THE IMPACT OF E-COMMERCE IN VIETNAMESE SMES

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ABSTRACT

Vietnam, is one of the developing countries, which approaches new technology, especially Internet is extremely fast approximately 67.1% in the population in 2017. With the boosting of information technology, it creates a new environment and tool to reach the customers' requirement. The new and effective method of narrowing the gap between the distributors and clients is electronic commerce (e-commerce). E-commerce is one of the most innovative expansions of the technologies that enable small and medium-sized enterprise (SMEs) access to global communication and trade. It can help SMEs expand their businesses to global market and increase sales, reduce costs as well as profits. In order to explore the impact of e-commerce as a novel way to boost the development in Vietnamese SMEs, this paper investigated the benefits and barriers of SMEs in e-commerce. Therefore, a questionnaire survey was conducted to study the impact of e-commerce on SMEs in Vietnam. From the results of this survey, we strongly believed that e-commerce is the main key to bring a lot of benefits to not only SMEs but also big companies in Vietnam.

KEY WORDS

business, electronic commerce, e-commerce, SMEs

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1 INTRODUCTION

Nowadays, Internet of Things (IoT) and Information communication technology (ICT) step by step play an important role in our life. Moreover, IoT can help big and small companies or factories in improving operations and increasing

customer satisfaction by selling products online, tracking their goods on shipping, location, control and security (Lopez Research, 2013). With the rapid growing of globalization trend, small businesses need to change the business

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environment; therefore, it needs to implement the Internet, especially for SMEs to compete and gain access to the market (Dan, 2014). Due to the development of economic globalization and information technology, e-commerce is a new way in approaching the customers and satisfying our lives. Some researchers analyze that e-commerce has a strong impact towards SMEs on organization, technology and environment characteristics (Kendall et al., 2001). Thus, in this paper, first summarizes key concepts in the field of e-commerce and Vietnamese SMEs, then we focus on exploring the impact of e-commerce on SMEs in Vietnam. Moreover, this research also figures out the current barriers of deploying e-commerce in Vietnamese SMEs in order to help the companies find the solutions for them.

2 BACKGROUND

2.1 E-commerce Definition

There are many definitions about the term "ecommerce" (EC). Firstly, e-commerce expresses the process of buying, selling or exchanging services and information between clients and seller or retailer via computer networks (Turban et al., 2009). Secondly, e-commerce is the information exchange and commercial transaction support between customers and suppliers on telecommunications networks (Raymond, 2001). Thirdly, any economic transaction such as delivery of goods and services, payments, pricing and complete the transaction through the delivery of payments via electronic media of Internet is also considered as e-commerce (Kaynak et al., 2005). In another way, EC is also a platform to connect between clients, business partners, employees, and suppliers through the Internet (Beheshti and Salehi-Sangari, 2007). In short, in this article, we used e-commerce definition as an environment to sell and buy the products activities online between customers and suppliers.

2.2 Small and Medium-Sized Enterprises in Vietnam

Small and medium-sized enterprises (SMEs) play an important role in Vietnam, especially in the Vietnamese economy. In Vietnam, a developing country, the process of globalization brings many chances for business. However, many Vietnamese companies, especially more than 97% of SMEs are facing to some challenges such as the competitiveness of SMEs in the

market, the lack of information technology, the challenge of shortage of high-quality human resources, employee management, and sustainable business.

With the dramatic developing of multimedia and networking, it creates a new environment to meet the requirement for human's needs. The new and innovative method of getting goods everywhere and every time is e-commerce. E-commerce can offer potential benefits in making high – quality and cost-effective in society and customers; therefore, it can help SMEs achieve their sustainable business goals. E-commerce is related to the customers or buyers and sellers who use the laptops or computers to surf the websites to make transaction online. The primary advantages of e-commerce consist of buying anytime and anywhere by accessing to the Internet, flexibility and more effectiveness.

2.3 Advantages

E-commerce has a lot of advantages in SMEs such as cost savings, reducing production costs, decreasing lead time and administration costs (Rahayu and Day, 2015). For example, it brings direct links with the customers, sellers and distributors in order to facilitate information transferring (Kaynak et al., 2005). It also offers chances for companies to advertise their products around the world without physically contact customers (Karakaya and Karakaya, 1998). Furthermore, EC can improve the management capabilities or the easy reach to the global market among the other objectives (Ifinedo, 2009). Besides, customers can compare the

product's price; good and bad reviews from other customers between this company and the others (Franco and Bulomine Regi, 2016). Ecommerce also helps the SMEs make a good relationship with customers (MacGregor and Vrazalic, 2007). Other study found that SMEs can have ability to reach new customers via e-commerce (Quayle, 2002). In another hand, if the bad weather like snowing and the roads are closed, the online business still opens for the customers 24/7 every day of the year, therefore; the profits of company will keep rising (Franco and Bulomine, 2016). In summary, e-commerce not only enhances SMEs' service quality but also help SMEs make a good connection between the buyers and the sellers.

2.4 Drawbacks

Although e-commerce offers a lot of potential benefits, it also has some disadvantages. First of all, e-commerce based on Internet; therefore, it requires SMEs spend an initial cost to set up a high ICT structure. E-commerce runs on internet environment through website applications; hence, it depends on the speed of internet connection. The employees and customers are required to have good Internet connection which allows order process, payment transaction easily. Moreover, a huge amount of things can be purchased online because it is easy and convenient such as clothes, foods, toys, music and so on. However, the security of ecommerce is also essential concerns (Niranjanamurthy and Chahar, 2013). Moreover, some EC software might not suitable for some hardware or operating system.

3 METHODOLOGY

E-commerce is now being applied in many SMEs in Vietnam; therefore, the authors used the research methodology and statistical descriptive methods for this article. Firstly, the authors designed a questionnaire to investigate the application of e-commerce by SMEs in Vietnam. The questionnaire was divided into three parts. The first part included questions about the demographic information of the business such as the number of employees; the location of the suppliers, the customers and the industry. The second part discovered how ecommerce brings benefits to SMEs. It included the use of the Internet, the company's website, as well as the effectiveness and the way of the company doing business by applying ecommerce. The last part, the authors would like

to investigate the understanding of SMEs in the use of electricity trade as well as the barriers of applying e-commerce.

Secondly, based on the questionnaire was designed, the authors collected data through the Google form. The online survey was used to study the opinion of managers in SMEs on the benefits and barriers in applying e-commerce. This method will allow the authors to easily collect data and facilitate for the respondents. In this study, the authors sent out 245 questionnaires, including 23 valid questionnaires for the study. At the same time, in this study, the authors used SPSS software to analyze the benefits and barriers in e-commerce application of SMEs in Vietnam.

4 ANALYSIS OF RESULTS

What form did SMEs in Vietnam use to serve the business? Vietnamese SMEs have several ways of information technology which they used for business activities and might use more than one (Tab. 1). The main of respondents indicated that 58.1% SMEs used e-commerce and electronic payment. In addition, 55.6% SMEs used the websites for their business as

the second method. Similarly, 50% company's own network was used as the third way. In particularly, 28.2% SMEs used social network for online business. However, 1.6% SMEs stated that they did not use any method in their company.

Tab. 1: The method to apply information technology to business activities of SMEs

Method	Percent
E-commerce and electronic payment	58.1
Company's website	55.6
Company's own network	50.0
Social network	28.2
Do not use any method	1.6

4.1 Expected Benefits from E-commerce

Vietnamese SMEs were asked to indicate whether they get more benefits from using ecommerce in their business. The top five benefits for all respondents consisted of "cost reducing such as transaction fee and marketing", "increasing the profitability of the business", "enhancing market share of the business", "improving the business processes" and "consolidating customer services". With the adoption of e-commerce, SMEs do not have to spend a lot of money to rent stores, premises, a large number of staffs and storage. Especially for the exporting businesses, they can sit at home and search for customers online without spending a lot of time on "outbound" personal trips. In addition, regarding e-commerce, SMEs can market on a global scale at extremely low costs. With a remarkably small cost, SMEs can bring their advertising information from hundreds to millions of viewers from around the world. It is considered that e-commerce can be more effective for enterprises than the other methods. E-commerce's benefits can be considered as a key factor of increasing the enterprises' profits. With e-commerce, the customers of SMEs are now no longer limited geographically, or working time. SMEs not only sell in the local but also they can sell in Vietnam or other countries. Rather, enterprises do not need to wait the customers to find themselves but they may actively seek customers through their e-commerce. Therefore, it is certain that the number of SMEs' customers will increase significantly, which leads to enrich the profits of companies. Furthermore, SMEs with lower expectations for other benefits to their business operations comprising "increasing brand name and business profile", "helping businesses reach customers more effectively", "strengthening and maintaining the trust of customers for the business", "improving the efficiency of production and business" and "developing the efficiency of working with suppliers". These were the indirect benefits of e-commerce that affect the SMEs' business results. Hence, SMEs should take full advantages of all e-commerce's benefits to make business operations better and sustainable development.

4.2 Barriers to Apply E-commerce of SMEs

Respondents were asked which factors represent barriers to e-commerce. The key barriers for all Vietnamese SMEs were "technical difficulties when using e-commerce websites", "who is responsible for the service and payment related to issues", "reliability of service use", "poor Internet service" and "barriers to information security and privacy of customers". "Technical difficulties when using e-commerce websites" was the most common barrier for almost all respondents. Although Vietnam has a rich resources of skilled people in this field, SMEs may feel their employees is not suitable for applying e-commerce. Moreover, many SMEs are newcomers so they do not have much technical experiences in implementing and applying e-commerce. Besides, SMEs are also afraid of other barriers when applying e-commerce in their production and business activities such as "who is responsible for the service and payment related to issues", "reliability of service use", "Internet service is not good" and "barriers to information security and privacy of customers". These are the common issues of e-commerce in Vietnam beyond the control of SMEs; therefore, the government needs to have solutions to ensure the safety, security in use and pay-

Tab. 2: Benefits from using e-commerce of SMEs in Vietnam

Benefits from e-commerce	Rank	Mean	Std. deviation
Cost reducing such as transaction fee and marketing	1	3.4700	0.71142
Increasing the profitability of the business	2	3.2160	0.74730
Enhancing market share of the business	3	3.2120	0.79770
Improving your business processes	4	3.1260	0.79207
Consolidating customer services	5	3.1180	0.80584
Increasing brand name and business profile	6	3.0680	0.69595
Helping businesses to reach customers more effectively	7	3.0540	0.85120
Strengthening and maintain the trust of customers for the business	8	3.0480	0.79180
Improving the efficiency of production and business	9	2.9800	0.79301
Developing the efficiency of working with suppliers	10	2.9320	0.79790

Note: The mean is the average on a scale of 1 = strongly disagree, 2 = disagree and 3 = neither agree nor disagree; 4 = agree, 5 = strongly agree; N = 237.

Tab. 3: Barriers to apply e-commerce of SMEs

Barriers to apply e-commerce of SMEs	Rank	Mean	Std. deviation
Technical difficulties when using e-commerce websites	1	3.2581	0.75608
Who is responsible for the service and payment related to issues	2	3.2389	0.75874
Reliability of service use	3	3.1996	0.83029
Internet service is not good	4	3.1951	0.75687
Barriers to information security and privacy of customers	5	3.1754	0.78075
Language difficulties	6	3.1179	0.75672
High user support cost	7	3.1120	0.78274
Lack of knowledge about e-commerce	8	3.0660	0.79430
Issues related to registration and certification	9	3.0285	0.75268
The cost of operating and maintaining the e-commerce system is higher than expectation	10	2.9490	0.79585

Note: The mean is the average on a scale of 1 = strongly disagree, 2 = disagree and 3 = neither agree nor disagree; 4 = agree, 5 = strongly agree; N = 237.

ment by e-commerce as well as upgrading the quality and service of the whole system. The results also suggested that SMEs faced other difficulties such as "language difficulties", "high user support cost", "lack of knowledge about e-

commerce", "issues related to registration and certification" and "the cost of operating and maintaining the e-commerce system is higher than expectation".

5 DISCUSSION AND CONCLUSION

E-commerce can be stated as an effective way which far outweighs the traditional trade. Moreover, this technology can facilitate customers and distributors in business environment. Besides, e-commerce is both essential and useful tool to help sellers or managers to reach the client's requirement. In fact, regarding our

research, e-commerce enhances the marketing share for the companies because it makes the clients quickly reach the products via companies' websites. It is more convenient that the clients can order the goods, pay online from anywhere at any time by their smartphone device (mobile phones, tablets, and laptops or desktops) and reduce the time consuming to go shopping. It may enrich the profits in reducing the cost for marketing products on mass communications. Furthermore, the survey results of the e-commerce's impact towards SMEs showed that e-commerce is significant for Vietnamese employers during their business. Although this research indicated the effectiveness of e-commerce for SMEs, there are some

barriers in applying it. Therefore, it is necessary for doing more research into the role of ecommerce which suppliers and customers can rely on. The researchers strongly believe that ecommerce will become more popular in the future in order to make more profit and help not only for SMEs but also for big organizations to access to global market and sustainable development.

6 REFERENCES

- Beheshti, H. M. and Salehi-Sangari, E. 2007. The Benefits of E-business Adoption: An Empirical Study of Swedish SMEs. Service Business, 1, 233–245.
- DAN, C. 2014. Matters Arising from SMEs E-Commerce Adoption: Global Perspective. International Journal of Internet of Things, 3, 1–7.
- FRANCO, C. E. and BULOMINE REGI, S. 2016. Advantages and Challenges of E-commerce Customers and Businesses: In Indian Perspective. International Journal of Research – Granthaalayah, 4 (3), 7–13.
- IFINEDO, P. 2009. The Determinants of Extent of Internet/E-business Technologies Use by SMEs in Maritime Canada: An Analysis. In: CONF-IRM 2009 Proceedings.
- KARAKAYA, F. and KARAKAYA, F. 1998. Doing Business on the Internet. SAM Advanced Management Journal, 63 (2), 10–14.
- KAYNAK, E., TATOGLU, E. and KULA, V. 2005. An Analysis of the Factors Affecting the Adoption of Electronic Commerce by SMEs: Evidence from an Emerging Market. *International Marketing* Review, 22 (6), 623–640.

- KENDALL, J. D., TUNG, L. L., CHUA, K. H., HONG, C., NG, D. and TAN, S. M. 2001. Receptivity of Singapore's SMEs to Electronic Commerce Adoption. Journal of Strategic Information Systems, 10, 223–242.
- Lopez Research. 2013. An Introduction to the Internet of Things (IoT). The IoT Series: Part 1.
- MacGregor, R. and Vrazalic, L. 2007. E-Commerce in Regional Small to Medium Enterprises.
- NIRANJANAMURTHY, M. and CHAHAR, D. 2013. The Study of E-commerce Security Issues and Solutions. International Journal of Advanced Research in Computer and Communication Engineering, 2 (7), 1–12.
- Quayle, M. 2002. E-commerce: the Challenge for UK SMEs in the Twenty-First Century. *International Journal of Operations & Production Management*, 22 (10), 1148–1161.
- Rahayu, R. and Day, J. 2015. Determinant Factors of E-commerce Adoption by SMEs in Developing Country: Evidence from Indonesia. *Procedia Social and Behavioral Sciences*, 195, 142–150.
- RAYMOND, L. 2001. Determinants of Web Site Implementation in Small Businesses. *Internet Research*, 11 (5), 411–424.
- Turban, E., King, D., McKay, J., Marshall, P. and Lee, J. K. 2009. *Electronic Commerce:*A Managerial Perspective.

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