THE ADOPTION OF E-COMMERCE IN SMALL AND MEDIUM-SIZED ENTERPRISES IN VIETNAM

– Recommendations for building an e-commerce strategy.
THE ADOPTION OF E-COMMERCE IN SMALL AND MEDIUM-SIZED ENTERPRISES IN VIETNAM

- Recommendations for building an e-commerce strategy

It is highly recommended for small and medium-sized enterprises (SMEs) to integrate e-commerce into their business operations because it is an opportunity to increase profitability, enhance effectiveness, and increase corporate values. However, the number of Vietnamese SMEs adopting e-commerce is insignificant due to lack of understanding of the process of integrating it into business operations. This research is conducted for the purpose of providing SMEs attempting to move towards the e-commerce sector with recommendations on how they can initiate e-commerce in Vietnam. The research is made with the cooperation of an experienced company in textile and garment industry, Duyen One-Member Co., Ltd. This company hopes that its corporate experience will help other enterprises to have an insight into the adoption of e-commerce.

The process of initiating e-commerce requires SMEs to have an initial understanding of benefits of adopting e-commerce, then identifying factors and barriers affecting their progresses towards the e-commerce sector. By doing so, SMEs will be able to develop a strategy which is suitable for their capabilities, so they can maximize values from the adoption of e-commerce. This research is designed based on an exploratory study with the employment of a single-case study as a research method and qualitative interviews as a data collection instrument. The act of reviewing the literature not only builds up a solid knowledge regarding key issues but also guides the author through the conduction of the fieldwork to gather sufficient information to conclude the study’s findings.

The study’s findings indicate that the adoption of e-commerce brings benefits to the case company such as the expansion of customer base, a reduction in business costs, an improvement in the buying-selling processes and customer relationship management, and a faster update of the corporate information. Nevertheless, there are factors such as the experience of the employees to manage e-commerce sector, low customer awareness of e-commerce, the unpopularity of electronic payment, and barriers such as lack of capital investment, customer habit, the characteristics of the products, and an ineffective planning, that affect the case company’s progress towards the e-commerce sector. Comprehending the benefits of adopting e-commerce, and barriers and factors affecting its progress towards the e-commerce sector, the case company is able to generate an e-commerce business plan including three significant steps to integrate e-commerce into MT’s business activities. Suggestions for future studies are also presented in the research.

KEYWORDS:

SMEs, e-commerce, benefits, factors, barriers, strategy, adopt, integrate, initiate
Tekijä(t)

OPINNÄYTETYÖN NIMI
- mahdollinen alaotsikko


ASIASANAT:

# CONTENT

**LIST OF ABBREVIATIONS (OR) SYMBOLS**

<table>
<thead>
<tr>
<th>ABBREVIATION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**1 INTRODUCTION**

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>2</td>
</tr>
<tr>
<td>1.3</td>
<td>2</td>
</tr>
<tr>
<td>1.4</td>
<td>3</td>
</tr>
</tbody>
</table>

**2 LITERATURE REVIEW**

<table>
<thead>
<tr>
<th>SUBSECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>4</td>
</tr>
<tr>
<td>2.2</td>
<td>6</td>
</tr>
<tr>
<td>2.3</td>
<td>7</td>
</tr>
<tr>
<td>2.4</td>
<td>9</td>
</tr>
<tr>
<td>2.5</td>
<td>10</td>
</tr>
<tr>
<td>2.6</td>
<td>13</td>
</tr>
<tr>
<td>2.7</td>
<td>14</td>
</tr>
</tbody>
</table>

**3 RESEARCH METHODOLOGY**

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>20</td>
</tr>
<tr>
<td>3.2</td>
<td>21</td>
</tr>
<tr>
<td>3.3</td>
<td>22</td>
</tr>
<tr>
<td>3.4</td>
<td>23</td>
</tr>
<tr>
<td>3.5</td>
<td>24</td>
</tr>
</tbody>
</table>

**4 DATA ANALYSIS**

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>27</td>
</tr>
<tr>
<td>4.2</td>
<td>30</td>
</tr>
<tr>
<td>4.3</td>
<td>31</td>
</tr>
<tr>
<td>4.4</td>
<td>33</td>
</tr>
</tbody>
</table>

**5 CONCLUSION**

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>42</td>
</tr>
<tr>
<td>5.2</td>
<td>44</td>
</tr>
</tbody>
</table>
APPENDICES

Appendix 1. Interview questions

FIGURES

Figure 1. The distinction between buy-side and sell-side of e-commerce (Chaffey, 2009, 11). .......................................................................................................................... 5
Figure 2. Vietnamese SMEs evaluate factors affecting them to adopt e-commerce (Đỗ, 2012, 16). ................................................................................................................................ 12
Figure 3. Elements of an environmental analysis suggested by Chaffey (2009, 246; 269-281). ........................................................................................................................................... 15
Figure 4. The procedures for introducing an online store for MT ................................ 37

TABLES

Table 1. European statistical system for defining a SME (European Commission, 2003). .................................................................................................................................................... 7
Table 2. Vietnamese statistical system for defining a SME (Vietnam government portal, 2016). ........................................................................................................................................... 8
Table 3. Factors affecting the adoption of e-commerce in SMEs (Wymer and Regan 2005, 441; Le and Pierre, 2006, 1337-1340). ................................................................. 10
Table 4. A manpower planning for the introduction of MT's online store ....................... 38
Table 5. The models of the process of adopting e-commerce suggested by theoretical discussions and case study. ................................................................. 41
# LIST OF ABBREVIATIONS (OR) SYMBOLS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small and medium-sized enterprises</td>
<td>SMEs</td>
</tr>
<tr>
<td>Electronic commerce</td>
<td>E-commerce</td>
</tr>
<tr>
<td>Electronic business</td>
<td>E-business</td>
</tr>
<tr>
<td>Consumer to consumer</td>
<td>C2C</td>
</tr>
<tr>
<td>Business to business</td>
<td>B2B</td>
</tr>
<tr>
<td>Business to consumer</td>
<td>B2C</td>
</tr>
<tr>
<td>Business to government</td>
<td>B2G</td>
</tr>
<tr>
<td>Information Technology</td>
<td>IT</td>
</tr>
<tr>
<td>Information and Communication Technology</td>
<td>ICT</td>
</tr>
<tr>
<td>Organization for Economic Co-operation and Development</td>
<td>OECD</td>
</tr>
<tr>
<td>Thoi Trang Nam Minh Thien</td>
<td>MT</td>
</tr>
<tr>
<td>Vietnam E-commerce and Information Technology Agency</td>
<td>VECITA</td>
</tr>
</tbody>
</table>
1 INTRODUCTION

1.1 Research background

According to the studies of Alnaser et al. (2013, 406) and Jian (n.d, 287), SMEs play a vital role in the economic growth in developed and developing countries and account for 80% of the global economic growth. In Vietnam, Nguyễn (2015, 1) claims that most of the companies are small and medium-size enterprises and therefore their successes are essential to the growth of Vietnam’s economy. Understanding the important role of SMEs to the country’s economy, the Ministry of Industry and Trade conducted research on factors stimulating the growth of SMEs in Vietnam. The research points out that electronic commerce (e-commerce), which is defined as “doing business electronically” is one of the most important factor in promoting the development of SMEs in Vietnam (Fellenstein and Wood, 2000, 6). (Thanh Nien News, 2016.)

Over the past years, the Vietnamese government has been executing plans to stimulate the growth of e-commerce sector, for example, the generation of technology infrastructure, the publication of legal frameworks, and the provision of education for present and future generations, etc. (Đình, 2015; Thanh Nien News, 2016). With these implementations, the amount of Internet users has increased significantly from 150,000 users in 2013 up to 49,063,762 million users in 2016 standing in the 13th position in the global ranking of Internet Users (Internet Live Stats; Tuoi Tre News, 2015; Hoang, 2003). These numbers show the potential online shoppers willing to buy products from e-commerce companies. The results of a survey conducted by Vietnam E-commerce and Information Technology Agency (VECITA) also provide an evidence to support this point. The evidence shows that the number of online orders on e-commerce websites had increased from 41% (2013) to 53% (2015). (Tran, 2014, 45; VECITA, 2015, 43.) In addition, the Vietnam E-commerce Association predicts that Vietnamese online retailers will generate increased profitability in the next five years with sales expected to hit US$10 billion in 2020 (Thanh Nien News, 2016).
1.2 Research motivation

As stated by Le & Pierre (2006, 1335), there are many factors affecting the participation of SMEs in the e-commerce sector in Vietnam, hence it is necessary for SMEs to formulate a strategy that not only defines the key long-term goals and objectives but also determines the essential activities and the important resources to achieve these goals (in Combe, 2006, 212). Even though research in building an e-commerce strategy has been done by many researchers, a special concentration on building an e-commerce strategy in the Vietnam context has been greatly ignored. Due to this reason, the author is interested in researching about the formulation of an e-commerce strategy so that providing Vietnamese entrepreneurs attempting to move towards the e-commerce sector with recommendations for how they can initiate e-commerce. Moreover, the author believes that by doing research into this topic, the author will gain valuable experience and knowledge which will be helpful for the author's future career in the e-commerce sector.

1.3 Research questions and objectives

In order to provide SMEs with a thorough research, the author has divided the main question “How do SMEs initiate e-commerce in Vietnam?” into four sub-questions:

1. What are the potential benefits for SMEs to participate in the e-commerce sector in Vietnam?

By answering this sub-question, the author would like to provide a comprehensive view on the potential benefits which Vietnamese SMEs will get from the adoption of e-commerce.

2. What are the factors that affect SMEs to participate in the e-commerce sector in Vietnam?

The answers to the second sub-question will reveal the factors which affect the adoption of e-commerce in Vietnam.

3. What are the barriers for SMEs to adopting e-commerce in Vietnam?
In addition to the factors affecting the adoption of e-commerce, there are barriers preventing new entrants to the e-commerce sector. Therefore, the answers to the third sub-question will expose the barriers limiting Vietnamese SMEs to the e-commerce sector.

4. How should SMEs develop strategies to initiate e-commerce in Vietnam?

Through the answers to the fourth sub-question, readers will obtain information on the process of developing an e-commerce strategy.

1.4 Research structure

Following this introduction, chapter two concentrates on theoretical discussions through the literature from various sources with a focus on the research questions. The purpose is to provide readers with an understanding of e-commerce and different aspects of the adoption of e-commerce.

The third chapter presents the author’s intention towards accomplishing research objectives and explains how the research methods are selected. This chapter is separated into five sections to address these two aims – research design, company background, data collection method, qualitative data analysis, and trustworthiness.

In the fourth chapter, the author analyzes empirical data and compare them with the theoretical discussions in order to examine the differences. The analysis of the empirical data is divided into three sections in connection with the research questions.

The final chapter of the study summaries main findings and gives suggestions for future studies.
2 LITERATURE REVIEW

2.1 E-commerce and E-business

Chaffey (2009, 11) defines “e-commerce was the exchange of information across electronic networks, at any stage in the supply chain, whether within an organization, between businesses, between businesses and consumers, or between the public and private sector, whether paid or unpaid”. Similarly, according to Craig and Ron (2000, 3), “e-commerce is the use of online facilities for doing business. The Internet, intranets, extranets, private networks, and any other networking facility that enables buyers to communicate with sellers (or suppliers) are components of online facilities. Doing business can be defined as a set of buying and selling activities of goods and services that make up a business transaction.” Although there are different definitions about these concepts, e-commerce can be simply understood as “any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact” (Andam, 2003, 6).

According to Tassabehji (2003), there are several assumptions about the source of e-commerce; however, the Internet is perceived as the main source that contributes to the presence of e-commerce all over the world. Andam (2003, 16) explains that the Internet, which is the connection of a large number of global networks using a common set of protocols, is low-cost and trustworthy for people around the world to get connected and share information. Importantly, with more than 1.6 billion Internet users and the surprisingly enormous amount of available information, the Internet is the most suitable environment for the extension of e-commerce globally (eMarketer, 2015, 5; Fellenstein and Wood, 2000, 10).

In relation to e-commerce, electronic business, which is also called e-business, is defined as the utilization of the Internet to link and authorize business processes, electronic commerce, organizational communication and collaboration within a company and with its customers, suppliers, and other stakeholders (Combe, 2006, 1). In the light of Gopalakrishina (2010), the relationship between e-commerce and e-business is presented in Figure 1.
Figure 1. The distinction between buy-side and sell-side of e-commerce (Chaffey, 2009, 11).

Figure 1 shows e-business uses the internet and e-commerce technologies to manage key business processes such as procurement, selling, auctions, order status, checking accounts, payment processes, shipping methods and activities from buy-side e-commerce to sell-side e-commerce (Craig and Ron, 2000, 1; Chaffey, 2009, 13). Specifically, buy-side of e-commerce refers to the online business transactions between the company and its suppliers to obtain needed resources. Sell-side of e-commerce represents for the online business transactions between the company and its customers. (Chaffey, 2009, 11.) On contrary, Tassabehji (2003, 5) disagrees with these statements. The researcher points out the major difference between e-commerce and e-business is that e-commerce has wider scope referring to macro-environment, while e-business is related to the micro-level of the firm.

Above all, one of the most notable point is that e-commerce and e-business are dissimilar concepts, and they cannot be used interchangeable (Craig and Ron, 2000; Tassabehji, 2003).
2.2 The classification of e-commerce

Tassabehji (2003, 28) asserts that the comprehension of partners participating in online trading is beneficial to identify the elements of e-commerce and understand its application in the business environment. In specific, businesses, consumers, employees, governments, managers, peers are participants in online trading (Nemat, 2011, 100), and when each of them trades with another electronically, it forms a type of e-commerce. Notwithstanding, various types of e-commerce, this research concentrates on elaborating only the four ones occurring in Vietnamese market - consumer-to-consumer, business-to-consumer, business-to-business, and business-to-government (Gupta, 2014, 2).

Consumer-to-consumer (C2C) e-commerce is understood as consumers selling to each other through an online market, and it is estimated to expand quickly (Laudon and Traver, 2002, 14). There is abundant evidence to support this assertion, for instance one example from the leaders in C2C e-commerce - China's biggest C2C mall Taobao. Taobao proclaims that there are 242 million online shoppers who are willing to spend $40,000 per second, and the most important factor is that 17% of these online shoppers account for 47% of sales. (Dan, 2014, 30.) Although there are no official statistics for the growth of C2C e-commerce in Vietnamese market, a report indicates that an average Vietnamese online shopper was willing to spend $150 buying goods and services online in 2015, and this number will increase to $600 per shopper by 2020 (EVBN & the European Union, 2016, 8).

Business-to-consumer (B2C) e-commerce refers to online business activities fulfilling end consumers (Nemat, 2011, 101). A further research in this area validates that B2C e-commerce sales were increasing continuously in many countries in the last decade (Nemat, 2011, 101). Among these countries, China is the fastest-growing market, with a growth rate of 130% in 2011 and 90% in 2012, in comparison to USA, UK and Japan (IORMA, TeJURI and IMRG, 2013, 6). The current data about Vietnamese market also reveals a significant sign about the growth of B2C e-commerce. Specifically, the sales of Vietnam's B2C were reported to be around $3.64 billion in 2015 increasing 22.5% than in 2014 and will reach $23.1 billion in 2020. (EVBN & the European Union, 2016, 8.)

Business-to-business (B2B) e-commerce relates to an online commerce transaction between one business and another, for example, a manufacturer and a wholesaler or a
wholesaler and a retailer (Kumar and Raheja, 2012, 447). The study of Brown (2015, 1-3) claims that this type of e-commerce doubles the size of the B2C market in which the sales will be around $6.7 trillion by 2020 whereas the total sales of B2C e-commerce will be approximately $3.2 trillion. By contrast, the data in Vietnamese market indicates a different point. It mentions that the size of Vietnam’s B2B e-commerce is inconsiderable in comparison to others because of the paperwork requirements for transaction issued by the government (EVBN & the European Union, 2016, 8).

Business-to-government (B2G) e-commerce, which is explained as online commerce between companies and the public sector, employs the Internet for public procurement, licensing procedures, and other government-related operations (Gupta, 2014, 4). In terms of B2G e-commerce in Vietnam, Nguyen (2009) points out that most of the government websites provide mainly information and downloadable forms regarding public services, except for three particular cities. Ho Chi Minh, Ha Noi, and Hau Giang are the only cities in Vietnam that allow new start-ups and foreign investors to register their companies online (Nguyen, 2009).

Overall, consumer-to-consumer, business-to-consumer, business-to-business, and business-to-government are four popular kinds of e-commerce appearing in Vietnamese market. Among them, it can be observed that C2C and B2C e-commerce are potential markets for SMEs to invest due to a constant growth rate.

2.3 The definition of small and medium-sized enterprises

Small and medium-sized enterprises (SMEs) are non-subsidiary or independent firms employing employees based on a given number depending on national statistical systems (OECD, 2000, 2). In Europe, there are three main criteria for determining whether an organization is a small or a medium-sized enterprise (European Commission, 2003).

Table 1. European statistical system for defining a SME (European Commission, 2003).

<table>
<thead>
<tr>
<th>Company category</th>
<th>Staff headcount</th>
<th>Turnover (or)</th>
<th>Balance sheet total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium-sized</td>
<td>&lt; 250</td>
<td>≤ € 50 m</td>
<td>≤ € 43 m</td>
</tr>
<tr>
<td>Small</td>
<td>&lt; 50</td>
<td>≤ € 10 m</td>
<td>≤ € 10 m</td>
</tr>
</tbody>
</table>
As can be seen in Table 1, European countries will consider an organization to be a small-sized enterprise if the number of staff are from 10 to 49 people and the organization’s turnover are less than or equal to 10 million euros. In addition, an organization will become a medium-sized enterprise when it employs more than 50 and less than 250 employees, and has an annual turnover of less than or equal to 50 million euros. Another criterion, which is applied to define whether an organization is a small or medium-sized enterprise instead of turnover, is balance sheet total.

In the same way, the Vietnamese government uses staff headcount and total equity, which equals to total asset clarified in the enterprise’s balance sheet as the main criteria to determine whether an organization is a small or medium-sized enterprise (Vietnam government portal, 2016). Nevertheless, the amount of total equity and the number of staff headcount required by the Vietnamese government are different from those of EU.

Table 2. Vietnamese statistical system for defining a SME (Vietnam government portal, 2016).

<table>
<thead>
<tr>
<th>Company category</th>
<th>Total equity</th>
<th>Staff headcount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium-sized</td>
<td>≤ 50 billion ₫</td>
<td>≤ 100</td>
</tr>
<tr>
<td>Small</td>
<td>≤ 10 billion ₫</td>
<td>≤ 50</td>
</tr>
<tr>
<td>Micro</td>
<td></td>
<td>≤ 10</td>
</tr>
</tbody>
</table>

According to the newest currency exchange rate, 1 euro equals to approximately 24,000 vietnamese dongs (XE Currency Converter, 2017). As observed from Table 2, Vietnamese government will recognize an organization as a small-sized enterprise if total equity is less than or equal to 415,275 euros and total staffs are less than or equal to 50 people. On the other hand, a medium-sized enterprise has total equity of less than or equal to 2,076,159 euros and total staffs of less than or equal to 100 people.

While a variety of definitions of the term small and medium-sized enterprises have been suggested, this research applies the definition announced by Vietnamese government because of research nature and selected context which are in Vietnamese market.
2.4 Potential benefits of adopting e-commerce to business operations

A considerable number of literatures point out that the adoption of e-commerce will generate plenty of benefits for SMEs (e.g. Chaffey, 2009; Niranjanamurthy et al., 2013; Savrul et al., 2014; Tassabehji, 2003). Tassabehji (2003, 12-13) and Niranjanamurthy et al. (2013) affirm that the application of any e-commerce forms facilitates the expansion of a business into the international marketplace, lowers operational and telecommunication costs, allows a business to perform mass customization, and minimizes the level of inventory. Nanehkaran (2013, 190) also supports this idea by providing an additional benefit of adopting e-commerce which is the capability of selling merchandise 24 hours a day, 7 days a week. Nevertheless, Chaffey (2009) argues that these points are not enough to illustrate the advantages of embracing e-commerce into a business operation. Indeed, a business should evaluate the potential benefits of adopting e-commerce in terms of tangible and intangible benefits. Tangible benefits of implementing e-commerce technologies included some of the already mentioned and higher sales and revenue because of new customers, new markets, repeated orders of existing customers, less marketing cost, supply chain cost, managerial cost. Meanwhile, intangible benefits of the implementation of e-commerce technologies are understood as higher public awareness of corporate reputation, better transmission of the marketing messages to the market, quicker product development life-cycle in response to market needs, enhanced customer service, more experience in the future, higher level of customer expectations, and faster acquisition of customer feedbacks on products. (Chaffey, 2009, 31.)

Apart from these theories, research about the potential of e-commerce for SMEs asserts that by entering e-commerce sector SMEs are able to discover new methods of adding value to new products, new services, and business models; expand their businesses into international markets; enhance their effectiveness; and co-operate with larger firms which can be their customers or suppliers or investors (Savrul et al., 2014, 44). Moreover, the findings on the adoption of e-commerce in Hue city, Vietnam indicate that most of SMEs agree on the benefits of adopting e-commerce, especially in cost reduction, time-saving, enhanced customer service, and increased brand awareness. Besides, there are other comments from Vietnamese SMEs about these benefits such as easy to seek for new customers and expand their business. (Pham, 2014, 49.)
In general, the benefits of adopting e-commerce in SMEs has been greatly realized and affirmed by many authors (e.g. Chaffey, 2009; Pham, 2014; Savrul et al., 2014). It is fair to say that SMEs that try to adopt e-commerce in their businesses will be likely to benefit from it.

2.5 Factors affecting the adoption of e-commerce in small and medium-sized enterprises

As discussed above in section 2.4, the adoption of e-commerce has the potential to bring lots of benefits to SMEs. Importantly, the conference held by the Organisation for Economic Co-operation and Development (OECD) in Bologna in 2000 also advocated the participation of SMEs in e-commerce sector. The report of this conference stated that there were substantial prospects for SMEs of enlarging customer base, entering new markets and being ahead in competition (OECD, 2000, 5). Nevertheless, Shah et al. (2011, 376) argues that there are many factors influencing SMEs to adopt e-commerce; therefore, identifying these factors is the first priority.

According to Wymer and Regan (2005), 102 entrepreneurs participating in their survey agree that environmental factors, knowledge factors, organizational factors, and technology factors are factors affecting the adoption of e-commerce in SMEs. Similarly, Le and Pierre (2006) points out that factors affecting the adoption of e-commerce in SMEs are environmental characteristics, characteristics of managers, organizational characteristics and characteristics of innovation. Specifically, the dissimilarities between two researches are included in Table 3:

Table 3. Factors affecting the adoption of e-commerce in SMEs (Wymer and Regan 2005, 441; Le and Pierre, 2006, 1337-1340).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental factors</td>
<td>markets, competitive pressures, government rules and regulations, suppliers, vendors,</td>
<td>intensity of competition, pressure of suppliers and buyers, support of large</td>
</tr>
<tr>
<td></td>
<td>partners and customers</td>
<td>enterprises, support of government, and national infrastructure</td>
</tr>
<tr>
<td>Knowledge factors/Characteristics of managers</td>
<td>executive knowledge and experience, employee expertise, recognition of needs and opportunities and exposure and experience with technology and change management</td>
<td>attitudes of managers towards innovation, knowledge of the new information technologies and of e-commerce</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Organizational factors</td>
<td>enterprise size (Al-Qirim 2004b; Huang et al. 2004), type of products and services, capital, human resources, expertise, efficiency, priorities and profitability</td>
<td>size and type of the business of the enterprise, strategic orientation of the enterprise, employee's expertise in e-commerce, culture of the enterprise, and resources of the enterprises</td>
</tr>
<tr>
<td>Technology factors/Characteristics of innovation</td>
<td>cost to setup and maintain, technology for selling products or services online, access to network services or infrastructure to support Web and Internet Technologies, reliability of Web and Internet technologies, security issues, and availability or adequacy of existing technology</td>
<td>perceived relative advantages, complexity of the innovation, and compatibility of innovation</td>
</tr>
</tbody>
</table>

As interpreted from table 3, there are four types of factors affecting the adoption of e-commerce in SMEs – environmental factors, knowledge factors, organizational factors, and technology factors. Specifically, environmental factors are market competition, the support of government, the density of buyers and suppliers, the support of large enterprise and national infrastructure. Knowledge factors are the managers and employees’ attitudes, experience, and knowledge of e-commerce, innovation, and new information technologies. Organizational factors are the size and the nature of the business, the strategy, the culture, and the resources of the enterprise. Technology factors are the perceived relative advantages, the complexity of the innovation and the compatibility of innovation. (Wymer and Regan 2005, 441; Le and Pierre, 2006, 1337-1340).
In the light of the studies of Wymer & Regan (2005) and Le & Pierre (2006), Alnaser et al. (2013, 407) stresses that the analysis of aforementioned four factors exposes valuable information whether an organization should adopt e-commerce. In specific, the analysis of environmental factors reveals the readiness of the enterprise’s industry towards electronic market which is one of the most important factor for SMEs to consider before entering e-commerce sector. The analysis of internal factors (technology factors, knowledge factors, and organizational factors) reveals the enterprise’s capabilities to survive in the electronic market. (Alnaser et al., 2013, 407.)

In an agreement with these researchers, Đỗ (2012) asserts that knowledge factors, environmental factors, organizational factors, and technology factors affect the introduction of e-commerce by SMEs in Vietnam.

In accordance with Figure 2, knowledge factors are lack of the support from managers and the inadequacy to deal with changes in business activities. Environmental factor is lack of the information on suppliers. Organizational factors are lack of the investment and lack of the experienced staffs. Technology factors are lack of new technologies and the cost of purchasing them. (Đỗ, 2012, 16.)

In line with Đỗ’s study, the study published by Van Huy et al. (2012) asserts that most of the Vietnamese SMEs feel unconfident to adopt e-commerce because of the insufficiency of capital, the unpopularity of technology, the lack of experts, the inability to recruit and retain skilled workers, the obstacles of delivering products in both internal and external markets, and the intensive competition among SMEs.

Figure 2. Vietnamese SMEs evaluate factors affecting them to adopt e-commerce (Đỗ, 2012, 16).
To conclude, this section identifies four categories of factors affecting the decision of SMEs about adopting e-commerce, and they are environmental factors, knowledge factors, organizational factors, and technology factors (Le and Pierre, 2006, 1337). Furthermore, this section addresses the importance of analysing external and internal factors in order to comprehend the readiness of one’s industry towards electronic market and the capability to survive in the e-commerce sector (Alnaser et al., 2013, 407).

2.6 Barriers for small and medium-sized enterprises to adopting e-commerce

In order to gain benefits from the adoption of e-commerce, organizations have to firstly overcome lots of barriers (Kuzic et al., 2002). Jebur et al. (2012, 75) point out that obstacles limiting the participation of SMEs in e-commerce sector are inadequate security system protecting customer and organizational information, rapid change in technology development, failure of capturing new opportunities, and enormous competition from both local and global firms.

On the contrary, the study of OECD (2004) claims that the barriers to adopting e-commerce vary according to countries. The study of Shah et al. (2011) proclaims that SMEs in developing countries faces more challenges to do business in the electronic market than in developed countries. Particularly, the major barriers preventing SMEs from participating in e-commerce sector in developing countries are low-speed internet access, low-level of Internet usage, the insufficiency of advanced information and communication technology (ICT), the adequacy of skilled workers or experts, low-level of credit card users, legalities, inefficient delivery infrastructure, and poor delivery services (Ksheteri, 2007, 44).

Another example illustrating barriers to adopting e-commerce in developing countries is taken from research about Vietnamese market (EVBN & the European Union, 2016). Vietnamese e-commerce companies participating in that research points out that e-commerce infrastructure and customer confidence are the most difficult barriers for them to overcome. Besides that, there are other barriers such as payment methods and cultural factors. Because of these barriers, several e-commerce companies decided to exit the industry, for example, www.deca.vn, www.beyeu.com, www.foodpanda.vn, and www.easytaxi.com. (EVBN & the European Union, 2016, 22.)
To sum up, it is significant to remember that there are existing barriers preventing SMEs moving towards e-commerce sector. In general, these barriers are related to security system, technology development, people and organizational issues, customer service, customer’s habits, market competition, and national legal system (Kuzic et al., 2002, 1609).

2.7 Key steps to formulate a strategy to adopt e-commerce

Although the term strategy is frequently used in most of the business books, there are various meanings for it. One of the oldest definitions of strategy by Chandler (1962, 13), considers strategy as the determinant of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources for carrying of those goals (in Karami, 2007, 3). According to a definition by Karami (2007, 3), a strategy means the general direction and long-term policy of the business which are different from short-term tactics and day-to-day operations. For Chaffey (2009, 259), a strategy is an organization’s objectives and goals in which obtains advantages for the organization through an effective arrangement of resources within a changing environment to satisfy both the needs of markets and stakeholder expectations. While a variety of definitions of the term strategy have been suggested, this paper will use the definition proposed by Combe (2006) and Kourdi (2015) who referred strategy to the process of scanning, selecting and determining activities for a company to attain more profit and success.

For enterprises which are going to adopt e-commerce, it is extremely important to develop an e-commerce strategy since it encompasses an identification of possibilities to achieve goals, a division of resources among departments to meet objectives, a collection of strategic options to compete against competitors, and a long-term plan for the growth of the organization (Karami, 2007, 59; Chaffey, 2009, 259; Labuschagne and Eloff, 2002, 291). Despite that there are numerous proposals to develop an e-commerce strategy, this research will follow strategy formulation suggested by Karami (2007) and Chaffey (2009) which is clarified in the following paragraphs.

**Step 1: Conduct an environmental analysis**

Several studies attempt to show that an environmental analysis plays a vital part in e-commerce strategy formulation (Combe, 2006; Karami, 2007; Chaffey, 2009).
Labuschagne and Eloff (2002, 292) and Shah and Dawson (n.d, 5) also agree on this point by stating that it is important because an environmental analysis will allow an organization to comprehend its capabilities, identify the critical factors that determine its future success in the competitive marketplace, and prepare for actions to minimize risks and maximize advantages. In order to carry out an environmental analysis, Chaffey (2009) recommends exploring factors enumerated in Figure 3.

![Figure 3. Elements of an environmental analysis suggested by Chaffey (2009, 246; 269-281).](image)

According to Figure 3, an environmental analysis examines the external environment and internal resources of an organization. External environment consists of social factor, legal and ethical factors, economic factor, political factor, and technological factor. Particularly, social factor relates to customer behaviours such as access to the Internet, customer opinions about the Internet as a communication channel and so on. Legal factor is accessibility, domain name registration, copyright and data protection legislation, while ethical factor includes ethical issues and privacy issues. Ethical issues underline the essence of protecting consumer privacy and security of personal information, and privacy issues mean the collection and dissemination of customer information, cookies and the use of direct e-mail. Economic factor is the difference in Internet usage for trade between different regions and therefore every market has a different budget to promote e-commerce. Political factor is the role of governments in the growth of e-commerce. Technological factor is the rapid change in technology and the adaption of customers and competitors to new technologies. (Chaffey, 2009, 269-281.)
Internal resources involve resource analysis, portfolio analysis, SWOT analysis, demand analysis, and competitor analysis. Specifically, resource analysis is the inspection of the technological, financial, and human resources of an organization and their usage in business processes. Portfolio analysis is the process of reviewing the business portfolio of an organization for the purpose of evaluating the facility of current information systems and prepare for future strategies. SWOT analysis is considered as the simplest manner to compare strengths and weaknesses of an organization with opportunities and threats of its market environment. Demand analysis is the examination of customer demand for e-commerce services. Competitor analysis considers two sides – competitors’ e-commerce services and the ability of customers in relation to those e-commerce services. (Chaffey, 2009, 269-281.)

Chaffey (2009, 269) affirms that the examination and evaluation of these factors will subsequently provide enterprises with crucial information as, for example, the available resources of an organization and its performance in the marketplace; the competitiveness of the market such as customer demand and behavior, competitors, market information, relationships between suppliers and partners and intermediaries; the information of the microenvironment where companies operates. Karami (2007, 39-41) specifically states that the analysis of external environment reveals factors bringing opportunities and threats to an organization; meanwhile, the analysis of internal resources exposes its strengths and weaknesses. Shah and Dawson (n.d, 5) emphasize that by comprehending the weaknesses and opportunities, the organization could identify risks then planning actions accordingly to overcome these obstacles for the sake of building competitive advantages which can be used to finalize an approach to e-commerce.

Above all, Labuschagne and Eloff (2002, 294) claim that it is significant for enterprises to remember that an environmental analysis should contain answers to the following questions – Will the financial capability of an enterprise afford changes when introducing e-commerce? Will the enterprise will be capable of managing a relationship with customers and supply chain through a new system? Will the level of its information technology infrastructure be adequate to conduct e-commerce? Will the skills of the available staff be able to manage e-commerce operations?

Step 2: Set vision and mission
According to Tracy (2015, 31), vision and mission setting is an important step in strategy formulation because the transparency in vision and mission will guide enterprises to the highest achievements (Tracy, 2015, 31). In order to create vision and mission statements, it is significant for enterprises to comprehend their differences.

Karami (2007, 44) describes vision as the decision of a managerial team about the future of the organization and therefore the vision statement will illustrate what the organization wants to achieve in the future. To create a vision statement, Tracy (2015, 25-28) underlines that the first priority is to comprehend the values of a business which are perceived as the business’s principles. However, Kourdi (2015, 138) advises that it will be better for enterprises to divide vision into three subgroups representing for different purposes as, for instance, vision for a company, vision for a department, and vision for an outcome. To be specific, a vision for a company refers to the direction and goals of the business, encourages and connects people together, leads actions and decisions at all levels. A vision for a department is the guidance for the department and the subsection of the overall vision for the smaller unit to achieve. A vision for a specific outcome states the core focus of a particular task or a specific area which is applied in establishing or re-establishing a team. (Kourdi, 2015, 138.)

On one hand, a mission statement is defined as a short written description of how an enterprise improves the lives of its customers as stated by Tracy (2015, 33). Chaffey (2009, 289) recommends that it is necessary to ascertain business objectives and business goals while defining vision and mission statements. The purpose of business objectives as stated by Karami (2007, 44) is to transform the mission statement into specific purposes that guide the direction and activities of an enterprise.

Above all, the most significant point is that an enterprise should set vision and mission for e-commerce business since they will convey the purposes of its business to the employees and target customers (Chaffey, 2009, 289; Karami, 2007, 44; Shah and Dawson, n.d, 3). Additionally, the act of forming business objectives and goals is necessary to ensure the success of strategy implementation (Chaffey, 2009, 266).

**Step 3: Strategic planning**

According to Chaffey (2009)’s model, the next step after the environmental analysis and the vision and mission setting will be strategic planning. The strategic planning process involve three parts which are the clarification of e-commerce role, human resources
planning, and strategy selection (Shah and Dawson, n.d; Labuschagne & Eloff, 2002; Karami, 2007).

In Shah and Dawson (n.d)’s argument, one of the most important tasks in strategic planning is to determine the role of e-commerce and to do so, an enterprise must consider the characteristics of its business, the outcome of the environmental analysis, and its vision. These researchers also emphasize that a wrong decision might result in series of failure actions (Shah and Dawson, n.d, 2).

Labuschagne & Eloff (2002) propose that if enterprises decide to concentrate on e-commerce business, they must have a plan which specifies tasks and responsibilities of every employee and department. Particularly, the role of top management is highlighted because they are responsible for examining crucial factors for strategy formulation to adopt e-commerce such as taxation, foreign exchange, legislation, contract, and governmental policies, and govern the execution of the strategy. An e-commerce team could be established for the sake of administering electronic contracting, electronic payment and web management, and supporting pre-sales and post-sales activities such as delivery, ordering, payment methods and customer care. This team could also be responsible for coordinating with the supply chain department to seek for solutions on faster delivery and superior customer service. The last and equally important team is information security management unit which could be responsible for security matters related to transactions over the Internet. (Labuschagne & Eloff, 2002, 298-300.)

Karami (2007) suggests several e-commerce strategies which maximize one’s competitive advantages and minimize risks. The first e-commerce strategy is the employment of online systems for enhancing customer service by authorizing consumers and partners to get product and inventory information. This strategy facilitates the penetration of SMEs to large markets at minimum costs and offer customers with products at lower prices than competitors. The second e-commerce strategy is the use of a customer relationship management application, which is an online system, to connect SMEs with its customers. This strategy allows SMEs to respond immediately to customer questions and concerns, hence reducing customer waiting time and strengthening customer satisfaction. The third e-commerce strategy is the use of extranets to increase business to business connections. With this strategy, SMEs can be an intermediary linking larger businesses with very small suppliers so that enhancing inventory management. (Karami, 2007, 44.)
At this stage, enterprises generally make a decision about the role of e-commerce in their organizations, then planning actions and strategies accordingly to this decision so that ensuring the effectiveness of the adoption of e-commerce.

**Step 4: Strategy implementation**

Karami (2007, 59) describes strategy implementation as the process of transforming strategies and policies into actions through the development of programs, budgets, and procedures. According to Kourdi (2015), Shah and Dawson (n.d), and Stroh (2014), there are several factors affecting the implementation of a strategy.

The first factor is the business situation of an enterprise at the moment of strategy implementation (Kourd, 2015). Kourdi (2015, 128) explains that the implementation of an e-commerce strategy should harmonize with the operations of other departments, the competencies of employees and suppliers, the needs of target customers, and the capability of solving every confusion and conflict affecting the implementation. The second factor is the adaption of an enterprise’s culture to the initiation of e-commerce as stated by Shah and Dawson (n.d). The researchers recommend enterprises should incorporate e-commerce into their organization’s culture and provide training to managers and employees so that acknowledging the benefits and barriers in relation to the adoption of e-commerce (Shah and Dawson, n.d, 6). According to Stroh (2014, 158), communication and coordination is one of factors affecting strategy implementation because the ineffective communication and coordination between units might disorientate and pause the implementation of a strategy. This researcher recommends that to promote the integration of e-commerce into a business, it is important to have adequate supports of management teams, proper incentives and rewards, and commitments from employees (Stroh, 2014, 159).

To sum up, it can be understood from this stage that the implementation of an e-commerce strategy will generate unexpected results if there are unsolved conflicts, unsupportive corporate culture, and deficiencies in communication and coordination.
3 RESEARCH METHODOLOGY

3.1 Research design

The term “research design” can broadly be defined as the overall plan of a researcher towards answering the research questions (Saunders et al, 2012). Research design is generally classified into three types – exploratory, descriptive, and explanatory research designs (Saunders et al., 2000, 97). This research is designed according to an exploratory study which stresses the importance of comprehending what is happening; pursuing new insights; asking questions and assessing phenomena in a new light (in Robson, 1993, 42). This research applies an exploratory research approach because it attempts to provide not only theoretical answers but also practical answers to the research questions through the discussion with experts in the field by interviewing them. (Saunders et al, 2000, 97.)

One of the most important steps in designing research is to determine a research approach which is explained as an action plan for accomplishing a research covering the stages from wide-ranging assumptions to specific data collection methods, data analysis, and data interpretation (Saunders et al., 2000, Creswell, 2014, 31). This research follows the qualitative approach because the author is eager to gain a comprehensive understanding of the topic through researching about it from the fieldwork, so that increasing the opportunity of ascertaining or exposing new ideas and explanations that have not been mentioned in the theoretical discussions (Yin, 2011, 261).

Following the define of the research design is to find most suitable research strategies for answering the research questions and objectives (Saunders et al., 2000, 92-107). The research strategy, that is applied in this research is a single-case study concentrating on analyzing a single unit (Saldana, 2011, 8). By conducting a single-case study, the author examines the research questions more fully in an actual context to discover new information, so that the main findings contain more valuable points (Hancock, 1998, 7; Creswell, 2014, 43). To do so, it is critical to choose a case company which is relevant to the research nature and context. The author sent invitations by email to some popular small and medium-sized e-commerce enterprises in Vietnam; however, only few of them responded. After some discussions, the author gained an acceptance from Duyen One-Member Co,. Ltd, which is a small-size fabric enterprise in textile and
garment industry. The background information of the chosen case company is presented in section 3.2. Generally, the cooperation with the experienced enterprise in the textile and garment industry meets the author's motivation in conducting the research. Specifically, the concentration on the business of Thoi Trang Nam Minh Thien allows the author to comprehend how a small-sized enterprise in the textile and garment industry adopt e-commerce. With years of experience in the industry, the author believes that the corporate experience contribute valuable points to the study's findings.

The conduction of theoretical discussions on the subjects related to the research questions and then the determination of a research strategy to test them imply that the research follows a deductive approach (Saunders et al., 2000, 87). The application of the deductive approach is really helpful because this approach promotes the development of initial concepts, hence the author can avoid facing doubts when doing the fieldwork, especially in collecting data (Yin, 2011, 95).

3.2 Company background

Duyen One-Member Co., Ltd is a small-size fabric enterprise was established in 1987 by Mrs. Duyen Le in Ho Chi Minh, Vietnam. The enterprise offers different kinds of fabrics such as cotton, khaki, silk, nylon, and polyester to the clothing manufacturers, fabric retailers, tailors, and end consumers. The enterprise has a flat organizational structure in which bookkeeping, customer service, inventory and shipping, marketing, and information technology (IT) cooperates with each other to manage three businesses - Duyen, Thô Trang Nam Minh Thien (MT), and Kidsky under the instruction of Mrs. Duyen – the founder and CEO of the enterprise. The daily management of the aforementioned departments is assigned to a bookkeeping manager, a customer service manager, an inventory and shipping manager, a marketing manager and an IT manager who have good knowledge of the enterprise's businesses and years of experience. These managers are responsible for assuring the achievement of monthly goals and reporting the business progress to the CEO.

The primary business of Duyen One-Member Co., Ltd is Duyen. Its business objectives are to provide high-quality fabrics for its customers with an affordable price and fulfill the demands of different target groups. As Duyen is established based on a traditional business model, the enterprise still maintains a retail representative for Duyen in the Tan Binh market, Ho Chi Minh, Vietnam where the samples of fabrics are displayed to allow
customers physically feel the products and directly make orders with the store. The representative store does not only serve existing customers but also is in charge of attracting potential customers who usually shop at the market.

Unlike Duyen, Thoi Trang Nam Minh Thien and Kidsky were established on November 2015 as an attempt to penetrate the garment industry. Thoi Trang Nam Minh Thien (MT) specializes in manufacturing men's clothing as, for example, t-shirt, trousers, and shirts and then selling them in bulk to clothing wholesalers and retailers. Instead of following the traditional business model, MT pursues a dream of becoming one of the leading B2B e-commerce apparel brand names in offering high quality and fashionable clothes for men. The website of MT was officially open to customers on July 2016 as a consequence of this orientation. Mrs. Duyen Le expected that the adoption of e-commerce could strengthen the effectiveness of MT's business, enhance MT's image, increase the opportunity to gain new customers and so on. Throughout the last year, the company had been doing business with clothing retailers in not only Ho Chi Minh but also other cities such as Hue and Da Nang. Kidsky which a sub-brand of Duyên One-Member Co., Ltd also focuses on manufacturing clothes for kids in bulk and then selling them to the clothing wholesalers and retailers. Because there is less potential growth, the enterprise only manufactures this brand name’s products based on customers’ pre-orders.

3.3 Data collection method

A data collection method can be defined as a specific instrument, which is employed by the researcher to collect data for the purpose of answering the research questions (Creswell, 2014, 45). The main data collection technique, which is employed to collect primary data is a qualitative interview which is described as semi-structured interviewing, unstructured interviewing, in-depth interviewing, or focus interviewing (Hancock, 1998, 9; Saunders et al., 2000, 243; Yin, 2011, 134). The secondary data which are used in this research are collected from journal articles, reports, books, and the case company’s materials.

Qualitative interview is selected because it allows the intensive communication between the interviewer and interviewees, and encourages the interviewer to use different questions for different participants based on the context (Yin, 2011, 134). The interview questions which are used to obtain information from the interviewees are semi-structured questions designed in accordance with research questions. Besides, some questions
may be altered based on each interviewee’s specialty and the situation of the conversation. During the interview sessions, extra questions may be asked to gain more information from the interviewees or explore new insights. For further details of the interview questions, readers can see in Appendix 1. (Saunder et al., 2000, 243-244.)

Interviewees who participated in the interview sessions are the managers of Duyen One-Member Co., Ltd. The face-to-face interviews with the managers of the case company took place on February 22, 2017, and the average time of an interview session was 45 minutes. The main language of the interview sessions was Vietnamese. Due to a request from the case company, the interviewees’ names are not revealed publicly in this study. Thus, to protect its confidentiality, the author calls them as:

1. Mr. CH - Bookkeeping manager
2. Mrs. TD – Customer service manager
3. Mrs. MH – Inventory and Shipping manager
4. Mrs. MN – Marketing manager
5. Mr. MT - Information technology manager

As permitted by the enterprise and the interviewees, the answers of the interviewees to the interview questions are recorded in audio format; however, after transcribing the records of conversations into texts, they must be deleted. The information obtained from the interview sessions are summarized in the form of a report for further reference. (Saunders et al., 2000, 388.)

3.4 Qualitative data analysis

According to Yin (1994), there are two approaches which can be applied to analyse qualitative data – a deductive approach and an inductive approach. In qualitative data analysis, the use of a deductive approach implies that this process applies a pre-determined theoretical or descriptive framework to analyse data. In contrast, the application of an inductive approach in qualitative data analysis indicates that this process explores qualitative data without any theoretical or descriptive framework. (Saunders et al., 2000, 390-391). In this research, a deductive approach is applied because the structure of data analysis process is designed according to the research questions which were developed during the author’s process of reviewing the literature. Moreover, the process of analysing qualitative data in this research follows the model
suggested by Yin (2011) which addresses the importance of four significant steps to analyse qualitative data. The first step is to gather database which is the collection of necessary information from the fieldwork. The second step is to classify database which is the arrangement of collected information by topics. The third step is to interpret data which is the attempt of a researcher to describe and find the meanings of the events. The final step is to conclude the findings of the research. (Yin, 2011, 178-179).

After data collection, the author classified the data that were collected from the interview sessions into categories. The categories, which is designed in accordance with the research questions include the benefits of adopting e-commerce to business operations, factors affect the adoption of e-commerce in SMEs, barriers for SMEs to adopting e-commerce, and recommendations for building an e-commerce strategy. Once the report of the interview sessions is ready, the author presents it to the interviewees for the purpose of verifying the accuracy of the collected information. Other comments are added to improve the quality of the report of the interview sessions. When they are arranged in an order, the next step is to demonstrate the connection between the data and the research questions. Explaining the connection between the data and the research questions, the author is capable of concluding the study’s findings. Furthermore, the secondary data which are mentioned in the literature review are used in the chapter “Data Analysis” for the purpose of showing the difference between what have obtained from the literature and what have found from the case company.

3.5 Trustworthiness

Addressing trustworthiness in qualitative research shows that the research findings are worth being believed (Elo et al., 2014, 2). Qualitative researchers in pursuit of a trustworthy study are recommended to address the following criteria – credibility, transferability dependability, and conformability, which is adapted and promoted by Lincoln and Guba (1985) (Shenton, 2004, 64, Elo et al., 2014, Morrow, 2005).

The first criterion “credibility” is associated with the question “How congruent are the findings with reality?” (Shenton, 2004, 64). In other words, credibility questions research findings whether they would reflect or represent reality exactly (Brink, 1993, 35). To ensure that the study’s findings is in relation to the reality, several actions were taken throughout the process of finalizing answers to the research questions. In the research, the study’s findings were concluded from the combination between theoretical
discussions and empirical data. To build up theoretical discussions on the research questions, the author only collected relevant information from the quality sources which were journal articles, books, and reports. The purpose of this action was to assert that the study’s findings were in connection with an existing knowledge (Shenton, 2004, 69).

The process of collecting and analysing empirical data for the purpose of finalizing answers to the research questions was elaborated throughout this chapter, thus allowing other researchers to make a judgement. To avoid any misunderstanding, the interviewees were well-informed about the author’s purpose of conducting the research as well as their roles in accomplishing the research. By doing internship at the case company, the author developed a comprehensive view of the case company’s operations; hence, enabling the author to obtain the most relevant data regarding the process of integrating e-commerce into MT’s business activities from the interviewees.

The interviewees in this research were selected purposely instead of randomly for the sake of assuring that informants had the best knowledge regarding the topic (Elo et al., 2014, 4). The report of the interview sessions was presented to the interviewees for the purpose of verifying the accuracy of the collected information. Additional comments were also added in the report after the review in order to improve the quality of the report. Nevertheless, it can be recognized that there are errors affecting the credibility of the collected field evidence. Particularly, the main language of the interview sessions was Vietnamese, so the translation of the interviewee transcripts from Vietnamese to English might have affected the authentic meanings of their answers. Lastly, some data related to the integration of e-commerce into MT’s business activities could not be revealed in this research because containing confidential information.

The second criterion “transferability” is defined as the appropriateness and the applicability of the findings to other circumstance (Noble & Smith, 2015, 34). It is a common belief that the findings of qualitative research cannot be generalizable to all populations due to small sample sizes and lack of statistical analyses (Morrow, 2005, 252). Nevertheless, there is an argument stating that every case contains unique points and can be set as an example to a broader group, thus researchers should not instantly reject the prospect of transferability in qualitative findings (Shenton, 2004, 69). Shenton (2004, 70) and Morrow (2005, 252) recommend that the investigator should provide adequate information regarding the fieldwork, so that readers are able to make a decision how the findings may transfer. In the light of Shenton and Morrow, this research provided sufficient information regarding the case company, the interviewees, the selected data
collection method, the number and length of the interview sessions, and the time period which data was collected (see 3.2 and 3.3) for readers to make the decision. However, with regard of the employment of a single case study which focuses on a single industry, the purpose of this research is not to produce a theory that is generalizable to all populations. This research simply tries to explore what is going on in the particular research setting, so the findings cannot be generalized to other industries.

The third criterion “dependability” is related to the question “Would the findings of an inquiry be repeated if it were replicated with the same or similar participants in the same context?”. In a different way, dependability is understood as the constancy of data over time and under different conditions. (Elo et al., 2014, 4.) According to Shenton (2004, 72), it is significant for researchers to clarify in detail the processes applied in their studies in order for fellow researchers to repeat the work, if not necessarily to gain the same results. To fulfil this criterion, the author described what was planned and implemented in general (see 3.1) and what was done in the field (see 3.3) (Shenton, 2004, 72-73).

The last criterion “conformability” refers to an agreement that research is never objective (Morrow, 2005, 252). Conformability highlights two issues in which the data precisely portray the information that the participants provided and the interpretations of those data are not invented by the researcher (Elo et al., 2014, 5). However, Ratner (2002) claims that qualitative research acknowledges the researcher’s subjectivity in which subjectivity direct all procedures from the selection of topic to study, to the generation of research hypotheses, to the selection of methodologies, and data interpretation. Therefore, a researcher who pursues the qualitative approach is encouraged to show the values and objectives which being integrated the research, and how these influence the research (Ratner, 2002). In the research, the study’s findings were the results of the experiences and recommendations of the managers; however, this research was conducted by the author without any cooperation with other researchers, it was impossible to assure that the author’s knowledge did not affect the study’s findings (Shenton, 2004, 72).
4 DATA ANALYSIS

As stated in section 1.2, the aim of this thesis is to provide Vietnamese small and medium-sized enterprises with a knowledge of the process of initiating e-commerce. By comprehending what an organization gains from the adoption of e-commerce, what factors affect the adoption of e-commerce, what barriers limit new entrants to the e-commerce sector, the author believes that small and medium-sized enterprises will be able to develop a strategy which is appropriate for their capabilities to adopt e-commerce. The aim of conducting a case study research about Thoi Trang Nam Minh Thien is to gain practical information about the potential benefits of adopting e-commerce, factors affecting the adoption of e-commerce, barriers limiting new entrants to the e-commerce sector in Vietnam, and suggestions towards strategy formulation to embrace e-commerce. Henceforth, this chapter presents the results of the interview sessions between the author and the five managers of Duyen One-Member Co., Ltd, which is the owner of Thoi Trang Nam Minh Thien and then discusses differences between these results and theoretical discussions.

4.1 Potential benefits for Thoi Trang Nam Minh Thien to participate in the e-commerce sector

When the interviewees were asked about the benefits they thought e-commerce could have brought to Thời Trang Nam Minh Thien, all the interviewees agreed on the idea that the initiation of e-commerce could generate more benefits than following a traditional business model.

Particularly, the expansion of the customer base was the first opportunity which MT could obtain from the adoption of e-commerce. To illustrate this point, Mrs. MN compared business range between the traditional business and the e-commerce business. She said, “following traditional business meant that MT could be restricted within a region where the physical store located, for example, in the Tan Binh market. Although that location was popular with clothing wholesalers and clothing retailers, there were more potential customers outside the region which the enterprise could not reach. On one hand, an online store could allow the enterprise to actively reach out to new customers without any restriction. A well-developed e-commerce marketing plan could increase the
brand name’s awareness which could help the enterprise to attract more and more customers contributing to the expansion of its customer base. “We also thought that the adoption of e-commerce could connect MT with more suppliers who were willing to offer cheaper raw materials than the existing suppliers”, according to Mrs. MH.

The second opportunity, which MT could gain from the adoption of e-commerce could be a reduction in business costs. Mr. CH said, “one of the business costs, which could be reduced could be the expense of printed materials, such as the expense of processing documents such as contracts, catalogues, orders, invoices and distributing them to partners and customers”. By computerizing the whole system, the enterprise could be able to generate and process the necessary documents on the computer, then sending these documents to the receivers’ email accounts. He also added “the other business costs which could be reduced could be the expense of the advertisement”. The traditional types of advertisements costed the enterprise a lot of money per advertisement, while an advertisement on Facebook could allow the enterprise to present not only product information but also the business information. The last business cost which was mentioned by Mr. CH was the expense of the store maintenance. He said, “when MT was established on November 2015, the enterprise had a different business plan for this brand, including opening a brick-and-mortar store in order to do business with partners and potential customers. However, rental costs, employment costs plus distribution costs would have been more expensive than they are now after the adoption of e-commerce. With an insignificant amount of money, the enterprise was able to build up an online store with all of the functions, for example, receiving orders, communicating with customers, and obtaining feedback from customers about the products.”

Moreover, the adoption of e-commerce was believed to improve the buying-selling processes. According to Mrs. MH and Mrs. TD, the traditional business required customers to visit the physical store in order to select and order preferable products, then the salespeople informed the personnel in the warehouse to check whether the products were available before responding to the customers. Mrs. MH commented “with a variety of products in the warehouse, this process could take time, which the company might lose customers to other competitors”. With the application of e-commerce, customers are allowed to select needed products on the online catalogue, then placing orders on the online store. The employees could process the order immediately, then informing customers about other procedures and the delivery time, which could be better than the traditional manner.
In addition to these main points, the interviewees pointed additional benefits of the adoption of e-commerce, for instance, better customer relationship management and quicker update of the enterprise information. From the interviewees’ point of view, the adoption of e-commerce allowed the enterprise to use email and phone calls to promote MT’s new products instead of sending catalogs or sample products by post to every customer. The enterprise information on the website which could be pricing, product feature, catalogue and so on could be adjusted easily and updated quickly, allowing the potential customers to obtain the newest and accurate information about the enterprise’s products.

In brief, this far, this section has demonstrated that Vietnamese SMEs who attempt to move towards the e-commerce sector will get benefits from this decision. It can be observed that there are a number of similarities between the theoretical discussions and the empirical data on this topic. Specifically, the benefits of adopting e-commerce in the case study research are in connection with those in the theoretical discussions.

As previously mentioned in the literature review, the adoption of e-commerce by business operations brings tangible benefits and intangible benefits to an organization (Chaffey, 2009). Tangible benefits of implementing e-commerce technologies are considered as higher sales and revenue because of new customers, new markets, repeated orders of existing customers, less marketing cost, supply chain cost, managerial cost. Intangible benefits of implementing e-commerce technologies are understood as higher public awareness of corporate reputation, better transmission of the marketing messages to the market, quicker product development life-cycle in response to market needs, enhanced customer service, more experience in the future, higher level of customer expectations, and faster acquisition of customer feedbacks on products. (Chaffey, 2009, 31.) Thus, SMEs who participate in the e-commerce sector are able to discover new methods of adding value to new products, new services, and business models; expand their businesses into international markets; enhance their effectiveness; and co-operate with larger firms which can be their customers or suppliers or investors (Savrul et al., 2014, 44).

Likewise, Duyen One-Member Co, Ltd decided to integrate e-commerce into MT’s business activities because of the tangible and intangible benefits which it could gain from this decision. The initiation of e-commerce could bring tangible benefit such as the minimization of business costs, and intangible benefits such as the expansion of
customer base, the improvement of the buying-selling processes, customer relationship enhancement, and the faster update of the corporate information to MT.

4.2 Factors affecting the company's progress of adopting e-commerce

According to all the interviewees, there were several factors which interfered in the decision-making on whether to initiate e-commerce for MT. These factors are clarified in the following paragraphs.

Mr. MT claimed that the employees' skills, understandings, and experience of e-commerce were a prerequisite for developing a plan for the integration of e-commerce into MT's business activities; however, "most of the employees in the enterprise were inexperienced of managing e-commerce activities". Hence, it was crucial for the enterprise to train the employees to adapt to e-commerce activities; otherwise, the enterprise had to recruit experienced staffs, especially technical personnel. Technical personnel played an important role in the initiation of e-commerce since "they were responsible for assuring the operation, troubleshooting any issues if occurred and developing new applications."., said by Mr. MT.

Furthermore, Mrs. MN said, "some customers preferred to do business traditionally due to lack of knowledge of technologies, trust issues or personal preference". In this situation, the interviewee also advised that enterprises could be flexible and find a way to do business with these customers; otherwise, they might lose them to their competitors.

The last factor that was mentioned by Mr. CH/ Mrs. TD/ Mrs. MN/ Mr. MT that might have prevented the enterprise's decision to adopt e-commerce for MT, was online payment methods. The answers of Mr. CH and Mrs. MN indicated, "online payment has not been a popular payment method in Vietnamese market yet". Some customers preferred to do business traditionally and therefore they preferred a cash payment method. Nevertheless, "there are also customers who agree on a bank transfer payment method", according to Mr. CH. Thus, he recommended that enterprises should be flexible in offering various payment methods in order to meet customer requirement.

Additionally, the interviewees highlighted that factors influencing SMEs to initiate e-commerce could vary depending on the nature of a company's business and its industry. They also suggested SMEs to conduct an analysis of the readiness of their markets in
regards to e-commerce. This analysis specified a number of potential customers, the relevance of the enterprises’ products or services to e-commerce sector, the input market (the availability of suppliers of raw materials, technologies, equipments) and the output market (the willingness of target customers and markets to purchase the enterprises’s products or services, and the prediction of market growth in coming years). In addition, this analysis provided the enterprises with information regarding their competitors, the competitors’ popularity in the market, the competitors’ technologies to manufacture products, the competitors’ business plans and marketing strategies and so on. The result of this analysis could be useful for the enterprise to determine its competitive advantages which could be used to finalize an approach to e-commerce.

In brief, this section presents factors affecting the case company’s progress of adopting e-commerce. From the literature review and the results of the case study research on this topic, the author discovers that there are a number of similarities. Particularly, the theoretical discussions point out four factors affecting SMEs to adopt e-commerce - environmental factors, knowledge factors, organizational factors, and technology factors (Le and Pierre, 2006, 1337). Similarly, the results of the case study research showed that there were four particular factors influencing the decision of Duyen One-Member Co., Ltd to adopt e-commerce for MT. They were the experience of the employees to manage e-commerce activities, low customer awareness of e-commerce, and the unpopularity of electronic payment. These factors are related to knowledge factors and environmental factors, which are mentioned in the theoretical discussions. Additionally, the theoretical discussions mentions the importance of analysing external and internal factors in order to comprehend the readiness of the industries in regards to electronic market and the capability to survive in the e-commerce sector (Alnaser et al., 2013, 407; Mohammed and Almsafir, 2013, 407). Even though the empirical data did not mention the importance of analysing internal factors, they still emphasized that SMEs should analyze external factors in order to comprehend the readiness of their markets in regards to e-commerce.

4.3 Barriers limit new entrants to the e-commerce sector in Vietnam

The barriers that might prevent Vietnamese SMEs to participate in the e-commerce sector are presented in the following paragraphs.
As agreed by all of the interviewees, lack of the capital investment could restrain the development of e-commerce in SMEs in Vietnam. In order to overcome this hurdle, Mrs. MH recommended enterprises to prepare a good business plan which they could present to investors since there had been a lot of investors who were willing to invest in a promising business.

Customer habit was another barrier limiting new entrants to the e-commerce sector in Vietnam. Mrs. TD said, “some Vietnamese customers are still afraid of sending their private information when placing orders and purchasing items which they cannot not see or get less product information.” Therefore, Mrs. MN suggested, “enterprises should comprehend their target customer habit because this understanding is significant to ensure the effectiveness of the application of e-commerce”.

The characteristics of the products also limiting new entrants to the e-commerce sector in Vietnam. To illustrate this point, Mrs. MN gave an example of some products which could be difficult for an enterprise to sell online. “Groceries such fresh meats and vegetables are one of the products which will be challenging to find customers because Vietnamese customers will prefer purchasing them from in-store supermarkets than online ones so that they can check the quality of these products. Expensive items such as mobile phone, computers, or jewelry are also difficult to be sold online in which most of the Vietnamese customers will visit the stores to view the products then deciding whether they would buy.” She suggested enterprises to research about the demands for their products in the electronic markets before selling their products online.

According to all the interviewees, the application of e-commerce could be restricted and ineffective if there was not a good preparation for the initiation of e-commerce. There were several assumptions provided by the interviewees about the reasons why some Vietnamese enterprises failed to prepare a plan for adopting e-commerce. Mrs. MH pointed out that it was because of an insufficient understanding of e-commerce, its functions, and limitations. Mr. MT told, “some enterprises consider e-commerce as an advance of technology or a website; hence, there are no clear aims and objectives of the initiation of e-commerce or not even an appropriate strategy to develop e-commerce.” Mr. CH assumed, “the investment in e-commerce focuses on purchasing equipment instead of considering about preparing human resources, managing customer relationship, and reorganizing organizational structure.” Taking into consideration of these things could help enterprises not repeat the same mistake in planning for e-commerce.
Generally, the empirical data on barriers preventing Vietnamese SMEs to participate in the e-commerce sector are slightly similar to those of previous studies. The case study revealed that the main barriers preventing new entrants to the e-commerce sector in Vietnam were lack of capital investment, customer habit, and an ineffective planning. These barriers are in relation to people and organizational issues and customer habit which are mentioned in the theoretical discussions (Kuzic et al., 2002, 1609). One interesting finding was that the results of the case study research revealed the characteristics of the products as a barrier preventing new entrants to the e-commerce sector in Vietnam which have not been mentioned in the literature review.

4.4 E-commerce business plan

According to the answers of the interviewees, it was significant for enterprises to generate an e-commerce business plan for the integration of e-commerce into their business activities. Like a traditional business plan, the interviewees stated that an e-commerce business plan also went through three basic steps – the generation of a business plan, the execution of the business plan, and the business development. Among these stages, the generation of a business plan was the most important stage because it directed the path of the execution and the business development, and helped enterprises to determine whether the e-commerce project could be sustainable, effective and viable. Therefore, it was suggested by the interviewees that other enterprises should consider generating an e-commerce business plan in order to achieve expected results.

The process of generating an e-commerce business plan for the initiation of e-commerce in MT involved three significant steps. The following steps were based on the enterprise’s previous experience of integrating e-commerce into business activities together with the interviewees’ additional suggestions.

Step 1: Determine the aims of an e-commerce project

From Mrs. MN’s perspective, enterprises wanted to adopt e-commerce because of a lot of reasons, for example, they wanted to increase sales, penetrate to a new market, provide a better customer service, look for a new source of partners, and so on. For Duyen One-Member Co., Ltd, the adoption of e-commerce aimed at increasing the opportunity to gain new customers and suppliers, reducing business costs, improving the buying-selling processes, improving customer relationship management, and facilitating a quick update of the product and enterprise information.
According to the interviewees’ opinions, the aims of adopting e-commerce could vary depending on the size of an enterprise and its business scope. For instance, a small-sized enterprise might want to build up a website for the main purpose of displaying product information in order to attract more customers. In this example, the purchase of products took place at the enterprise’s location rather than in the online store and therefore the cost of designing, building up, and maintaining the website could be lower than the one with comprehensive functions such as auction, transaction, online communication and so on, according to the perspectives of Mrs. TD and Mr. MT.

In sum, the interviewees addressed that enterprises must have an understanding of the aims of the e-commerce project, because this comprehension could help enterprises to estimate benefits and expenses of fulfilling them and then decide whether to continue adopting e-commerce.

**Step 2: Estimate the benefits and the expenses of the e-commerce project**

According to Mrs. MN, “the estimation of the benefits and the expenses of the e-commerce project helped the enterprise to decide an appropriate resource allocation for the integration of e-commerce into business activities”. By understanding the benefits and the expenses of the e-commerce project, the enterprise could also identify risks of adopting e-commerce and risk of not adopting e-commerce. The identification of these elements could be beneficial to determine whether the enterprise was ready to initiate e-commerce, as stated by Mrs. MH.

To estimate the benefits and the expenses of the e-commerce project, enterprises were suggested to attach one of the aims of the e-commerce project to the current business strategies. In the context of MT, the enterprise applied e-commerce to its business strategies in order to enhance the values of MT’s products, services, and image, and decrease MT’s business costs. E-commerce could help the enterprise to obtain customer feedbacks about MT’s products/services, sell MT’s products, build up MT’s brand name, etc.

Mr. CH stated that the estimation of the tangible benefits of the e-commerce project was easier than that of intangible benefits. He also gave an example to illustrate this point as the calculation of a number of goods sold was less difficult than the estimation of the level of customer loyalty. When identifying the benefits of the e-commerce project, the interviewees advised enterprises to consider the measurable benefits, even if they were the intangible benefits. Below we see several examples which were used to estimate
several benefits of the adoption of e-commerce in MT based on the answers of Mrs. TD/ Mrs. MH/ Mrs. MN.

The first example mentioned related to the method of estimating the level of customer loyalty. Particularly, the level of customer loyalty could be measured through the number of repeat orders of the same customers and/or the number of customer complaints. The second example discussed the estimation of brand awareness. In other words, some companies created websites for the main purpose of promoting their brand names, and in order to measure this benefit, these companies could conduct a market research or obtain customer opinion to conclude the popularity of their brand names. Besides, the brand awareness could be measured by investigating or doing surveys about the brand awareness. The last example indicated a way to measure the improvement of the distribution system after the adoption of e-commerce. To be specific, the improvement of the distribution system could be measured through the distribution costs and distribution time.

Following the estimation of the benefits of the e-commerce project could be the estimation of the expenses of this project. Mr. MT/Mr. CH/ Mrs. TD/ Mrs. MH indicated that the expenses of the adoption of e-commerce could be considered as an initial investment. The amount of the initial investment varied based on the aims of the e-commerce project. For example, the purchase of hardware (server, computers, routers, firewall) and software (operating system, web server software, database software, application software), the expenses of web design, the expenses of recruiting experienced personnel, the expenses of maintaining websites, etc. Mr. MT advised that it could be a good idea to use the services offered by web hosting companies if companies were inexperienced in e-commerce or lack of skillful employees.

Importantly, Mr. CH suggested that enterprises should quantify those benefits and costs into specific numbers for comparison. ROI, which is an acronym for return on investment, was suggested in this situation in order to make the decision whether to continue adopting e-commerce or not. ROI could be calculated by dividing income by cost of investment; however, it is significant to remember to use the actual amount of cash moving in and out of a business over a period of time (Knight, 2015; Investopedia, n.d). If the result was greater than one, the e-commerce project would have a potential to generate profits. However, Mr. CH also said that the adoption of e-commerce could be compulsory for some enterprises in order to continue surviving in their industries in the
future. Therefore, the calculation of ROI should take into consideration about the future income and long-term benefits.

**Step 3: Prepare a plan for the implementation of the e-commerce project**

After comprehending the aims of the e-commerce project, the benefits and the costs of doing it, the enterprise was ready for preparing a plan for the implementation of the e-commerce project. The interviewees pointed out that this implementation plan involved five key steps which were illustrated in the following example of planning for the introduction of MT’s online store.

The first step in the process of planning for the initiation of MT’s online store was to define the structure of the online store. Mr. MT explained that the online store, which could be understood as the website, had at least four web pages. The home page presented the basic information about the brand name MT as well as the company and contain links connected to other web pages containing MT’s product information and contact information. The second web page described all kinds of products including their images, while the third web page showed the enterprise’s history, location, news, and outdoor activities pictures. The final web page was an online form for customers to express their opinions or ask questions together with MT’s contact information.

The next step after defining the structure of the online store was to generate a flowchart about procedures for the introduction of the online store. Figure 4 illustrates a well-structured flow chart for introducing an online store at the case company.
Figure 4 indicates that it is critical for the enterprise to create a website and prepare human resources to manage the website in order to introduce an online store for MT. The creation of a website demands a website’s interface, a content and a web service infrastructure. Mr. MT addressed that the communication with customers could be easier and more effective depending on how intuitive website interface and informative content. In addition, the introduction of the online store required the enterprise to have employees who must be capable of managing e-commerce activities and communicating with foreign customers.

By mapping all the steps for the introduction of the online store, it was easier to determine the tasks which should be achieved in order to gain the expected results, which was also the third step. Particularly, the enterprise had to collect information, gather images related to its businesses and products, and then process them in order to upload to the website for the purpose of building the website’s contents. To design a web service infrastructure, it was significant to create a network infrastructure by installing the Internet, and create a web server by installing web server software and hardware. Additionally, the management of e-commerce activities and the communication with foreign customers required to have some employees who were capable of maintaining web contents and web services, and some employees who had a good knowledge of English. Mrs. TD and Mrs. MN stated that the enterprise also generated a process,
sample conversations, and emails which employees could utilize to communicate with the foreign partners.

With an understanding of the tasks that must be achieved, the enterprise could prepare a manpower planning, specifying which tasks were insourced or outsourced and which skills needed to perform each task. In relation to the aforesaid tasks, an example of the manpower planning for the introduction of MT’s online store was summarized in Table 4.

Table 4. A manpower planning for the introduction of MT’s online store

<table>
<thead>
<tr>
<th>Tasks</th>
<th>People in charge</th>
<th>Required skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design the website’s layout and interface</td>
<td>Outsourcing</td>
<td>Web design</td>
</tr>
<tr>
<td>Create Web content</td>
<td>An internal employee</td>
<td>A good knowledge of English, and an understanding of the company’s history, product and service.</td>
</tr>
<tr>
<td>Collect images of the company’s activities and MT’s products</td>
<td>An internal employee</td>
<td>Photography</td>
</tr>
<tr>
<td>Edit the images in order to upload to the website</td>
<td>Outsourced</td>
<td>Web design</td>
</tr>
<tr>
<td>The internet installation</td>
<td>Outsourced</td>
<td>Data networks</td>
</tr>
<tr>
<td>The hardware and software web server installations</td>
<td>Outsourced</td>
<td>Hardware installation, web server installation, and web server configuration.</td>
</tr>
<tr>
<td>The installation of web content management</td>
<td>Outsourced</td>
<td>Web content management</td>
</tr>
<tr>
<td>Train employees who would be responsible for maintaining web contents</td>
<td>Outsourced/Recruiting new employees</td>
<td>Web content management and web services.</td>
</tr>
<tr>
<td>Create a process to communicate with foreign customers</td>
<td>An internal employee</td>
<td>Customer relationship management and an understanding of the company’s internal process.</td>
</tr>
<tr>
<td>Task</td>
<td>Responsible Party</td>
<td>Required Skills</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Create sample conversations and emails to communicate with foreign customers</td>
<td>An internal employee</td>
<td>A good knowledge of English and customer relationship management.</td>
</tr>
<tr>
<td>Prepare human resources to communicate with foreign customers</td>
<td>Training/Recruiting new employees</td>
<td>Strong English communication skills</td>
</tr>
</tbody>
</table>

Table 4 specifies the people in charge of every task and the required skills of the people to accomplish these tasks. Particularly, the enterprise decided to outsource the design of the website’s layout and interface to a company which had skills in web design. The creation of web content was assigned to an internal employee who spent two hours per day in three months to accomplish it and had a good knowledge of English, the company’s history, product and service. The collection of the images of the company’s activities and MT’s products was assigned to an internal employee who had skill in photography. The process of editing images in order to upload to the website was outsourced to a company who had skill in web design.

The internet installation was outsourced to a company who had skill in data networks. The hardware and software web server installations were outsourced to a company who had skill in hardware installation, web server installation, and modifying web server configuration. The installation of web content management was outsourced to a company who had skill in web content management. The training of employees who was responsible for maintaining web contents was outsourced to a specialist who had skill in web content management. However, Mr. MT claimed that for the enterprise’s long-term benefit, recruiting experienced employees who possessed skills in running web services, to be responsible for maintaining web services was critical.

The creation of a process to communicate with foreign customers was assigned to an internal employee, who was also known as online customer service staff. This tasks usually required the employee to be active online one hour per day, had skill in customer relationship management, and comprehended the company’s internal process. The creation of sample conversations and emails to communicate with foreign customers was assigned to an internal employee who spent an hour per day to do this task. This employee must have skill in customer relationship management. Because English played a highly important part in the company’s e-commerce strategy, it was a
requirement for its employees to be able to communicate and serve customers in the English language. For current employees who did not have strong English skills, MT provided training sessions for them. In several cases, hiring new employees might be needed.

Once identifying the human resources to perform the tasks, it was important to create a timeline indicating the exact time for accomplishing each task. To begin with, all the tasks needed to be put into an order which the important ones must be given more priority. When the tasks were sorted by order, the next job was to determine an appropriate time to finish each task. Importantly, the interviewees suggested enterprises to notice the ability of the internal employees when assigning tasks, so that the estimation of the time could be more accurate. In addition to this point, Mrs. MH and Mr. MT stated that enterprises should be flexible in determining the finished times of the works outsourced. The accomplishment of all the tasks in accordance with the timeline was vital for the success of the project; otherwise, a delay might lead to many negative consequences.

Until now, the plan for the introduction of the online store has been almost completed in all the major parts had been mentioned. Other parts, which had not been discussed, were a purchase plan, a project budget, and a summary of the project plan. In specific, the purchase plan specified the needed technologies and equipment for the introduction of the online store together with the times which the purchases would occur. The project budget determined the expenses of the project, the amount of money invested in the project, and the monthly spending on the project. The summary of the project plan provided a summary of all the mentioned information, demonstrated how a project would be executed, and acted as a guidance for the project team to follow. Moreover, the summary of the project plan involved three significant points – a change management plan, a communication plan, a risk management plan, and an evaluation report. In specific, the change management plan included a backup plan for any changes which might happen due to the changes of the project scope. The communication plan described every method how the project team members contacted each other, and how others contacted with the project team; meanwhile, the risk plan pointed out risks related to the project and suggested actions to avoid them. The evaluation report reviewed the entire implementation process of the project and compared the final outcomes with the aims of the project for the purpose of identifying factors affecting the effectiveness of the project.
Summarily, this section presented key steps which MT applied to generate an e-commerce business plan. The empirical data on the generation of an e-commerce business plan is considered as being different from the theoretical discussions on key steps to develop an e-commerce strategy. To facilitate this comparison, two models are portrayed in Table 5.

Table 5. The models of the process of adopting e-commerce suggested by theoretical discussions and case study.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>The formulation of an e-commerce strategy</th>
<th>The generation of an e-commerce business plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conduct an environmental analysis</td>
<td>Determine the aims of an e-commerce project</td>
</tr>
<tr>
<td>Step 2</td>
<td>Set vision and mission</td>
<td>Estimate the benefits and the expenses of the e-commerce project</td>
</tr>
<tr>
<td>Step 3</td>
<td>Strategic planning</td>
<td>Prepare a plan for the implementation of the e-commerce project</td>
</tr>
<tr>
<td>Step 4</td>
<td>Strategy implementation</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5 indicates that the formulation of an e-commerce strategy in the literature is more comprehensive than the generation of an e-commerce business plan in the case study. To be specific, the steps of the model of the case study can be seen as parts of the steps of the model of the literature review. Besides, there is a major difference between these models in which the case company did not conduct any environmental analysis during the process of generating an e-commerce business plan. Nevertheless, the conduction of an environmental analysis is highly recommended in the literature due to its importance (Labuschagne and Eloff, 2002, 292; Shah and Dawson, n.d, 5). Hence, this step should be taken into consideration when developing an e-commerce strategy or an e-commerce business plan.
5 CONCLUSION

5.1 Summary of the main findings

To provide Vietnamese SMEs with a thorough research, the research aimed to answer the following research questions:

1. What are the benefits for SMEs to participate in the e-commerce sector in Vietnam?
2. What are the factors that affect SMEs to participate in the e-commerce sector in Vietnam?
3. What are the barriers for SMEs to adopting e-commerce in Vietnam?
4. How should SMEs develop strategies to initiate e-commerce in Vietnam?

According to section 1.3, the purpose of answering the first question “What are the benefits for SMEs to participate in the e-commerce sector in Vietnam?” is to provide Vietnamese SMEs with an understanding of the potential benefits which they can get from adopting e-commerce. Comprehending benefits of integrating e-commerce into business operations allows Vietnamese enterprises to determine whether they should adopt e-commerce. In the literature, the benefits of adopting e-commerce in SMEs has been greatly realized and affirmed by many authors and therefore Vietnamese SMEs that try to adopt e-commerce in their businesses will be likely to gain benefits from this decision (Chaffey, 2009; Savrul et al., 2014; Pham, 2014).

The results of the case study research indicate that Duyen One-Member Co., Ltd decided to adopt e-commerce because it comprehended the tangible and intangible benefits which MT could gain from this decision. To be specific, the tangible benefits, which the case company could get from the integration of e-commerce into MT’s business activities was a reduction in business costs such as the cost of processing documents, the cost of advertisement, and the cost of the store maintenance. The intangible benefits, which the enterprise could get from that decision were the expansion of customer base, an opportunity to improve the buying-selling processes, an improvement in customer relationship management, and a faster update of the corporate information.

Due to factors which might affect Vietnamese SMEs to participate in the e-commerce sector, the answers to the second question “What are the factors that affect SMEs to
participate in the e-commerce sector in Vietnam?” help them to comprehend factors affecting their adoption of e-commerce and barriers limiting new entrants to the e-commerce sector. With regards to the theoretical discussions, there are four factors affecting the decision of SMEs about adopting e-commerce, and they are environmental factors, knowledge factors, organizational factors, and technology factors (Le and Pierre, 2006, 1337). Among them, knowledge factors and environmental factors are asserted to affect the case company’s progress to the e-commerce sector. In specific, these knowledge and environmental factors are the experience of the employees to manage e-commerce activities, low customer awareness of e-commerce because of lack of knowledge of e-commerce, trust issues, and personal preference, and the unpopularity of electronic payment.

As addressed by the interviewees, factors influencing a company’s process of adopting e-commerce could vary depending on the nature of the company’s business and its industry. Hence, SMEs are suggested to conduct an analysis of external and internal factors in order to comprehend the readiness of their industries in regards to electronic market and the capability to survive in the e-commerce sector (Alnaser et al., 2013, 407; Mohammed and Almsafir, 2013, 407). Especially, the analysis of the external factors could be useful for the enterprise to determine its competitive advantages which could be used to finalize an approach to e-commerce.

By answering the third research question “What are the barriers for SMEs to adopting e-commerce in Vietnam?” the author provides readers with information on barriers preventing new entrants to the e-commerce sector in Vietnam. The results of the case study research point out that they are related to lack of capital investment, customer habit, the characteristics of the products, and an ineffective planning. Additional barriers, which are concluded from the theoretical discussions are security system, technology development, customer service, market competition, and national legal system (Kuzic et al., 2002, 1609).

The purpose of answering the fourth research question “How should SMEs develop strategies to initiate e-commerce in Vietnam?” is to provide Vietnamese SMEs with an understanding of the process of integrating e-commerce into business activities. As suggested by the case company, the generation of an e-commerce business plan is significant in order to achieve expected results. Additionally, it is important because it directs the path of the execution and the business development, and helps enterprises to determine whether the e-commerce project will be sustainable, effective, and viable.
According to the theoretical discussions on the conduction of an environmental analysis, it allows an organization to comprehend its capabilities, identify the critical factors that determine its future success in the competitive marketplace, and prepare for actions to minimize risks and maximize advantages (Labuschagne and Eloff, 2002, 292; Shah and Dawson, n.d, 5). Hence, conducting an environmental analysis is an important step and can not be ignored. As the purpose of this study is to suggest strategic planning for SMEs who are interested in adopting e-commerce in their business, the author integrates what have been discussed in the literature as well as new insights from the results of the case study to build up more appropriate and comprehensive suggestions for the enterprises in concern. As a results, the complete model of strategy formulation for SMEs to adopt e-commerce to their business could be:

Step 1: Environmental analysis
Step 2: Vision and Mission
Step 3: Strategic planning (including the estimation of costs and benefits)
Step 4: Plan implementation

5.2 Suggestions for future studies

Although there are more small and medium-sized enterprises in different industries in Vietnam which have already adopted e-commerce, this research can only obtain information from a single company in a single industry due to the limitation of time and resources. Hence, future studies are suggested to explore the processes which companies in various industries employed to integrate e-commerce into business. To investigate in the larger scale, the employment of both quantitative and qualitative approaches is highly recommended. With regard to quantitative approach, future studies can use questionnaires or structure interviews to collect various opinions in terms of benefits of adopting e-commerce, factors and barriers affecting the progress of adopting e-commerce, and the processes of integrating e-commerce into business activities. By following qualitative approach, future studies are suggested employing multiple case study to explore these subjects in-depth.
REFERENCES


Hancock, Beverley. Trent Focus for Research and Development in Primary Health Care: An Introduction to Qualitative Research. Trent Focus, 1998


Interview questions

Question 1: Could you introduce yourself?

Question 2: What were the intention of the enterprise when deciding to enter e-commerce sector?

Question 3: What types of e-commerce did the company plan for Thoi Trang Nam Minh Thien to follow?

Question 3.1: Why was B2B e-commerce business model?

Question 4: What were the benefits did the enterprise think that e-commerce would bring to Thoi Trang Nam Minh Thien?

Question 5: What were factors do you think that might affect the adoption of e-commerce in SMEs in Vietnam?

Question 6: What were factors affecting the progress of MT to adopt e-commerce?

Question 7: What barriers do you think that might prevent SMEs in Vietnam to adopt e-commerce?

Question 7.1: Do you have any suggestion for other SMEs to overcome these difficulties?

Question 8: How was your initial experience when the enterprise started to initiate e-commerce?

Question 9: Do you have any suggestion regarding the process which SMEs should follow to initiate e-commerce in Vietnam?

Question 9.1: Why is it important to have a plan for initiating e-commerce?

Question 9.2: Could you give some examples of how to estimate the mentioned benefits?

Question 9.3: Can you give some examples of needed applications for the initiation of e-commerce?

Question 9.4: Were there any changes in other business functions regarding the initiation of e-commerce?
Question 9.5: Are there any side effect of e-commerce to the current business strategy of the company?

Question 10: How do you evaluate the effectiveness of your plan towards the initiation of e-commerce?