisfaction. In the equation, “Support” and “Satisfaction” are independent variables or predictors, and “Loyalty” is the dependent variable or outcome that we want to predict. The coefficients (0.154 and 0.792) represent the weight or importance of each independent variable in predicting the outcome. A higher coefficient means that the corresponding independent variable has a stronger relationship with the outcome. The constant term (0.074) is the intercept, which represents the expected value of Loyalty when both Support and Satisfaction are zero.

To use the equation to make predictions, you would need to plug in the values for Support and Satisfaction and solve for Loyalty. For example, if someone had a Support score of 3 and a Satisfaction score of 5, you could predict their Loyalty score as follows:

$$\text{Loyalty} = 0.074 + (0.154 \times 3) + (0.792 \times 5) = 4.496$$

Therefore, their predicted Loyalty score would be 4.496

Customer Satisfaction – UI, Quality, Influence

The equation for Satisfaction is as follows: $\text{Satisfaction} = 0.415 + 0.428(\text{UI}) - 0.060(\text{Influence}) + 0.504(\text{Quality})$. (See appendix)

The equation you provided is a linear regression model that attempts to predict an individual's satisfaction based on their ratings of different factors. In the equation, “UI”, “Influence”, and “Quality” are independent variables or predictors, and “Satisfaction” is the dependent variable or outcome that we want to predict. The coefficients (0.428, -0.060, and 0.504) represent the weight or importance of each independent variable in predicting the outcome. A higher coefficient means that the corresponding independent variable has a stronger relationship with the outcome. The constant term (0.415) is the intercept, which represents the expected value of Satisfaction when all of the independent variables are zero.

The negative coefficient (-0.060) for the “Influence” predictor in the Satisfaction equation indicates that there is a negative relationship between “Influence” and “Satisfaction”. This means that as the Influence score increases, the predicted Satisfaction score decreases. In this context, “Influence” may refer to the degree to which an individual feels when purchasing products. It's important to note that the coefficients in a linear regression model are estimates of the relationship between the independent variable and the dependent variable, and do not necessarily imply causation. The negative coefficient for “Influence” in this equation simply

suggests that there is a negative relationship between Influence and Satisfaction in the data that was used to derive the equation.

Loyalty - Customer Satisfaction, UI, Quality, Influence

The equation for Loyalty is as follows: $Loyalty = -0.155 + 0.242(UI) - 0.005(Influence) + 0.172(Quality) + 0.590(Satisfaction)$. (See appendix)

In the equation, “UI”, “Influence”, “Quality”, and “Satisfaction” are independent variables or predictors, and “Loyalty” is the dependent variable or outcome that we want to predict. The coefficients (-0.155, 0.242, -0.005, 0.172, and 0.590) represent the weight or importance of each independent variable in predicting the outcome. A higher coefficient means that the corresponding independent variable has a stronger relationship with the outcome. The constant term (-0.155) is the intercept, which represents the expected value of Loyalty when all of the independent variables are zero.

To use the equation to make predictions, you would need to know the values for UI, Influence, Quality, and Satisfaction, and solve for Loyalty. For example, if someone had a UI score of 5, an Influence score of 3, a Quality score of 5, and a Satisfaction score of 5, you could predict their Loyalty score as follows:

$$Loyalty = -0.155 + (0.242 \times 5) - (0.005 \times 3) + (0.172 \times 5) + (0.590 \times 5) = 4.366$$

Therefore, their predicted Loyalty score would be 4.366.

The coefficient for “UI” (0.242) suggests that the user interface has a positive impact on loyalty, while the coefficient for “Influence” (-0.005) suggests that influence has a negative impact on loyalty. The coefficient for “Quality” (0.172) indicates that product or service quality has a positive impact on loyalty, and the coefficient for “Satisfaction” (0.590) suggests that satisfaction has the strongest impact on loyalty.

Table 3: Summary of Results of Multiple Linear Regression

Variables	
Dependent Variable	Independent Variables (Predictors)
Customer Satisfaction	$0.297 + 0.381(Expectation) + 0.369(Quality) + 0.169(Price)$
Loyalty	$0.074 + 0.154(Support) + 0.792(Satisfaction)$
Customer Satisfaction	$0.415 + 0.428(UI) - 0.060(Influence) + 0.504(Quality)$
Loyalty	$-0.155 + 0.242(UI) - 0.005(Influence) + 0.172(Quality) + 0.590(Satisfaction)$

Source: Own contribution

Short explain: In simple linear regression, we can understand the relationship between two variables. However, in a business setting, a factor can be influenced not just by one variable, but by multiple variables. For my research, I am examining two factors - customer satisfaction and customer loyalty - and trying to determine the importance of various factors that contribute to both customer satisfaction and customer loyalty. Multiple regression analysis aims to predict the value of a single dependent variable using known values of multiple independent variables. The contribution of each predictor variable is measured by its weight in the model, which reflects its relative importance in making the overall prediction. (Andrew W. Moore, 2006)

$$Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n$$

In this analysis, the dependent variable Y is predicted based on n independent variables X1, X2, ..., Xn. By calculating the weights (a, b1, b2, ..., bn) of each independent variable, regression analysis aims to maximize the accuracy of the prediction of the dependent variable based on the set of independent variables. In traditional business, customer satisfaction and customer loyalty can be predicted based on factors such as expectations, quality, and price. However, in the context of e-commerce, other factors such as support, influence, and user interface become crucial and must be taken into account in predicting customer satisfaction and loyalty.

6. Recommendation to increase Shopee Mall Customer Satisfaction and Customer Loyalty

6.1 Findings

- It is inferred 85.6% of people are Shopee Mall buyers, and the research carried out on them (fig 10).
- 61% of non-Shopee Users cited other reasons for not using the platform (fig 11).
- There is a significant relationship between Quality and Expectation
- There is a no significant relationship between Loyalty and Complaint
- There is a significant relationship between Loyalty and Satisfaction
- There is a significant relationship between Satisfaction and Quality
- The regression equation shows the relationship between predictor variables and the outcome variable.
$$\text{Satisfaction} = 0.297 + 0.381(\text{Expectation}) + 0.369(\text{Quality}) + 0.169(\text{Price})$$
- The regression equation shows the relationship between predictor variables and the outcome variable.
$$\text{Loyalty} = 0.074 + 0.154(\text{Support}) + 0.792(\text{Satisfaction})$$
- The regression equation shows the relationship between predictor variables and the outcome variable.
$$\text{Satisfaction} = 0.415 + 0.428(\text{UI}) - 0.060(\text{Influence}) + 0.504(\text{Quality})$$
- The regression equation shows the relationship between predictor variables and the outcome variable.
$$\text{Loyalty} = -0.155 + 0.242(\text{UI}) - 0.005(\text{Influence}) + 0.172(\text{Quality}) + 0.590(\text{Satisfaction})$$

6.2 Recommendations

- To increase the number of Shopee Mall buyers, the platform could consider implementing marketing strategies targeting potential customers, such as advertising campaigns or promotions. Additionally, the platform could work on improving the overall user experience and the quality of the products offered to attract and retain customers.
- The data suggests that the majority of Shopee's target demographic is within the age range of 18-25, and it should consider this when developing its marketing strategies and

targeting its customer base. This group is considered to be the most active demographic in terms of online shopping and social media usage.

- From data I suggests that Shopee may need to consider other methods of reaching out to these customers or explore ways to increase its social media presence. Overall, the data shows that Shopee has a strong presence on Facebook and TikTok but can improve its presence on other platforms.
- To address the reasons cited by non-Shopee users for not using the platform, it would be beneficial to conduct further research to understand why they are not interested in using it. Based on this information, the platform could then make changes to address these issues and attract new users.
- Improving the quality of products offered on the platform is crucial in increasing customer satisfaction and loyalty. This could involve implementing stricter quality control measures, offering a wider range of products, or working with reputable suppliers.
- The platform should be aware of the relationship between satisfaction and quality when making changes to the platform. A change that improves one may not necessarily improve the other.
- The regression equations provided can be used to predict the impact of specific changes on satisfaction and loyalty. For example, the equation for satisfaction can be used to predict how changes in expectation, quality, and price will affect satisfaction.
- The platform should consider how changes to the user interface (UI) and influence (such as advertising or word of mouth) can impact satisfaction and loyalty.
- Price should also be considered as a factor when making changes to the platform. The platform should aim to offer competitive prices without sacrificing quality.
- Support should be given more importance as it is positively related to loyalty. The platform should consider how to improve its customer support, such as providing more detailed product information, or making it easier to contact customer service. Additionally, the platform should consider how to improve the overall support experience and make it more efficient and effective.

7. Summary

The study aims to explore the factors which influence to customer satisfaction and customer loyalty and the relationship between customer satisfaction and customer loyalty in the context of online shopping through Shopee.com, a B2C e-commerce platform in Vietnam. With the increasing trend of online shopping, businesses need to understand the factors that influence customer satisfaction and loyalty to remain competitive in the market. To achieve this objective, the study employs a quantitative research approach and uses a survey to collect data from Shopee Mall customers.

The findings of the study indicate that customer satisfaction has a significant positive impact on customer loyalty. This means that the more satisfied customers are with their shopping experience on Shopee, the more likely they are to remain loyal to the platform and continue to make purchases. Furthermore, the study identifies significant factors that contribute to customer satisfaction: expectation, security, product quality, website design, and customer service. These factors play a crucial role in shaping customers' perceptions of the overall shopping experience on the platform.

Product quality is a critical determinant of customer satisfaction as it directly affects the customers' experience of using the products. Therefore, businesses should ensure that the products they sell on the platform are of high quality, and customers receive what they expect. Website design or user interface is also an essential factor that contributes to customer satisfaction. A well-designed website enhances the user experience and makes it easier for customers to navigate the platform, find what they need, and complete their purchases. Lastly, customer service is vital for ensuring that customers feel supported and valued throughout their shopping journey. Providing excellent customer service can lead to higher levels of customer satisfaction and increased customer loyalty.

In conclusion, the study highlights the importance of customer satisfaction in promoting customer loyalty in the context of online shopping. It suggests that businesses should focus on improving product quality, website design, and customer service to enhance customer satisfaction and ultimately increase customer loyalty on e-commerce platforms like Shopee Mall.

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Appendix 1:

Hi everyone, my name is Dau Quang Vu, I am conducting a study on CUSTOMER SATISFACTION AND CUSTOMER LOYALTY - Case Online Shopping through Shopee.com (B2C) at Hungarian University of Agriculture and Life Sciences. I am hoping you can help me by completing this very brief questionnaire. It is only 22 questions and I think should take you no more than 4-5 minutes. Your responses are anonymous and will not be identified with you in any way.

Thank you for your participation. I really appreciate your help!

1. What mobile device do you use? Multiple choices
 - a. Apple
 - b. Samsung
 - c. Huawei
 - d. Honor
 - e. Xiaomi
 - f. Nokia
 - g. LG
 - h. Google
 - i. Others
2. Do you use Shopee application?
 - a. Yes (continue with questionnaire) Skip to question 5
 - b. No (new set questionnaire open) Skip to question 3, 4
3. What others website/ application do use for online shopping? Multiple choices
 - a. Tiki
 - b. Lazada
 - c. Sendo
 - d. Ali-express
 - e. Fpt shop
 - f. Vatgia
 - g. Chotot

4. Why not Shopee Mall? Multiple choices
 - a. High products' price
 - b. Difficult to use
 - c. Found other better options
 - d. Other reasons...
5. How did you know about Shopee Mall? Multiple choices
 - a. By friends/relatives
 - b. Promotional offer
 - c. Advertisement
 - d. Web search
 - e. By influencers/ celebrities
 - f. Others ...
6. What version of Shopee you are using currently?
 - a. Web
 - b. App
 - c. Both
7. What types of products from Shopee Mall that you have bought? Multiple choices
 - a. Books
 - b. Tech devices
 - c. Dress
 - d. personal care products
 - e. Official things
 - f. Food and Drink
 - g. Others ...
8. Do you follow Shopee Mall on any social media? Multiple choices
 - a. Twitter
 - b. Instagram
 - c. Facebook
 - d. Zalo
 - e. Telegram
 - f. None of the above
9. Do you think that Shopee Mall is safe and secure?
 - a. Highly secure

- b. Moderate secured
 - c. Neuter
 - d. Not secures
 - e. Totally unsafe
10. How did Shopee meet your expectations before using it for the first time?
- a. Much better than expected (5)
 - b. Somewhere better than expected (4)
 - c. About the same as expected (3)
 - d. Somewhat worse than expected (2)
 - e. Much worse than expected (1)
11. How would you rate Shopee UI (user interface)?
- Rate from 1(Very poor) to 5(Excellent)
12. How often do you complain about Shopee Mall quality and services?
- Rate from 1(Never) to 5(Always)
13. How was the support provided by Shopee?
- Rate from 1(Never) to 5(Always)
14. How satisfying is the products' quality provided by Shopee Mall?
- Rate from 1(Very poor) to 5(Excellent)
15. How are you satisfied with the prices of the products?
- Rate from 1(Very dissatisfied) to 5 (Very Satisfied)
16. Does Shopee have any influence in your personal life/ mood?
- Rate from 1(Strongly disagree) to 5(Strongly agree)
17. How likely are you to repurchase or suggest Shopee Mall to others?
- Rate from 1(Not at all) to 5(More likely)
18. Measure your overall satisfaction level?
- Rate from 1(Very dissatisfied) to 5 (Very Satisfied)

Personal data

19. What is your age group?
- a. Under 18
 - b. 18 to 25
 - c. 26 to 35
 - d. 36 to 50

- e. 50 and above
20. What profession are you in?
- a. Student
 - b. Employed
 - c. others
21. What is your gender?
- a. Male
 - b. Female
 - c. Prefer not to say
22. What is your marital status?
- a. Single
 - b. In a relationship
 - c. Married
 - d. Divorced
 - e. Widow
 - f. Prefer not to say

Appendix 2:

Table 4: Model summary of Quality and Expectations

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.699 ^a	.489	.482	.709	.489	71.836	1	75	.000

Source: Own contribution

a. Predictors: (Constant), Expectation

Table 5: ANOVA table of Quality and Expectation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.114	1	36.114	71.836	.000 ^b
	Residual	37.704	75	.503		
	Total	73.818	76			

Source: Own contribution

a. Dependent Variable: Quality

b. Predictors: (Constant), Expectation

Table 6: Coefficient table of Quality and Expectation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.512	.263		5.742	.000
	Expectation	.584	.069	.699	8.476	.000

Source: Own contribution

a. Dependent Variable: Quality

Table 7: Model summary of Loyalty and Complaint

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.037 ^a	.001	-.012	1.249	.001	.103	1	75	.749

Source: Own contribution

a. Predictors: (Constant), Complaint

Table 8: ANOVA table of Loyalty and Complaint

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.162	1	.162	.103	.749 ^b
Residual	117.085	75	1.561		
Total	117.247	76			

Source: Own contribution

a. Dependent Variable: Loyalty

b. Predictors: (Constant), Complaint

Table 9: Coefficient table of Loyalty and Complaint

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.588	.292		12.303	.000
	Complaint	-.034	.107	-.037	-.322	.749

Source: Own contribution

a. Dependent Variable: Loyalty

Table 10: Model summary of Loyalty and Satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.754 ^a	.568	.562	.822	.568	98.540	1	75	.000

Source: Own contribution

a. Predictors: (Constant), Satisfaction

Table 11: ANOVA table of Loyalty and Satisfaction

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.575	1	66.575	98.540	.000 ^b
	Residual	50.671	75	.676		
	Total	117.247	76			

Source: Own contribution

a. Dependent Variable: Loyalty

b. Predictors: (Constant), Satisfaction

Table 12: Coefficients table of Loyalty and Satisfaction

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.209	.345		.605	.547
	Satisfaction	.904	.091	.754	9.927	.000

Source: Own contribution

a. Dependent Variable: Loyalty

Table 13: Model summary of Satisfaction and Safe and Security

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.617 ^a	.381	.373	.820	.381	46.170	1	75	.000

Source: Own contribution

a. Predictors: (Constant), Safe and Security

Table 14: ANOVA table of Satisfaction and Safe and Security

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.067	1	31.067	46.170	.000 ^b
	Residual	50.466	75	.673		
	Total	81.532	76			

Source: Own contribution

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Safe and Security

Table 15: Coefficient table of Satisfaction and Safe and Quality

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.030	.256		7.926	.000
	Safe and Security	.487	.072	.617	6.795	.000

Source: Own contribution

a. Dependent Variable: Satisfaction

Table 16: Model summary of Customer Satisfaction - Quality, Expectation, Value

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.843 ^a	.711	.699	.568	.711	59.770	3	73	.000

Source: Own contribution

a. Predictors: (Constant), Price, Expectation, Quality

Table 17: ANOVA table of Customer Satisfaction - Quality, Expectation, Value

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.943	3	19.314	59.770	.000 ^b
	Residual	23.589	73	.323		
	Total	81.532	76			

Source: Own contribution

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Price, Expectation, Quality

Table 18: Coefficient table of Customer Satisfaction - Quality, Expectation, Value

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.297	.275		1.080	.284
	Expectation	.381	.080	.434	4.751	.000
	Quality	.369	.103	.351	3.573	.001
	Price	.169	.095	.159	1.784	.079

Source: Own contribution

a. Dependent Variable: Satisfaction

Table 19: Model summary of Loyalty – Support, Satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.761 ^a	.579	.567	.817	.579	50.860	2	74	.000

Source: Own contribution

a. Predictors: (Constant), Satisfaction, Support

Table 20: ANOVA table of Loyalty – Support, Satisfaction

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	67.871	2	33.936	50.860	.000 ^b
	Residual	49.376	74	.667		
	Total	117.247	76			

Source: Own contribution

a. Dependent Variable: Loyalty

b. Predictors: (Constant), Satisfaction, Support

Table 21: Coefficient table of Loyalty – Support, Satisfaction

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.074	.356		.206	.837
	Support	.154	.111	.140	1.394	.168
	Satisfaction	.792	.121	.660	6.554	.000

Source: Own contribution

a. Dependent Variable: Loyalty

Table 22: Model summary of Customer Satisfaction – UI, Quality, Influence

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.826 ^a	.682	.669	.596	.682	52.142	3	73	.000

Source: Own contribution

a. Predictors: (Constant), Quality, Influence, UI

Table 23: ANOVA table of Customer Satisfaction – UI, Quality, Influence

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	55.590	3	18.530	52.142	.000 ^b
	Residual	25.942	73	.355		
	Total	81.532	76			

Source: Own contribution

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Quality, Influence, UI

Table 24: Coefficient table of Customer Satisfaction – UI, Quality, Influence

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.415	.279		1.490	.141
	UI	.428	.090	.445	4.757	.000
	Influence	-.060	.053	-.081	-1.136	.260
	Quality	.504	.099	.480	5.086	.000

Source: Own contribution

a. Dependent Variable: Satisfaction

Table 25: Model summary of Loyalty - Customer Satisfaction, UI, Quality, Influence

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.775 ^a	.601	.579	.806	.601	27.149	4	72	.000

Source: Own contribution

a. Predictors: (Constant), Satisfaction, Influence, UI, Quality

Table 26: ANOVA table of Loyalty - Customer Satisfaction, UI, Quality, Influence

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	70.503	4	17.626	27.149	.000b
Residual	46.743	72	.649		
Total	117.247	76			

Source: Own contribution

a. Dependent Variable: Loyalty

b. Predictors: (Constant), Satisfaction, Influence, UI, Quality

Table 27: Coefficient table of Loyalty - Customer Satisfaction, UI, Quality, Influence

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.155	.382		-.406	.686
1 UI	.242	.139	.210	1.742	.086
Influence	-.005	.072	-.006	-.073	.942
Quality	.172	.156	.137	1.106	.272
Satisfaction	.590	.158	.492	3.731	.000

Source: Own contribution

a. Dependent Variable: Loyalty

Declaration of Consultations with Supervisor

Name of Student: Dau Quang Vu

Program and specialization: Business Administration and Management specialization in business

Name of Thesis Supervisor: Dr. Taralik Krisztina

First personal consultation

Date and time: 2023. 01. 10.

Topic discussed: Literature review and research plan.

Signature of Supervisor:



Second personal consultation

Date and time: 2023. 02. 22.

Topic discussed: Data analysis and results interpretation.

Signature of Supervisor:



Third personal consultation

Date and time: 2023. 03. 16.

Topic discussed: Smaller corrections.

Signature of Supervisor:



This has to be attached to the Thesis /Diploma thesis

DECLARATION

Dau Quang Vu (student Neptun code: **JR07I8**)

as a consultant, I declare that I have reviewed the final thesis and that I have informed the student of the requirements, legal and ethical rules for the correct handling of literary sources.

I recommend / do not recommend¹ the final **thesis** / dissertation / portfolio to be defended in the final examination.

The thesis contains a state or official secret: yes **no**^{*2}

Date: *2023 year 10 month 28 day*



insider consultant

¹ The appropriate one should be underlined.

² The appropriate one should be underlined.

DECLARATION

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As a student with limited time and experience, some deficiencies may be inevitable in this thesis, and I am grateful for the professors' guidance and feedback, which will help me improve my knowledge and practical skills in the future.