

E-Commerce Application of Enterprises in Viet Nam

Nguyen Thi Dung, Nguyen Ngoc Thuy, Nguyen Thi Minh Hue,
Nguyen Hai Nam, and Dao Danh Ly

ABSTRACT

This study uses Descriptive statistics method to analyze datasets in e-commerce reports for the period 2019 to 2022 of the Department of e-commerce and digital economy, the Ministry of Industry and Trade. The analysis results of the current state of e-commerce applications of Vietnamese enterprises show that e-commerce in Vietnam is still limited compared to other countries in the world. E-commerce is in the development stage with a low level. There is a transformation of business form of enterprises. Enterprises tend to apply on social networks more than traditional advertising. It is difficult for enterprises to invest in equipment for e-commerce. Since then, this study offers solutions to develop e-commerce in enterprises.

Keywords: E-Commerce, E-Commerce Application, Enterprises.

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N. T. Dung*

Bac Giang Agriculture and Forestry
University, Viet Nam

(e-mail: nguyenthidungtk81@gmail.com)

N. N. Thuy

Bac Giang Agriculture and Forestry
University, Viet Nam

N. T. M. Hue

Bac Giang Agriculture and Forestry
University, Viet Nam

N. H. Nam

Bac Giang Agriculture and Forestry
University, Viet Nam

D. D. Ly

Bac Giang Obstetrics and Paediatrics
Hospital, Viet Nam

**Corresponding Author*

I. INTRODUCTION

E-commerce is the process of businesses trading with other businesses and the formulation of internal processes using electronic links (Ohene-Djan, 2008). The main benefit from the customers' point of view is significant increase and saves of time and eases access from anywhere in the globe. Countries around the world are always interested in e-commerce. In particular, the Sars-Covid-2 pandemic occurred across the global. So today, enterprises in Viet Nam are very interested in e-commerce. Although, the difficulty of enterprises in Viet Nam are as follows: Difficult to build trust with customers; Taxes, regulations and compliance are quite complicated; Appear competitive on the prices of stores; Increase Logistics Costs for e-commerce; Market capacity is not large enough. The article indicates application of e-commerce in enterprises in Vietnam on aspects: E-commerce in the world, the current state of e-commerce for enterprises in Viet Nam, the importance of e-commerce in production and business activities of enterprises. Since then, this study offers solutions to develop e-commerce in enterprises.

II. LITERATURE REVIEW, RESEARCH METHOD, RESULT AND DISCUSSION

A. Literature Review

1) The concept of E-commerce

Ohene-Djan (2008) showed that E-commerce is the process of businesses trading with other businesses and the formulation of internal processes using electronic links. According to Kutz (2016) we can understand that electronic commerce, commonly written as E-Commerce, is the trading of products or services using computer networks, such as the Internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle, although it may also use other technologies such as E-Mail.

According to Mary Elizabeth (2023) an e-commerce application is a software application that is specifically designed to support the creation of an e-commerce website or add functionality to it. Typically, e-commerce *applications* refer to the wide variety of shopping cart programs that are available, as well as other software that incorporates payment options as plug-ins or as part of an entire site application. Shopping carts may add only the shopping cart itself to a website built with software not designed especially for e-commerce and has no particular e-commerce features in its basic setup. Alternatively, it may actually be built onto an online store that includes a product catalog, search function, checkout, stock control, shipping, and the means to accept payment in a variety of ways.

2) *The nature of E-commerce*

Three core concepts underpin the nature of e-commerce:

The first, the management of transactions and transaction costs through the use of online technologies and computerised networks.

The second, the re-engineering of business processes into logical, related and sequential activities that ensure businesses engage in transactions in the most efficient and effective manner through the use of online technologies and computerised networks.

The third, the use of information technologies and computerised networks to facilitate employees' telecommuting or teleworking. Such activities enable flexible working, distributed workforces and efficient productivity paths (Ohene-Djan, 2008).

3) *Benefits of E-commerce*

The main benefit from the customers' point of view is significant increase and saves of time and eases access from anywhere in the globe. Customer can place a purchase order at any time. The benefits of e-commerce for customers are as follows:

- Transaction costs for participating exchange in a market was reduced.
- Comfort - transactions can be made 24 hours a day was increased, without requiring the physical interaction with the business organization.
- Time saving- Customer can buy or sell any product at any time with the help of internet.
- Customers access to information quickly and continuously. They will have easier to access information check on different websites at the click of a button.
- Convenience-All the purchases and sales can be performed from the comfort sitting a home or working place or from the place a customer wants to.
- Switch to other companies - Customer can easily change the company at any time if the service of a company is not satisfactory.
- Customer can buy a product which is not available in the local or national market, which gives customer a wider range of access to product than before.
- A customer can put review comments about a product and can see what others are buying or see the review comments of other customers before making a final buy.

The main benefits of e-commerce from sellers' point of view is increasing revenue and reducing operation and maintenance costs through internet. These include as follows: The first, the sellers increase revenue, reduce operation and maintenance costs. The second, the e-commerce help to reduce purchase and procurement costs, raise customer loyalty and retention. In addition, it helps to reduce transportation costs, develops customer and supplier relationships, improve speed of the process of selling, improves internal and external communication, develops the company image and brand (Abdul Gaffar Khan, 2016)

B. *Research Method*

This study uses the Descriptive statistics method and datasets in e-commerce reports for the period 2019 to 2022 of the Department of E-commerce and Digital Economy, the Ministry of Industry and Trade to analyze application of e-commerce in enterprises in Vietnam on aspects: E-commerce in the world, the current state of e-commerce for enterprises in Viet Nam, the importance of e-commerce in production and business activities of enterprises. Since then, this study offers solutions to develop e-commerce in enterprises.

C. *Result and Discussion*

1) *E-commerce in the world*

Fig. 1 shows that the Top 10 countries with the largest e-commerce market share in 2021 are China, USA, UK, Japan, Korea, France, India, Canada, Brazil. In particular, China is the country with the largest trade market share in the world. The country's e-commerce market share accounts for more than half of the worldwide market share. It accounts for 52.1%. The next countries are USA, UK, Japan, Korea, Germany, France, India, Canada and Brazil. USA has the 2nd largest e-commerce market share in the world, its market share is 19%, equal to nearly a third of China.

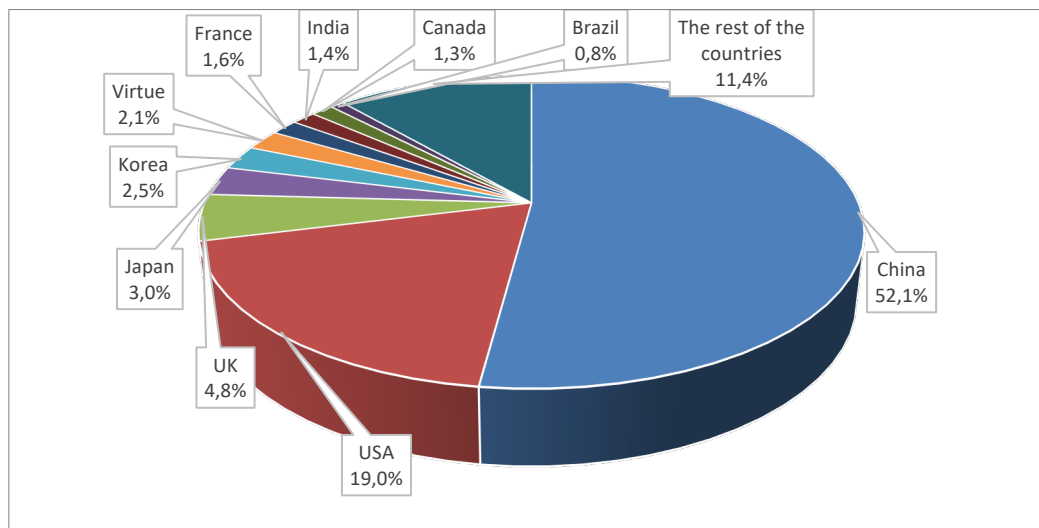


Fig. 1. Top 10 countries with the largest e-commerce market share in 2021.
Source: Lebow (2021).

Vietnam's e-commerce market share accounts for a very small percentage. This market share is in 11.4% of the rest of the countries. This shows that e-commerce in Vietnam is still limited compared to other countries in the world. Especially China, a country close to Viet Nam.

2) The current state of e-commerce for enterprises in Viet Nam

Information technology infrastructure of Vietnamese enterprises focuses on 3 aspects such as hardware, software and human resources, training.

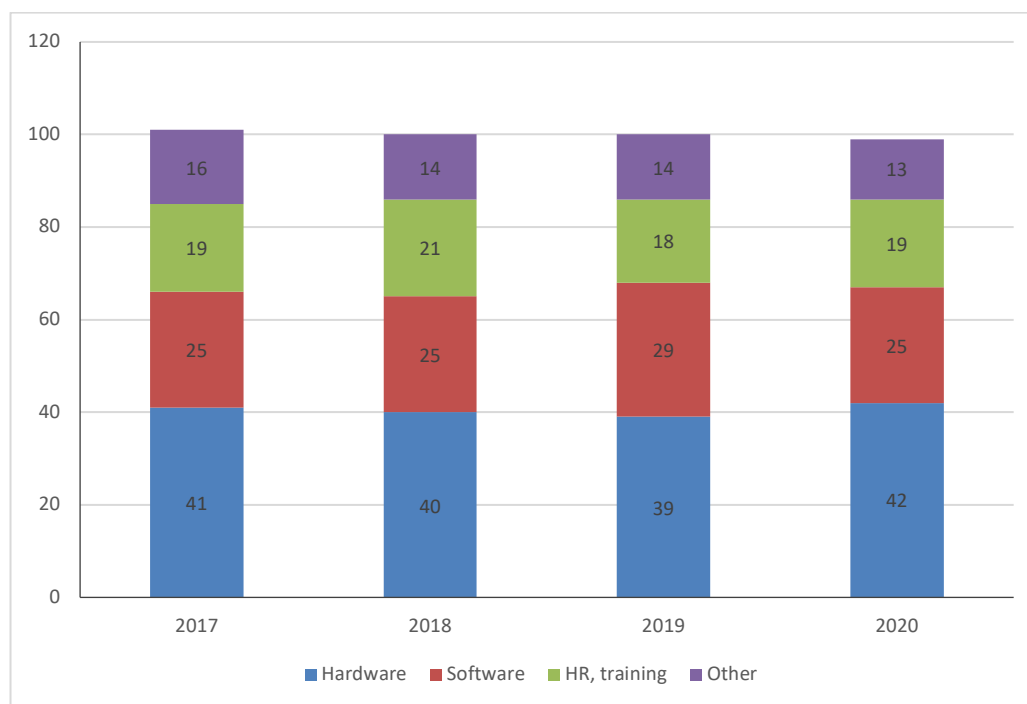


Fig. 2. Investment structure for enterprise's information technology infrastructure.
Source: Viet Nam e-commerce report in 2018, 2019, 2020, 2021.

Investment in hardware accounts for a large proportion, it accounts for nearly 40% over the years (from 2017 to 2020). Software investment rate of Vietnamese enterprises accounted for 25% in 2017, 2018 and 2020. In 2019, due to the impact of the covid-19 pandemic, the rate of software investment in enterprises increased for the purpose of serving their business.

Thus, Vietnamese enterprises are in the stage of investing in hardware equipment, and the level of investment in software is still limited. This reflects that e-commerce is in the development stage at a low level.

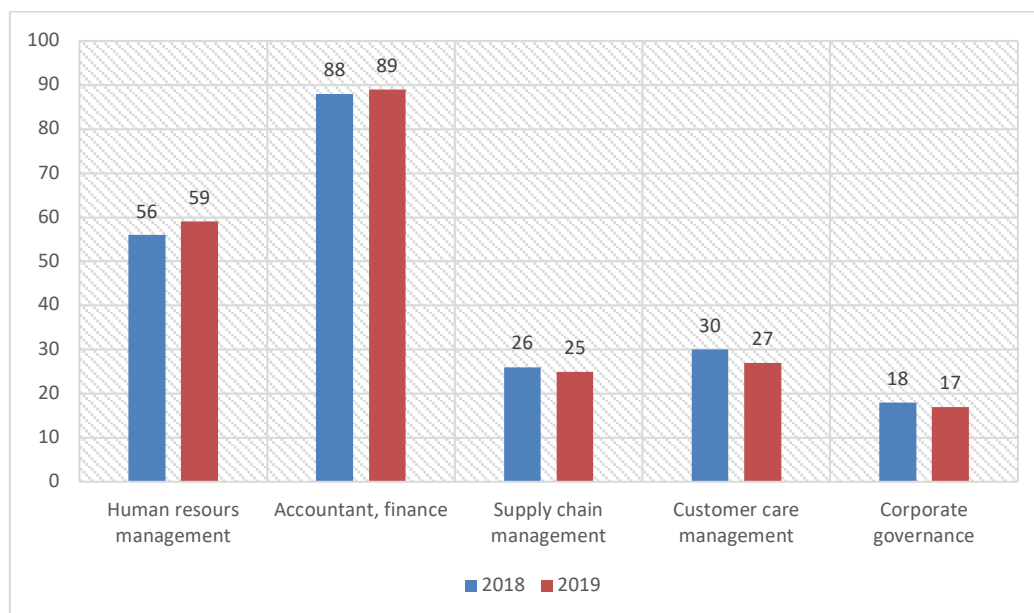


Fig. 3. Popular software used by enterprises in 2018, 2019.
Source: Viet Nam e-commerce report in 2019, 2020.

Fig. 3 shows that the softwares such as human resource management, economics and finance are used by Vietnamese enterprises in 2019 more than in 2018. In contrast, the softwares such as supply chain management, customer care management and corporate governance are used by Vietnamese enterprises in 2019 tended to decrease compared to 2018.

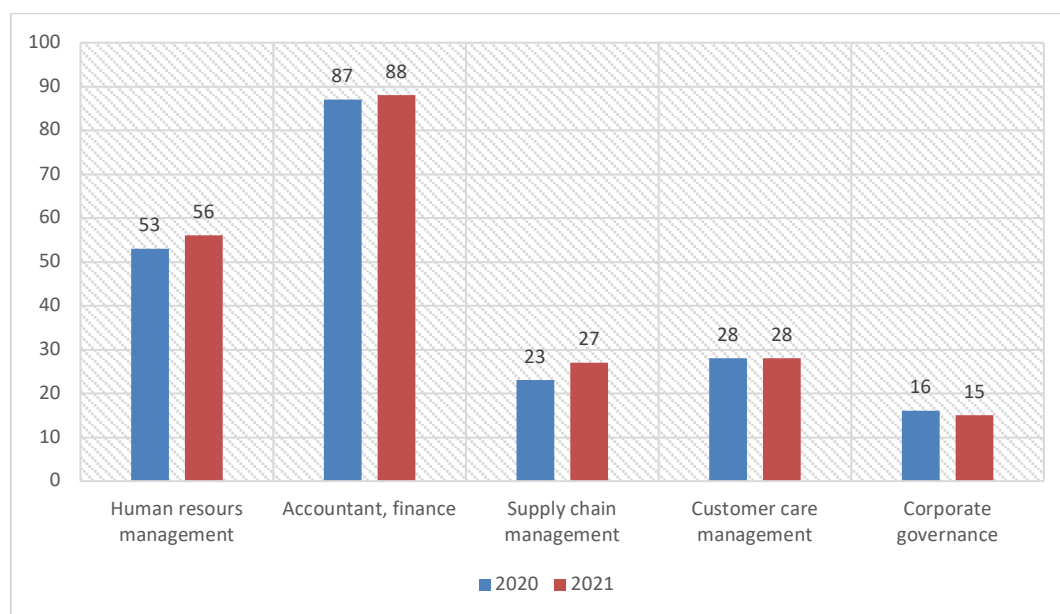


Fig. 4. Popular software used by enterprises in 2020, 2021.
Source: Viet Nam e-commerce report in 2021, 2022.

The results of Viet Nam e-commerce report in 2022 reflect that the software used by Vietnamese enterprises such as human resource management, economics and finance, supply chain management, and customer care management tends to increase over 2 years, 2020 and 2021. Corporate governance software alone tends to decrease over 2 years (Fig. 4).

The results of this study indicate that in the period 2018-2021, enterprises tend to invest in software more. The reason is due to the influence of the industrial revolution 4.0 and the emergence of the Covid - 19 pandemic.

Fig. 5 shows that the percentage of enterprises that own a website has a tendency to change in 2020 with a decreasing trend. The reason for the decrease is the impact of the Covid-19 pandemic prevention policy of the Vietnamese government. In 2020, the government of Vietnam implemented a policy of temporarily suspending the operation of business and service establishments (except for essential goods and service establishments), which causes enterprises to face difficulties in production and business.

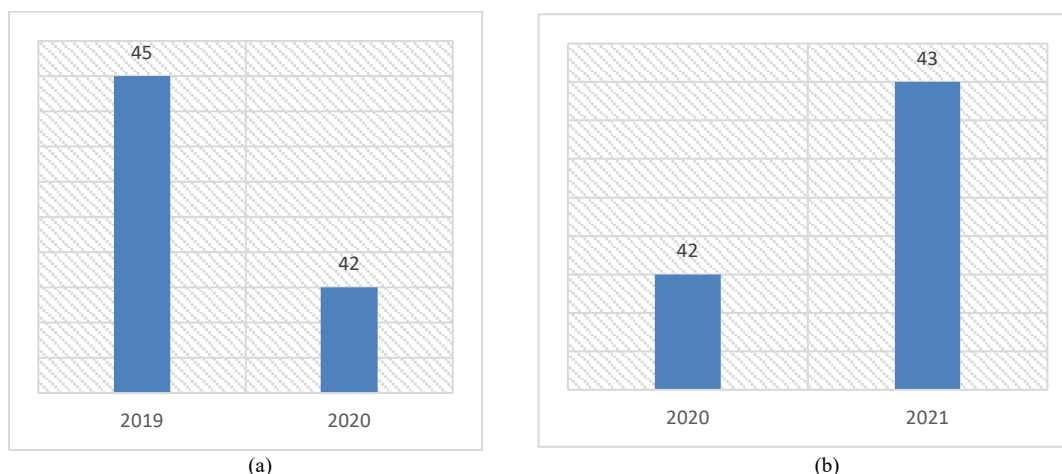


Fig. 5. Enterprises owning websites; a) In the year 2019 and 2020; b) In the year 2020 and 2021.
Source: Viet Nam e-commerce report in 2020, 2021, 2022.

Corporate bankruptcy is on the rise. In 2021, the pandemic prevention policy tends to change with the motto of both fighting the epidemic and developing the economy. This has helped businesses recover and change the way of e-commerce business, so the number of businesses' websites increased. In 2021, the percentage of enterprises that own a website increases to 1% compared to 2020. Although this percentage is not significant, this shows that there is a transformation of the business form of enterprises.

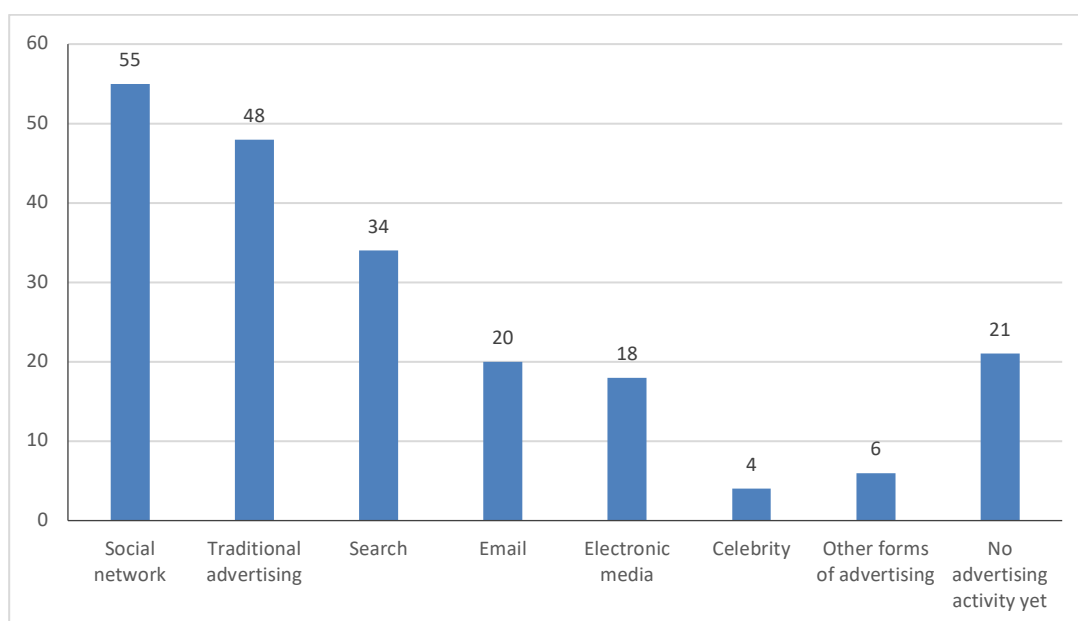


Fig. 6. E-commerce application of enterprises in 2021.
Source: Viet Nam e-commerce report in 2022.

E-commerce application of Vietnamese enterprises is done on fields such as social network, traditional advertising, search, email, electronic media, celebrity, other forms of advertising and no advertising activity yet. Among them, social networks account for the highest percentage. That ratio is 55% (Fig. 6). According to Digital VN (2021) in 2021, the population of Viet Nam will reach 97.8 million people, with the urban population rate of 37.7%. In which, about 68.17 million people are using the internet (accounting for 70.3% of the population) through different platforms and applications, with an average duration of 6 hours 47 minutes. According to statistics, we can easily see that Vietnamese internet users spend a lot of time watching TV Streaming and using social networking platforms at 2 hours 40 minutes and 2 hours 21 minutes. Therefore, enterprises tend to apply on social networks more than traditional advertising.

3) The importance of e-commerce in production and business activities of enterprises

In Viet Nam, the number of businesses owning a website is less than 50% (Fig. 5).

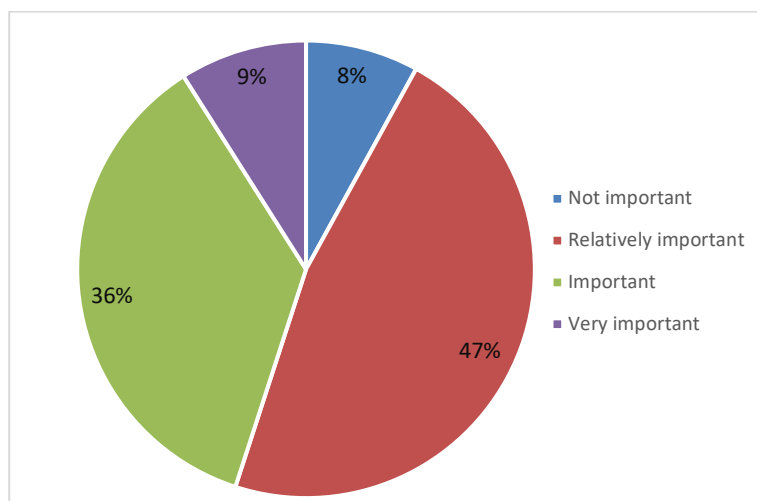


Fig. 7. Enterprise's assessment of the importance of e-commerce in production and business activities in 2021.
Source: Viet Nam e-commerce report in 2022.

According to the Vietnam e-commerce report in 2022, it shows that the rate of enterprises' assessment of the degree of unimportant and the relative important in the proportion is large. This percentage is 55%. This indicates that some Vietnamese enterprises have not really considered e-commerce. The main reason is that the level of investment in equipment is larger than the profit, so it seems that enterprises do not see the need for this investment.

The analysis results of the current state of e-commerce applications of Vietnamese enterprises show that e-commerce in Vietnam is still limited compared to other countries in the world. E-commerce is in the development stage with a low level. There is a transformation of business form of enterprises. Enterprises tend to apply on social networks more than traditional advertising. It is difficult for enterprises to invest in equipment for e-commerce.

The study provides solutions to be taken to develop e-commerce applications in businesses such as:

Firstly, the government needs to have policies to support e-commerce investment.

Second, businesses need to be aware that e-commerce is an inevitable trend in business. If businesses do not keep up with the trend, they will be eliminated.

Third, businesses need to develop e-commerce through social networks (i.e. Facebook, Zalo, TikTok, etc.).

III. CONCLUSION

This study shows that although the e-commerce of Vietnamese enterprises has developed, it is still at a limited level. To promote this development, the research proposes 3 solutions: Firstly, the government needs to have policies to support e-commerce investment. Second, businesses need to be aware that e-commerce is an inevitable trend in business. If businesses do not keep up with the trend, they will be eliminated. Third, businesses need to develop e-commerce through social networks (i.e. Facebook, Zalo, TikTok, etc.).

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