# Factors Affecting Customers' Satisfaction with E-commerce of Business in Vietnam

# <sup>1</sup>Nguyen Tien Minh, <sup>2</sup>Vu Hoang Manh Trung, <sup>3</sup>Nguyen Thi Thu Ha

<sup>1</sup>VNU Hanoi-University of Economics and Business, Hanoi, Vietnam, tiennguyenm306@gmail.com

#### **Abstract**

Together with the trend play develop labour turmeric above position gender, love trade electricity death in Vietnam is \_ ever step Figure become, increase chief strong strong, and Hold shoulder trick day claw mandarin important in feces mix row chemical. Item write feces volume real status, shoulder trick of the love trade electricity death in play develops terrible economic in Vietnam, over their topic export the prize France aim recommended encourage the play develop love trade electricity death fit fit with love bridge manager physical of the home country mount with create each school favorable profit help business Karma and People pepper use to push strong deliver Translate love trade electricity death.

**Keywords**: Customers satisfaction, e-commerce, Vietnam.

#### 1. INTRODUCTION

Vietnam is considered one of the fastest-growing e-commerce markets in Southeast Asia, just behind Indonesia. Vietnam is also one of two countries (along with Indonesia) with solid growth in e-commerce website traffic in the region. With high and continuous growth from 2015 onwards, it is forecasted that by 2020, the scale of Vietnam's e-commerce market could reach 13 billion USD. This is entirely reasonable when there are 68 million internet users out of 97 million people in Vietnam, which is the driving force behind the strong development of the e-commerce segment.

Along with the trend of technology development globally, e-commerce in Vietnam is also gradually forming and growing strongly. Over the past time, the State has had many policies to support this relatively new field. However, the e-commerce development process in Vietnam during the 4th Industrial

Revolution still has many problems to be solved and discussed.

#### 2. Literature review

### 2.1. E-commerce

Currently, in the world, there are many different definitions of e-commerce. The United Nations provides a complete explanation for countries to refer to as a standard, creating a basis for building an appropriate e-commerce development strategy: "E-commerce is the performance of all business activities including marketing, sales, and marketing. goods, distribution and payments through electronic means".

According to the Organization for Economic Co-operation and Development: "E-commerce is doing business over the internet, selling goods and services that can be distributed over the internet or goods that can be encrypted with

<sup>&</sup>lt;sup>2</sup>National Academy of Public Administration, Campus in Hue, Vietnam

<sup>&</sup>lt;sup>3</sup>Hanoi University of Natural Resources and Environment, Hanoi, Vietnam

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digital technology digitally and delivered over the network or not through the network."

According to the European Union, e-commerce includes commercial transactions through telecommunications networks and electronic means. It includes indirect commerce (exchange of tangible goods) and direct commerce (exchange of intangible goods). E-commerce is also understood as an electronic business activity, including Electronic purchase and sale of goods and services, online delivery of goods with digitized contents; design and production cooperation; electronic bill of lading – E/B/L; search for resources online; direct marketing, after-sales customer service...

Meanwhile, according to the World Trade Organization: "E-commerce includes the production, advertising, sale and distribution of products bought, sold and paid for on the internet, but delivered either physically or by delivery—received over the internet in digital form."

traditional Compared with commercial activities, e-commerce has some fundamental differences as follows: Parties conducting transactions in e-commerce do not have direct contact with each other and do not require prior of Traditional knowledge each other: commercial transactions are carried out with the existence of the concept of national borders, while e-commerce is carried out in a market without borders (uniform global market); In ecommerce transactions, there are at least three parties involved, including an indispensable party, a network service provider and authentication agencies. Usually, e-commerce application platforms include e-mail, electronic information pages, social networks, mobile channels, applications for mobile devices, and television channels.

# 2.2. E-commerce development in Vietnam

In 2019, Vietnam's e-commerce market bid farewell to the "big guys" such as Adayroi or Lotte.vn, but not because of that; the attraction in this field is more minor. According to the eConomy SEA 2019 report published by Google and Temasek, the scale of Vietnam's e-commerce market in early 2020 reached 5

billion USD; the growth rate was up to 81%. Notably, the Vietnam E-commerce White Paper in 2019 released by the Department of E-commerce and Digital Economy (Ministry of Industry and Trade) shows that the growth of Vietnam's e-commerce market has been at the highest level in the past three years.

In particular, e-commerce also became more critical when the proportion of revenue from ecommerce over the total retail sales of goods in the country in 2019 reached 4.2%, an increase of 0.6% compared to 2018. The number of people participating in online shopping on ecommerce platforms skyrocketed. In 2019, the whole country had 39.9 million people participating in online shopping, an increase of 11.8% compared to 2018 and nearly doubled after only three years. Online shopping value per capita reached 202 USD, up 8.6%. Among the ten e-commerce platforms with the highest total number of website visits in the Southeast Asian market in the first six months of 2019, up to 5 are from Vietnamese enterprises including Tiki, Sendo, thegioididong, Dien May Xanh, and FPT Shop.

According to experts, Vietnam's e-commerce market is going along two trends. First, the game is for e-commerce giants with huge investments to compete for market share; Second, the emergence of more and more startup ideas with breakthrough technology providing services to leading enterprises in the industry. According to the top e-commerce businesses in Vietnam, updated by iPrice insights on March 3, 2020, Shopee Vietnam continues to lead in the whole year of 2019 in terms of website traffic (averaging 38 million visits). /month). Followed by Thegioididong with 28 million visits/month, Sendo with 27.2 million visits/month, Lazada with 27 million visits/month, and Tiki with 24.5 million visits/month.

Along with the high growth rate of ecommerce, recent times have witnessed the strong development of logistics services, lastmile delivery, and order fulfillment. The three prominent factors of this sector are the substantial increase in investment, the application of advanced technology, and fierce competition. Dissatisfaction with the delivery experience is a fairly common occurrence in e-commerce in Southeast Asia. According to research by iPrice and Parcel Performance, up to 34.1% of e-commerce users in the region are still not satisfied with the quality of parcel delivery services they receive. In Vietnam, studies show that, on average, it takes 5-6 days for products to be delivered to buyers, the second slowest transaction speed in the region.

Realizing that consumers' demand for fast and timely delivery is legitimate, leading e-commerce companies in Vietnam are racing to improve the delivery speed with many different strategies to increase customer experience. Competition for fast or slow delivery of goods in the market is becoming more and more fierce when the "giant" DHL commits to sameday delivery, Lazada opens express service, Tiki with a "declaration" of delivery within 2 Now, Shopee "commits" to delivery in 4 hours with Shopee Express service.

Vietnamese e-commerce floors have continuously promoted logistics systems to optimize efficiency and costs in the past few years. For example, Tiki has partnered with UniDepot, a logistics provider with 35,000 square meters of domestic storage space, to prepare for future expansion. Meanwhile, Lazada opened delivery warehouses in Ho Chi Minh City. Ho Chi Minh, Da Nang and Bac Ninh. LEL Express has put the second cargo sorting center in Hanoi into operation with a capacity of about 10,000 products/hour.

According to a survey by the E-commerce Association, Vietnam has more than 50 large and small fast delivery units. This number has increased tenfold over the past five years. Vietnam Post Corporation (Vietnam Post) is a delivery service provider hired by 61% of online sales units, followed by Viettel Post Company (Viettel Post) with 25%. The respective rates for EMS, express delivery, and economy delivery are 5%, 1%, and 1%, respectively. Other delivery units accounted for 13%. 2019 witnessed the strong development of several logistics startups such as Ninja Van, Ahamove, J&T Express, and GrabExpress, combined with e-commerce

platforms to make deliveries quickly and receive positive feedback poles from shoppers.

# 2.3. E-commerce service quality

Business-to-Consumer e-commerce is an e-commerce transaction between a company (business) and a consumer (customer). This is called the online retail service of companies over the Internet.

To evaluate, Parasuraman et al. (1988) developed the SERVQUAL scale - a measuring tool including 22 components to quantify service quality from the customer's point of view. This study pointed out five critical factors to evaluate service quality: reliability, responsiveness, assurance, empathy, and tangibles [9]. However, SERVQUAL is developed and measures factors in undeveloped e-commerce, besides the service quality factors are tangible. Therefore, the application of this model to measure the quality of e-commerce services is not appropriate.

Zeithaml et al. (2002) built a thee-SERVQUAL scale to measure the quality of online services perceived by customers. This scale includes seven factors: effectiveness, trust, completeness, confidentiality, responsiveness, compensation, and communication [10].

In her research, Duong Thi Hai Phuong (2012) gave the following factors: information about the company and products, perceived ease of use, perceived risks, perceived benefits, and purchasing experience, and online shopping intention to measure e-commerce service quality through online shopping [11].

Ha, Nam Khanh Giao, and Le Minh Hieu (2017) have shown: efficiency, responsiveness, reliability, assurance, website quality, and ease of use to quantify the quality of e-commerce services died during the study [12].

Research by Yang and Jun (2002) and Zorayda Ruth Andam (2003) has extended knowledge related to service quality aspects in the context of e-commerce from different perspectives of two groups: buyers and non-buyers of Internet services [2, 13]. This study has identified six main service quality characteristics that have been pointed out by Internet service buyers,

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which are: (1) reliability, (2) accessibility, (3) ease of use, (4) personalization, and (5) confidentiality, and (6) credibility.

Lee and Lin (2005) developed a model to examine the relationship between e-commerce service quality and overall service quality, customer satisfaction, and purchase intention [14]. This study has shown e-commerce service quality: (1) website design, (2) reliability, (3) responsiveness, and (4) trust.

According to the research of Li and Suomi (2009), the research team proposed an 8-dimensional scale to measure the quality of electronic services based on the E-SERVQUAL scale: (1) site design, (2) reliability, (3) completeness, (4) security, (5) responsiveness, (6) individuality, (7) information and (8) empathy [15].

According to the authors, research on e-commerce service quality has been conducted in different contexts, which include quality of electronic services, quality of online retail services, quality of online shopping services and quality of online financial services, and safety of online transactions. Most of the above studies inherit the factors in the SERVQUAL scale and, at the same time, combine them with some website quality factors.

# 2.4. Satisfaction

According to P. Kotler (1997), customer satisfaction results from experiences throughout the shopping process, including specific steps: perception of need, information search, evaluation of options choice, purchase decision-making, and post-purchase and consumption behavior. Therefore, it covers all the reactions that a buyer may display and the various stages in the buying process [16].

Research model of e-commerce service quality and customer satisfaction in Vietnam

The authors have inherited the SERVQUAL scale to propose a research model on e-commerce service quality and customer satisfaction in Vietnam, including the following factors: (1) reliability, (2) ) fulfillment, (3) Confidentiality, (4) responsiveness, (5) individuality, (6) empathy.

So, Hypothesis is:

H1: Reliability has a positive influence on customer satisfaction when using e-commerce services

H2: Completion has a positive effect on customer satisfaction when using e-commerce services

H3: Confidentiality has a positive effect on customer satisfaction when using e-commerce services

H4: Responsiveness has a positive influence on customer satisfaction when using e-commerce services

H5: Individuality has a positive influence on customer satisfaction when using e-commerce services

H6: Empathy has a positive influence on customer satisfaction when using e-commerce services

#### 3. Methodology

The authors use both qualitative and quantitative research.

Firstly, qualitative research is carried out through in-depth interviews. Since then, the authors have adjusted and completed the questionnaire. The questionnaire consists of the following two parts:

Part one, designed by the author team, includes questions related to personal information about customers, such as age, gender, income, and education.

Part two is designed by the authors to estimate e-commerce service quality and customer satisfaction. Part two consists of 62 questions and is divided into two groups by the author team. Group one, consisting of questions about e-commerce service quality, includes six main factors: (1) reliability, (2) completion, (3) Confidentiality, and (4) responsiveness., (5) individuality, (6) empathy.

Group two, including eight questions about customer satisfaction. Second (quantitative

research), the authors use a 5-level Likert scale, in which: 1 = strongly disagree, 2 = disagree, 3 = regular, 4 = agree, and 5 = completely Totally agree to quantify e-commerce service quality and customer satisfaction when shopping at four websites, including 2 Vietnamese websites: sendo.vn and tiki.vn; and foreign websites: shopee.vn Lazada.vn. These seven websites were selected by the author group because of the highest number of transactions in the last four quarters, according to the report: Vietnam e-commerce map (December 12, 2020).

The authors posted the questionnaire on social networking sites like Facebook and Zalo. They sent it via email with an invitation to participate in the research and help replicate it to friends and customers in Vietnam. The authors applied a random sampling method to collect primary data in this study. As a result, the author's team has obtained 479 valid answer sheets, from which the author team conducts the analysis.

#### 4. Results

#### 4.1. Demography sample

The research results show that most female customers participating in the survey are 48%, while male customers account for 42%. The primary age of customers participating in the survey is under 32 (accounting for 58.6%), aged 45 and above rarely participate in ecommerce and account for 11.1%. At the same time, the study also shows that the survey respondents' education level is mainly customers who have graduated from university (57.2%), undergraduate (25.3%), and the rest is a master's degree or higher. As for income, 62.2% of survey respondents have an income of between 5 and 10 million VND/month, have payments over 10 million VND/month, and the rest are customers below 5 million VND, million VND/month. The website that customers participate in the most is shopee.vn (45%); tiki.vn (24.2%), followed by lazada.vn (12.2%), vatgia. com (12.8%).

# 4.2. Cronbanh's alpha

To consider the reliability of data, the author team uses a reliable coefficient to assess the scale's reliability. This method helps to eliminate observation variables' inadequate reliability (with a total correlation coefficient <0.3). According to Hoang Trong et al. (2008), the scale is guaranteed to have cronbach anpha  $\geq 0.6$  [17].

Table 1 indicates that 08 factors of e-commerce quality with reliable systems are more significant than 0.6, and Sig is very small. Therefore, these eight factors have a dedicated database. Therefore, these 08 factors are used in factor analysis.

Table 1. Cronbach's alpha

No	Factors	Cronbach's alpha	Mean
1	Reliability	0,7983	3,97
2	Completion	0,797	3,49
3	Security	0,793	3,85
4	Responsiveness	0,895	3,02
5	Personal	0,791	3,89
6	Empathy	0,733	3,75

# 4.3. Regression

Regression analysis was performed to examine the relationship between e-commerce service quality and customer satisfaction. The author uses the Enter method to analyze 06 factors of e-commerce service quality and satisfaction regression. The adjusted coefficient of determination R2 was used to evaluate the model's fit. We have the coefficients R2 = 0.979 and adjusted R2 = 0.896; Durbin-Watson = 1,797.

Table 2 shows that Sig = 0.000 of 06 factors in the e-commerce service quality scale is consistent with the collected data. Besides, the criteria for considering multicollinearity with the variance exaggeration coefficient VIF of 06 elements in the model are all less than two. Therefore, the factors in the scale do not have multicollinearity. Moreover, the adjusted R2 coefficient is 0.896, which means that the variables in the model explained 89.6% of customer satisfaction when participating in e-commerce at four websites.

According to the analysis results of the regression parameters in the model, the

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significance level of the Sig components are all < 0.05, so the 06 factors in the e-commerce service quality scale are statistically significant. Both have a positive impact on customer

satisfaction. Which reliability has the most significant impact on customer satisfaction (0.289), and the factor with the lowest result is confidentiality (0.028).

Table 2. Results of regression analysis

No	Factors	Regression coefficient	Normalized regression coefficient	Sig	Variance
1	Reliability	0,289	0,32	0	1,79
2	Completion	0,109	0,19	0	1,13
3	Security	0,028	0,02	0	1,52
4	Responsiveness	0,097	0,11	0	1,68
5	Personal	0,167	0,14	0	1,73
6	Empathy	0,179	0,18	0	1,97

#### 5. Conclusion

To develop e-commerce in Vietnam, the solutions to be taken into account include:

Firstly, establish a legal environment for ecommerce development. The legal environment for e-commerce and other industries is formed and developed from the legislative system of the political system. The legal framework is regularly reviewed to make adjustments and changes to suit the country's development stages, technology trends, and international laws. Policies to support the information technology (IT) and e-commerce market should be developed, with particular attention paid to tax policy support and preferential lending interest rates for service enterprises—services e-commerce applications. implement Departments and agencies should regularly organize inter-sectoral inspection activities in the field of e-commerce; in localities and organize annual review and inspection activities to grasp the situation of e-commerce development in the area as a basis for better implementation of policies and enforcement of laws on e-commerce.

Second, developing human resources for ecommerce. Research shows that IT and ecommerce human resources are mainly concentrated in big cities such as Hanoi, Da Nang, and Ho Chi Minh City. In Ho Chi Minh City and the remaining provinces, human ecommerce resources are still weak and lacking, so it is necessary to promote human resource development in remote and isolated areas to promote the development of e-commerce on a large scale. It is essential to organize many short-term training courses, training classes, seminars, or seminars at different levels and localities to disseminate to all people, subjects, and sectors. Economics is the most basic knowledge about Internet/websites and e-commerce. In addition, it is necessary to implement training programs on e-commerce at the university and college levels in the provinces and cities to improve the knowledge of the e-commerce workforce.

The number of people participating in online shopping on e-commerce platforms skyrocketed. In 2019, the whole country had 39.9 million people participating in online shopping, an increase of 11.8% compared to 2018 and nearly doubled after only three years. Online shopping value per capita reached 202 USD, up 8.6%.

Third, promote the application of forms and means of payment. Considering the reality in enterprises, the application of electronic payment still has many limitations in both awareness, action, and means of application. The habit of using cash is still imprinted in most people's minds. Hence, no matter how high the technology applied to payment, the number of electronic payment transactions is still limited. The online payment adoption rate is still not high. Propagating and mobilizing people to make electronic payments, use credit

cards, e-wallets, etc., to gradually get used to modern payment methods and give up the habit of using cash. The trend of using smartphones is more and more popular among people. If customers want to use online payment methods instead of money, there must be online payment tools on mobile phones; increasing convenience, convenience, and ease of use will increase the number of users.

Fourth, develop the field of goods delivery The State should (logistics). increase investment in ports, airports, train stations, seaports, passenger car and bus systems, etc., which are convenient for guests to use; Develop logistics development planning for the provinces and the whole country, linking the infrastructure system development planning with the logistics service industry development planning; Synchronously building technical infrastructure for logistics activities nationwide, creating a favorable business environment for enterprises, to improve the efficiency of logistics business of enterprises as well as facilitate the development of the industry.

Fifth, raise awareness about e-commerce. Most enterprises in the locality currently have not approached and developed e-commerce methodically; most are spontaneous, so the effectiveness and ability to promote ecommerce are still limited. Many businesses are not fully aware of the role and benefits of ecommerce and its potential and limitations of ecommerce. Most companies think that ecommerce is simply an application of IT, or ecommerce is just a website to introduce enterprises. This limitation has dramatically hindered the development of e-commerce in recent years because most companies have not clearly defined the purposes, goals, and strategies of e-commerce development in both the short and long term. Therefore, enterprises need to build a team of staff specialized in ecommerce actively, need to select staff who have been trained in IT, the internet, and especially know e-commerce; Organize seminars to propagate the benefits of ecommerce to change the gradually

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