

THE INFLUENCES OF E-COMMERCE ON 3PL COMPANIES IN VIETNAM (E-LOGISTICS)

Present Status and Upcoming Trends

LAB University of Applied Sciences

Bachelor of International Business

2022

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Abstract

Author(s) Duyen Vu	Publication type Bachelor's thesis, UAS	Completion year 2022
	Number of pages 62	
Title of the thesis The influences of E-logistics on Vietnam's e-commerce market		
Present Status and Upcoming Trends		
Degree International Business (UAS)		
Abstract <p>The global extension of the Internet resulted in E-commerce that has transformed the traditional method of purchasing into a new one - online purchasing. To reach the increase in demand of e-Commerce customers, many related services, not excluding logistics have progressed. To address the research question: "What is the ongoing situation and future prospect of E-Logistics service in Vietnam?" This thesis uses a deductive technique to study both qualitative and quantitative data.</p> <p>The thesis' theoretical section covers the concepts of e-commerce and e-commerce logistics (e-logistics) services. Secondary data is gathered and examined from published publications, market reports, and certified sources on the internet to provide a general overview of the thesis's objectives.</p> <p>The SWOT analysis is applied to figure out the Strength, Weakness, Opportunity, and Challenge of E-logistics to describe its ongoing status and predict upcoming trends.</p> <p>The empirical portion, on the other hand, offers an empirical analysis of Vietnam E-commerce consumers (both seller and buyer) to determine which logistics companies provide the most trusted and used e-logistics. Also, the survey results are linked to answering partly the present and future status of logistics distribution problems for E-commerce in Vietnam, or, to put it another way of e-logistics. The author creates an online survey and sends it to several categories of prospective Vietnamese e-Commerce users.</p> <p>Since it arrived, the Vietnam e-logistics business has had the most rapid growth. The e-logistics service is majorly chosen by the Vietnamese market's demands providing consistent delivery throughout a countrywide network. However, its disadvantages include a lack of infrastructure, a disproportionate distribution of essential goods, and ways of paying. The biggest difficulty for the sector is the gap between customer aspirations and market immaturity. The thesis concludes with recommendations for future study after examining the benefits and drawbacks of E-logistics in Vietnam's e-commerce (using both SWOT analysis and a survey).</p>		
Keywords E-commerce, Logistics, E-Logistics, Delivery		

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1 Introduction

The essay is written to provide readers with an overview of the thesis topic. The research background, thesis goals, research questions, scope and limitations, research methods, data collection, and theoretical framework are all described here.

Ecommerce logistics is the most recent great engine of improvement in logistics and physical distribution networks in developed countries, which have evolved significantly in recent years. For the time being, e-commerce continues to grow. The majority of shipping service providers, particularly multi-channel shippers, are only now beginning to figure out what this means for their dispersion network structures (Builderfly 2022).

To Vietnam particularly and developing nations generally, the Ecommerce Logistics aspect is still new and has not been fully utilized yet; however, when it is understood and grasped the trends, Vietnam will be a market full of potential and opportunities for the Logistics industry development in the future. Because Vietnam is one of the highest economic growth in the developing ASEAN area with a large amount of young population and encouraged policies of investment for foreign enterprises. Also, the country develops the world's leading e-commerce industry, and is the second-ranked market for purchasing and selling on mobile platforms, just behind South Korea. In Vietnam particularly, there are several hidden potentials in the e-commerce market and users at a young age are always eager to try new things (VN Review 2017.)

According to all the given data above, the author finds out the possibility to implement research about the logistics service industry operating in Vietnam when there is the penetration of e-commerce. The combination between logistics and e-commerce, as described above, is also called E-logistics. The main source to exploit information are the current features of Vietnam e-logistics, and the benefits and challenges of logistics services when facing the e-commerce era. From there contribute to logistics companies' figures and information in advancing the e-logistics service towards customer satisfaction in the selected country.

With a favourite for anticipating new technology trends, a special interest in Logistics as well as a background experience in e-commerce, these factors are believed to be the solid basis and inspiration for the author conducting the research.

1.1 Thesis objectives

The logistical procedure that regulates everything associated with the internet marketplace is referred to as e-logistics - or can be described as e-commerce logistics (Logistics and Fintech 2017).

In recent years, E-commerce has flourished in Vietnam with a series of e-commerce sites sprouting like mushrooms after rain and also social media platforms have been used fully utilized to trade. Consumers gradually change their consumer culture, gradually accept and get used to buying online which promotes the trend of outsourcing services in last-mile delivery, warehousing, and packaging segments... for instance (Logistics4vn 2015). Thus, it is clear to see that E-commerce and Logistics have a close relationship with each other and depend on and support each other for success and growth. All logistics activities that are related to e-commerce can be named e-logistics services.

Despite significant challenges, the e-commerce logistics industry has a bright future. Thanks in part to Vietnam's free trade agreements (FTAs), which assist stimulate foreign direct investment (FDI) in the country's infrastructure and information system. Aside from that, the government has established laws to boost the development of countrywide logistics centres by 2030, as well as to strengthen Vietnam's competitiveness and development of logistics services by 2025. That legislation encourages present investors to increase their capital spending in the coming years, and that new entrant will continue to look at the Vietnamese market for investment opportunities (Bhatla 2020.)

The thesis main objective is to contribute figures as well as information on E-Logistics services for advancing customer satisfaction in the selected country. According to these thesis's purposes, the author applies various methods to contribute general knowledge of Vietnam's E-Logistics, study it, and then figure out the resolutions under the present status and upcoming trends mentioned above.

1.2 Research question

A major research question (RQ) with three sub-questions (SQ) is developed to achieve the thesis objectives as designated below.:

RQ: What are the ongoing state and future prospects of E-Logistics in Vietnam?

- SQ1: What are the principal features of E-logistics in Vietnam's e-commerce?
- SQ2: Which benefits and challenges of E-logistics in the E-commerce market?

- SQ3: Which companies provide the best e-logistics that e-commerce (end) consumers expect?

The questions themselves are to substantiate the results of the study after gathering factual information from verification sources and answers from the end consumers to make the thesis research. Its results can be consulted by large and small domestic and foreign logistics companies or even documented for further research.

1.3 Scope of thesis

Firstly, this thesis is being written to investigate E-Logistics in Vietnam, hence its geographical scope is limited to that country. If any data from other nations or regions are available, it is exclusively utilized to help market research in Vietnam. Second, this research will solely look at Vietnam's logistics since 2016. Because the focus is on the present situation and potential concerns, data from before 2016 is just briefly covered. Before making any predictions for the future of the market, the author will think about it. Finally, only the viewpoints of corporations, logistics service providers, and end-users are considered.

1.4 Research methodology

Research technique and data gathering, in agreement with Kothari (2004, 8), are critical components of any research that aims to answer theoretical research questions. Rajasekar, Philominathan, and Chinnathambi (2013, 5) describe research methodology as the study of methodologies, which include various numerical schemes, theoretical processes, and algorithms for gaining information. Data collecting addresses the origin and collection techniques, whereas research methodology addresses how to acquire and analyse data. Saunders, Lewis, and Thornhill (2009, 108) offer the research system consisting of aspects that compose the methodology: research approach (approaches), re-search method (choices), and data collection (techniques and procedures).

a. Research approach: Deductive

Deductive and inductive techniques to research are the two most common types. Each method's nature is opposed to the other. The empirical study is undertaken to validate a hypothesis or to prove a theoretical notion, which is known as deduction testing theory. Before collecting data, a theory must be considered and created - theory comes first. Induction, on the other hand, is the process of gathering and analysing facts to form theories. The theory comes last in the inductive research technique. (Saunders et al. 2009, 125-126; Blumberg, Cooper, & Schindler 2005, 16-36.) To get from general to specific,

this thesis takes a logical technique. First, Theoretical foundations for e-commerce, logistics, and e-logistics are provided. Second, a survey of diverse Vietnamese customers will be done to troubleshoot the sub-questions, with the findings being analysed. Finally, the findings are summarized to respond to the research questions.

b. Research method: Quantitative & Qualitative

There are two types of standard social research methods: quantitative and qualitative. Data and statistics are the centres of quantitative research. It answers the queries "what" and "how many" by evaluating various forms of data. Qualitative research, on the other hand, focuses on the meanings of issues and how participants' motives influence their knowledge and engagement with those issues. This strategy tries to address the questions "what," "how," and "why." (Robson, 223-227, 2011.) However, depending on the study topics, these two methodologies can be mixed. Complicated approaches are essential, especially for contemporary challenges with complex research objectives (Tashakkori & Teddlie 2009, as cited in Brickman & Rog 2009, 283.). Instead of being binary or discrete words, quantitative and qualitative methods are thought to be on a continuum of approaches (Brickman & Rog 2009, viii).

As a result, this thesis employs a mix of qualitative and quantitative methodologies. The first and second sub-questions will be answered using a qualitative manner: SQ1: What are the principal features of E-logistics in Vietnam's e-commerce? And SQ2: Which benefits and challenges of E-logistics in the E-commerce market? A SWOT analysis of E- is also cited as a technique for bolstering the interpretation and making it easier for readers to visualize the work. SWOT is an acronym for Strengths, Weaknesses, Opportunities, and Threats. Strengths (S) and Weaknesses (W) are internal factors over which you have some influence. Otherwise, Threats (T) and Opportunities (O) are external conditions over which you have limited control (MSG 2021). Furthermore, a survey will be used to study the end-consumers in the Vietnam e-commerce industry, allowing for thorough conclusions to be drawn for the third sub-question: SQ3: Which are companies provide the best e-logistics that e-commerce (end) consumers expect?

1.5 Theoretical framework

E-Logistics is a notion that is still in its infancy. Those that have yet to begin have shown an interest in doing so. E-logistics is the logistical procedure that regulates everything about the online marketplace. Entrepreneurs should consider multi-channel activities, cross-border operations, warehouse layout and stock, door-to-door delivery, and reverse

logistics, planning and forecasting, and performance assessment as significant parts of e-logistics (Logistics and Fintech 2017.)

The research aims to learn about the existing state of logistics for e-Commerce in Vietnam (E-logistics) as well as its potential state (research questions), the theoretical framework is separated into two main parts: the fundamentals of main features of E-logistics, information on E-Logistics current benefits and anticipated up-coming challenges which is the major theoretical pillar of the thesis answering two research sub-questions:

- SQ1: What are the principal features of E-logistics in Vietnam's e-commerce?
- SQ2: Which benefits and challenges of E-logistics in the E-commerce market?

Besides, the SWOT analysis is used as a tool to interpret to ongoing status and upcoming trends of E-Logistics in Vietnam.

Finally, a little theoretical analysis is employed at the end of the third sub-question to summarize the end-consumers satisfaction in this country's e-commerce market with e-logistics services of companies, reflecting the delivery segment only based on the statistical analysis of the survey.

- SQ3: Which companies provide the best e-logistics that e-commerce (end) consumers expect?

To make the theoretical framework more accessible, the sub-questions and their chapter are visualized in the table below.

	Background, objectives, questions, limitations & research methodology	Chapter 1
RQ: What are the current situations and prospects of E-Logistics in Vietnam?		
<ul style="list-style-type: none"> • SQ1: What are the principal features of E-logistics in Vietnam's e-commerce? • SQ2: Which benefits and challenges of E-logistics in the E-commerce market? • SQ3: Which companies provide the best e-logistics that e-commerce (end) consumers expect? 	<p>The theoretical foundation of the objective collected from secondary data</p> <p>Theory analysed by SWOT</p> <p>In addition to the major primary data is used in this part, a small part of secondary theory data used to support concluding the Vietnamese end-consumers examination</p>	<p>Chapter 2</p> <p>Chapter 3</p>
	Summary and conclusion	Chapter 4

Table 1. The theoretical framework of the thesis

1.6 Data collection

Data collection is the foundation of the research procedure, which refers to the strategies and procedures used to obtain research data (Saunders 2009, 108). Primary data and secondary data are the two forms of data available which are both necessary for the research.

Primary data can be seen, felt, or documented in the immediate aftermath of an occurrence. Data that has been captured or evaluated is referred to as secondary data. Direct measurement, observation, interviews, conversations, and inquiries are the most common sorts of primary data, which refers to empirical data. Written resources from published newspapers, documentaries, and the Internet are the most common sorts of secondary material.

Both primary and secondary data will be collected and analysed for the thesis. To gather primary empirical data, e-Commerce end-consumers in Vietnam performed an online survey to analyse their experience with e-Commerce logistics services. Secondary data from publications, reports, articles, and films, on the other hand, is used to address the theoretical sections.

An online survey is provided to 100 end-consumers who are randomly selected to answer 12 available questions. After gathering all the needed data, the contents and figures are analysed for supporting the key research question.

The research expresses the first sub-question (theory segment) with the usage of secondary data. The primary data was used to perform the third sub-question (primary data collection from end-consumer's survey). While there is a combination of primary data and secondary data in the second sub-question which is about the benefits and challenges. The secondary source initially gives theoretical figures while empirical data (author's observation) reinforces the given theory as an assist. Finally, these sub-questions are summed up to answer the research topic: What are the ongoing situation and prospects of E-Logistics in Vietnam's e-commerce?

2 Overview of E-commerce, Logistics, and E-Logistics

2.1 Overview of E-commerce

2.1.1 E-commerce definition

E-commerce is a significant player in the marketplace both locally and internationally. As more people shop online rather than at traditional retail stores, it's becoming a fast-growing industry of business. The electronic buying and selling of items and services over the internet is known as e-commerce, or "electronic commerce." Other online activities that can be incorporated are online auctions, tickets, and banking (Indeed 2021). Although many businesses rely on the sale and purchase of actual goods and services through the internet, e-commerce encompasses a broader variety of economic activities. E-commerce includes both consumer-to-consumer and business-to-business transactions, as well as internal organizational transactions that enable such activities. E-commerce developed as a method of exchanging commercial papers, such as orders and invoices, between suppliers and their customers (Zwass 2021).

E-commerce has changed the way people live, as well as how businesses and governments work. On the Internet-Web, trade takes occur through electronic marketplaces (or marketspaces) and supply chains. Consumer-oriented marketplaces include large e-malls (such as Amazon), consumer-to-consumer auction platforms (such as eBay), multichannel businesses (such as L.L. Bean), and millions of e-retailers. Alibaba and other companies have constructed large business-to-business marketplaces. The so-called sharing economy, which includes services like Airbnb's online rentals of private homes, allows for more efficient resource usage. Electronic currencies (or cryptocurrencies) like Bitcoin became popular as a means of settlement. Users' ideas and reviews, which operate as electronic word-of-mouth, drive social networking sites like Facebook, which facilitate a wide range of individual interactions and serve as a platform for so-called social commerce. The Internet is also an interactive human communication channel that often replaces and enhances traditional media (Zwass 2021.)

2.1.2 Classification of e-commerce transactions

Business-to-consumer (B2C); Business-to-business (B2B); Consumer-to-consumer (C2C); Consumer-to-business (C2B); Business-to-administration (B2A); and Consumer-to-administration (C2A) are the several types of e-commerce transactions.

Business-to-consumer e-commerce is the most common (B2C). B2C e-commerce refers to electronic commercial relationships between businesses and their clients (Indeed 2021). Many customers like this form of e-commerce because it allows them to shop around for the best deals, read user reviews, and frequently find new items that they would not have seen in a store. This e-commerce industry also enables businesses to have a more personalized relationship with their customers (Wilks 2018). B2C e-commerce is the type of e-commerce that the author focuses on because it relates to the thesis objective - E-logistics. E-logistics in B2C e-commerce is whole actions that take care of the flow of goods from the point of supply (business) to the point of consumption (consumer) through electronic purchase and sale transactions (Indochina Post 2022).

Business-to-business transactions (B2B) - E-commerce refers to any electronic goods and purchase orders between two businesses. This type of e-commerce describes the relationship between product makers and distributors who offer items for sale to clients. In certain circumstances, this aids wholesalers in staying ahead of their competition (Wilks 2018.)

Consumer-to-consumer transactions (C2C) All online exchanges between two or more individuals are referred to as e-commerce. On sites like eBay and Craigslist, this form of e-commerce may be found. In Vietnam, to be precise. C2C e-commerce platforms such as Shopee, Lazada, and Sendo are as popular as B2C e-commerce platforms. These transactions are usually conducted using online platforms (such as PayPal or similar programs), but they are also commonly conducted through social platforms (such as Facebook Marketplace) and webpages (such as Craigslist) (Wilks 2018.)

Consumer-to-business transactions (C2B) When a customer makes their services or goods available for purchase by companies, this is referred to as e-commerce. It isn't your conventional form of online shopping. This may be a graphic designer changing a company logo or a photographer taking photos for an e-commerce website (Wilks 2018.)

Transactions between enterprises and governmental organizations, such as social security, employment, and legal services, are referred to as business-to-administration (B2A) e-commerce (Indeed 2021).

And finally, electronic transactions between people and government agencies are classified as consumer-to-administration (C2A) e-commerce. Taxes (releasing tax returns), health (using an online service to schedule a meeting), and legally binding document preparation are all instances of this (Wilks 2018).

There are numerous functional versions of e-commerce as well as different forms of e-commerce that may be distinguished by the relationship between the activity and the commodities or services being sold (Indeed 2021). Some of the more common instances are as follows: 1. Retail: Retail e-commerce refers to the sale of a product directly to a client. 2. Wholesale: refers to the sale of goods in large quantities to a retailer, who then sells them to their customers. 3. Physical products: In e-commerce, physical products are any products that have an impact on stocks and therefore should be manually shipped. 4. Digital products: In e-commerce, they refer to things that are sold as downloadable goods, such as online publications, designs, or lessons; 5. Drop shipping: Drop shipping e-commerce is when one company sells a product while another handles the manufacturing and shipping. 6. Subscription: In e-commerce, a subscription is when a customer purchases a product or service on a regular basis (weekly, monthly, annually, etc.) and the product is automatically paid and renewed. 7. Services: Service e-commerce is the buying of services that are typically priced by the length of time it takes to perform the service. 8. Crowdfunding e-commerce: When money is obtained as production equity before an item is produced, this is referred to as crowdfunding e-commerce.

2.1.3 Status of E-commerce in Vietnam

Despite the impact of the Covid-19 outbreak, according to Vietnam Credit's Country Report 2021, e-commerce is one of the fastest-growing economic sectors in the country, with an 18 percent growth rate and a market value of \$11.8 billion USD. During the previous six years, it has consistently increased at a rate of 23 percent to 37 percent. The cost of internet shopping has grown considerably as well, from 160 USD in 2015 to 225 USD in 2019. According to the National E-commerce Development Master Plan for the years 2021-2025, e-commerce revenue would increase by 25% annually to USD 35 billion, with average annual online purchases per person reaching 600 USD (VietnamCredit 2021.)

The epidemic, according to a Nielsen study, has increased Vietnamese consumers' desire for purchasing on e-commerce platforms. Non-food products and fashion have given place to requirements and food, notably fast-moving consumer goods (FMCG) (VietnamCredit 2021.)

According to Nielsen, the demand for buying through e-commerce platforms has risen considerably since the outbreak in 2020. More than 70% of the Vietnamese population now has internet access, with 53% utilizing e-wallets to conduct online purchases (VietnamCredit 2021.)

Due to the rise in demand induced by the pandemic, it is projected that e-commerce will continue to grow fast in the coming years. The appearance of this increase is possible when comparing to the Figure 1 which displays the growth of B2C e-commerce in the period between 2014 and 2020 (before Covid-19 pandemic). The Vietnam B2C e-commerce grew from around 3 billion USD of sales in 2014 to approximately 16 billion USD in 2020, increased more than 5 times through seven years.

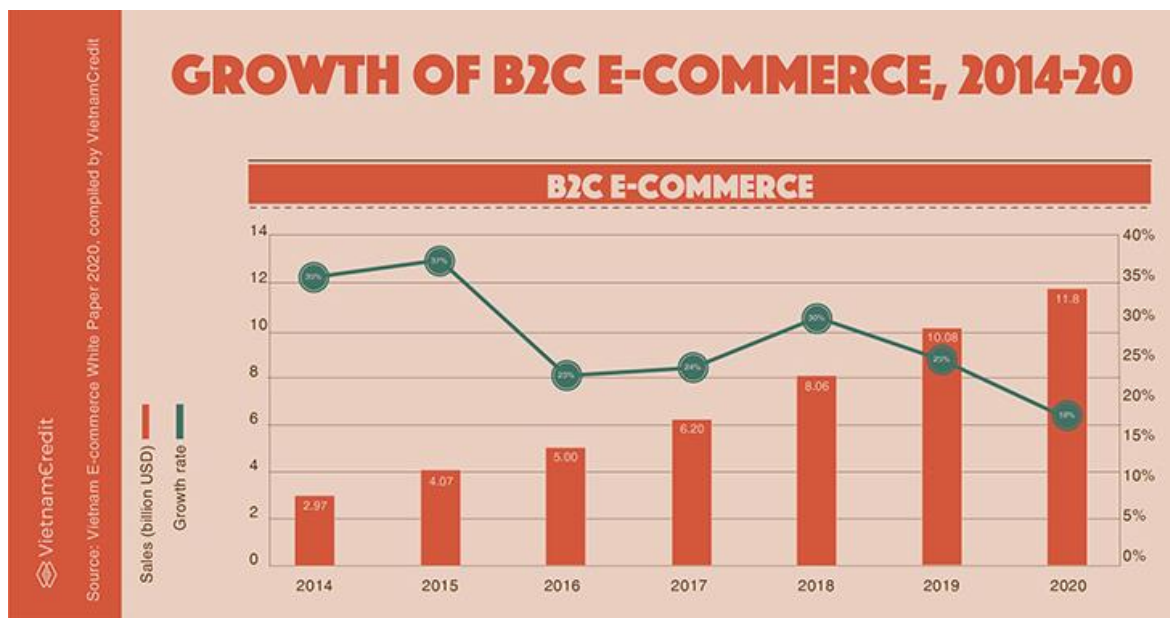


Figure 1. Growth of B2C E-commerce, 2014-2020 (VietnamCredit 2021)

Outstanding e-commerce companies in Vietnam

Shopee is the leading e-commerce site in Vietnam, according to statistics acquired by Vietnam Credit from iPrice Group, with about 70 million monthly visitors, followed by The Gioi Di Dong with more than 30 million visits and Tiki with approximately 22 million visits. Lazada and Sendo are ranked fourth and fifth, respectively (VietnamCredit 2021.)

Shopee is a Singapore-based e-commerce firm owned by the SEA group. Vietnam, Thailand, Indonesia, the Philippines, Brazil, Malaysia, and Taiwan are among the countries where this e-commerce platform is available. Shopee Vietnam is well-liked by both companies and customers in Vietnam. It began as a consumer-to-consumer (C2C) model but later switched to a business-to-consumer (B2C) one. As of February 2021, this e-commerce site had received about 68.5 million monthly visits because of its user-friendly design and efficient marketing strategies (data from iPrice Group).

Mobile World Group (Vietnamese name: The Gioi Di Dong) owns the Mobile World Group (MWG) e-commerce platform, which was founded in March 2004 and made its first profit

after only seven months of operation (Nguyen 2018). MWG's market share in the mobile device segment in 2020, according to figures from Vietnam's retail sector, was over 50%, making it the country's top company in this industry. They want to grow their market share to 60% by 2022, which would need a 16 percentage point gain (Nguyen 2021). In addition, the firm has made it into the top 100 largest merchants in Asia-Pacific. MWG's e-commerce platform ranks second in Vietnam's top five e-commerce firms with 31.4 million monthly visitors (VietnamCredit 2021).

Tiki is one of Vietnam's most popular e-commerce platforms. It was founded in March of 2010. This e-commerce firm offers the TikiNow service, which allows clients to get things in as little as 2 hours after placing an order (Ding 2021). To suit the different demands of clients, Tiki's e-commerce platform presently provides over 500,000 goods from over 6,500 prominent brands. Despite being Vietnam's third most popular e-commerce platform, the number of visitors to its website has dropped considerably. It receives over 22.2 million monthly visits (up from more than 30 million in 2019), placing it fourth in app downloads on iOS and Android (VietnamCredit 2021).

Lazada is a famous internet shopping platform in Southeast Asia. Lazada Vietnam, a subsidiary of the Lazada Group, first opened its doors in Vietnam in 2012, with the country's top payment and shipping network at the time (Ding 2021). They own a large variety of market segments, such as furniture, technology products, haute and apparel, pharmaceuticals, beauty, children's gadgets, and sports equipment. Lazada has over twenty million monthly views, placing it behind only Shopee, Tiki, and MBW.

Sendo is an online e-commerce platform that was launched in Vietnam in September 2012. FPT Online Services Joint Stock Enterprise - FPT Online is in charge of this e-commerce company. Sendo entices consumers with unique features such as free 24-hour returns and countrywide shipping (Ding 2021). Sendo is Vietnam's fifth largest e-commerce site, with roughly 11 million monthly visitors (VietnamCredit 2021).

Drivers of Vietnamese e-commerce

Traditional product introduction techniques require a while to obtain to the target market, resulting in greater prices and inferior quality. Otherwise, e-commerce, due to its benefits in areas such as saving time, simple transfers, and cost minimization, has become incredibly common in many nations throughout the world. In Vietnam, the use of e-commerce in business activities has become a necessary and practical trend in Vietnam. Despite the various opportunities for enterprises to grow their revenue base, several obstacles continue to obstruct the goods movement and extension beyond the local market. The key driv-

er behind e-commerce, on the contrary, is trends and events (Nhan Dan 2018.). Here are some of Vietnam's new e-commerce development drivers.

1. The development of mobile commerce

The development in mobile internet usage in the nation is driving the expansion of e-commerce (Mishra 2015). Typically, online merchants' expanding reach in rural areas has driven the usage growth of mobile internet in Vietnam (Suthar 2017).

Since 2014, mobile online buying has surged threefold. In fact, despite falling unit pricing, worldwide smartphone sales are increasing every day. As a result, cell phones are now accessible to even the world's poorest people. In accordance with Hootsuite, mobile internet penetration increased over 65 percent in the first quarter of 2017, increasing the amount of mobile online users to nearly 5 billion out of the global population of approximately 7.5 billion. Second and third-world economies have seen the fastest rise in mobile internet usage (Suthar 2017). With the development of online connectivity, smartphone use; and increased belief in Internet purchasing, e-commerce in Vietnam has risen from around 30 percent in 2017 to over 50% of the population in 2020. Above seventy percent of Vietnamese are expected to use e-commerce transactions by 2025. Furthermore, according to Statista, by the end of 2020, the country's e-commerce sales would have surpassed six billion dollars, with predictions nearing nine billion dollar by 2025 (Bhatla 2020).

More customers are turning to online mobile shopping as mobile technology becomes more widely adopted and disposable income rises. Furthermore, clients are becoming more focused and knowledgeable about their demands and available options than ever before (Suthar 2017). As a result, mobile commerce is unquestionably one of the key driving forces (Mishra 2015).

2. Debit cards are becoming more widely used for cashless transactions

The development of the digital payments industry is being driven by the expansion of e-commerce as an alternative to brick-and-mortar purchases (Bhatla 2020). PayPal and Payoneer, two large online payment platforms, have grown globally. However, because the services are not offered in all nations, there is still a gap (Suthar 2017). Local online payment services and money transfer applications via mobile phone like Momo, Airpay, ViettelPay, ZaloPay, and others (Figure 2), which are now popular in Vietnam, cover this void (Vietnam Credit 2020). There has also been a rapid rise in the use of online wallets, cryptocurrencies, and other digital currencies, which allow peo-

ple to trade without having to worry about exchange rates or country-specific financial concerns (Suthar 2017).

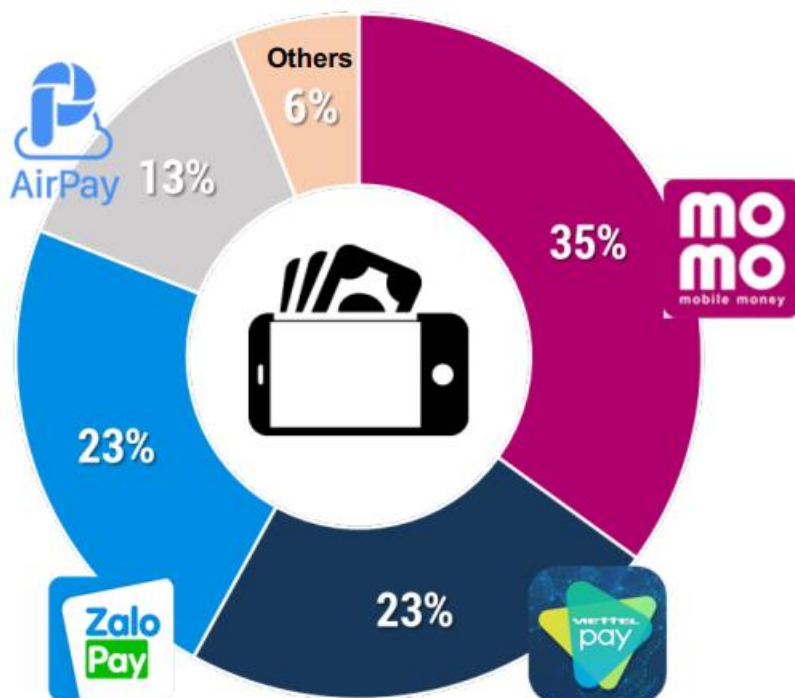


Figure 2. E-Wallet market in Vietnam (Buzzmetrics 2018)

In addition, greater acceptance of digital financial technology and the COVID-19 epidemic have fuelled an increase in request for contactless and cashless transactions in Vietnam. Cash payments presently account for about a third of all e-commerce transactions in Vietnam, but this figure is predicted to drop to a quarter by 2025. This 7% drop in cash payments is anticipated to be replaced by an increase in digital payments (Bhatla 2020.)

To summarize, the burgeoning e-commerce business and positive legislative reforms are promoting the fast endorsement of digital payment mechanisms in Vietnam (Bhatla 2020), indicating that people are more eager to use debit cards for money transfers other than cash withdraw. Furthermore, many online businesses still require card payment for high-value sales, so this is a good move. In the next years, it will enable e-tailers to reach out to several more places and consumers (Mishra 2015).

3. Political readiness to promote internet trade is increasing

While governments in the developed world have been enthusiastic about electronic commerce, some resistance and regulations were promulgated in the developing world, with governments eager to keep internet trade under their jurisdiction. Furthermore, there have been several logistical issues since needless authorization and examination processes have frequently been imposed at the entrance into the markets. By 2016, however, most

of governments, excluding first-world countries had recognized the advantages of increasing border commerce, permitting, and even encouraging it (Suthar 2017.)

Vietnam has one of the most favourable legislative conditions in the ASEAN area for starting e-commerce. Five of the six legislation intended to regulate e-commerce activity have been passed in the nation. The e-commerce sector has dominated the recent expansion of the country's ecosystem of transportation, distribution, and fulfillment services. Vietnam is a member of free trade agreements (FTAs) as of 2020, which means products that are imported and exported with reduced or zero customs tariffs in Vietnam (Bhatla 2020) To support long-term e-commerce, the government should continue to examine, alter, supplement, and promulgate the legislative framework and e-payment systems. They should also focus more on promoting and attracting societal investment in the development of e-payment technological infrastructure, as well as improving regulations to stimulate the growth of prospective markets for e-payment applications such as transportation... Enterprises and e-commerce platforms must also strengthen network and information security, boost product quality control, and take actions to restrict and penalize enterprises that sell counterfeit items. Simultaneously, government and industry should collaborate with consumers to increase communication and education efforts. These efforts seek to help individuals in utilizing electronic payment systems, to create the necessary human resources, and to satisfy the demands of developing e-payment services and e-commerce in general (Nhan Dan 2018).

4. Big Data's Expansion

It's been suggested that a good understanding of client demands and providing customer experience based on solutions equals exceptional service. When mentioning e-commerce, nothing could be farther from the truth. Analyzing the target market and offering solutions that surpass client expectations are the keys to producing high-quality solutions. The fundamental problem of e-commerce is that the products are always been received indirectly, and there is little opportunity to speak with customers privately (Suthar 2017.)

Fortunately, the issue has been overcome thanks to the application of big data and artificial intelligence. These methods have shown to be quite beneficial in subscription Internet marketing where clients sign up to receive products at predetermined intervals. AI assists businesses in tracking client activity online and determining the customer's requirements, tastes, and preferences. With this data, e-commerce businesses may tailor their services to each customer's specific requirements and preferences (Suthar 2017.)

Unfortunately, another challenge encountered by investors in the Vietnam market is damage caused by counterfeit goods, infringement of intellectual property rights, and the selling of prohibited commodities on the Internet. The difference between marketed and real items as well as the fear of personal data exposure (Bhatla 2020) are all reasons that discourage Vietnamese customers from purchasing online, prompting the Vietnamese government to take immediate steps to improve network security.

5. Increasing logistics investment

In the e-commerce supply chain, logistics plays a critical role in establishing visibility and determining customer happiness, efficiency, and service delivery (Suthar 2017). This driver will be explored in-depth in the thesis via the implications of e-commerce on e-logistics services, as well as current and future trends.

Logistics is a complicated and time-consuming process. It also needs a significant amount of skill as well as a sophisticated network of multiple tiny units (Suthar 2017). Long delivery periods are one of the most common issues that e-commerce businesses face, with an average of 5.6 days according to a survey. Otherwise, fast delivery is a prerequisite for widespread acceptance of online buying, hence e-commerce companies must keep improving their delivery times (Bhatla 2020). As a result of these issues or developments, the supply chain inside the sector has grown. (Third-party) logistics is quickly becoming a major force in the country's e-commerce industry. Given the logistical component of the supply chain's complexity and capital-intensive nature, most online merchants are finding it financially feasible to outsource it. The logistics service providers are assisting these merchants in becoming more efficient by providing improved services such as maintenance, storage, and delivery. These services eliminate the need for warehouses and transportation as well as lower the chance of damage while the items are in transit (Suthar 2017).

Many firms that run large e-commerce platforms, such as Shopee, Lazada, and Tiki, have decided to invest in specialized logistic services to facilitate delivery in the next years. Other freelancers and retail sales organizations, on the other hand, continue to create and employ logistical services.

It is clear that e-commerce platforms have benefited many businesses (for example, as an effective channel for introducing and selling their products), particularly small and medium-sized businesses, thanks to the explosion in mobile internet penetration and expanded payment options for shoppers. It enables companies to contact clients outside of their immediate geographic region, to reach customers rapidly regardless of location or time, and assist small businesses to compete on an equal footing with large brands in interna-

tional trade and marketing (Nhan Dan 2018). Nonetheless, logistical, price, and product perception issues have plagued Vietnam's e-commerce businesses. As a result, the Vietnamese government has made pledges to the economy's digital transformation, simplified logistical procedures, and tightened internet security policies, all of which are boosting the country's e-commerce development.

2.2 Overview of Logistics

2.2.1 Logistics definition

a) Logistics definition

Logistics relates to the procedure of moving items (raw materials or completed goods) from one location to another. Transportation and warehouse management are the two main activities of logistics. Logistics operations can encompass the design; implementation; maintenance of commodities transit and storage consisting of service and data during from the start to the finish points (LAPAAS 2020.)

About the types of logistics, there are many forms of logistics; however, these four are the most commonly used: inbound logistics, outbound logistics, reverse logistics, and third-party logistics (3PL).

Furthermore, following the thesis objective – E-logistics the author gives an overview of the e-logistics definition and its association with 3PL. E-logistics refers to the logistics of e-commerce (internet sales), comprising all logistics activities such as warehousing, packing, and shipping in the e-commerce market, especially the B2C e-commerce market. In e-commerce, large enterprises (brands) have the option of handling e-commerce logistics in-house or outsourcing a third-party logistics provider known as 3PL. Small businesses prefer to outsource 3PL services frequently. Many businesses find that partnering with a third-party logistics provider allows them to focus on building their business while also guaranteeing that their clients receive excellent delivery and returns service (Ende 2022). Therefore, any logistics knowledge in relationship with e-commerce that the thesis focuses on is Third-party logistics (3PL) only.

To make it easy for readers to visualize, but still based on the structure of the essay, the author decide to provide in detail the concept theory of Third-party Logistics first (Chapter 2.2.1.b) and then E-logistics (Chapter 2.3.1)

b) Third-party logistics (3PL) and its types

Third-party logistics, abbreviated as 3PL, is a service provided by a logistics company to businesses that require warehousing and transporting. This is a type of integrated service (integrated logistics) mainly between transportation, forwarding, and warehousing services (Tomorrow Marketers 2020). A 3PL business is frequently used by a business (client) that does not have its own logistics sector. The 3PL providers handle some or entire of the logistics-related tasks according to entire client company's demand (Saloodo 2020).

According to Blue Cart, third-party logistics, or 3PL, is the umbrella term for all e-commerce logistical activities. Outsourcing your order fulfilment and administration to a third-party logistics (3PL) business is known as third-party logistics (3PL). There are several sorts of 3PL service providers, each of which performs different responsibilities according to your company's requirements (Blue Cart 2022).

So you can focus on your goals, a 3PL supplier manages your warehousing, picking and packaging, transportation, and delivery. Using a 3PL provider frees up your time while also lowering the risk of in-house fulfilment problems. It's a type of leverage that allows you to devote more time and resources to long-term goals like product development or branding (Blue Cart 2022).

Businesses can figure out a satisfying match with one 3PL supplier over another, based on their particular criteria (Blue Cart 2022). There are four main 3PL providers:

Firstly, a 3PL logistics firm often provides one or two specialized services to small and medium-sized organizations. An all-inclusive provider, for example, manages the complete process from order confirmation through delivery, whereas a logistics business may just deal with daily transactions. Not all eCommerce shipping firms provide third-party fulfilment. These 3PLs are ideal for organizations who wish to operate their own warehouse or employ a preferred carrier but want assistance with other phases of fulfilment. A 3PL logistics company is also an excellent choice for small businesses that are rapidly expanding.

Secondly, there are 3PL fulfillment firms, which are different from logistics providers. While many 3PLs specialize in product packaging, storage, and/or distribution, some are large enough to take on additional responsibilities. Fulfillment encompasses everything from receiving items from the supplier through expeditious transportation (think stuff like transporting alcohol) and delivering products to clients. A 3PL fulfillment company handles orders, tracking numbers, and packing since the fulfillment process is integrated with the seller's website and software.

Next, it is also vital to distinguish between freight forwarders and 3PL freight businesses when it comes to shipping. Freight forwarders are intermediaries who charge a fee to the seller in exchange for the seller's cooperation with preferred carriers. A 3PL freight firm, which includes transportation, provides a greater range of services on a flexible scale. 3PL freight services manage the warehousing, picking, packaging, invoicing, and transportation of your items instead of just sending them to an existing carrier. It's a straightforward solution to reduce carrier touchpoints while also saving time and money.

Finally, 3PL warehousing organizations are committed to stocking, maintaining, and monitoring their clients' items, whether at the company's warehouse or elsewhere. If you have a large inventory, have just enlarged your warehouse, or need to free up your crew for other work, this form of 3PL can help. Using a 3PL warehousing firm offers several advantages. Allowing them to apply their inventory management practices will result in fewer product surpluses or shortages, as well as improved shelf organization. The 3PL can also take care of code-compliant product storage, particularly for perishable and temperature-controlled items. Fourth Party Logistics (4PL) was established to help 3PL firms improve their operations. All of the client's supply chain procedures are controlled and managed by the 4PL firm (Saloodo 2020.). However, in this report, the author would like to focus only on the 3PL.

2.2.2 (Third-party) Logistics Current Market in Vietnam's e-commerce

The global 3PL market is valued at 950.7 billion to reach 1.513 billion USD by 2025, recording a CAGR of 7.1% from 2018 to 2025. In 2018, the Asia-Pacific region reached its value. highest in the global 3PL market at \$358.8 billion (Tomorrow Marketers 2020). Armstrong announced that the 3PL market in Vietnam in 2014 was only worth about 1.2 billion USD, still very low compared to the world. By 2018, Vietnam's 3PL market had reached \$3.7 billion, ranking third in the region (\$16.9 billion) and Thailand (\$5.5 billion) (Tomorrow Marketers 2020).

The significant growth of the 3PL market comes from the development of the E-commerce industry. Moreover, the service demand of the 3PL market is expected to escalate soon, as manufacturers and retailers want to focus on sales, so they tend to outsource logistics services (Tomorrow Marketers 2020) to be fast delivery, efficient inventory management, and individualized shipping time (Ken Research 2018). Besides, GDP growth and import and export volume (in 2017, GDP increased by 6.81% before, Vietnam's total import and export volume was recorded at 400 billion USD) are also factors that promote the development of the domestic 3PL market (Tomorrow Marketers 2020). Also, it is projected that the country's industrial operations would develop, resulting in more chances for interna-

tional players. This will benefit the 3PL sector since these businesses will need third-party logistics partners to manage their supply chains (Business Wire 2018).

Figure 3 shows that the 3PL market in Vietnam is expected to produce sales of USD 55 billion by the year 2022, rising at a CAGR of 13.6 percent over the forecast period of 5 years. In addition, 3PL firms will place a greater emphasis on technical advancements to connect with clients in the next years, such as ERP and SCM, and the trend of fourth-party logistics (4PL) will emerge in the future to support the 3PL industry in the nation (Ken Research 2018.)

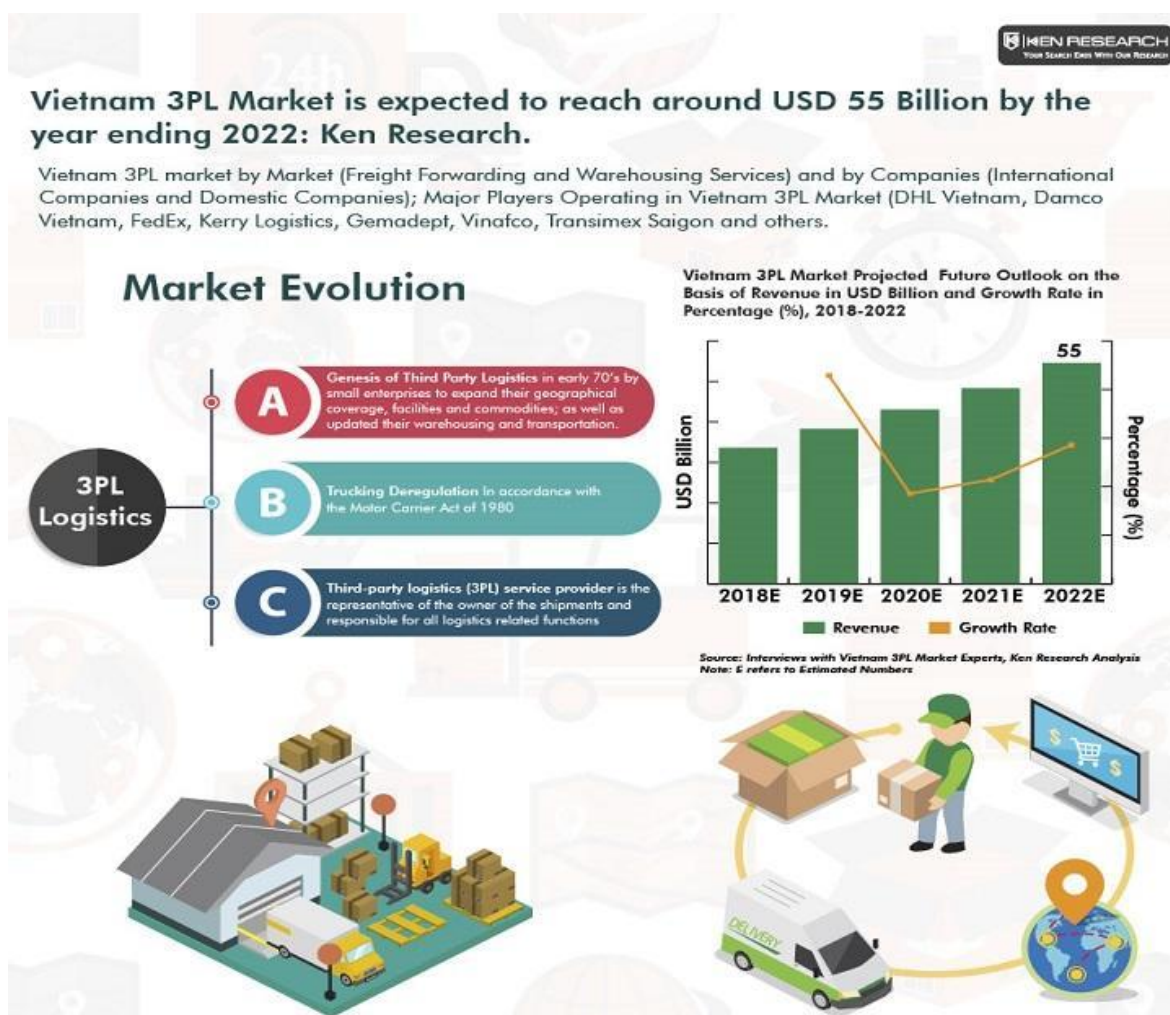


Figure 3. Ken Research: Vietnam 3PL Market Evolution

However, in comparison to other areas of the globe, Vietnam's logistics sector is still in its early stages, with supply chain activities such as procurement, transportation, warehousing, and delivery not yet fully linked (Ken Research 2018). Competition within the 3PL business is ramping up by delivering many value-added services to clients in order to limit capacity and enhance consolidation within the supply chain arena, which has resulted in fewer partners for 3PLs and higher pricing (Business Wire 2018).

2.3 Overview of E-Logistics

2.3.1 E-Logistics Definition

In e-commerce, logistics is a major element influencing on the profits of enterprises. According to calculations, about 40% of the total cost of selling online is concentrated after the customer clicks on the buy icon. When a customer becomes a buyer in an online transaction, the enterprise also begins the e-logistics process. Order processing and fulfillment, delivery, payment, exchange, and recovery of unsatisfactory goods... are the basic contents of logistics in this environment (Man 2015.)

E-Logistics is a notion that is still in its infancy. Those who have yet to begin to have at the very least shown an interest (Logistics and Fintech 2017). E-commerce logistics, often known as e-logistics or e-fulfillment, refers to the logistics of internet sales (C-Log 2019) or online marketplaces (Logistics and Fintech 2017). This activity entails establishing customized processes to respond to a given flow management situation (C-Log 2019).

E-commerce logistics takes over other supply chain activities. However, there are logistics providers that only focus on some of the specific activities, that meet the outsourcing orders of certain businesses (C-Log 2019).

The e-commerce model's features is distinguished by its broad market penetration, great dispersion of items, small scale, high purchase frequency, and diversified products, which frequently necessitate quick and free delivery and make money on the spot. The flow of commodities is substantially expanding in terms of scope, distance, and complexity at this time, thus e-logistics has considerable differences from traditional logistics; if not adequately structured, the model's efficacy will be significantly diminished (Man 2015.)

Because clients may obtain information about items and make transactions using any mobile device, such as portable laptops, online distribution is independent of time and place of supply. Hands, e-books, mobile phones, and other devices may connect to the Internet. This enables the store or producer to directly contact the client and satisfy the customer's purchase demand promptly and at any time. Simultaneously create a price and cost advantage from the lower cost of production, storage, and distribution. Therefore, in B2C and C2C e-commerce, e-logistics activities will become paramount and focus on the following main issues (Man 2015.)

Warehousing is the maintenance of several goods at reasonable storage points to respond quickly to order requirements. However, because the needs of customers are very diverse, the complexity of inventory is also time and again greater. To optimize support for

operations, stock management and maintenance must assure accuracy, flexibility, and high requirements in the use of automation machinery and equipment, as well as the usage of warehouse management software systems. To ensure time and speed, receive items, verify goods, label/barcode, categorize, and create a list of goods (Man 2015.)

Order preparation is a system for receiving, processing, and preparing items in response to orders submitted through various sales channels (stores, markets, etc., or online like shopee, Lazada, sendo...). Order-to-order, standard shipping packing is included. The extent to which mechanization and automated technology are used at this stage is critical since it will raise supplier productivity, accuracy, client wait time, and sales efficiency (Man 2015.).

Order coordination, offloading from warehouses to customers or couriers, and updating customer information are all part of the delivery process. If a B2C shop has enough money and experience to establish, train, and manage a delivery staff, they may execute their delivery operations. However, because small firms frequently lack this capability, they must rely on third-party logistics providers for forwarding services. When delivering items, B2C merchants frequently utilize a variety of delivery techniques, which influence the quantity of logistical services used and how much a firm engages in electronic transactions (Man 2015.).

Delivery at the seller's warehouse (Buy online, pick-up in-store) or buy goods online, customers come to pick up the goods at the store. In this way, customers go to the supplier's warehouse or store to pay and receive goods. This is the most primitive method of e-commerce and is not convenient for customers. However, businesses that are not able to provide logistics services can still use them (Man 2015.).

The delivery method at the buyer's address is also known as online purchase - home delivery, last-mile delivery, good--door delivery. Allowing goods to be delivered to the location requested by customers, creating convenience for customers but increasing costs and significant logistics resources. At this time, the B2C retailer will have to bear all shipping and delivery costs, in the case of limited capital and delivery capacity, it is very difficult to do (Man 2015.).

Drop shipping or shipping without shipping is a very optimal model, allowing businesses to buy individual products from wholesalers and ship them directly to their customers. Instead of having to buy a large amount of inventory, a B2C retailer simply partners with a supplier that can ship and catalogue their merchandise for sale. Then, when an order is received, it is forwarded to the supplier for fulfillment. Suppliers will ship products directly from their warehouses to their customers, and businesses only pay the shipping fee for

the order (Man 2015.). Dropshipping is an advanced innovation of delivery that optimizes the shipping times and minimizes risks during the journey from warehouses to customers.

The benefits of this method are that it does not need a lot of capital, does not have to be in inventory, has a quick capital turnover, and has no time pressure. In particular, it is suitable for B2C retail businesses that completely lack a network of warehouses, means of transport, and delivery teams because they have taken advantage of the full logistics capacity of suppliers (Man 2015.).

Consumers are increasingly demanding in terms of delivery, as they always want a seamless experience from ordering to delivery. In addition, the desire for same-day or next-day delivery, or the right to return the item (free of charge) are also considered. Cost and time will be the two most considered factors by customers in last-mile delivery. According to research by Datexcorp, the cost of last-mile delivery accounts for 28% of total freight costs. And when those two key issues are satisfied, then the quality of service will go hand in hand (VILAS 2022.).

The general requirement for Last-mile delivery is to deliver as soon as possible and without affecting the goods (Loss of Goods). In addition, factors affecting Last-mile delivery cost should also be considered such as Warehousing – Amount of space, storage characteristics, geographic location and the total number of accessible locations play and affect costs; Fulfillment – Number of individual packages, packaging needs. Order completion time, order quantity; Delivery – It is inversely proportional to time, size of the order, scope of delivery (Packing, choose shipping method), and Technology – Analysis of customer needs based on Big Data is often based on Blockchain. To adapt to the increasing demand for automation and to establish information homogeneity. Operating equipment and labor costs also contribute to the cost (Kiet DG 2022.).

However, there will be negative objective factors. For example, in Vietnam, the delivery time to the door is much longer due to traffic congestion and confusing addresses. The last mile is also a matter of actually being able to transport cargo. Especially when the goods are shipped to a place where someone is home to pick up the goods. Leads to extra time and expense. Also, costs may be affected by the reverse logistics process. Due to substandard goods or lack of customer satisfaction (Kiet DG 2022.).

2.3.2 E- Logistics market in Vietnam

Due to the country's rising access to the internet and smartphones, as well as the emerging trend of online shopping, the Vietnam E-commerce logistics business produced sales of million USD in 2015. Third-party logistics companies such as GHN, Viettel Post, VN

Post, and DHL eCommerce lead the industry, followed by E-commerce merchants such as Lazada, Shopee, Tiki, and others. The progressive movement in client preferences from physical (store-based) to internet purchasing has resulted in a significant increase in the number of online orders (Report Linker 2022.).

The Vietnam E-Commerce logistics market is divided into three categories: channel, delivery area, and payment method. First and foremost, by channel: In the E-commerce logistics business in Vietnam, 3PL companies have dominated the market in terms of the number of orders received in 2017. VN Post, Viettel Post, GHN, and other significant 3PL providers provide end-to-end services, ranging from safeguarding inventory in a warehouse to shipping items from one location to another. E-commerce merchants, on the other hand, gained the remaining market share in terms of several orders in 2017 through their in-house logistics teams. Lazada Vietnam, Adayroi, and Tiki are major E-commerce enterprises in Vietnam, each with a well-established distribution channel. Second, by delivery location: Within the Vietnam E-commerce logistics business, the intercity segment has established itself as the market leader, with a vast market in terms of the number of orders, which was estimated at million orders in 2017. Ground shipping is the most common mode of intercity delivery, and mini trucks are favoured to handle many deliveries of orders from various clients over the same route. Because of the increasing vehicle load capacity, this category dominates. Finally, by Payment Method: With a mammoth revenue in 2017, the Cash on Delivery (COD) category established itself as the market leader in the Vietnam E-commerce logistics business. In 2017, other payment methods such as bank transfers, payment cards, debit/credit cards, e-wallets, and scratch cards jointly accounted for the remaining portion of the Vietnam E-commerce logistics industry (Report Linker 2022). Increasing E-commerce spending, particularly by a young, smartphone-addicted, and the extremely internet-savvy millennial group is expected to drive demand in the Vietnam E-commerce logistics market over the forecast period, prompting E-commerce platforms in Vietnam to alter their strategies to cater to the younger generation. Service order fulfillment and electronic logistics, particularly in the case of e-commerce logistics providers, are critical for business development. Value-added services like door delivery, real-time tracking, and others have provided logistics companies a competitive advantage in developing long-term relationships with their consumers. The industry is predicted to grow in metropolitan areas, where a significant portion of traffic originates from tier 2 and tier 3 cities. With the extension of the logistic carrier's network, a package may now be transported throughout a larger geographic area, including rural hubs (Business Wire 2018). From 2018 to 2022, the E-commerce logistics industry in Vietnam is

estimated to produce a million dollars in sales, rising at a CAGR (Compounded Annual Growth Rate) of 5% (Report Linker 2022).

While commerce has changed dramatically from traditional to electronic, its "couple" - Logistics - has taken very slow steps to change itself. Therefore, when e-commerce companies combine with logistics outsourcing companies (3PL companies), there are still some constraints (Man 2015).

Not only newly launched web shops are undervalued undervalue the importance of e-Logistics, but even bigger firms also see e-commerce as a viable supplemental sales channel struggle from time to time to organize the logistical procedures that go along with online transactions. On the other side, e-logistics can be detrimental to a company's operations, control system, personnel, and organizational structure. Entrepreneurs should handle multi-channel activities, cross-border abilities, storage design and stock, door-to-door and reverse logistics, forecasting and planning, and performance evaluation (Logistics and Fintech 2017.).

On the one hand, the price, both for the brand and for the customer. The e-merchant wants to provide a fair shipping charge to its clients that are not too high. Consumers are on the lookout for a good deal. The cost of shipping is a limitation, and when it is excessively expensive, it might lead to basket abandonment. As a result, it is vital to be able to offer a variety of offers at rates that are tailored to the customer's demands. The preparation, shipment, and delivery of the order must all be completed as quickly as possible to meet the needs of the various customers (C-Log 2019.).

Returns management must be exact, relate to a certain flow, and be managed flawlessly by the logistics provider. In recent years, this activity has gained a lot of traction, forcing companies to improve their flow. E-merchants are seeking a low-cost solution for their business, in addition to a difficult procedure that must be grasped in its totality. The issue of cost also plays a role because the consumer wants to return his items for free, implying that the businesses must make an effort (C-Log 2019.).

In the views of customers, the environmental approach has become increasingly significant. It is no longer necessary to go via a brand that will supply items in oversized packaging with a variety of settings that are not suited to prospective returns. As a result, the entire offer must be re-thought in this regard: transportation, packing, and returns (C-Log 2019.).

To be successful in e-Logistic, an online shop's emphasis must be fully dependent on the focus chosen. If quick growth is the primary aim, profitability will take a back place. Col-

laboration is, by definition, an important component in achieving success. The same can be true for keeping clients informed regarding delivery and returns in a straightforward manner (Logistics and Fintech 2017.).

2.3.3 E-Logistics enterprises in Vietnam

Currently, the economies of countries around the world have been creating a strong trend of shifting from traditional commerce to e-commerce, and the logistics industry has also made rapid changes to catch up. That is the birth of electronic logistics, also known as logistics in e-commerce (E-logistics). Enterprises operating in business and providing E-logistics services are called E-logistics enterprises (Do 2021).

When E-logistics businesses rely on information technology applications, they can exploit the benefits of optimal scheduling algorithms, data mining, artificial intelligence, and global networks to create advantages of scope. The market is wide, the traffic density is high, the buying frequency is high, the products are diverse and abundant, the delivery time is fast, and it is possible to collect money directly or electronically (Do 2021.).

This creates for those businesses the ability to operate without restrictions on time and place, creating many opportunities to expand markets in different regions and regions, especially those that are not convenient. geographical location, thereby promoting the development of the entire economy (Do 2021).

On the other hand, with the help of information technology, E-logistics businesses can increase their ability to control orders and solve problems about input materials, the quantity of products produced, the transportation process is fast, the problem of warehousing, delivery, and inventory is kept to a minimum, especially using a third party in the transportation process in a reasonable way, cutting the costs of the intermediary stages. These things make the competitiveness of those enterprises increase, promote the development of domestic and international trade, and contribute to the growth of the domestic economy (Do 2021.).

In 2017, the E-commerce logistics industry in Vietnam was found to be extremely consolidated with key firms such as GHN, VNPost, and Viettel Post accounting for a large portion of the market. These logistics providers compete in Vietnam based on shipping locations, coverage area, delivery boys, rates, payment collecting techniques, and affiliations with E-commerce merchants. DHL, Saigon Post, and Shipchung are some of the other E-commerce logistics companies in Vietnam...

There are some popular E-Logistics companies in Vietnam in recent years, which are divided into two categories: Well-known delivers and Start-up delivers. Well-known Delivers, for instance, DHL Express, FedEx, UPS, Schenker, Maersk Logistics, APL Logistics, Nippon Express, KMTTC Logistics, Log Win, KWE, CJ Logistics, Lazada, Tiki Shopee, The Gioi Di Dong, Viettel Post, Vietnam Post, Sen Do, FPT Shop, Dien May Xanh, Adayroi, Amazon, GHN, GHTK... Otherwise, Start-up Delivers, for example, Ninja Van, Lozi.vn, Loship, Boxme, Netsale... Some familiar E-Logistics brands activating in Vietnam are displayed in the Figure 4.



Figure 4. Some E-Logistics enterprises in Vietnam (Inanfa 2020)

Deutsche Post DHL Group: DHL is a long-standing brand in the world, specializing in logistics operations in more than 220 countries and territories. DHL's operations are highly regarded for quality and cost savings (Top Dev 2022). DHL officially operated in Vietnam in 2017 after establishing DHL Ecommerce focusing on solving the problem of domestic distribution of goods in Vietnam (Tomorrow Marketers 2020). Key services can be mentioned such as Express delivery, international delivery, logistics management, and international e-commerce logistics, ... (ALS 2021).

Transport and Logistics Company Gemadept: Gemadept is proud to be a pioneer in port operation and logistics in the Vietnam market (Ninh 2022). They have 8 logistical delivery hubs around the country, with a network of harbours, storage, and big facilities serving more than 40 significant clients, both transnational (Samsung) and local (Vinamilk, Masan) (Tomorrow Marketers 2020). The company is capable of providing a variety of services such as Warehousing, transportation, distribution, e-commerce, value-added support services,...(ALS 2021). 3PL service is the second most important contributor to Gemadept's revenue structure. As of September 2015, the company's revenue from this segment reached VND1,382 billion and remained stable over the years in Vietnam. over 1,000 billion VND (Tomorrow Marketers 2020).

Transport Company - Logistics TRANSIMEX: TRANSIMEX is a leading logistics service provider in the country (ALS 2021), providing total logistics solutions to customers with the mission of a 3PL, including international freight forwarding, warehousing, transportation, domestic and distribution (Top Dev 2022). International standards and extensive knowledge in the logistics industry are perfectly combined to create optimal solutions that promote efficiency while meeting the needs and requirements of the market (Ninh 2022). Transimex Saigon's revenue in 2014 was 480.8 billion dong, with a profit after tax of 138 billion dong, after improving the ICD port (inland customs clearing port) in 2011 and investing in a distribution centre in 2013. When compared to 5 years earlier, this represents a 2.7-fold rise in revenue and a 3.7-fold increase in profit after tax (Tomorrow Marketers 2020) (Tomorrow Marketers 2020).

FedEx Transportation and Logistics Services: FedEx is present in more than 220 countries and territories (Ninh 2022), is one of the largest express delivery companies in the world and is headquartered in the United States. FedEx to date has leveraged its global air and road network to expedite the fast, efficient, and quality shipping of received shipments (Top Dev 2022). Delivery time is always guaranteed and is completed within one to two business days. Like DHL, FedEx in Vietnam mainly focuses on solving the problem of cross-border delivery, international import, and export (ALS 2021).

Transport and Logistics Company Viettel Post: Viettel Post is a member unit of Military Telecommunications Group (Viettel), established in 1997 until now (Ninh 2022). After many years of operation, up to now, Viettel Post has grown to become one of the country's main distribution brands, with a network of post offices, operations centres, and an extended network that spans all provinces and cities (Top Dev 2022).

Transport and Logistics Company – Indo Trans Logistics Corporation (ITL): ITL is a prominent 3PL company brand in the country, many of which are located at the top of the most effective 3PL enterprises (Top Dev 2022). As a regional logistics service and solution provider, ITL is considered to become the leading general agent for airlines, as well as the general agent for international warehousing and freight forwarding services, economy, import and export freight forwarding, and nationwide transportation network (Ninh 2022).

A.P Group. Moller-Maersk: A.P Group. Miller-Maersk, commonly known as Maersk, is a Danish-owned international business group operating in a variety of sectors, including offshore oil and gas drilling and production, consumer goods retail, and transportation, maritime, and so on (Ninh 2022). Maersk is considered the largest shipping company in the world. With more than 100 years of experience in the freight industry, Maersk Vietnam has become a leading shipping company with flexible, quality, and reliable services (Top

Dev 2022). The service they provide ensures that customers receive perfect and consistent quality, regardless of whether they transport a single package or hundreds of containers. The company operates sailing ships on major global trade routes worldwide, with a total of approximately 639 vessels (Ninh 2022).

Giao Hang Nhanh (GHN): GHN was founded in 2012 with the goal of servicing the expert transport requirements of e-commerce companies throughout the nation and is dedicated to offering clients speedy, secure, and effective delivery service. The 24/7 online order management system helps customers easily check order status, create orders quickly, track travel journeys, and retrieve transaction history easily (Top 10 Collections). Duc 2022). GHN includes 3 branches operating as follows: GHN Express: provides last-mile delivery service, in which 90% of goods are from E-commerce. - GHN Logistics: becoming a warehouse fulfillment and transportation service (air & truck), 80% of the goods are from B2B. - Ahamove: provides instant on-demand services, 90% are E-commerce and food products (Tomorrow Marketers 2020).

Transport and Logistics Services Vinafco: Established in 1987, Vinafco currently has the following main activities: Sea freight, domestic and international multimodal transport services, warehousing and distribution centre business, production, and trading. construction steel and trade in import and export goods (Ninh 2022), thus meeting the diverse needs of domestic and international customers in the fields of transportation, forwarding, distribution, and commercial (Ninh 2022). Vinafco has also defeated numerous giants to get large worldwide contracts, including Akzo Nobel (Son Dulux) and Kimberly-Clark (Kotex), and is able of offering third party logistics services in critical economic regions, for instance, at important industrial bows of Vietnam such as Saigon, Hanoi, Da Nang, Hai Phong and so on. The company also deploys advanced warehouse management software, which helps to reduce 50% of working time, and responds to requests. rapid response to market changes (Tomorrow Marketers 2020).

Giao Hang Tiet Kiem (GHTK): Last on the list of 3PLs in Ho Chi Minh City is Economical Delivery (GHTK), which is a professional shipping company specializing in e-commerce shipping. Door-to-door delivery is the signature of GHTK, providing services to online stores and businesses in the form of cash on delivery. A significant advantage of Economical Delivery is its high speed, nationwide network, and most importantly, flexible and friendly service thinking, based on technological innovation (Ninh 2022).

Loship is a company founded in 2014 and located in Ho Chi Minh City with funding reaches to twelve million USD. They offer an app providing multi-category delivery services. The platform helps users to deliver products from one place to other. It offers services for

food, groceries, e-commerce packages, laundry pickups, medicines, flowers, pet deliveries, beauty products, etc (Tracxn 2022).

Lozi.vn is a provider of delivery solutions for an E-commerce platform. It was founded with capitalization of 510,000 USD in 2014, Ho Chi Minh city. Its online platform is designed to deliver products within one hour. The company's platform offers the C2C e-commerce portal as well as its fleet for on-demand delivery services, allowing users to buy and sell homemade cosmetics, food delivery, grocery delivery, medicine delivery, and more. The platform contains a fleet of 70,000+ drivers and 200,000+ merchants (Tracxn 2022).

Boxme is a cross-border fulfillment service for e-commerce retailers via their warehouse network. They offer cross-border shipping, warehousing, and delivery services. Sellers can send their products to the company for warehousing which stores the products and packs, ships, and delivers when the consumer places an order. They offer multiple delivery formats including same-day, next-day, express, economy, and international delivery, and also offer a Cash-on-Delivery format. This company's founded year is 2015 and work until now, its headquarter is based in Hanoi, Vietnam (Tracxn 2022).

Launched in 2017, Netsale is the provider of a drop shipping management platform. Its features include sourcing of suppliers and products, e-commerce and customs clearance, order processing, supplier negotiation, management of imports and exports, transboundary and multi-modal transport, fulfillment, storage, packing, unpacking and tax custom freights. It caters to both individuals and businesses (Tracxn 2022).

3 Analysis of E-logistics in Vietnam

3.1 SWOT Analysis of E-Logistics in Vietnam

SWOT is an abbreviated collection of the first letters of English words: Strengths, Weaknesses, Opportunities, and Threats. SWOT is a model that brings together all the analysis of external and internal factors, incoming and upcoming potential of an enterprise or within an industry (Kenton 2021). The SWOT Analysis is applied to the research to assist the readers to have a general and intuitive view of the Strengths, Weaknesses, Opportunities, and Threats of E-Logistics in Vietnam. Also, this analysis is provided to defend the main point of the thesis research (current status and future change of E-logistics in Vietnam). From then, the 3PL companies can adjust business strategies in line with the current general situation of E- and orient long-term policies. To help readers systematize knowledge more easily, the author firstly analyses the four SWOT aspects in detail and after that, concludes the main points of each objective in the summary table (VILAS 2022.).

Strength

First, the percentage of individuals who purchase online, as well as how they shop, varies greatly in large cities like Hanoi and Ho Chi Minh City, according to Q&Me's yearly poll. The percentage of people shopping online in Ho Chi Minh City climbed from 40% in 2016 to 52% in 2017. Customers found that buying via social networks was more "interesting" than buying through traditional online sales websites, with 66 percent of online shoppers making purchases through Facebook, up from 47 percent in 2016 (Vinalines Logistics 2018.). This necessitates more growth. Professionalization of e-commerce logistics channels to satisfy e-retail services. Small and limited delivery firms will no longer be able to match the present needs of delivering professional logistics services on a continuously rising scale if they continue to operate in the same manner.

Second, the multi-channel selling trend has manifested itself in Vietnam. According to the Vietnam Retail Association, single-channel retailing will eventually go away, with multi-channel retailing taking its place. The distinction between "real" and "virtual" purchasing activities is becoming increasingly blurred; people are increasingly searching online and then shopping in person, as well as physically searching and then shopping online (Vinalines Logistics 2018.). As a result, retail and e-commerce companies must rebuild their logistical systems to match the demands of a multi-channel consumer experience. Multi-channel systems, on the other hand, are distinguished by the fact that merchants seldom invest in distribution centers themselves. They prefer instead to outsource profes-

sional distribution businesses, therefore increasing their market competitiveness. This demonstrates that the logistics services sector must evolve to serve all sorts of multi-channel retail, rather than focusing on a single type of business.

Weakness

Third, despite the relatively rapid growth rate, COD delivery accounts for 88 percent of all orders, with the exchange rate on B2C sales websites ranging from 10% to 15%. This raises the cost of transportation and operations, as well as lowers business profits. Aside from that, the price of a product is still a significant component in enticing buyers to purchase electronic products in Vietnam. According to a Q&Me poll, up to 51% of internet customers purchase things because of "excellent prices." To facilitate COD delivery, e-commerce logistics services must become more efficient. E-Logistics Improved delivery operations are given special attention to minimize logistics system costs and boost product price competitiveness. The requirements of e-commerce businesses are becoming more sophisticated. Only 3PLs and professional packaging service contractors can become last-mile logistics providers, as evidenced by the fast growth in the number of touchpoints in omnichannel sales (Vinalines Logistics 2018.). It demonstrates the need for Vietnamese 3PLs to swiftly reorganize and adapt to these demands.

Fourth, the degree of competition in the e-commerce industry is increasing, as is the participation of all types of businesses. Not only are small retail stores seeking methods to break into the market through e-commerce platforms, particularly social media, but many other types of enterprises are looking for ways to benefit from this strategy as well. In this lucrative business, traditional stores including The Gioi Di Dong, FPT, Nguyen Kim, Lotte, Big C, Saigon Coop, and others are expanding their online presence. Alibaba has purchased Lazada, VNG has invested in Tiki, and Central Group has partnered with Zalora and Nguyen Kim. Through Vingroup's partnership with Adayroi, Thegioiidong's partnership with Vuivui.com, and Lotte's partnership with Lotte.vn, and Aeon's partnership with Aeonshop.com, significant conventional retail chains are rapidly migrating to the internet world. E-Logistics (Vinalines Logistics 2018.). When the degree of competition rises, e-commerce businesses must work closely with logistics service providers to optimize the delivery system. This includes warehousing, payment, and, most importantly, delivery. The necessity for logistics companies that specialize in delivering efficient delivery solutions is becoming more pressing.

Opportunities

Despite substantial hurdles, logistics has a promising future, due in part to free trade agreements with Vietnam. The Comprehensive and Progressive Agreement for Trans-

Pacific Partnership (CPTPP) went into force this year, and the European Union Free Trade Agreement (EVFTA) is scheduled to be enacted the following year. The benefits of these agreements will help to encourage foreign capital in Vietnam's facilities and systems. Along with that, the government has enacted laws to assist businesses in overcoming administrative impediments. One of these is Decision No.1012/QD-TTg, which calls for the establishment of logistical centres all around Vietnam by 2030. Then followed Decision No. 200/QD-TTg, with the goal of increasing national competence and promoting services of logistics by 2025 (Le 2019.).

With improving investment conditions and ongoing regulatory change, current investors' capital expenditure is likely to expand in the coming years, while new entrants will continue to analyse the Vietnamese market for investment. Present and prospective e-commerce logistics operators will eventually succeed by maintaining a clear understanding of the difficulties occurring in Vietnamese industry and discovering the economical solutions to these obstacles.

Threat

While the logistics business in Vietnam is developing, it is not without its challenges. Companies with their delivery network, such as Lazada, have limits. Despite having its logistics network in place, it has relied on 3PL partners to fulfil orders, highlighting the expanding e-commerce sector's expectations (Le 2019.).

Aside from that, Vietnam is mostly a cash-based economy, with the majority of transactions taking place in cash. E-commerce companies are obliged to rely on cash for delivery, resulting in greater operating expenses. Corporations must also deal with items being replaced or destroyed in reverse delivery. Furthermore, three-quarters of routine orders are conducted in Hanoi and Ho Chi Minh City, which have considerable traffic, raising transportation expenses even further. Furthermore, the logistics sector legislations and requirements remain complicated. Issues with the last mile must be handled, and shipping to rural locations is difficult. These challenges become more prominent when corporations strive to expand outside of Vietnam's leading cities (Le 2019.).

According to the SWOT analysis, the author performs the Strength, Weakness, Opportunities, and Threat of E-logistics in Vietnam specifically. This SWOT can be used as a tool to examine the current market and predict upcoming trends. To summarize the analysis, the author describes major ideas in the table below.

	HELPFUL	HARMFUL
INTERNAL	<p>STRENGTH</p> <ul style="list-style-type: none"> • The percentage of individuals who purchase online varies greatly in large cities. • Customers found that buying via social networks was more "interesting". • The multi-channel selling trend has manifested itself in Vietnam. • The distinction between "real" and "virtual" purchasing activities is becoming increasingly blurred. • Merchants prefer to outsource professional distribution businesses. 	<p>WEAKNESS</p> <ul style="list-style-type: none"> • COD delivery accounts for a very large percentage of all orders, with the high exchange rate on B2C sales websites which raises the cost of transportation and operations, as well as lowers business profits. • The final price of a product bought online is still a significant component. • The requirements of e-commerce businesses are becoming more sophisticated. • The degree of competition in the e-commerce industry is increasing. To enhance the distribution operation, e-commerce enterprises need to co-operate frequently with logistics contributors.

EXTERNAL	<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Logistics has a promising future, due in part to the benefits of free trade agreements that will help to encourage foreign capital in Vietnam's facilities and systems. • The government has enacted laws to assist businesses in overcoming administrative impediments. • With improving investment conditions and ongoing regulatory change, current investors' capital expenditure is likely to expand in the coming years, while new entrants will continue to analyse the Vietnamese market for investment. 	<p>THREAT</p> <ul style="list-style-type: none"> • Despite having their logistics network in place, e-commerce companies have relied on third-party logistics providers to complete orders. • Vietnam is a cash-based country, with the majority of payment are in cash resulting in greater operating expenses. • Corporations need to struggle with returned goods that are exchanged or damaged. • An enormous amount of routine orders are transacted in Hanoi and Ho Chi Minh City which are big cities leading in heavy traffic, thus further increasing distribution costs. • The legislations and requirements of logistics sector remain complicated. • Issues with the last mile must be handled, and shipping to rural locations is prominently difficult when corporations strive to expand outside of Vietnam's first-tier cities.
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Table 2. SWOT Analysis

After analyzing SWOT, the author continues to conduct an online survey to figure out the best logistics companies recently from the viewpoint of end-consumers. Furthermore, the survey results are linked to support the answer to the research question: the present and future status of e-logistics.

3.2 End-consumer's online survey

Consumer demand increases as last-mile delivery becomes more efficient. Because 55 percent of end-consumers would quit a merchant that provides a terrible delivery experience, how businesses handle the last leg of their products' journey will have a direct impact on their overall sales. So, what can customers expect? First and foremost, fast delivery times and assured packet entirety are essential. Second, they demand personalized services as well as new, adaptable solutions. Third, due to the emergence of breakthrough technologies, convenience in both online and offline encounters is in great demand. Finally, customers demand as many of their needs to be met as feasible. Because the demand affects directly to E-logistics process, the survey will research the behaviour, experience, and opinion of end consumers (VILAS 2022.).

The survey questions are completed and answered in English and Vietnamese language. Because the thesis focuses mainly on the Vietnam market and to get effectively strong attention, the survey is planned to post on a social media platform such as Facebook which is also used by many Vietnamese people to buy and sell products/services online. The main purpose of the survey is to answer the third sub question about the most popular/best e-logistics companies under present status by collecting data on user experience when they use the last-mile delivery service in Vietnam. The reason why this survey focuses on last-mile delivery services rather than others is that it is the final stage of the fulfillment process, during which merchants or logistics businesses connect with their customers. Also, last-mile delivery is the process of reflecting customer satisfaction and indirectly positioning the brands in the market. The survey comprises four sectors, the first sector is about demographic information, the second one includes behaviour questions, then experience questions, and then finishing with opinion questions. There are 12 questions in total, most of the answers are multiple choices and it takes approximately five minutes and supposes to be answered by 100 end-consumers who are randomly selected. To set up the survey and gather its data, the Google form is used by the author. The survey link is embedded in every survey-calling post. The data of end-consumers will be automatically saved in Google and will display in graphs and charts formats which help the author be able to research and analyze easily.

The survey questions are divided into four parts as the description below:

Part 1: Demographic questions: Basic background information regarding online buying customers. To ensure uniform data, this section uses multiple-choice questions.

Part 2: Behaviour questions: Consumers' attitudes and behaviours toward various last-mile delivery scenarios. Respondents are asked to score their attitudes using multiple-choice answers.

Part 3: Experience questions: This section uses both multiple-choice and open-ended questions, which allow customers to express their unrestricted views. Experience questions answer the end-consumer experience and express the level of their satisfaction.

Part 4: Opinion question: Issue recommendations from the consumer's point of view. Participants are invited to identify their most vexing issue and to jot down their suggestions for improving the last-mile delivery experience. The open question is given for participants to demonstrate their infinity opinions.

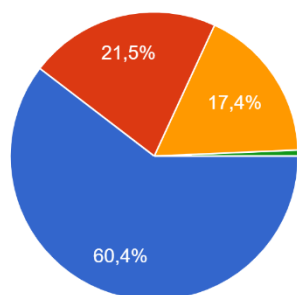
The data collected from the online survey is analysed and shown in several sorts of charts utilizing tools from Google Forms and Google Sheets. Each section will be explored in order to determine how various elements impact on the behaviour, experience, and opinion of e-commerce end-consumers in Vietnam regarding the existing status of Vietnam's last-mile delivery. The survey results will indicate the best/most popular e-logistics company and partly give suggestions for the e-logistics future prospect in Vietnam.

3.2.1 Demographic questions

First - Demographic questions: The questions about basic background information regarding online buying customers. This section includes three queries: Age zone, Employment status, and The kind of e-commerce user the respondent is (Seller or Buyer), which is visualized in Figure 7 below.

What is your age zone ? Độ tuổi của bạn

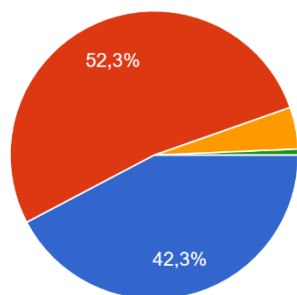
149 câu trả lời



- Generation Z: born after 1996 - (Sau 1996)
- Millennials: born from 1981 to 1996 - (Từ 1981 - 1996)
- Generation X: born from 1965 to 1980 - (Từ 1965 - 1980)
- Baby Boomers: born from 1946 to 1964 - (Từ 1946 - 1964)
- Silent generation: born from 1928 to 1945 - (Từ 1928 - 1945)

What is your employment status ? Nghề nghiệp

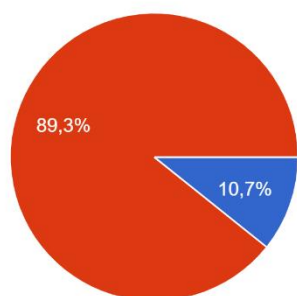
149 câu trả lời



- Student (Học sinh)
- Employed (Có việc làm)
- Unemployed (Không có việc làm)
- Buôn bán tại nhà

Do you often sell or buy products online? Bạn thường xuyên mua hay bán hàng online?

149 câu trả lời



- Selling (Bán)
- Buying (Mua)

Figure 5. Basic background information of survey participants (n=149)

Figure 5 visualizes the basic information of 149 respondents regarding Age, Occupation, and their main purpose in using e-commerce. It is observable that the majority of them are born after Baby Boomers period, account for 99.3% of the whole group (60.4% less than 26, 21.5% from 26 to 41 years old, and 17.4% from the age 42 to 57). About employment status, employed emerge with 52.3% of the participants, followed by the student with

42.3%. The smallest portions of e-Commerce consumers are unemployed people and others (approximately 5.4% both). The ratio of buyers and sellers also has a big difference in e-commerce, when the number of buyers (89.3%) accounts for nearly 90% of the total and 10 times more than the number of sellers (10.7%). These data, when applied to a small group, cannot be indicative of the overall population. However, according to World Bank data, 70% of the Vietnamese population is under the age of 35. (The World Bank In Vietnam: Overview 2019). As a result, the youthful generation remains the largest segment of Vietnamese e-commerce users.

3.2.2 Behaviour questions

Second - Behaviour questions that focus on consumer's attitudes and behaviours toward various last-mile delivery scenarios.

The first question in this section is designed to determine whether or not the respondents are active Internet users. Figure 6 depicts five alternatives for describing their purchase/sales frequency.

How many times per week do you buy/sell products online? Tần suất mua/bán hàng online mỗi tuần của bạn
149 câu trả lời

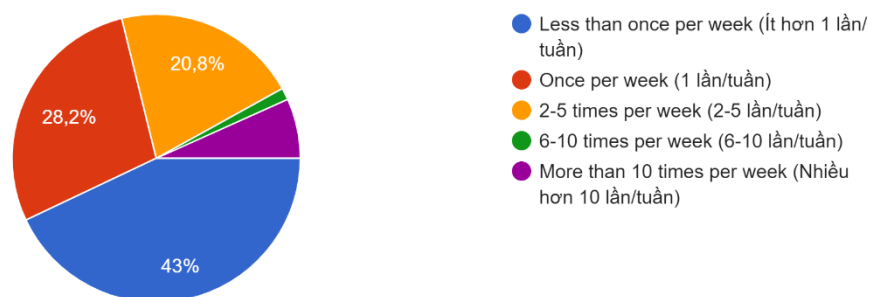


Figure 6. The frequency of respondents' purchases/sales

According to the data, 43 percent of participants make online purchases/sales contraction fewer than once each week, followed by the number of respondents conducting once per week with 28,2 percent and 2-5 times per week with 20.8%, respectively. There is only about 9,2 percent of people who buy/sell more than 5 times per week (Figure 6). These figures also prove the level of interest and preference for online shopping among young Vietnamese in particular and Vietnamese people in general, nearly 60% of participants make from one order per week.

After researching the frequency people conduct online purchases/sales, the survey continues to figure out which logistics companies the customers regularly use/have experienced. Since the author wants to see for which the best/most popular e-logistics companies in viewpoint of end-consumers using last-mile delivery service. Excluding six available well-known companies were most chosen, the variety of companies were given by respondents which lead to more other results. Also, it is clear to see that other results showing Shopee Express. However, Shopee Express is not a logistics business. It is a logistics service belonging business operation of Shopee e-commerce group (Shopee 2020). It can be seen that some survey respondents have a slight confusion between the delivery service provided by the logistics company and the logistics service from the e-commerce company, but this does not affect the results as well in general. The last figures were displayed in Figure 7 below.

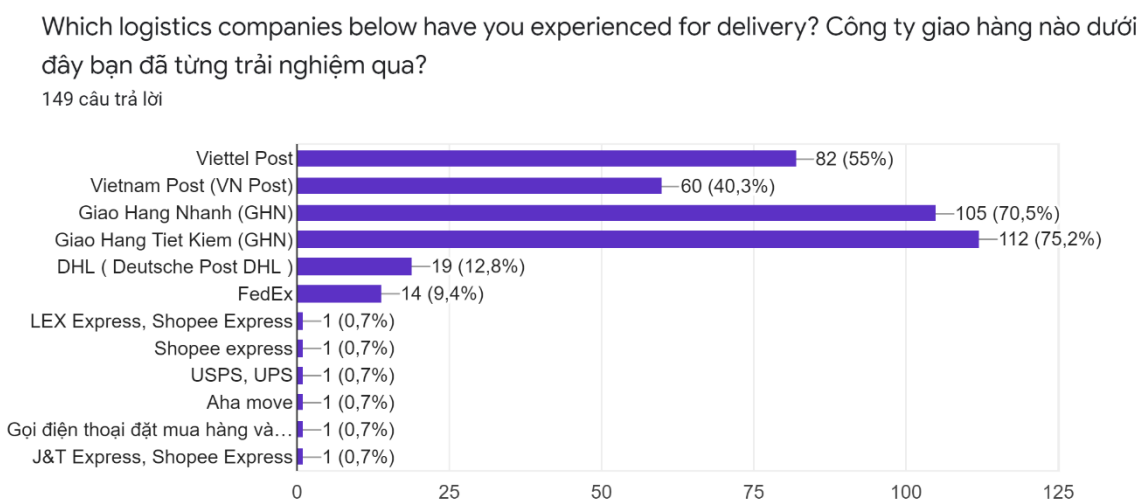


Figure 7. The best/most popular logistics companies in end-consumers view.

It appears that Giao Hang Tiet Kiem (GHTK) accounts for the biggest percentage of 75.2%. Giao Hang Nhanh (GHN) is at the second place with 70.5%, followed Viettel Post, Vietnam Post, DHL and FedEx with 55%, 40.3%, 12.8% and 9.4% respectively. Others (such as Ups, Ahamove, J&T Express...) just account for about 2 percent in total. Generally, the practical results of this questionnaire truly reflect the theory of e-logistics companies mentioned above. The companies chosen by many end-users (GHTK, GHN, Viettel Post, VN Post) are the top companies that provide the best customer experience/customer service (Figure 7).

In general, these figures are insufficient to draw a broad supposition about the e-logistics aspect. However, they show that the delivery process has a major influence on customer

satisfaction and trust with the order fulfillment process of 3PL companies to a certain extent. People would not choose the companies often and many times if they do not distribute the logistics service well enough.

On the other hand, the product sending/receiving place is also an important factor affecting to the decision use services of logistics companies or not. The figures of this questionnaire are displayed in the Figure 8.

Do you prefer send/receive parcels at home or at collection post office? Bạn thích gửi/nhận hàng ở bưu cục hay tận nhà?

149 câu trả lời

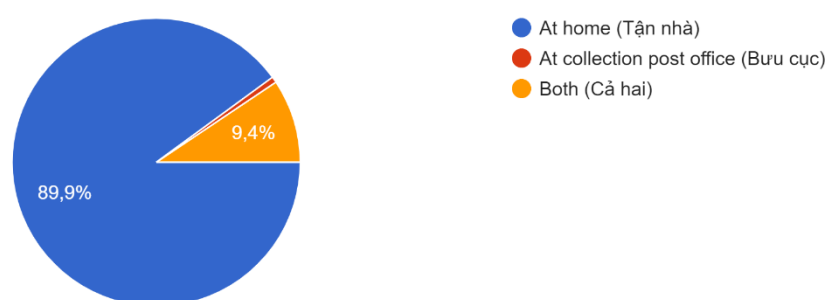


Figure 8. Goods receiving/sending places which respondents prefer

In Vietnam, sending/receiving parcels at home and at the collection post office are two major options for people who use e-commerce (Nhat Tin Logistics 2018). It is clear to see that people prefer sending/receiving goods at home, which reaches nearly 90%. Otherwise, the “at collection post office” choice accounts insignificantly (under 0.5%). Nevertheless, the number of consumers choosing both options is 9.4% which leads it a little bit confusing for readers to understand (Figure 8). This phenomenon from the author's point of view and knowledge can be explained as follows. Sending or receiving goods at home takes waiting time more than at collection posts as senders/receivers need to passively wait shippers from logistics companies coming their homes to take parcels at exact shift time. For individuals who are always in hurry, for example, individuals who sell online several goods daily or busy buyers who are not always at home prefer actively sending/receiving parcels at collection post office. In addition, self-picking at the collection post office helps consumers save money compared to home delivery.

Besides the places, other factors are also estimated to affect customer satisfaction and change their behaviors when picking up a delivery booking. There are available answers consisting of Price, Popularity, Easy-to-use interface, Customer service, Regularly updated tracking information, Rapid delivery, Final situation of the parcel, COD control time, and Payment method shown in Figure 9.

Which factors do you think they are important to use logistics service ? Bạn nghĩ các yếu tố nào quan trọng khi đặt giao đơn hàng?

149 câu trả lời

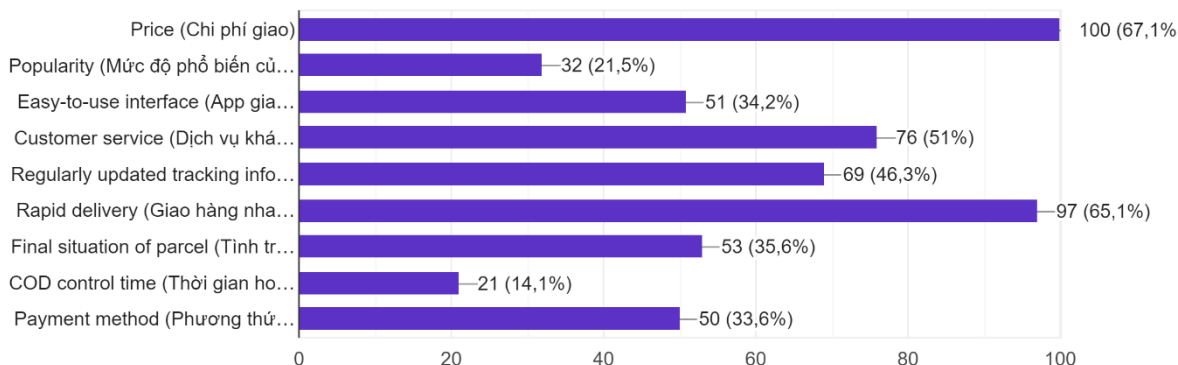


Figure 9. Important factors considered to choose a delivery logistics service

It is observable that most consumers consider Price and Rapid delivery which are 100 choices and 97 choices respectively. Followed by Customer service (51%) and Regularly updated tracking information (46.3%). Easy-to-use interface, Final situation of parcel, and Payment method are three next elements considered to be equally important which are chosen by 51 persons, 53 persons and 50 persons respectively. The popularity of companies and COD control time are the two least important factors (Figure 9). Price and Rapid delivery are always two critical elements for Vietnamese customers. Since Vietnam is a developing country, the average income of people to pay for high transportation fees is not reasonable. Moreover, with the competition of many e-commerce platforms at the present, customers have more reason to choose orders with the lowest cost and fastest delivery.

3.2.3 Experience questions

Third - Experience questions: answering the end-consumer experience and express the level of their satisfaction.

Moreover, delivery time is a vital factor directly influencing the customer experience. Data of average days to obtain the package are collected and abstracted in Figure 10.

How many average days package is received in Viet Nam ? Trung bình bao lâu bưu kiện sẽ được nhận ?

149 câu trả lời

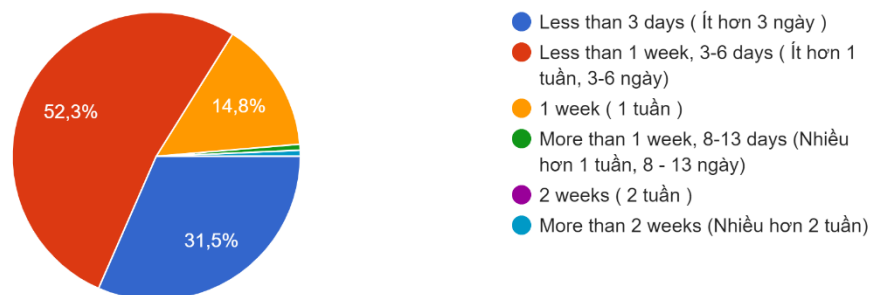


Figure 10. Average days for a package to be delivered

According to the pie chart in Figure 10, 52.3 percent of respondents said it normally takes less than a week (3-6 days) to fulfill an order in Vietnam. Given that Amazon's average click-to-door speed in the United States in March 2018 was 3.07 days, this length is reasonable (Mazareanu 2019). On the other hand, 31.5 percent of shipments are delivered to consumers' doorsteps within two days, 14.8 percent are delivered within a week, and just 1 percent of package amount is received longer than one week. The less days logistics companies deliver, the more they assert their position in the market. Connecting to the Figure 9 above, Vietnamese people are often satisfied with orders fastly transported in a few days with a suitable fee. Giao Hang Nhanh (GHN) and Giao Hang Tiet Kiem (GHTK) are the two domestic logistics businesses have fierce competition in this field. GHN delivers the orders very rapidly; however, the price was slightly higher than the common ground. Meanwhile, GHTK has a low-cost delivery fee, although the delivery time is occasionally delayed due to overcrowding of orders (Buu Cuc 2022).

Related to payment survey research, there are two main methods used by Vietnamese end-consumers (pay in advance and COD payment). Other paying ways are not selected by any respondents. Figure 11 below describes the data in detail.

What kind of payment would you often use? Phương thức thanh toán bạn hay sử dụng

149 câu trả lời

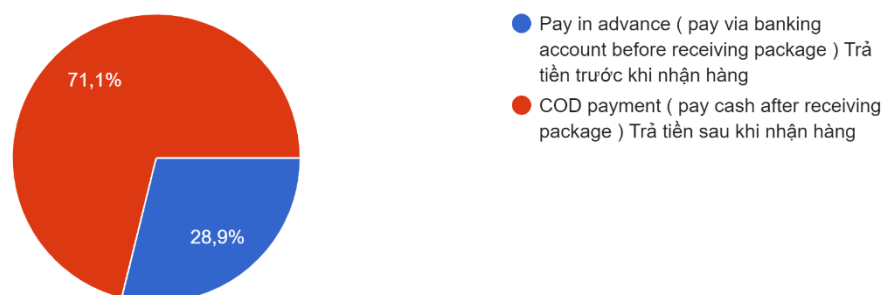


Figure 11. Payment method when purchasing online

Pay in advance (Pay via banking account before receiving package) accounts for around 29%. Otherwise, COD payment (pay cash after receiving package) reaches over 71% which proves end-consumers are still afraid about the quality of products and suspicious of online sellers, except big e-commerce brands. Furthermore, banking payment in advance is not popular with Vietnamese youth because of the effect of their routine habit in traditional shopping – cash payment (Figure 11).

As shown in Figure 12, 147 out of 149 respondents (level 3 – 32 individuals; level 4 – 76 people; level 5 – 39 people) are happy or very satisfied with the latest delivery. The grades from four (4) account for 77.2 percent of the total responses, indicating that the majority of e-Commerce users are happy with the present delivery service options. On the other hand, 32 individuals rank their experience as three (3), while 2 people believe their pleasure is less than three (3). In general, the chart shows the positive ascent of logistics companies, especially in delivery service through increasing customer satisfaction.

Are you satisfy with the delivery service recently ? Mức độ hài lòng của bạn với dịch vụ giao hàng hiện nay
 149 câu trả lời

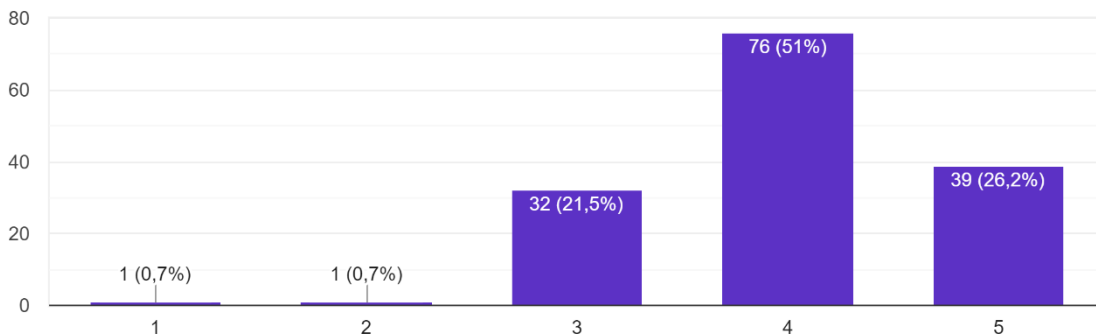


Figure 12. Level of customer satisfaction in recent situation

Before going to solutions of Vietnam’s customer satisfaction for the present state of last-mile logistics, figuring out the causes is crucial. As a result, the questions in this part are designed to delve further into these themes. The answers to the question: “What is the most vexing issues you have with last-mile delivery?” are categorized and visualized in Figure 13.

What are the most vexing issues you have with last-mile delivery ? Vấn đề khiến bạn khó chịu nhất khi giao hàng chặng cuối là gì?
 149 câu trả lời

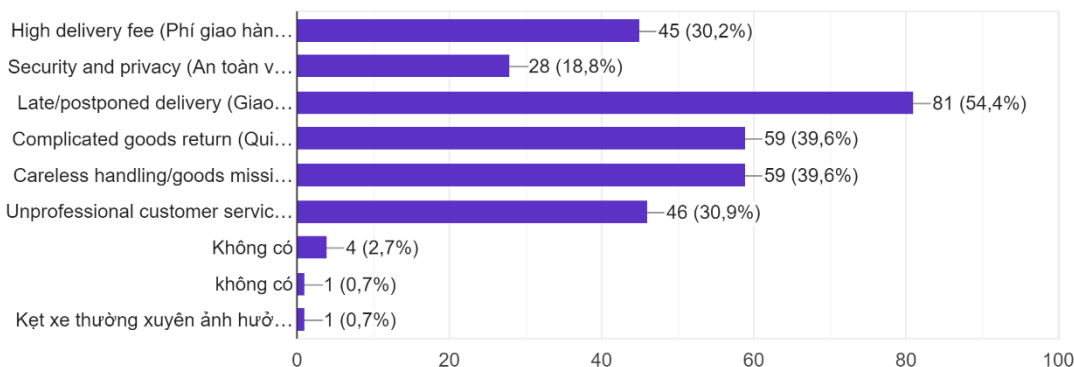


Figure 13. Vexing issues end-consumers facing in last-mile delivery

With around 54.4 percent of respondents picking it, it is clear that late/postponed delivery tends to be the most serious issue. Both negligent handling/goods missing, and complex goods return are followed by the same statistic of 39.6 percent. Unprofessional customer service, high delivery fee, security and privacy are following next with respectively 30.9%, 30.2%, and 18.8%. Five people did not give any complaints, and only one person has

another issue related to traffic jams which happen regularly in large cities affect delivery time (Figure 13). The most selected number of answers Late/postponed delivery can be explained based on the theory mentioned. The cause of this problem are majorly affected by external factors which are weak infrastructure, no innovative technology to support delivery and traffic jams happening frequently in large cities of Vietnam.

3.2.4 Opinion question

And last - Opinion question which its purpose is collecting Issues recommendations from the consumer's point of view.

To validate the issues about last-mile delivery, the final query encourages participants to offer advice for enhancing the delivery process. The findings are shown in Figure 14.

Suggestions for the logistics company (new technology / methods,...) Đề nghị/lời khuyên để cải tiến dịch vụ

62 câu trả lời

Cần có những giải pháp quản lý shipper và đơn hàng chặt chẽ hơn. Bảo vệ hàng hoá của khách hàng tốt hơn, tránh tình trạng hư hỏng,....

0

Pay more attention to shortening the delivery time and preserving the quality of goods during the delivery process.

Nhẹ tay vs bưu kiện

do better

no

Kiểm tra chất lượng hàng hóa, dịch vụ đổi trả, khiếu nại thực hiện nhanh hơn

Dự trữ và báo trước khung TIME giao Hàng cho khách hàng

Figure 14. Suggestion for the logistics company

The questionnaire receives 48 suggestions to analysis, accounts for one third of number of respondents, which also means two third of survey participants amount (nearly 100 persons) are satisfied with the current service (Figure 14).

These forty-eight answers are divided into 5 main issues need improving (customer service, delivery time, package preservation, delivery fee, money/package return time). The most majority of answers is about customer service which is suggested to improve better,

shippers should have the right attitude, more professional; consultants should pay more attention and understand customer psychology to promptly solve customer requests. The second one should be noticed is delivery time. Logistics companies need to pay more attention to shortening the delivery time, transport on time and improving sending/receiving procedures more rapidly and less sophisticated, extend the shipper amount to conduct more bookings is a suggestion as well. Thirdly - package preservation, ensure the correct delivery of the goods, the goods are carefully preserved and intact while being delivered to the recipient. Companies must be responsible for compensating customers for wrong orders, and damaged deliveries. For fragile items such as glass, perfume and so on should be very gentle with the parcel. Followed by the delivery fee, which needs to be cut down and has cheaper options, so customers will be more pleased. Finally, money/package return time needs testing and execution faster, at least on the same day of parcel delivery (Figure 14).

It can be seen clearly that the five main suggestions (customer service, delivery time, package preservation, delivery fee, money/package return time) corresponds to the issues that border customers in previous questions. To solve these problems, both e-commerce companies and logistics companies need to collaborate more closely together to gradually improve customer service, package integrity, and delivery time by enhancing the professionalism of employees. The remaining issues such as return time and delivery costs need to be optimized as possible through the provision of promotional packages, and gifts, for example, to satisfy customers more.

Results of the survey

In summary, the online survey's findings addressed four areas.

Demographic questions: The majority of Vietnamese e-commerce customers are young individuals under the age of 42. The majority of occupations are employed and student.

Behaviour questions: Most Vietnamese e-commerce customers perform their online selling/purchasing less than once a week, and they prefer to have their goods picked up from/delivered to their doorsteps. They suppose affordable delivery price and rapid delivery time are the two most important elements when choosing the service. There are 2 companies corresponding to those 2 factors, which are highly appreciated by the majority of choices from end-consumers are Giao Hang Nhanh (GHN) and Giao Hang Tiet Kiem (GHTK).

Experience questions: More than 50 percent of respondents receive their parcels in less than one week, and over two-thirds of them are satisfied with the present delivery procedure. Because they are still familiar with a traditional payment method, paying in advance

is new and strange for almost people. Based on vexing issues that e-commerce consumers have to deal with, they tend to choose the delivery partner which have less problems in Late/postponed delivery, careless handling/goods missing, complicated goods return, high delivery fee and unprofessional customer service.

Opinion questions: The most of outstanding issue recommendations are about customer service, delivery time, package preservation, delivery fee, money/package return time. In addition to solutions to these concerns, consumers demand novel technology as well as their suggestions, which will be applied to logistics services for improving customer experience more convenient and more comfortable.

To conclude, it can be seen that last-mile delivery is the most popular and most important factor to help a third-party logistics company build branding trust with customers and is the basis for improving and developing other e-logistics services in the order fulfillment process. Moreover, the positive effects of e-commerce on 3PLs have recently spurred the continuous improvement of e-logistics services. Thanks to bilateral cooperation, e-commerce companies and 3PL companies have a close connection with each other to meet the ever-increasing demand for online buying/selling of consumers.

4 Conclusion and Summary

Conclusion

The final aim of the thesis is to figure out the present status and predict upcoming trends of E-logistics in Vietnam. The research question and three sub questions in Chapter 1 are used to clarify this purpose. Below are the summarized answers to show the research outcome in an overview.

SQ1: What are the principal features of E-logistics in Vietnam's e-commerce?

First, in the E-commerce logistics business in Vietnam, 3PL companies have dominated the market in terms of the number of orders received in 2017. These companies provide end-to-end services, ranging from safeguarding inventory in a warehouse to shipping items from one location to another. Second, by delivery location: Within the Vietnam E-commerce logistics business, the intercity segment has established itself as the market leader, with a vast market in terms of the number of orders, which was estimated at million orders in 2017. Ground shipping is the most common mode of intercity delivery, and mini trucks are favoured to handle many deliveries of orders from various clients over the same route. Finally, by Payment Method: With a mammoth revenue in 2017, the Cash on Delivery (COD) category established itself as the market leader in the Vietnam E-commerce logistics business (According to the analysis in chapter 2.3.2)

SQ2: Which benefits and challenges of E-logistics in the E-commerce market?

The benefits and challenges E-logistics struggling with in the E-commerce can be described as follow.

About the benefits, the percentage of individuals who purchase online, as well as how they shop, is great in large cities like Hanoi and Ho Chi Minh City. Thus, present needs of delivering professional logistics services are on a continuously rising scale. Moreover, the multi-channel selling trend has manifested itself in Vietnam. According to the Vietnam Retail Association, single-channel retailing will eventually go away, with multi-channel retailing taking its place. The distinction between "real" and "virtual" purchasing activities is becoming increasingly blurred; people are increasingly searching online and then shopping in person, as well as physically searching and then shopping online. As a result, retail and e-commerce companies must rebuild their logistical systems to match the demands of a multi-channel consumer experience. Multi-channel systems, on the other hand, are distinguished by the fact that merchants seldom invest in distribution centers themselves. They prefer instead to outsource professional distribution businesses, therefore increasing

their market competitiveness. This demonstrates that the logistics services sector must evolve to serve all sorts of multi-channel retail, rather than focusing on a single type of business. Despite substantial hurdles, logistics has a promising future, due in part to free trade agreements with Vietnam. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) went into force this year, and the European Union Free Trade Agreement (EVFTA) is scheduled to be enacted the following year. The benefits of these agreements will help to encourage foreign capital in Vietnam's facilities and systems. Along with that, the government has enacted laws to assist businesses in overcoming administrative impediments.

About the challenges, despite the relatively rapid growth rate, COD delivery accounts for 88 percent of all orders, with the exchange rate on B2C sales websites ranging from 10% to 15%. This raises the cost of transportation and operations, as well as lowers business profits. To facilitate COD delivery, e-commerce logistics services must become more efficient. Aside from that, Vietnam is mostly a cash-based economy, with the majority of transactions taking place in cash. E-commerce companies are obliged to rely on cash for delivery, resulting in greater operating expenses. Corporations must also deal with items being replaced or destroyed in reverse delivery. Furthermore, three-quarters of routine orders are conducted in Hanoi and Ho Chi Minh City, which have considerable traffic, raising transportation expenses even further. Furthermore, the logistics sector legislations and requirements remain complicated. Issues with the last mile must be handled, and shipping to rural locations is difficult. These challenges become more prominent when corporations strive to expand outside of Vietnam's leading cities.

(More information in details provided in chapter 3 – SWOT Analysis and Survey parts)

SQ3: Which companies provide the best e-logistics that e-commerce (end) consumers expect?

Based on the survey, Giao Hang Tiet Kiem (GHTK) accounts for the biggest percentage of 75.2%. Giao Hang Nhanh (GHN) is at the second place with 70.5%, followed Viettel Post, Vietnam Post, DHL and FedEx with 55%, 40.3%, 12.8% and 9.4% respectively. Others (such as Ups, Ahamove, J&T Express...) just account for about 2 percent in total. Generally, the practical results of this questionnaire truly reflect the theory of e-logistics companies mentioned above. The companies chosen by many end-users (GHTK, GHN, Viettel Post, VN Post) are the top companies that provide the best customer experience/customer service.

In general, these figures are insufficient to draw a broad supposition about the e-logistics aspect. However, they show that the delivery process has a major influence on customer satisfaction and trust with the order fulfillment process of 3PL companies to a certain extent. People would not choose the companies often and many times if they do not distribute the logistics service well enough.

In addition, the author partly discovers the current status of e-logistics in Vietnam through survey questions related to consumer behavior, experience and opinion. From there, draw the upcoming development trend of e-logistics in Vietnam. These trends are based on the challenges facing e-logistics as well as innovative suggestions from customers.

RQ: What are the current situations and prospects of E-Logistics in Vietnam?

Although the e-logistics market is a new concept and only launched after e-commerce was expanded, e-logistics has proven its important position in e-commerce. Therefore, logistics companies that are outsourced by e-commerce partners, especially 3PL companies, have to further improve and develop their services to match the daily needs of buying/selling online. the more increasing. Important factors that logistics companies can actively consider are delivery costs, delivery time, package and COD return process, and integrity of the package until it is received (Figure 13 in survey). In addition to the factors mentioned above, external factors such as weak infrastructure lead to traffic jams or restrict traffic flows to the provinces; the habit of paying in cash increases costs incurred and so on, which also leads to difficulties and challenges for e-logistics.

Fortunately, the Vietnamese government has timely policies to promote foreign investment in the improvement of the logistics network in general and e-logistics in particular. The Government of Vietnam has signed many trade agreements which help minimize administrative procedures and sophisticated tax costs. This may also be the development trend of Vietnam e-logistics in the future. Some suggestions recommended for both 3PL companies and e-commerce businesses are offering promotions, regular vouchers, and freeship, for example, to satisfy customers when waiting for long delivery or paying high expenses; advancing staff profession and logistics technology also need to be considered as a future trend of e-logistics service.

Regarding the prospects of e-logistics in Vietnam, it is impossible not to deny the achievements that have been, are, and will be achieved. Vietnam is on a stronger economic track than ever before, with a young population and the popularity of the Internet, making it easier to embrace innovation and constant change. For example, e-logistics, certainly still contains a lot of potential that will be discovered soon in the near future if current challenges are optimized and limited.

Summary

The study was conducted to present the current situation and future challenges that e-commerce impacts on 3PL, or in other words, E-logistics in Vietnam. The purpose of the study focuses on explaining the important characteristics of the target - E-logistics, giving its benefits and challenges, thereby finding the best E-logistics distributors that meet the customer's experience in Vietnam. In addition, the author expects that the information, data and value of this study will help those who learn about Vietnam's E-Logistics market in the near future.

The thesis consists of two main parts: theoretical part and experimental part. The theoretical part is presented in Chapter 2, the main content is the definition of terms, components and characteristics of E-commerce, Logistics and E-logistics. The interplay between these concepts is also mentioned in the theoretical part of the study. In addition, the SWOT analysis provides an overview of E-Logistics Strengths, Weaknesses, Opportunities and Threats from secondary data that answer the current performance of E-Logistics and its potential trends in the future.

The experimental part is shown in Chapter 3 through the process of collecting primary data through an online survey and analysing them using the main quantitative research method. The purpose of the survey is to find out the most popular/best e-logistics distributor today through customer experiences, behaviors, and opinions about last-mile delivery service because it plays an important role important in the entire e-logistics process. In addition, the survey data is very valuable to analyse the current general situation of e-logistics as well as the challenges that logistics companies in particular and the e-logistics market, in general, have been facing.

Chapter 4 is a conclusion and summary of the thesis, the findings from all chapters are gathered and discussed in this chapter to answer the main research question and three sub-questions. Also, giving suggestions and future research is included.

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APPENDICES

The survey of customer satisfaction about last-mile delivery service - Khảo sát mức độ hài lòng của khách hàng về giao hàng chặng cuối

Hi, I am Duyen Vu and I am writing my thesis to complete my International Business bachelor's program. The thesis provides information and research data related to E-logistics (E-commerce and Logistics). This survey is a vital empirical part belonging to my bachelor thesis and it takes only 3-5 minutes to complete.

Last-mile delivery is defined as the transportation of goods from the distribution place/goods warehouse to the final delivery point, in other words, to the final consumer. This process is an important logistics process affecting most significantly customer experience when they buy/sell online (e-commerce).

Survey participation is voluntary and your responses are sources to be objectively analyzed and considered for the survey result.

I hope you enjoy spending time filling out the survey. The more answers I receive, the faster I can graduate. Thus, I am really appreciated your help and your time! 🙏🙏🙏

PLEASE SHARE IF POSSIBLE. THANK YOU SO MUCH... 🙏🙏🙏

PART 1: DEMOGRAPHIC QUESTIONS

Mô tả (không bắt buộc)

What is your age zone ? Độ tuổi của bạn *

- Generation Z: born after 1996 - (Sau 1996)
- Millennials: born from 1981 to 1996 - (Từ 1981 - 1996)
- Generation X: born from 1965 to 1980 - (Từ 1965 - 1980)
- Baby Boomers: born from 1946 to 1964 - (Từ 1946 - 1964)
- Silent generation: born from 1928 to 1945 - (Từ 1928 - 1945)

What is your employment status ? Nghề nghiệp *

- Student (Học sinh)
- Employed (Có việc làm)
- Unemployed (Không có việc làm)
- Khác...

Do you often sell or buy products online? Bạn thường xuyên mua hay bán hàng online? *

- Selling (Bán)
- Buying (Mua)

PART 2: BEHAVIOR QUESTIONS

Mô tả (không bắt buộc)

How many times per week do you buy/sell products online? Tần suất mua/bán hàng online mỗi tuần của bạn *

- Less than once per week (ít hơn 1 lần/tuần)
- Once per week (1 lần/tuần)
- 2-5 times per week (2-5 lần/tuần)
- 6-10 times per week (6-10 lần/tuần)
- More than 10 times per week (Nhiều hơn 10 lần/tuần)

Which logistics companies below have you experienced for delivery? Công ty giao hàng nào dưới đây bạn đã từng trải nghiệm qua? *

- Viettel Post
- Vietnam Post (VN Post)
- Giao Hang Nhanh (GHN)
- Giao Hang Tiet Kiem (GHN)
- DHL (Deutsche Post DHL)
- FedEx
- Khác...

Do you prefer send/receive parcels at home or at collection post office? Bạn thích gửi/nhận hàng ở bưu cục hay tận nhà? *

- At home (Tận nhà)
- At collection post office (Bưu cục)
- Both (Cả hai)
- Khác...

Which factors do you think they are important to use logistics service ? Bạn nghĩ các yếu tố nào quan trọng khi đặt giao đơn hàng? *

- Price (Chi phí giao)
- Popularity (Mức độ phổ biến của công ty giao hàng)
- Easy-to-use interface (App giao hàng có giao diện dễ sử dụng)
- Customer service (Dịch vụ khách hàng)
- Regularly updated tracking information (Thông tin theo dõi đơn hàng được cập nhật thường xuyên)
- Rapid delivery (Giao hàng nhanh chóng)
- Final situation of parcel (Tình trạng cuối cùng của kiện hàng)
- COD control time (Thời gian hoàn tiền COD)
- Payment method (Phương thức thanh toán)

PART 3: EXPERIENCE QUESTIONS

Mô tả (không bắt buộc)

How many average days package is received in Viet Nam ? Trung bình bao lâu bưu kiện sẽ được nhận ? *

- Less than 3 days (Ít hơn 3 ngày)
- Less than 1 week, 3-6 days (Ít hơn 1 tuần, 3-6 ngày)
- 1 week (1 tuần)
- More than 1 week, 8-13 days (Nhiều hơn 1 tuần, 8 - 13 ngày)
- 2 weeks (2 tuần)
- More than 2 weeks (Nhiều hơn 2 tuần)

What kind of payment would you often use? Phương thức thanh toán bạn hay sử dụng *

- Pay in advance (pay via banking account before receiving package) Trả tiền trước khi nhận hàng
- COD payment (pay cash after receiving package) Trả tiền sau khi nhận hàng
- Khác...

Are you satisfy with the delivery service recently ? Mức độ hài lòng của bạn với dịch vụ giao hàng hiện nay *

1 2 3 4 5

Strongly disagree (Tuyệt đối không hài lòng)

Strongly agree (Tuyệt đối hài lòng)

What are the most vexing issues you have with last-mile delivery ? Vấn đề khiến bạn khó chịu nhất khi giao hàng chặng cuối là gì? *

- High delivery fee (Phí giao hàng cao)
- Security and privacy (An toàn và bảo mật)
- Late/postponed delivery (Giao hàng chậm trễ/trì hoãn)
- Complicated goods return (Quy trình đổi trả phức tạp)
- Careless handling/goods missing (Kiện hàng bị mất/ dập nát/hư hỏng...)
- Unprofessional customer service (Dịch vụ khách hàng thiếu chuyên nghiệp. VD: Shipper có thái độ không ...)
- Khác...

PART 4: OPINION QUESTION

Mô tả (không bắt buộc)

Suggestions for the logistics company (new technology / methods,...) Đề nghị/lời khuyên để cải tiến dịch vụ

Vấn bản trả lời dài

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Thank you for taking the survey!! Cảm ơn bạn đã thực hiện khảo sát!!

Mô tả (không bắt buộc)