

**Farjana Akhtar**

**GROWTH AND CHALLENGES OF E-COMMERCE**

**A Comparison between Bangladesh and Finland**

**Master's Thesis**

**CENTRIA UNIVERSITY OF APPLIED SCIENCES**

**International Business Management**

**September 2019**

**ABSTRACT**

<b>Centria University of Applied Sciences</b>	<b>Date</b> September 2019	<b>Author</b> Farjana Akhtar
<b>Degree programme</b> International Business Management		
<b>Name of thesis</b> GROWTH AND CHALLENGES OF E-COMMERCE. A comparison between Bangladesh and Finland		
<b>Language instructor</b> Eija Torkinlampi		<b>Pages</b> 40+ 2
<b>Supervisor</b> Katarina Broman		
<p>This thesis aimed at examining the growth and challenges of e-commerce in Bangladesh. Moreover, this thesis will also compare the growth and challenges of e-commerce in Bangladesh with Finland. The main problem was that there has been a positive growth of e-commerce in both Bangladesh and Finland, but this growth is faced with challenges which this thesis sought to determine. The research also tried to examine the overall case of e-commerce in Bangladesh and Finland.</p> <p>The preparation of this thesis was as a result of the analysis of several studies done on e-commerce. E-commerce has a great chance of evolving in Bangladesh. The government of Bangladesh has secured various measures to ensure that e-commerce is highly practiced in this particular nation. Such measures include availing necessary facilities for e-commerce to be conducted smoothly. The government of Bangladesh supports e-commerce because through it, growth and production will expand. The government also minimized the regulatory requirement of e-commerce.</p> <p>This thesis is descriptive in nature. The thesis has used relevant research findings from secondary sources such as the journals, the newspapers, books and periodicals. The internet was also a relevant source of data. Besides, the thesis applied the use of primary data whereby questionnaires were supplied to respondents in Bangladesh and Finland. Empirical analysis on the feedback was later conducted, and findings and recommendations drawn.</p> <p>The thesis found out that Bangladesh is lagging behind in e-commerce transactions as compared to Finland. The main reason being lack of information on e-commerce. The thesis also found out that there is high potential for growth in Bangladesh e-commerce. This was propelled by the fact that many entrepreneurs in Bangladesh showed the willingness to apply software use in transactions. However, the government needs to conduct education on e-commerce usage and e-commerce applications. This will shed light on both the entrepreneurs and the general public on the advantages that come with the use of e-commerce as a form of business transaction.</p>		

<p><b>Key words</b> Credit cards, Debit cards, E-commerce platform, Gross domestic product, Internet access.</p>
--

## **CONCEPT DEFINITIONS**

<b>E-Commerce</b>	Electronic commerce
<b>B2B</b>	Business to Business
<b>B2C</b>	Business to Consumers
<b>B2A</b>	Business to Administration
<b>C2C</b>	Consumers to Consumers
<b>C2B</b>	Consumers to Business
<b>C2A</b>	Consumer to Administration
<b>B2G</b>	Business to Governments
<b>BTRC</b>	Bangladesh Telecommunication Regulatory Commission
<b>EFT</b>	Electronic Funds Transfer
<b>EDI</b>	Electronic Data Interchange

**ABSTRACT**  
**CONCEPT DEFINITIONS**  
**CONTENTS**

<b>1 INTRODUCTION.....</b>	<b>1</b>
<b>2 STATUS OF E-COMMERCE .....</b>	<b>3</b>
<b>2.1 Theories of e-commerce .....</b>	<b>3</b>
<b>2.1.1 Social construction of technology theory .....</b>	<b>3</b>
<b>2.1.2 System theory .....</b>	<b>3</b>
<b>2.1.3 Adoption theory.....</b>	<b>4</b>
<b>2.1.4 Innovation theory of profits .....</b>	<b>4</b>
<b>2.1.5 Innovation diffusion theory .....</b>	<b>5</b>
<b>2.1.6 Stakeholders theory .....</b>	<b>6</b>
<b>2.2 Empirical studies on e-commerce.....</b>	<b>6</b>
<b>2.3 State of e-commerce in Bangladesh and Finland .....</b>	<b>8</b>
<b>2.4 The need for e-commerce in Bangladesh.....</b>	<b>12</b>
<b>2.5 History of e-commerce in Bangladesh and Finland.....</b>	<b>13</b>
<b>2.6 Sources of funds for e-commerce in Bangladesh and Finland .....</b>	<b>15</b>
<b>2.7 E-commerce business revenue in Bangladesh and Finland between 2010 and 2016.....</b>	<b>19</b>
<b>3 RESEARCH AND REPORTING METHODS .....</b>	<b>22</b>
<b>3.1 Research strategy .....</b>	<b>22</b>
<b>3.2 Research design .....</b>	<b>23</b>
<b>3.3 Research methodology.....</b>	<b>24</b>
<b>3.4 Data collection and the study area.....</b>	<b>26</b>
<b>4 RESEARCH ANALYSIS .....</b>	<b>29</b>
<b>4.1 Information from respondents.....</b>	<b>29</b>
<b>4.2 Challenges facing the current ecommerce business.....</b>	<b>30</b>
<b>4.3 Usage of software application .....</b>	<b>31</b>
<b>4.4 Management of the e-commerce Website .....</b>	<b>32</b>
<b>5 RESEARCH FINDINGS AND CONCLUSIONS.....</b>	<b>33</b>
<b>5.1 Summery of research.....</b>	<b>33</b>
<b>5.2 Discussion.....</b>	<b>34</b>
<b>5.3 Recommendations.....</b>	<b>37</b>
<b>5.4 Policy implications .....</b>	<b>37</b>
<b>6 CONCLUSION.....</b>	<b>39</b>
<b>REFERENCES.....</b>	<b>41</b>
<b>APPENDICES</b>	
<b>FIGURES</b>	
<b>FIGURE 1. Number of online shoppers in Finland in millions.....</b>	<b>10</b>
<b>FIGURE 2. Growth of E-commerce in Bangladesh between the years 2010 and 2016.....</b>	<b>14</b>
<b>FIGURE 3. Growth of E-commerce in Finland between the years 2010 and 2016 .....</b>	<b>15</b>
<b>FIGURE 4. Gender of ecommerce consumers.....</b>	<b>29</b>

FIGURE 5. Age of ecommerce consumers.....30

**TABLES**

TABLE 1. Revenue generated by the e-commerce business in Bangladesh between 2010 and 2016 ...19  
TABLE 2. Revenue generated by the e-commerce business in Finland between 2010 and 2016.....20

## 1 INTRODUCTION

Electronic commerce is a term associated with online transactions. E-commerce is a situation in which goods and services are sold through the internet. Currently, e-commerce is the trending form of performing business. As a result of expanding internet services, there has been an enormous growth of e-commerce over the recent years. This thesis will analyze the growth and challenges of e-commerce in Bangladesh and Finland. In the year 2017, internet users crossed about 67 million users in the first nine months. By the year 2016, there were about 3.8 billion users of the internet in the entire world. About 50% of the global population was able to access the internet during that year.

Most of the internet users were from the south and East Asia. China, India, USA, Brazil, and Japan were the top five countries with the highest number of internet users. China was the leading with about 725 million internet users followed by India which was ranked second with about 450 million users followed by the U.S, Brazil, and Japan consecutively. According to Bangladesh Telecommunication Regulatory Commission (BTRC), the country entered a new era of internet access in the year 2016 whereby about 94% people were using the internet during that year through their mobile phones. The key product categories in the e-commerce markets in Bangladesh are the tickets such as the railway, air travel and the bus tickets, the baby consumables and financial services, the electronic products, clothing, jobs, and the electronic items.

The thesis aims to investigate the growth and challenges of e-commerce in Bangladesh as well as to make a comparison between Bangladesh and Finland. The main problem facing the e-commerce companies in Bangladesh is the lack of persons who are willing to use the debit cards as well as the credit cards for their daily transactions. According to the recent statistics, there are only about 5.5 million debit cards and about 1.2 million credit cards that are meant to be used by approximately 154 million of the entire population in Bangladesh. Out of this, about only one percent of the people who have the debit cards use it to carry online purchases. The remaining people only activate them at the automated teller machine (ATMs). The use of automatic teller machines is usually as a result of a lack of knowledge among the consumers of the use of debit cards. Moreover, there is an insufficient number of infrastructures that are customer friendly.

Therefore, it is of great importance that this thesis comes up with several relevant applications which will have their functions built around the attitude and culture of Bangladesh and Finland to aid in the

operations of e-commerce. Most of the applications in the market share will have their overall performing functions which might necessarily not have an impact in traditional businesses. Furthermore, this thesis aims to discuss the importance of using software application in revenue monitoring inside the organization.

The research task is to identify the rate of growth of e-commerce in Bangladesh, and to discuss the challenges facing growth in Bangladesh and identify how growth and challenges in Bangladesh compare to Finland. Besides, the thesis will also evaluate the challenges faced by e-commerce in Bangladesh and compared the growth and challenges of e-commerce in Bangladesh with Finland. Lastly, the research will provide an understanding of formulation policies required for e-commerce. The research targets various stakeholders who may have an interest in the provision of e-commerce in Bangladesh as well as the people who may wish to switch to the use of both debit and credit card. This thesis may not cover all the aspects of e-commerce in Finland and Bangladesh due to limitations such as lack of data regarding income as a result of e-commerce in Bangladesh and Finland.

The thesis is divided into six chapters, beginning with the introduction, which discusses the background of the thesis, emphasis on the importance of why this research needs to be done. After the introduction is the status of e-commerce that reviews both the theories and empirical studies on e-commerce. This part will also discuss the need for e-commerce in Bangladesh, the history of e-commerce in both Bangladesh and Finland and the sources of funds for the e-commerce entrepreneurs. The empirical studies evaluate previous researches written by different authors on the topic. Articles, journals, reports and other scientific materials are going to be reviewed as part of the secondary data. Chapter three discusses the methodology that will be used in the thesis as well as the sample and population of the respondents. The analysis and the presentation of data follows the methodology which is chapter four.

The fifth chapter presents the discussion on the findings and recommendation about the research. The findings will be based on information gathered in this research. The researcher makes clear recommendations that could be used in the future, either by an entrepreneur or any individual willing to undertake further studies in the topic. The sixth chapter concludes the thesis with the summary of the whole dissertation, giving out criticisms as well as the final presentation on the study.

## **2 STATUS OF E-COMMERCE**

This chapter reviews both the theories and the empirical studies on E-commerce. The chapter reviews several theories that are related to this topic as well as similar studies that have been covered by other authors. This chapter also discussed different source funds, history and need of e-commerce both Finland and Bangladesh.

### **2.1 Theories of E-commerce**

The following section provides discussion on some of the theories of ecommerce. This discussion outlines some of the effects of technology. The theories presented include the social construction of technology theory, systems theory, adoption theory, innovation theory of profits, innovation diffusion theory and stakeholder's theory.

#### **2.1.1 Social construction of Technology Theory**

This is often referred to as SCOT theory. This dwells on the work done by several researchers from the school of sociology of scientific knowledge. This theory states that human action impacts on technology. The theory argues that technology cannot be accepted if people do not know how that technology is socially inclusive. This theory believes that technology emerges from interactions of people in their day to day activities. There are no right or harmful technologies as all technologies can be made to suit the users need. This theory disagrees with the conventional view that the technology is determined by itself and it unfolds over time to meet different needs of the society. (Tosoni & Pinch 2016.)

#### **2.1.2 Systems Theory**

System theory was meant to understand the complexity of the social, economic and biological systems. Usually, a system is defined as a set of interrelated units that work to achieve a set of stated objectives. System theory, therefore, provides a base for the identification of an entity hence the ability to understand the existence by which several groups of elements can be studied jointly. The relevance of the

system theory is that it involves a variety of concepts such as the boundary, the output, inputs, control, and feedback. A good illustration of a system is the information system. (Saunders 2014.)

E-commerce utilizes several practices to attract as well as retain customers. Since e-commerce is computer embedded, it is subjected to the risks that are as a result of the uncertainty related to system dependency. Extensive technological infrastructure or the transaction specific features are said to be the major causes of system-dependent insecurity. The risks associated with the system-dependent characteristic, therefore, inspire the role of trust in the day to day online transaction. (Saunders 2014.) The system approach, therefore, focuses on putting into practice a variety of ways of earning trust in the e-commerce sector.

### **2.1.3 Adoption Theory**

Adoption of any innovation is majorly determined by compatibility, complexity, trialability and relative advantage. The adoption theory objective is to observe new product adoptions and new product diffusions. Ryan and Gross who are the proponents of this theory believe that adoption in e-commerce is determined with the ease with which the individuals are willing to adopt such technologies to use in carrying out their activities. Adoption is the choice of a particular individual to use an innovation. (Saunders 2014.)

### **2.1.4 Innovation Theory of Profits**

This theory explains that economic benefits arise out of successful changes introduced by the entrepreneur. Joseph Schumpeter proposed this theory in 1950. According to this theory, the primary function of an entrepreneur is to introduce various innovations in their production activities, and profits are a reward to this. According to the Innovation theory of profits, innovation is any new measure or policy introduced by an entrepreneur to reduce his or her cost of production or increase the demand for his or her products. E-commerce is a technological innovation in itself. Innovations are divided into two; those which reduce the cost of production for example introduction of a new product, design or variety, developing a new firm and the methods of organizing a firm and those which increase the demand for a product for example introduction of a new market. (Saunders 2014.)

According to the Innovation theory of profits, if innovation is successful, it either achieves a reduction of costs or an increase in demand. This will help increase the profits earned by a firm. Benefits arise because of successful innovations. However, profits caused by a particular novelty tend to compete away as others imitate and adopt it. This is because initially, firms get more advantages which keep on deteriorating as more and more firms get into the market and learn about the innovation. E-commerce was, therefore, an innovation to increase efficiency, increase profits as well as reduce the costs. (Saunders 2014.)

### **2.1.5 Innovation Diffusion Theory**

Innovation diffusion theory was developed in 1962 by E.M. Rodgers. Change is a process of creating a new technology, a new device or a new procedure. Diffusion is the spreading of ideas and concepts in society. Innovation diffusion theory explains how innovations came to be accepted and spread through communities, whether large or small. (Rogers 2003, 93.)

Innovation diffusion process involves five stages; knowledge stage which consists of an individual being exposed to technology and explores how it functions. Second is persuasion stage where information regarding technology is looked at, evaluation is made on which sources are credible and also peer attitudes towards technology put into consideration. Thirdly, we have decision making whereby individuals will participate in the activities which will either result in acceptance or rejection of the technology. Fourth is the implementation stage, which is the actual use of technology. Here, individuals put technology into use. Last is confirmation stage whereby the individual looks for support regarding the use of technology. (Rogers 2003, 93.)

Rogers (2003, 96) goes ahead to outline the effects which influence the diffusion of an innovation. The effects include the extent to which technology improves tools currently available, the compatibility of the technology to practices, norms and the values of the users, ease of learning by individuals to this technology, liability and whether the effects of this technology are apparent or not. It is good to note that e-commerce is one of the technological innovations and this theory perfectly suits this research.

### **2.1.6 Stakeholders Theory**

This theory was developed by Edward R. Freeman in 1984. The theory is concerned with what it means to create value and how to measure it. Stakeholder's theory talks about harmonization of stakeholders' interests and how to benefit from the cooperation. According to this theory, economic measures capture the value created through the good treatment of stakeholders. Economic returns are fundamental to a company's stakeholders. However, stakeholders want other things as well. Attention should, therefore, be drawn to these other factors which explain why firms succeed over time, why stakeholders are drawn to some firms and which firms do the most for stakeholders. A stakeholder's perspective of value is more critical than a managerial perspective because managers focus attention on things that lead to higher performance based on what gets measured. (Friedman & Miles 2006.)

The stakeholder theory is built on two essential perspectives of value; Individuals know what is best for them. By this, individuals' differences in defining values are essential. Secondly, healthy markets allow customers to choose what they will buy, from whom and under what terms. People will tend to make choices that provide the most value for what they give up and tend to shift from previous to a better deal all the time. As such, if firms want to be successful, they need to find ways of improving what they do to appeal to customers. It is because of this that e-commerce was developed, with an aim of enticing customers. (Friedman & Miles 2006.)

According to the stakeholder's theory, financial performance is the right way for valuing a firm. If firms want to be valued higher, that is, financially, they have to put more efforts on customer appeal (Friedman & Miles 2006). E-commerce, therefore, is in line with this theory, has adopted several measures to boost customer appeal and improve their profits. From this theory, how various e-commerce conduct their activities will be examined therefore attaining the objective of this study.

### **2.2 Empirical Studies on E-commerce**

Several studies have been conducted on the challenges and growth of e-commerce in Bangladesh as well as how it compares to Finland. Other scholars have done studies on the same in other countries such as China, Sweden, USA, Brazil, and Japan. They have shown the effects of e-commerce from both the negative and positive perspectives as discussed below:

Fakhruddin (2017, 370) did a study on the growth and challenges of e-commerce in Bangladesh. The study was conducted in Bangladesh. The author sought to assess how the use of mobile phones and access to internet impacts on e-commerce. The author adopted a descriptive research design and included the entire population of Bangladesh. Panel data was used for four years under study. The author found out that people can easily access the internet and the increased number of mobile users is positively correlated to profitability in the e-commerce sector. However, the author just dealt with the performance for only four years. Analyzing the effects of internet access and the number of mobile users on e-commerce need to cover a more comprehensive period now that technology is a dynamic aspect. Four years is not a proper scope for analysis of this aspect. Due to this reason, this study covers up to six years.

Sajid (2014) did a study on the growth and challenges of e-commerce in Bangladesh. The research was done in Bangladesh. The author sought to find out the factors that stimulate the growth of e-commerce in Bangladesh and the challenges that e-commerce business incurs in their day to day transactions. The study adopted a descriptive research design and included about 38 e-commerce firms in Bangladesh by the year 2014. The researcher used both primary and secondary data; the former was obtained through questionnaires while the latter was obtained from various research institutes in Bangladesh. Panel data involving the 38 e-commerce firms for the period 2010 to 2014 was used. The analysis was done to determine several factors that determine the growth and challenges of e-commerce in Bangladesh.

Sajid (2014) mentions that e-commerce has been growing at a higher rate for the past four years. However, the sector has also experienced several challenges. The ease with which e-commerce transactions are carried out has majorly contributed to its positive growth. On the other hand, e-commerce faces challenges such as lack of awareness among the people of Bangladesh. However, the author is not clear on the motivations for e-commerce. Sajid (2014) also focused on e-commerce between 2010 and 2014. The technology being dynamic cannot be confined to just this period; more has to be done to analyze the latest trends. E-commerce has advanced in so many ways since then. However, just like the author, this study also bases on e-commerce which is carried out through the credit and the debit card.

Lee and Lin (2005, 163) did a study on the customers' perceptions of the e-service quality in online shopping. They performed a casual research design. Based on their research, customers' perceptions about the quality of services has an impact on e-commerce. They also found out that the customer's trust affects the activities of e-commerce. The study used the entire population of Bangladesh that used

e-commerce ranging from the year 2005 to 2010. However, e-commerce in the period 2005 to 2010 was low as compared to the current period. This thesis use data collected from the field in 2019, which is up to data thus providing the status of e-commerce.

Rodriguez (2016, 217) did a study on the factors influencing the evolution of e-commerce, an empirical analysis of the developed market economy. He performed a detailed research which included about 29 e-commerce firms in Finland. He did his research between the years 2011 to 2013. However, the study was just fixed on one country. Besides, being that technology is dynamic, a lot has changed in e-commerce since the year 2013. This thesis therefore focuses on many e-commerce firms.

### **2.3 State of E-commerce in Bangladesh and Finland**

E-commerce in Bangladesh has been facing problems such as consumers being charged a high amount of fees to obtain the credit card. Another problem is that the commercial banks in Bangladesh are not willing to promote e-commerce because they feel that this will interfere with their activities. Furthermore, there is a problem with low power. The problem with the shortage of power is due to frequent outages as well as planned blackouts. Power is a necessary component for e-commerce, and therefore this presents a significant challenge to e-commerce. Another significant problem for the e-commerce sector in Bangladesh is the lack of adequate digital communication services. About half of the lines in Bangladesh are still analog. (Hasan 2016.)

The provision of telecommunication is also weak in Bangladesh. This hinders e-commerce as telecommunication is a significant component of e-commerce. Moreover, Bangladesh lacks e-commerce sites that offer affordable services. Another major challenge and this especially face the entrepreneurs is the lack of commercial know-how and also technical skills to set up the e-commerce activities. There is also poor policy formulation concerning e-commerce; hence this hinders the development of the e-commerce sector (Hasan 2016). In general, Bangladesh e-commerce market has not stabilized. However, there is a greater possibility of e-commerce to experience high growth despite the challenges. This thesis will, therefore, find the factors that contribute to the growth of e-commerce as well as the problems and the solutions to these challenges.

Finland, on the other hand, has a developed e-commerce market. Developed e-commerce is mainly attributed to developed digital marketing technologies. Various social media platforms have estab-

lished a strong foundation for e-commerce in Finland. Finland is known to have one of the highest internet and broad penetration rates in the world. Internet penetration is at 84.8% and by 2021, the penetration is projected to reach 85.4%. (Wadolowska 2017.)

According to data sources, about 80% of the people in Finland shop online. These contribute to about \$3700 average per capita income with the most purchase being the clothing and the home technology. From the online shoppers, 90% of them buy via desktop. Only 3% and 6% of the buyers buy through smartphone and tablets consecutively. The top industries selling online in Finland are fashion, which accounts for 1.42 billion USD of the market share. It is followed by electronics and media, which generates 1.04 billion USD in sales (Wadolowska 2017.)

Most entrepreneurs who engage in the e-commerce sector have testified that the increased technology has to a greater extent helped in the growth of the sector. Moreover, with the continual advancement in information technology, as well as success in mobile connectivity and cloud computing, entrepreneurs can always afford the advanced technologies to a higher extent. However, their decision to fully incorporate technology in their processes is often challenged by the fact that not so many people in Bangladesh are up to date with the technologies. Some people hardly allocate time to access how technology could improve as well as ease their daily transactions activities and prefer to go to the traditional way of doing business. Even so, several people have been able to commit to new technology trends and innovations. They invest in newer technologies as and when they are available to stay relevant in the ever-changing technological environment. (Hasan 2016.)

E-commerce has been impacting on the business process in Bangladesh, therefore, shaping the business process in the country. Bangladesh is a country that is densely populated with a population of about 153.51 million persons living in it (Hossain & Khandanker 2011, 401). Out of this population, about 76 million are internet users, and with this, it is evident that Bangladesh is indeed a growing economy. Bangladesh is a developing economy. Online transactions have been increasing over time at a higher rate than had been anticipated. E-commerce uses a broader range of technologies such as the electronic fund transfer (EFT) and the electronic data interchange (EDI).

Finland on the other hand has been receiving a positive economic growth. Finnish e-commerce has been growing at a higher pace since most of its people have embraced e-commerce and are spending an enormous amount of money on online transactions. The country has approximate of about 5.5 million people, with a total GDP of 236.79 billion USD. There are about 3.32 million ecommerce users in

Finland. In Finland, 32% of the population prefer to make payments using credit and debit cards, 31% opt for direct payments, 13% prefer PayPal while 24% use invoice. (Wadolowska 2017)

The e-commerce market of Finland is facing a stabilization stage. The sector is projected to grow up to 2022.



Figure 1. Number of online shoppers in Finland in millions (Adapted from Wadolowska 2017)

From figure 1, e-commerce is expected to grow at an increasing rate over the near future. In the year 2016, Finnish e-commerce growth increased by about 42 % compared to about 38% in the previous year. At the same time, the average purchase increased by about 8%. This increase indicates increased purchasing power. Finnish e-commerce has had significant growth. This is particularly propelled by changes that led the industry to shift to a more professional direction, and the e-commerce industry became strongly networked (Lindsay 2002). Moreover, the high purchasing power from foreigners increases Finland opportunity to attract foreign retailers. Nonetheless, Finnish e-commerce market faces stiff competition from other developed countries.

Competition among e-commerce businesses has improved due to the fusion of information technology in their processes. Finland faces stiff competition from more developed nations such as the US and the

UK, Sweden and Russia, where the country imports from some of the products sold through E-commerce (Wadolowska 2017). What IT does in promoting competition is promoting easy processing of data, easy way of gathering information, storage of collected materials, accumulation of knowledge as well as boosting of communication. Entrepreneurs in these e-commerce centers must have an in-depth knowledge about their organizational corporate resources which are vital to gaining competitive advantage through the usage of information technology (Kotler, Wong, Saunders & Armstrong 2005). A technological diffusion or infusion may be attributable to the fact that IT introduction onto an organization creates a further technological need and encourages product and policy innovation to meet such needs (Kotler et al. 2005).

Most of the organizations in Bangladesh have gone online in the past six years. This is because they have realized the relevance of e-commerce in both exchange and distribution (Sajid 2014.) The increased internet users in Bangladesh have in no small extent stimulated the growth of e-commerce. E-commerce has unique advantages such as the ease to reach people globally, ease of extension of the enterprise, fast operations and also it is easy to obtain as well as retain the customers online.

E-commerce exists in various forms such as business to business e-commerce (B2B), business to consumer e-commerce (B2C), consumer to consumer e-commerce (C2C) and finally business to government e-commerce (B2G). The leading e-commerce platforms in Bangladesh include chaldal.com, kikksha.com, darez.com, chorka.com, bagdoom.com, kaymu.com, baglamart.com, muktobazaar.com, shohoz.com and ekhanei.com (Hasan 2016).

## **2.4 The need for E-commerce in Bangladesh**

Bangladesh needs to improve the performance of the e-commerce sector due to an increase in the number of customers of late (Hossain & Khandanker 2011, 402). There has been an increased need for the e-commerce services by the various stakeholders within the Bangladesh economy. There is also a need for better operational performance by all e-commerce sites. In order to achieve this, various solutions have been found to the challenges facing the e-commerce growth in Bangladesh. Part of these solutions include various innovations to ensure that the e-commerce sector thrives. E-commerce however utilizes the use of computer and therefore most times face the challenge of high installation and startup costs and also large maintenance costs. The high costs at some instances negatively affect the performance of the e-commerce sector (Hasan 2016).

There is therefore a need to understand the extent of growth of e-commerce in Bangladesh and the challenges that hinders the e-commerce sector from thriving despite the current technological developments. Development of the e-commerce sector is quite important for the overall growth of the Bangladesh economy (Hossain & Khandanker 2011, 402.) This development includes the use of the debit and the credit cards in the performance of the daily transactions hence increase in the number of increased sophistications in the new payment systems and other alternatives to holding money.

Furthermore, there is need to establish the satisfaction of using the practical solutions, which is to enhance the competitive advantage it would have on other competitors in the market. It is important to be ahead of the competitors within the e-commerce sector to achieve success (Lindsay 2002). As the world evolves, competitors engage in new technologies to outshine their rivals. Which has made it relevant to adopt efficient technologies and to always stay ahead.

The use of information technology has expanded the rate at which people transact through the e-commerce platforms. A considerable number are too lazy to engage in the traditional business transaction. This reflects the great chance that information technology and the internet provide as an important tool for the success of e-commerce (Saunders 2014). If e-commerce is well supported within an organization's strategy, internet can always contribute to the sharing of information, exchange of information, building of business-customer relationship, actions as well as other market –oriented supporting activities.

To facilitate financial deepening and the use of e-commerce, several banking institutions in Bangladesh have risen in support of the e-commerce sector (Saunders 2014). In response to this, mobile networks and financial institutions have adopted e-commerce and therefore the increase in mobile as well agency banking. With this support, so many e-commerce platforms have emerged over the years. In an effort to uphold their reputation and to solve several issues relating to their operations, e-commerce sites have developed several techniques that are more convenient. For instance, the number of debit transactions over the recent years has greatly increased (Fakhruddin 2017, 378). This is a great indication that the e-commerce has been heavily investing in this area and has taken a good part of their capital. The issue of cost is therefore a sensitive issue.

In as much as a certain ratio of the total population look at e-commerce as a channel to cut on costs and improve convenience of purchase, this might not be the case with the rest of the population espe-

cially those in rural areas and low- income earners. Furthermore, the maintenance of e-commerce site requires a lot of resources which increases the costs contrary to the high expectations. The question to be answered therefore is whether the e-commerce growth contributes the overall economic growth of Bangladesh and also whether the challenges facing the operation of the e-commerce have been properly tackled. Despite its significance, the e-commerce growth in Bangladesh effect is seen as a paradox. E-commerce growth has come with disadvantages that may negatively affect the general economic growth of the economy in Bangladesh (Hasan 2016).

Empirically, various studies have been tackled on the growth and challenges of e-commerce in Bangladesh as well as Finland and the researchers have provided mixed reactions over the level of growth of e-commerce in both countries as well as challenges that each country mentioned faces in the e-commerce sector. Bhowmik (2012, 131) found out that in the current world, the growth of any nation can be measured by how well the e-commerce sector has grown.

Mobile banking could be a factor that can facilitate the development of e-commerce apart from the use of the debit and the credit cards (Sajid 2014). This particular innovation had a moderating effect on the performance of e-commerce sector in Bangladesh. Sajid (2014) also found out that the development and challenges of e-commerce sector had no significant relationship with the performance of the e-commerce. It is therefore in amidst the confusion that this study was developed with a purpose to examine the growth and challenges of e-commerce in Bangladesh as well as to make a comparison with Finland.

This thesis however differs from Sajid (2014) because it makes a comparison to Finland. This is so as to have a broad and detailed analysis of the growth of e-commerce in both these countries and also see if the challenges facing the e-commerce sector in both these two countries are similar or differ in so many ways. This thesis also differs from Bhowmik (2012, 133) study on the growth and challenges facing the e-commerce in Bangladesh as it covers up to 2016. This provides a most recent analysis of how e-commerce has grown and the current challenges facing the e-commerce.

## **2.5 History of E-commerce in Bangladesh and Finland**

In the year 2009, Central Bank of Bangladesh begun permitting online transactions. In the year 2013, the central bank advanced its permission to the online purchase of goods and services through the cred-

it cards. Since then, the e-commerce market has grown with estimates provided by the e-commerce association of Bangladesh being the existence of 720 e-commerce markets and about 7,559 e-commerce pages. Facebook is a popular platform through which e-commerce carries transactions. This has resulted in most e-commerce business to ignore the creation of e-commerce platforms (Statistics 2017).

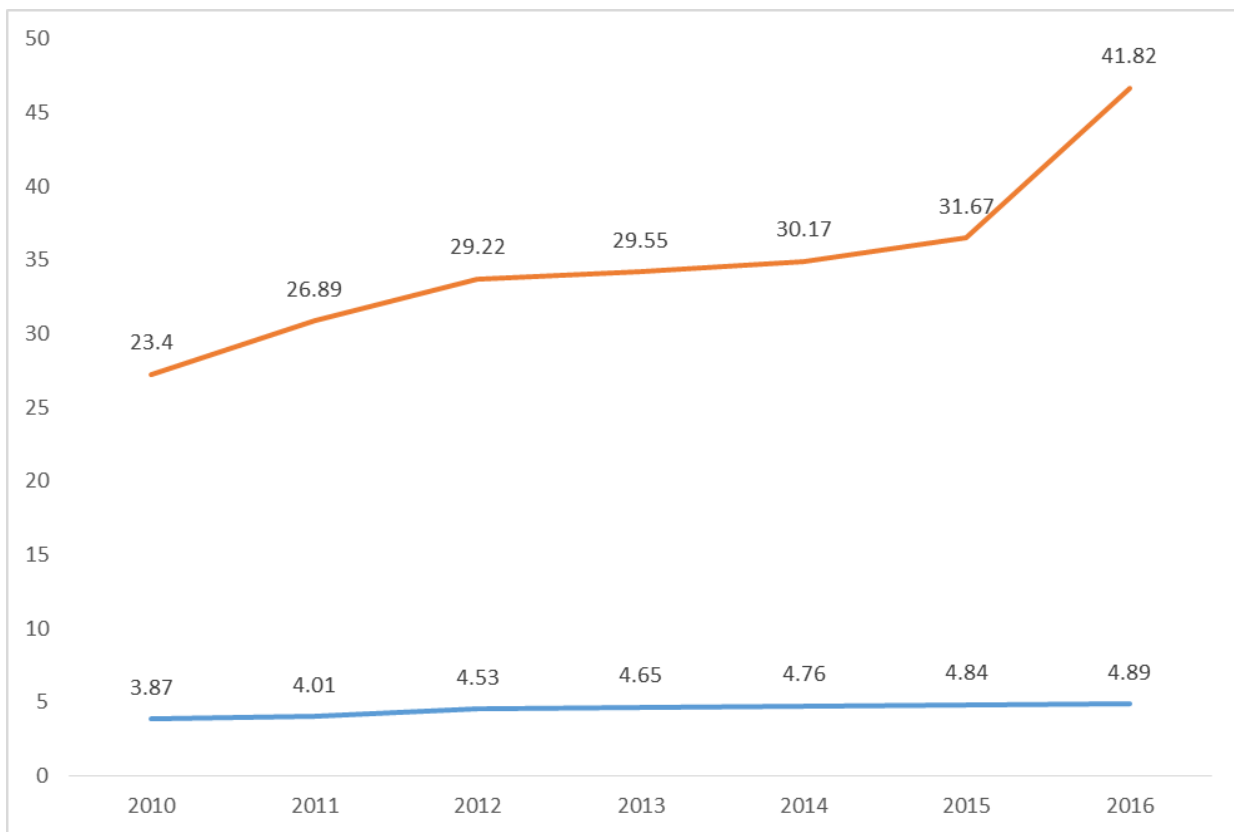


FIGURE 2. Growth of E-commerce in Bangladesh between 2010 and 2016 (Adapted from Statistics 2017)

The vertical axis shows the rate of e-commerce in Bangladesh while the horizontal axis indicates the number of years which ranges from 2010 to 2016.

Finland is a developed country and penetration of e-commerce has been a success. The success of e-commerce is mainly due to the availability of a variety of goods at low prices. One unique thing about Finland e-commerce is that they mostly rely on foreign retailers for the online transaction. Various statistics have shown that e-commerce has been increasing in Finland over the past six years but the increasing rate of growth in Finland is not the same as Finland since being a developed country e-

commerce grew long time ago. Therefore, the Finnish e-commerce market has been facing a stabilization stage as shown by the graph below.

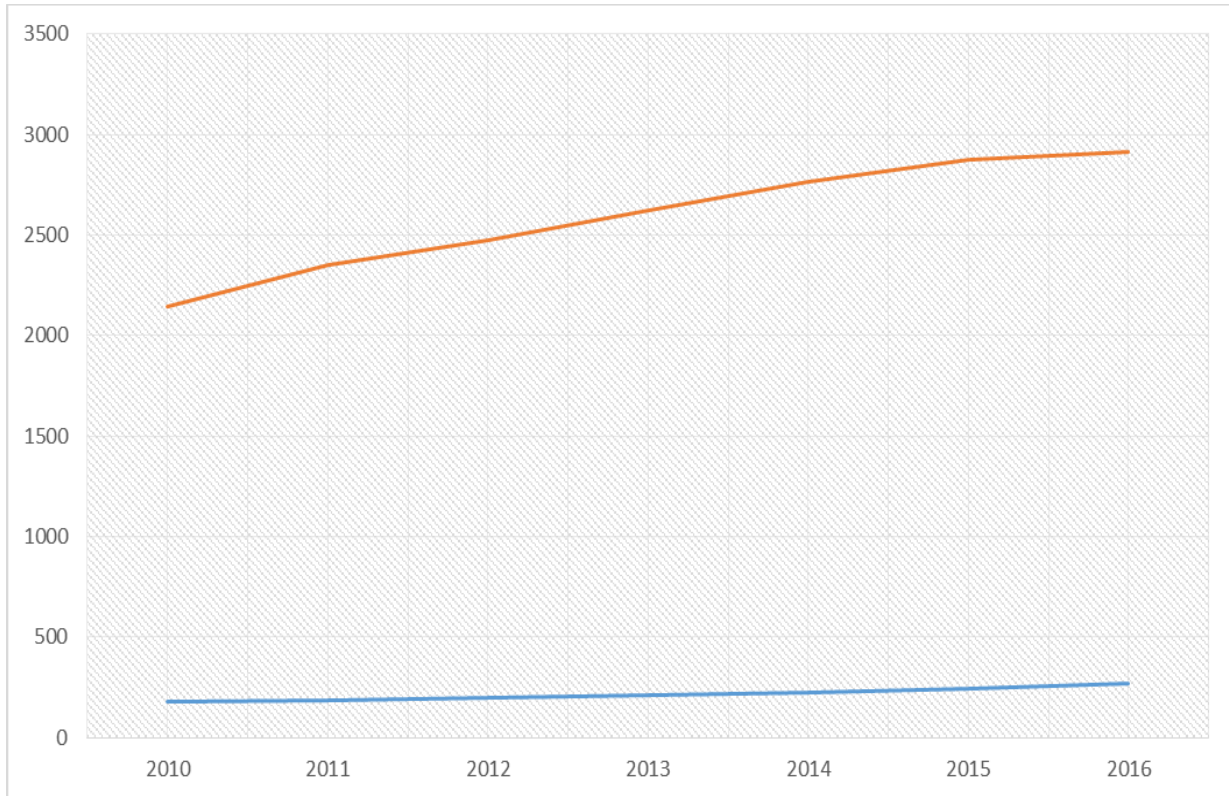


FIGURE 3. Growth of E-commerce in Finland between 2010 and 2016 (Adapted from Dong 2017)

The vertical axis shows the growth of e-commerce in Finland while the horizontal axis indicates the number of years ranging from 2010 to 2016.

## 2.6 Sources of Funds for E-commerce in Bangladesh and Finland

There are various means of obtaining funds for e-commerce business. First, one can get money through personal savings. This is especially advantageous when the entrepreneur is not sure about high returns and also to avoid high costs of lending. Another means of obtaining funds to start the e-commerce business is through family and friends. This may be especially cheap due to low or zero existence of interest.

Use of credit cards may also be a natural source of cash especially when one has several credit cards. Another source of funds for e-commerce is the peer to peer loan. These are the online lending networks that provide individuals with unsecured loans.

Bank loans are also another way of obtaining funds to start e-commerce business. Various researchers believe that banks are the main external capital providers for the e-commerce sector in both Finland and Bangladesh. During the development and growth of e-commerce, the financial systems play a fundamental role by serving as an alternative source of funds. A postulation made by Sajid (2014) was that commercial banks constitute the most widely used source of funds to finance most e-commerce operations. This declaration was supported by Hossain (2018), asserting that commercial banks loans for starting e-commerce operations are in most cases short-term loans, while in some instances, some banks may offer long-term loans. It is assumed that bank loans are available for e-commerce on a fair and competitive basis (Hasan 2016).

According to Oishe (2017), for the e-commerce sector to be able to maximize its capital structure, it will need to focus more on bank financing. Besides, despite bank financing being more expensive in comparison to other alternative financing, it has the ability of generating higher rate of return for the e-commerce sector. Oishe (2017) further inferred that bank finance can help e-commerce to achieve better performance levels than other sources of finance. This is because e-commerce tends better utilize the funds as they are monitored and answerable to banks.

Moreover, when banks act as a source of financing for e-commerce, they will always demand the operators of e-commerce to provide evidence of their sites' capacity to pay interest as well as the principal on the agreed duration (Mohiuddin 2014, 05). Therefore, banks can know the ability of various e-commerce sites to pay their loans through their financial statements that they make each year. Moreover, banks always demand security, to cater for the cases of loan default (Mohiuddin 2014, 05).

In most situations, raising of funds for the immediate purchase of certain machines and equipment is of great challenge to most e-commerce sector. This leads to the e-commerce sector resorting to installment packages for purchases. By doing this, they have to pay an initial deposit before the rest is spread across a period, either weekly or monthly, running into years, usually three to five years period. However, an alternative to this is equipment leasing. Leasing allows e-commerce firms to have a greater investment flexibility and only smaller amounts of capital is required by the firm at any given particular period. However, the cost involved by doing this is always much higher than the cost of

making a purchase once. In situations where continued specialized maintenance and protection against obsolescence is required, leasing may be more suitable (Oishe 2017).

Due to existence of risk and problems with information obscurity typically being more severe during the initial stages of e-commerce development, internal equity financing is therefore best represented by owner-manager personal savings which acts as an important source of funding for e-commerce in these advanced stages that is start-up cost (Hasan 2016). During their operations, and as they are growing, they tend to decrease the dependence on this source of finance and progress into alternative ones. Venture capital and internal generated profits are just two instances of equity options e-commerce seek to expand as they grow.

Generally, equity capital is funds invested in the firm without having a specific repayment date. It is a situation where the supplier of the equity capital is actually investing in the business. According to Bhowmik (2012), equity capital can either be generated internally or externally depending on the size of the money required. Internal equity in most occasions is from the owners of the company, friends, family members or it could be the retained profit from the firm. External equity is capital mostly acquired from external channels apart from the existing partners, friends and relatives.

Venture capital is actually a financing means through which funds are raised from the available investors and reassigned by making an investment in high risk informational ambiguous firms. Such firms are in most cases in their early stages. According to Bhowmik (2012), venture capital as a pool of equity capital contributed by wealthy individuals normally as limited partners, and they are professionally managed by general partners for a fee. The fee is usually a proportion of the total gain on investments. Venture capital firms are therefore investment firms. According to Bhowmik (2012), the venture capitalist practically participates in the strategic planning and making of decisions in the firm. The venture capital market often consists of public entities together with small business investment corporations and also the private limited partnerships.

One major feature of venture capital is that it involves enormous levels of irregular information and unreliability as well as more assets that are not tangible. Venture capital organizations usually target the organizations that have the possibility of rapid growth, with profits that are above average. These targeted companies must also take an initiative to go public within some few years and should be less than 10. They usually target to cash in on their investments if prices are substantially above their initial investments in the respective organizations (Bhowmik 2012).

Venture capitalists aid e-commerce to provide solutions to many informational problems that they face. Venture capital also helps in provision of additional sources of capital. With the assistance of increasing their financial flexibility, venture capitalists offer e-commerce the chance to source funds from other financial channels. Such channels include insurance companies and banks. Nevertheless, the supply of venture capital appears to be somehow inflexible, at least in the short-run, as they can only be used when the necessary experience and skills is available (Bhowmik 2012).

Another unique form of raising capital in the e-commerce sector is through joint venture. From the word itself, joint venture is a strategic alliance that is very common in today's businesses operations. It is usually the situation in which two or more business organizations come together to form a new entity. The main reason for this is to provide these organizations with the necessary competitive advantage within the environment in which they operate (Hasan 2016.) Joint venture is also formed to increase profitability aspects.

When resources for two entities are combined, they exert an expansive power to influence decision in the competitive market as well as well as facilitate attainment of coordination. The newly formed organization may be able to perform more efficiently than the previous organizations. This creates utmost results in greater profits for the firms involved than they would have achieved as separate entities (Hasan 2016).

Small e-commerce firms have a tendency to attain massive benefits when they form a joint venture and are usually put in a better financial position than they were before. In addition, joint venture does stand a better chance of obtaining loan as more creditors and investors' will increase their confidence in the new firms. Joint entities guarantee the creditors that their funds will be returned as their assets base have widened (Hasan 2016).

There are always no intermediaries in business ventures compared with other external sources of financing. According to Hasan (2016), ventures are usually a combination of wealthy individuals with long business experience who usually invest directly in high growth e-commerce that they did not have previous relationship. Most of these individuals tend to have some techniques concerning the business and are prosperous professionals who may have a lot of money to invest. They are often categorized in the casual sector because there is no specific market where their investment is carried out and are in most cases contacted through deal makers such as accountants and business associates.

There are some features that can be seen in business ventures, that makes it the ideal option for e-commerce. Previously, business ventures are more active at their early stages of the business, closing the so-called ‘equity gap’ by facilitating a ‘bridge’ between internal financing sources and outside financing. Secondly, there is a low rate of denial and is a very tolerant form of capital with longer exit perception. The financiers of joint venture tend to be more understanding to the needs of e-commerce owner. Finally, the venture investors always prefer to invest in local economies where majority of e-commerce operate (Hasan 2016).

Crowd funding is also another means through which e-commerce obtain funds. Crowd funding is the means of raising small amounts of capital from many individuals to fund a certain business operation (Hasan 2016). It makes use of easy accessibility of a large number of people through various social media platforms. Usually, social media brings together the investors and the entrepreneurs and increase the probability of entrepreneurship by expanding a pool of investors from whom the funds can be raised beyond the traditional venture capitalists.

## 2.7 E-commerce Business Revenue in Bangladesh and Finland between 2010 and 2016.

Revenue generated from e-commerce business in both Bangladesh and Finland is observed to be Increasing as shown in Table 1.

TABLE 1. Revenue generated in billions by e-commerce business in Bangladesh between 2010 and 2016 (Alwahaishi, Nehari-Talet & Snasel 2009)

Years	B2B	B2C	C2C	C2B	B2A	C2A
2010	\$400	\$200	\$450	\$138	\$88	\$78
2011	\$420	\$220	\$570	\$140	\$87	\$65
2012	\$445	\$210	\$640	\$150	\$90	\$67
2013	\$450	\$238	\$740	\$143	\$96	\$92

2014	\$502	\$240	\$820	\$145	\$95	\$98
2015	\$550	\$250	\$870	\$132	\$97	\$99
2016	\$600	\$280	\$900	\$134	\$98	\$93

From table 1, it can be observed that the leading e-commerce platform in the revenue generation is the consumer to consumer platform followed by business to business platforms. The business to business platform generated an amount of between \$400 and \$600 billion indicating a growth while the consumer to consumer platform generated an amount of between \$450 and \$700 billion also showing that there has been rapid growth. The other e-commerce platform has been producing a fluctuating revenue indicating that they have not grown that much as compared to the latter two.

TABLE 2. Revenue generated from e-commerce business in Finland in billion dollars between the year 2010 and 2016 (Adapted from Dong 2017)

Years	B2B	B2C	C2C	C2B	B2A	C2A
2010	\$600	\$300	\$650	\$400	\$324	\$321
2011	\$609	\$322	\$675	\$469	\$339	\$324
2012	\$670	\$319	\$856	\$476	\$346	\$312
2013	\$720	\$332	\$878	\$512	\$349	\$315
2014	\$870	\$333	\$900	\$522	\$356	\$316
2015	\$956	\$346	\$917	\$539	\$382	\$319
2016	\$982	\$348	\$918	\$543	\$396	\$329

From table 2, it can be observed that the e-commerce sector has grown in Finland as compared to Bangladesh. Every e-commerce platform has been recording an upward trend of revenue generation as compared to Bangladesh. Moreover, while in Bangladesh the consumer to consumer (C2C) platform was the leading e-commerce platform in revenue generation, In Finland there have been the same trend

with consumer to consumer recording a revenue generation of \$650 in 2010 to \$918 in 2016 but in the years 2015 and 2016 the business to business (B2B) e-commerce platform was the leading recording a revenue of \$870 in the year 2015 and \$982 in the year 2016.

### 3 RESEARCH AND REPORTING METHODS

This chapter covers how the research objectives will be achieved. The research methods are the techniques used to conduct a study. Therefore, research methods represent the tools of the study, and provide the researcher with ways to collect, group and how the analyzed information will be presented so that the researcher can come to some conclusions. It is mostly a combination of theoretical and empirical type of data (Creswell & Creswell 2017).

#### 3.1 Research Strategy

A researcher makes use of research strategy to answer the research questions. It is therefore, the research objectives and questions that guide the choice of the research strategy (Kratochwill 2013.) Besides, there are other factors that determine the choice of research strategies. Such factors include philosophical underpinnings, time available for the research, and the extent of prevailing knowledge.

The research strategy enables the researcher to achieve timely production of results and detailed reporting. The research strategy also helps the researcher to have a clear understanding of the objectives needed to be achieved (Kratochwill 2013).

The objectives that need to be achieved in these cases are;

- To determine the factors facilitating e-commerce in Bangladesh.
- To identify the challenges of e-commerce in Bangladesh.
- To come up with the solutions of the challenges facing e-commerce.
- To determine the factors facilitating the growth of e-commerce in Finland.
- To determine the challenges of e-commerce in Finland as well as to come up with the solutions to these challenges.

### 3.2 Research Design

The research objectives determine the method to be used in carrying out research (Marczyk, DeMatteo & Festinger, 2017). Research design is the structure of the research and holds all the elements in the research project together. It is actually the plan of the proposed research work. Research design is the arrangement of the condition for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy and procedure (Creswell & Creswell 2017). Therefore, the research design can be seen as a master plan that specifies the methods and procedure for collecting and analyzing needed information. Research design is a representation of the blueprint for the collection and the analysis of data.

There are several categories of research design such as the formative research. Formative research forms the basis in which the research is started. It often the first stage of the research. This type of research mainly aims to achieve insights into the phenomenon that exists. Formative research helps in the formulation of the hypothesis from which the reach problem that needs in depth investigation is found. In situations where there are a few or unavailable knowledge about the problem, then exploratory research is more appropriate (Creswell & Creswell 2017). The goals of this research is to find out the extend of growth of e-commerce as well as the main challenges, test the feasibility and undertake extensive research.

The second category of research design is the descriptive research design. It is used to obtain and identify information on the nature of a particular issue like a community. Descriptive Research is always concrete or abstract in nature. It is used to identify and obtain information on characteristics of a particular issue like a group or people. Governments for example usually use this type of research to conduct population census, as well as collection of social indicators that can be used to take decisions on the provision of amenities to a community or a country. Its usage is prominent in socio-economic survey and analysis of job activities. At the end of the research, the researcher should have been able to answer questions such as; what, who, where, how and when. The views of a society, a community or country can be obtained through the usage of descriptive research. It is directed at making careful observations and detailed documentation of a phenomenon of interest and must be based on the scientific method, which are more reliable than casual observation (Creswell & Creswell 2017.)

Another important category of research design is explanatory research. Explanatory research design is often conducted to explore a new phenomenon, that is means a study which has not been tackled. It

neither involves comparison nor factors of change. Researchers normally use this type of research to obtain insight in an unknown area through formulation of a problem to allow specific investigations to be done. The researcher is always guided by concepts which guide him to arrive at facts. It tries to connect the dots in research, by noting the natural factors and outcomes of the target phenomenon (Creswell & Creswell 2017.)

Experimental research on the other hand is usually carried out to test relationship between variables under controlled situation. Controlling of phenomenon means condition should not be allowed to change while the experimentation is ongoing. It is mostly considered to be the “gold standard” in research designs, which is one of the rigorous of all research designs. Its internal soundness is a unique strength because of the ability to connect the cause and effect through manipulation of treatment, while at the same time controlling the spurious effect of extraneous variable (Creswell & Creswell 2017).

In conjunction with the research design, this study was done to examine the growth and challenges of e-commerce in Bangladesh and also offer a comparison between Bangladesh and Finland. The study was conducted in Bangladesh a country in Asia. The survey covered about 200 e-commerce sites in Bangladesh, but the main focus was on the leading top 10 e-commerce sites between the years 2010 and 2016. Secondary data was also collected in Finland to see how it compares to Bangladesh when it comes to growth and challenges of e-commerce. Data was also obtained from the Bangladesh Development Research center. Panel data was used whereby top 10 e-commerce was analyzed.

### **3.3 Research Methodology**

Theoretical methods provide explanatory principles for a phenomenon, which is mostly based on an abstract rather than a reality. Empirical method contradicts with the theoretical method in that it requires the researcher to gather data which could be done by either experimenting or observing a phenomenon.

Gathered data or hypothesis are explained by the models developed to find out the relationship between the data and relevant variables of the environment. The results of empirical research should be able to be replicated as adherence to this method implies the use of objective, reliable and valid research methodology and criteria.

The information or data collected and analyzed is primarily non quantitative in character, consisting of textual materials such as interview transcripts, field notes, and documents or visual materials such as artifacts, photographs, video recordings, and internet sites, that document human experiences about others or self in social action and reflexive states. Therefore, qualitative research is an umbrella term for a wide variety of approaches and methods for the study of natural social life. Qualitative research is a research that is based on descriptive data that does not regularly use statistical procedures (Creswell & Creswell 2017).

It is known that a social phenomenon is best explained and understood with the help of a qualitative research, which actually uses the interviews, observations, documents and others to gather information. Most of the information gathered are data collected from respondents who have personal experiences in a particular subject matter. They are often stories about life obtained through interviews, observations, interactions and visual texts which is of greater significant to people's life (Creswell & Creswell 2017.) Naturalistic inquiry remains solidly based on the nonfictional realm of social reality for its investigation, yet its write-ups can employ expressive and creative literary components.

Most researchers prefer using qualitative methods in conducting studies because they will have to use their senses such as eyes, ears and intelligence to collect deep rooted perceptions of the target population, events and places. Various methods are utilized in this kind of methodology, and often include, direct observation, focus groups, open-ended surveys, interviews, oral narration of the history, observation by the participants, observation that is ethnographic as well as deep analysis of contents (Creswell & Creswell 2017).

The essence of quantitative research is the study of the relationships between variables. For quantitative researcher, reality is conceptualized as variables and the ultimate objective is to find out how different variables are related to each other, and why. Several other authors define quantitative methods as the research that involves the coordination among variables after they have been operationalized hence allowing a researcher to measure study outcome (Creswell & Creswell 2017). Concisely, it investigates the relationship between variables with the prioritized goal being to analyze and make a representation of the data mathematically through statistical analysis.

Despite the advantages qualitative methodology has in terms of data collection, there are disadvantages that hamper the methodology. The scope usually formed in this methodology is limited which makes the generalization of the study highly impossible. Researchers also must use caution with these meth-

ods to ensure that they themselves do not bring undue personal bias to their interpretation of the feelings (Creswell & Creswell 2017).

One common feature associated with quantitative research methods is, they are numerical in nature and they are analyzed using mathematical and statistical methods (Creswell & Creswell 2017). Therefore, at the end of the study, the conclusion must be either to confirm or disconfirm a phenomenon. Some variables are identified that are used in the research work, then data collection is followed.

Quantitative data is mostly sourced from surveys, observations or secondary sources (Creswell & Creswell 2017.) Surveys usually involve the usage of questionnaires, which are series of questions developed for the sole purpose of gathering information from respondents. Technology in recent times have made it possible and easy for researchers to develop and disseminate questionnaires online as web-based surveys are adopted. Most questions to be answered are always closed ended with multiple-choice answers. They are then analyzed, which usually involve graphs such as pie chart, bar charts and percentages. Questionnaires increases speed of data collection, low or no cost requirements, and higher levels of objectivity compared to other methods of primary data collection

The research approach is usually divided into deductive research approach, the inductive research approach, and the abductive research approach. This thesis utilizes the inductive research approach. This is because the inductive approach is based on learning. Besides the thesis also used quantitative research method in carrying out research.

### **3.4 Data Collection and Study Area**

Data collection is the process of obtaining data from either primary or secondary sources (Creswell & Creswell 2017.) This process is the most important for the study successful completed. This study made use of both primary and secondary data, but a lot of emphasis was placed on the primary data to verify the true picture of the situation. Primary data are those that are collected a fresh and for the first time, and therefore it happens to be the original in data. The main reason as to why they are collected is to serve as the basis for the analysis. Primary data are in all cases not published and therefore they are reliable, objective and authentic. Because they are atomic data with no the touch of humans, its credibility is of more importance to the secondary data. Most of the primary data are obtained from questionnaires, experiments, surveys, interviews as well as observations.

Secondary data on the other hand, are those which have been collected already and which have already been passed through the statistical process. They are often data collected from a source that has been published in any form such as journals. Secondary data serves as a relevant source of data especially when primary data is not readily available. There are several sources of secondary data that could be used to get the information needed. Magazines, books, journals/ periodicals, published electronic sources, e-journals and others can all be good sources of secondary data to researchers (Creswell & Creswell 2017.)

A sample is a population's subset used in representing the entire group as a whole (Mujere 2016.) The reason for using samples in any research is because the number of objects or people involved is too large and hence it is impractical to survey every member. This study selected members of a given population to help in arriving at the conclusion of the whole population. The study also ensured that the samples selected represented all relevant characteristics and features of a population. It was thus possible for the researcher to generalize the results represented in a sample. In research, sampling enables a researcher to use the targeted population in selecting an adequate number of elements to enhance in making generalizations about the sample and its features (Mujere 2016, 118).

In this thesis, the questionnaires used were made up of ten questions, attempting to get information from the entrepreneurs who operated the e-commerce business. The research was conducted majorly on the entire population of Bangladesh because sample represented the entire Bangladesh region. Use of questionnaires was to ensure that we know how their sales revenue was being monitored. Therefore, questionnaires containing 10 questions were supplied to respondents who used the e-commerce in their daily transactions. The researcher categorized the questionnaires into parts such as, technology revenue and basic information concerning the e-commerce. Both open and closed ended questions were used with the use of closed ended questions dominating.

There was a need for two facilitators to aid in collection of data from both Bangladesh and Finland. The facilitators were to communicate to the respondents as instructed by the researcher on the type of research being conducted. Emails were used to facilitate sending of the questionnaires to the facilitators. Moreover, respondents were supervised by the research facilitators, who made sure that the questions were responded to correctly to fulfill the research objectives. A sample of 500 users of e-commerce were given the questionnaire and also 100 e-commerce operators were to answer the questionnaire. A total of 450 responses were collected among the users while a total of 90 responses were

collected from the users. The facilitators were to inform the researcher upon the completion of the entire process hence paving way for further analysis of the results.

This thesis also used secondary data. The secondary data will be obtained from the Bangladesh Bureau of statistics, the ministry of finance, the Bangladesh Bank, the annual publications, the Bangladesh economic survey, board of investment of Bangladesh, audited financial statements of the top e-commerce sites in Bangladesh and statistical abstracts. Secondary data covered 10 top e-commerce sites within Bangladesh. For comparison with Finland, secondary data was also collected from the international statistical system, the statistical office of the European Union and the organization for economic corporation and development.

The thesis used secondary data which it obtained from Bangladesh bureau of statistics, the ministry of finance, Bangladesh economic survey, financial and economic journals, audited financial statements of the various e-commerce sites. Secondary data regarding the Finnish e-commerce of the top 10 e-commerce sites is collected for comparison. The thesis also utilizes the primary source of data that is the information obtained from the questionnaires.

## 4 RESEARCH ANALYSIS

This study examined the growth and challenges of e-commerce in Bangladesh as well as how it compares to Finland. The analysis was done on the performance of the e-commerce sites in terms of profitability. Therefore, the effects of various e-commerce innovations on the financial performance of the e-commerce sites were thoroughly examined.

### 4.1 Information from Respondents

Respondents were both from Bangladesh and Finland with the main focus on people who use e-commerce transactions on their day to day operations to carry out their transactions and those who operate the e-commerce network. Several questionnaires were sent to the respondents in Finland through the mails. These questionnaires were sent to the people who utilized several means of e-commerce transactions. These transactions ranged from business to business, business to consumers, consumer to consumer, consumer to administrations and marketing to administration.

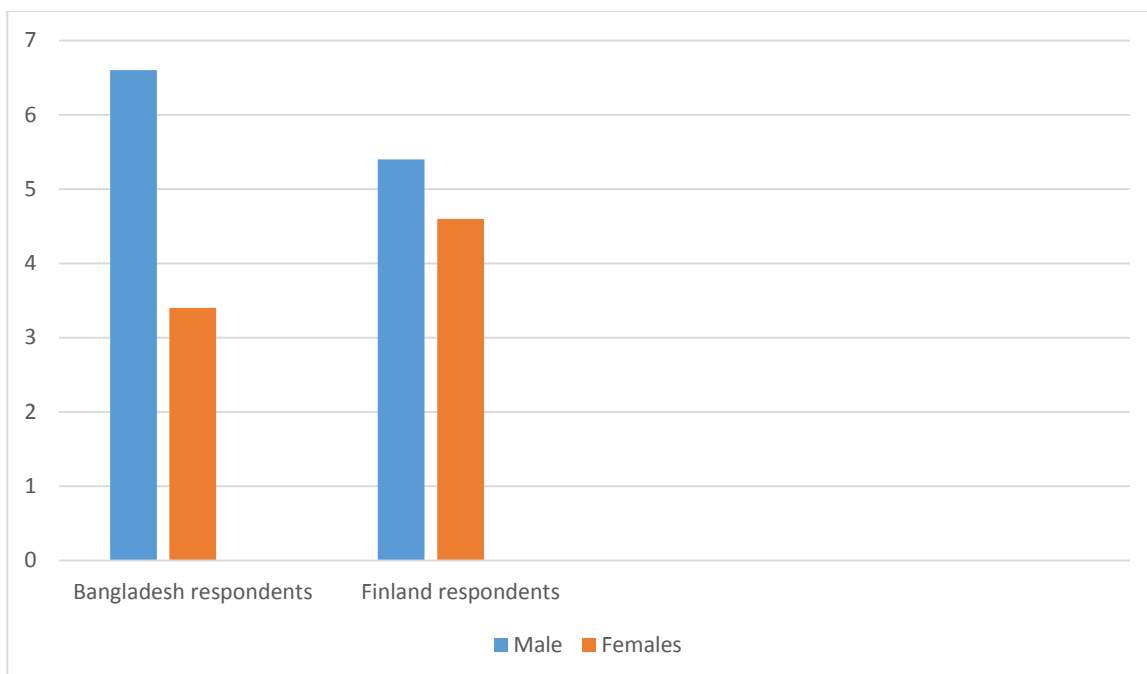


Figure 4. Gender of ecommerce consumers

According to figure 4, the first category of the respondents represents the gender that is the males and the females. It was observed that most of the users of e-commerce are males.

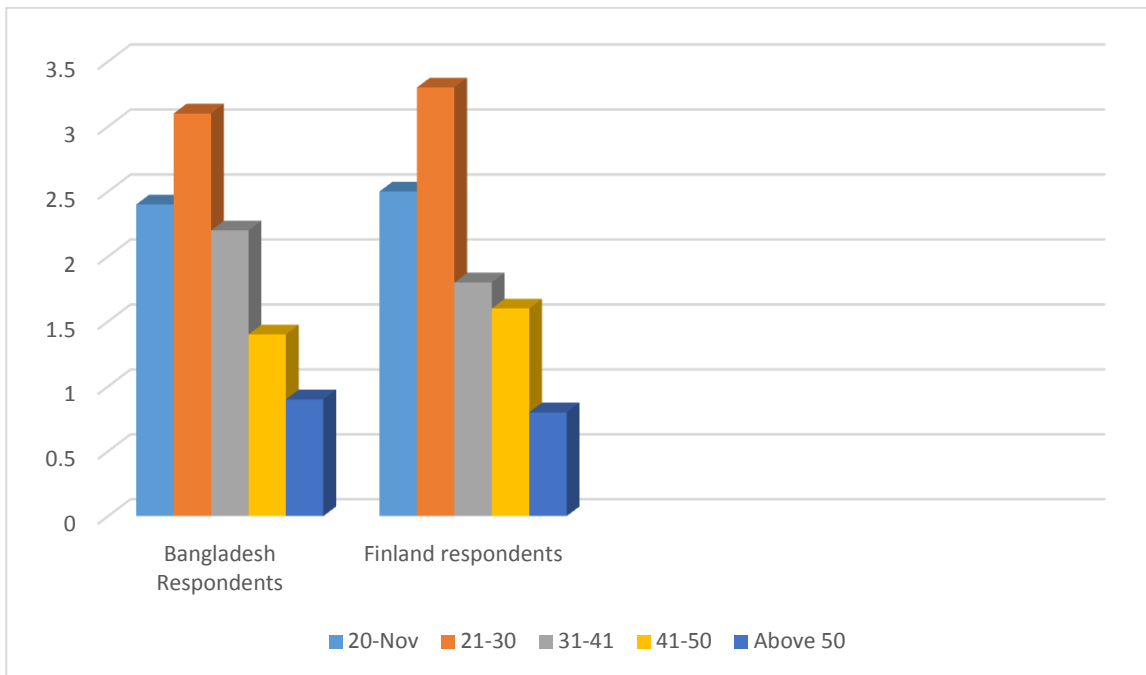


Figure 5. Age of ecommerce consumers

The third category was based on age distribution. The research found out that most people in the e-commerce business range between the ages of 21 to 30 in both Finland and Bangladesh (FIGURE 5). The second category that had the highest response was between ages 31 to 40. This could be attributed to the fact that these people are more aware of technological progress than those who lie at the age of above 30. The fourth category was that of the original citizen and the foreigners. In Finland for instance, the number of foreigners operating the e-commerce business was higher than the Citizens of Finland, but the number of people who purchased products and services through the e-commerce was mostly the citizens of both the nations, Bangladesh and Finland.

#### 4.2 Challenges facing the current e-commerce business

In Bangladesh, the main challenge facing the e-commerce is the lack of debit cards and credit card users. By the year 2016, there were only 42% of the entire population with debit cards and about 60 %

of the entire population with credit cards. However, out of these, only 1% of the debit card holders use them in the e-commerce business while the rest only activate their cards through the automated teller machines. This could be majorly attributed by lack of awareness of the existence of the debit cards and also lack of infrastructure that is customer friendly. Moreover, the high amount of fees charged when issuing these debit cards also discourages the consumers.

The regulatory system also hinders the development of e-commerce, for instance, the use of the tax ID. Finally, the significant challenge currently facing e-commerce is the existence of fraud. A lot of people with malicious intentions are taking advantages of the online transactions corrupt the system. This problem is major because some people have more advanced technological knowledge and are taking advantage of these to take advantage of other people. Moreover, changing technology over time contribute to fraudulent activities.

In Finland however, the current challenges facing e-commerce are quite different as compared to that of Bangladesh. Firstly, there is a slow adjustment regarding the local modifications regarding the payment methods as well as return handling. This is because most of the people who operate the Finnish e-commerce sector are foreigners. There also exists expensive freight rules and prices concerning the free returns. This mainly affects e-commerce providers from foreign nations. There is also a challenge of the existence of fraud. About 50% of e-commerce retailers experience fraud. This could be attributed to the fact that the fraud tactics evolve each and every time due to dynamic technology making the matter more complicated. However, Finland deals mostly with the cross-border e-commerce and experience fewer fraud cases as compared to Bangladesh.

Another main challenge currently facing e-commerce is the multiple data identity elements required for sound decision making. The need to reduce the online fraud at the same time maintaining an excellent customer experience requires various e-commerce organizations to accurately and quickly verify their identities, yet it is not enough to only look at the identity elements of the individuals.

### **4.3 Usage of the Software Application**

The analysis of the usage of the software application in both Bangladesh and Finland is necessary as it goes hand in hand with e-commerce. The software application is the software designed to perform a group of coordinated functions for the user benefit. In Bangladesh, the use of the software application

first evolved in the year 1960. Since then, there has been an increasing number of users of the software application. About 35% of the Bangladesh population is using the software while the remaining 65% only know of the existence of software application but are not using them. However, the usage of the software application has not stabilized, but there is a potential for advancement. On the other hand, about 49% of the Finland population are using the software application while the rest are only aware.

#### **4.4 Management of the E-commerce Website**

Through the information from the respondents who utilize e-commerce, there are several ways of managing the e-commerce website. This includes advertisement. People will not be aware of the existence of a particular e-commerce website unless they are made aware of through the ad. Management of e-commerce can also be through conversion-based landing pages. This always helps in attracting people to a specific e-commerce landing page. Both the respondents from Finland and Bangladesh agreed on these methods of managing the e-commerce website.

## **5 RESEARCH FINDINGS AND RECOMMENDATIONS**

This chapter discusses the results and findings based on this research. The significance of the research is to assess the growth of e-commerce in Bangladesh as well as Finland and also the challenges faced by e-commerce in the two nations.

The research was also aimed to come up with the practical solutions mainly to the challenges facing e-commerce and therefore encourage the e-commerce sector to grow to their full potential. Secondary data and also the information collected from the respondents is what these findings are all about. The research is presented both on the empirical data findings from both the primary as well as the secondary data from chapter two.

### **5.1 Summary of Research**

E-commerce is a technological advancement in the manner in which financial transactions are carried out. There are many types of e-commerce than what the research focused on. Bangladesh and Finland have many e-commerce platforms, but this thesis took into consideration the top 10 largest e-commerce businesses in both countries. Secondary data revealed adoption and further use of various forms of technology such as the use of mobile phones, debit cards and the credit cards by the people of Bangladesh led to an increase in the growth of the e-commerce sector. Increased performance was observed over the study period generally. The study that was discussed at the literature review covered periods 2010 through 2016.

The objective of this thesis was to examine the growth of e-commerce in Bangladesh and Finland as well as the challenges facing the e-commerce sector and to finally come up with the solutions to this challenge. However, this thesis focused on the annual number of transactions through the e-commerce and their effects on the general e-commerce sector. The thesis sought to analyze what factors promote the growth of e-commerce and what challenges hinder e-commerce in both Bangladesh and Finland. The thesis sought to answer several questions as mentioned in the first chapter. To explain more about these concepts, literature from books was obtained at the theoretical literature review where various theories which explain e-business performance were looked at. For example, the diffusion theory of innovation was discussed in the second chapter. Various studies on this subject matter were analyzed

under the empirical literature review. Data used was panel data which was secondary in nature drawn from the Bangladesh bureau of statistics and various books and journals from both Bangladesh and Finland. Primary data collected through the questionnaires was also used to facilitate the secondary data. Panel data was the top 10 e-commerce business in both Bangladesh and Finland was analyzed for the periods 2010 through 2016.

The research intended to come up with factors that facilitate the growth of e-commerce in Bangladesh as well as Finland, the levels of growth of e-commerce on both these two countries and the solutions to the challenges facing the e-commerce in these two countries. There was the necessity to conduct practice-based research meaning the need to obtain information directly from their respondents; therefore, the need to use a software application that sought to solve the problem.

Questionnaires were distributed to several people who run the e-commerce business and also the people who just took part in transacting through the e-commerce in both Bangladesh and Finland to get their views on several issues concerning the e-commerce. 1200 questionnaires were issued in both Bangladesh and Finland and out of these 540 respondents returned their questionnaires in Finland while 580 respondents returned their questionnaires from Bangladesh. For easy analysis of the data from the surveys, the data from the respondents were entered into a simple grid for straightforward interpretation.

## **5.2 Discussion**

This thesis therefore critically analyzes the growth and challenges of e-commerce in Bangladesh as well as Finland. The analysis was done on the data collected through the questionnaires and also the secondary data collected from the secondary sources. There was the need to provide means for the people of more people in Bangladesh to either be educated of the internet use or be made aware of the use of the internet, therefore, encouraging the number of people with the internet access. For the success of the e-commerce sector, there was a need for an increase in the issuing of debit cards to encourage transactions through e-commerce. This information was majorly obtained from the people operating the e-commerce business in Bangladesh as well as the secondary sources on the challenges facing the e-commerce business.

In this thesis, growth and challenges facing e-commerce have been analyzed by comparing the e-commerce sectors in Bangladesh and Finland. For any business activities to thrive with e-commerce included, they should be able to monitor sales, to use proper methods of keeping records as well as record transactions. The ability e-commerce to properly monitor revenue within its operation monitoring is something that is highly appreciated and encouraged to be to go on.

The use of software applications to monitor revenue, could not be left out. It had been pointed out earlier that only a few numbers of businesses engaged in e-commerce are using software applications actively to monitor revenue on their day to day activities. There is therefore the need to introduce an application that needs to be used since the study showed that a large proportion of the population were willing to use it. Reasons given for not using the software application include the high cost of acquisition and also the high maintenance cost, lack of adequate knowledge in software application. The thesis therefore found out that there is need of educating entrepreneurs, ensuring that the software applications are cheaper and that they are easily accessible, and most importantly providing training that would enhance their understanding of software application and the necessity to use it.

Furthermore, an interesting revelation in conjunction with the growth and challenges facing the e-commerce that needs to be addressed relates to the critical challenges that e-commerce face in the trying to monitor revenue. The thesis showed a number of problems such as difficulties in basic computation of revenues, data loss through theft and hacking of data based, lack of acceptance by the society among other challenges. The thesis after enumerating this challenge found out that that the introduction as well as the use of application software will contribute to reduction of the challenges mentioned.

There is also the desire among the owners of the e-commerce sites for people to accept as well as to make use of their phones and computers to access the e-commerce websites and make their purchase as many people especially in Bangladesh were not willing to change from the traditional way of doing business. The thesis found out the evidence that showed, there exists adequate knowledge about software applications that could be used by the people to carry out the e-commerce transactions. However, most people did not trust the operation of e-commerce and therefore e-commerce posed a major problem. Concerning the problem of revenue monetization, in most developing e-commerce sites, there was the desire to make use the software application as this was necessary for the operation of e-commerce.

There was also a need for robust e-commerce privacy policies to encourage more people to transact through e-commerce. This data was obtained from the respondents of both Bangladesh and Finland as well from the secondary data sources of these two countries. For the e-commerce sector to succeed, there was also a need to develop various measures that will ensure online marketing practices were practiced successfully.

Moreover, fewer people, especially in Bangladesh, engaged actively in the use of software applications. There was, therefore, the need to introduce education about the use of software application since the study showed that in as much as the people were more willing to use the application, they either had no clue or just a little knowledge about the use of software application. With more people having experience with the use of software application then the number of entrepreneurs ready to participate in the e-commerce business will also increase. There will be even more people transacting their daily transactions through the e-commerce platform. After the analysis obtained from the respondents of Finland, the issue of the use of software application did not seem to pose any significant challenge as the country had enormously invested in the software application.

Being a developing country, people in Bangladesh raised a concern about the increase in fraudulent activities in the e-commerce sector. These were majorly attributed to the fact that as the majority of the population were learning about the use of internet and transactions through e-commerce, some were already well informed in this sector and therefore took advantage of the lesser informed population. The cases of fraudulent activities were not much observed from the respondents from Finland and also from the analysis of the secondary data on challenges facing e-commerce in Bangladesh.

Finland, according to the data collected was found to have the highest internet penetration in the world. This therefore, facilitates the growth of e-commerce in Finland. The reasons given for Finland having a popular and growing e-commerce was said to be driving the existence of the variety of goods at lower prices.

On the analysis of the e-commerce transactions carried out by the people, many people were engaged in the consumer to consumer e-commerce transactions. These were the same situations observed from data of both Finland and Bangladesh. The reason why many people prefer these is because of this category of e-commerce facilitates transactions between private individuals as well as increasing transactions between these people. However, from the data collected from the people of Finland recent data showed the prevalence of business to business e-commerce as compared to the consumer to consumer.

### **5.3 Recommendations**

E-commerce sector cannot realize its full potential without the entrepreneurs establishing a proper way of conducting their business. This may be accomplished by e-commerce creating awareness about their existence through the use of various platforms such as the Facebook pages and other social media platforms. Moreover, this can also be achieved by e-commerce business developing a robust privacy policy to attract more consumers as well as preventing fraudulent activities and solve the problem of lack of trust. Further studies should be done to expand the study through the inclusion of businesses from different sectors to make a comparison on how each of them is using as well as benefiting from the improvement of technology. Future studies should be done on how the government of Bangladesh may utilize the systems of monitoring revenue in important institutions such as the public hospitals, public offices to help reduce corruption and theft.

There is a need to expand further studies by the inclusion of businesses from different sectors to make a comparison of how each one of them is using and benefiting from the development of technology. Bangladesh is a developing country; hence it is encouraged to engage more in technological investment as it will not only help in the growth of the e-commerce business but will also promote monetization of revenue from the various business platform. This will help in assisting the government in making important decisions such as the amount of tax to be charged.

As for e-commerce in Finland, it is recommendable for limitation of the government regulations regarding the operation of e-commerce as some of the regulatory measures were hindering the growth of e-commerce. E-commerce sector brings enormous opportunities to the business sector as it enables 24/7 business transactions.

### **5.4 Policy Implications**

E-commerce growth makes the economic activities more zestful. E-commerce plays a paramount role in attaining the anticipated economic growth and socio-economic development. E-commerce has at least been successful achieving the increase in gross domestic product. Regarding the growth of ecommerce, Bangladesh has to ensure that it follows some effective steps. One of the steps is that

Bangladesh should strive to provide greater layers of security for its payment procedures. This can only be achieved through upper level business courses in different disciplines such accounting, finance and marketing. Moreover, management economics should be modified by ensuring there is integration of e-commerce topics. Furthermore, the government should ensure maximum support of e-commerce association of Bangladesh (e-CAB).

The government should take the internet as a fundamental element of business, particularly e-commerce business and therefore ensure a great internet access especially in rural areas which lacks high internet speed. There should also be a low-cost internet of access for the people in rural areas in Bangladesh to ensure that the vision of digital Bangladesh becomes a reality. Moreover, e-commerce sites should ensure timely deliveries to their customers. Bangladesh government should also ensure that it addresses the growing concern for e-commerce in Bangladesh. Bangladesh should also ensure that high IT security is maintained through the adoption of the latest IT technology.

## 6 CONCLUSIONS

Bangladesh could be a potential user of e-commerce being the leading member of the least developed countries in e-commerce transactions, even though just a few people in Bangladesh are benefiting from e-commerce. Growth of e-commerce in Bangladesh should, therefore, strongly reflect on peoples' livelihood. Thriving this potential sector ensures that all people of Bangladesh are benefiting. E-marketplace is on the other hand a store of information that acts as an agent which provides buyers and sellers with information on products. To increase participation of online shopping, the origin of consumer confusion and risk that need to be identified should be apprehended and risk identified, understood and finally alleviated.

Therefore, it was of prime importance for this thesis to come up with various solutions that will mobilize people to engage in e-commerce either through purchase or through entrepreneurship. The thesis found out that most applications on the market have universal functions which might not necessarily have a positive impact on the promotion of e-commerce transactions. They are mostly developed around default concepts which are applicable mostly in developed countries such as Finland but not locally in Bangladesh. The study also discovered that Bangladesh being a developing country, most people especially in the rural areas could not easily access the internet hence the need to have a localized application which inculcate the Bangladesh culture in e-commerce business. Intensive adoption of e-commerce may help businesspersons increase their income level along with improvement of customer satisfaction. Buyers will benefit from reduction of cost. This would translate to improved standard of living.

Technological know-how plays a significant role in the development of the e-commerce sector. The technology ensures that there is a proper monetization of the customers as well as to ensure adequate revenue monetization. The objective of the study was;

- ✓ To examine the growth of e-commerce in Bangladesh
- ✓ To explore the challenges of e-commerce in Bangladesh
- ✓ To compare the growth and challenges of e-commerce in Bangladesh with Finland
- ✓ To provide an understanding of the formulations of policies required of e-commerce

The research was descriptive hence afforded the researcher the quantitative methodology while conducting the study. Secondary data was collected through various ways as mentioned in chapter three. Use of questionnaires as a primary source of data and questionnaires were structured in such a way that could help the necessary information from the respondents. Facilitators helped in collection of data in both Bangladesh and Finland.

The thesis found out that a lot needs to be done to ensure the growth of e-commerce in Bangladesh. This was because there were a lot of challenges facing e-commerce in Bangladesh as compared to Finland. The thesis, however, observed a positive trend of growth of e-commerce in Bangladesh and concluded that the level of e-commerce would grow as long as the solutions that needed to solve the above challenges are implemented. The thesis also observed a nearly stable level of e-commerce growth in Finland. This was attributed to the fact that Finland was a developed nation and had advanced technology as well as a large number of people with access to the internet. The thesis, however, found out that despite Finland e-commerce market being developed, it faced several challenges such as the difficulty of the foreigners to establish their e-commerce platforms and also a lot of regulations regarding the operation of the e-commerce business.

The thesis faced some challenges such as lack of respondents but still was able to achieve the stated objective. This study does not include all the types of the e-commerce business, further research on financial innovations such as government to business and government to citizen needs to be carried out. Apart from just the financial performance of the top 10 e-commerce sectors and what affects them, more research should be done on qualitative aspects affected by the various forms innovations. This include factors like customer loyalty, employee turnover and effects on staff motivation.

The researcher also suggests that future researches focus mainly on one country to keenly examine their peculiar problem since the conditions existing in each country differ. Although the world is a global village and technology seems to cut across all divides, but the facts remain that it would be wise for any researcher or a developer to focus on a country or countries within the same continent. Researching on countries in the same continent, where there might be similarities in cultures, will enable researchers to realize what really affects the growth of e-commerce and also the challenges in that particular nation.

## REFERENCES

- Alwahaishi, S., Nehari-Talet, A. & Snasel, V. 2009. Electronic commerce growth in developing countries: Barriers and challenges. In 2009 First International Conference on Networked Digital Technologies, 225-232.
- Bhowmik, R. 2012. The Present E-Commerce Situation in Bangladesh for B2C E-Commerce. International journal of economics and research. 3(1), 77-91.
- Creswell, J. W., & Creswell, J. D. 2017. Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications. California, US.
- Dong, Z. 2017. E-commerce trend and E-customer analyzing: Online Shopping. Bachelor's thesis. Degree program in Business Informaton Technology, Oulu university of Applied Sciences. Oulu, Finland. Available: <http://urn.fi/URN:NBN:fi:amk-201704194948>. Accessed 3.8.2019.
- Fakhruddin, M. 2017. Internet, Mobile users up, Daily Asian Age, Bangladesh, Available: <http://dailyasianage.com/news/89045/internet-mobile-users-up>. Accessed 23.8.2019.
- Friedman, A.L. & Miles, S. 2006. Stakeholders: Theory and practice. Oxford University Press. Oxford, England, UK.
- Hasan, N. 2016. E-Readiness for E-Commerce Development in Bangladesh. Journal of Business and Management, 13(2), 23-56.
- Hasan, M. & Huda, M. 2013. E-commerce challenges, solutions and effectiveness perspective Bangladesh. International Journal of Computer Applications, 70(9).
- Hossain, S. & Khandanker, A. 2011. Implementation challenges of mobile commerce in developing countries-Bangladesh perspective. In 14th International Conference on Computer and Information Technology (ICCIT 2011), 399-404.
- Kotler, P., Wong, V., Saunders, J. & Armstrong, G. 2005. Principles of Marketing, fourth European edition. Harlow: Pearson Education Limited. London, UK.
- Kratochwill, T. 2013. Single subject research: Strategies for evaluating change. Academic Press. Massachusetts.
- Lee, G. & Lin, H. 2005. Customer perceptions of e-service quality in online shopping. International Journal of Retail & Distribution Management, 33(2), 161-176.

- Lindsay, P. 2002. E-commerce, The Economist Books. P. 1.E-Commerce in Bangladesh, Available: <http://e-cab.net/resource-center/bangladesh-e-commerce-sector/> Accessed 15.8.2019.
- Marczyk, G., DeMatteo, D. & Festinger, D. 2017. Essentials of research design and methodology. JohnWiley & Sons Inc. Hoboken, New Jersey. United States.
- Mohiuddin, M. 2014. Overview the e-commerce in Bangladesh. IOSR Journal of Business and Management, 16(7), 01-06.
- Moon, N., Sultana, S., Nur, F. & Saifuzzaman, M. 2017. A literature review of the trend of electronic commerce in Bangladesh perspective. Global Journal of Management and Business Research. 17(3-B).
- Mujere, N. 2016. Sampling in Research. In Mixed Methods Research for Improved Scientific Study, 107-121. IGI Global.
- Oishe, F. 2017. Customers behavior towards E-commerce in Bangladesh: An Empirical Study on Some Selected B2C E-commerce Sites. International Journal of Business and Management, 5(1), 40-50.
- Rodriguez, A. 2016. Factors influencing development of e-commerce. Empirical analysis of developed market economy, JTAER journal 3(1)209-227.
- Rogers, E. 2003. Diffusion of preventive innovations. Addictive behaviors journal, 27(6), 92-96.
- Sajid, A. 2014. A closer look at e-commerce in Bangladesh, The Financial Express, Bangladesh. Survey report on Bangladesh e-commerce, Available: <https://hifipublic.com/2015/07/12/kaymu-releases-survey-report-onbangladesh-> Accessed 16.8.2019.
- Saunders, P. 2014. Technology enhanced language learning: Connecting theory and practice. Elsevier Science publishers. Amsterdam, Netherlands.
- Statistics. 2017. Statistical Yearbook of Bangladesh. Statistics Division, Ministry of Planning, Dhaka, Government of the People's Republic of Bangladesh.
- Tosoni, S. & Pinch, T. 2016. Social Construction of Technology. Entanglements. Oxford university press Oxford, England, UK.
- Wadolowska, A. 2017. Finland ecommerce insight. Available: <https://learning.eshopworld.com/cross-border-ecommerce-blog/finland-ecommerce-insights-2017/> .Accessed 13.9.2019

## APPENDIX1/1

Dear respondent,

Thank you for taking time off your busy schedule to answer this survey. The questionnaire seeks to get information from you as an entrepreneur on your e-commerce organization operation. It will be much appreciated if all questions are answered for better analysis.

This questionnaire takes a maximum of five minutes and all information provided is confidential. It is part of an academic process for the completion of Master's in International Business Management. Entrepreneurs will have a greater perspective on the revenue being generated as well as how to solve any limitations within their platforms, with the usage of technology.

Best Regard  
Farjana Akhtar  
Centria University of Applied Sciences  
MBA – International Business Management.

## APPENDIX 1/2

1. What is your gender?
  - a. Male
  - b. Female
  
2. Where is your business located?
  - a. Bangladesh
  - b. Finland
  
3. How long have you been in the e-commerce business?  
 -----
  
4. What is the type of your e-commerce business?
  - a. Consumer to Consumer
  - b. Business to Business
  - c. Business to Consumers
  - d. Business to Administration
  - e. Consumer to Administration
 Other \_\_\_\_\_
  
5. How many employees do you have?
  - A. 0-5
  - B. 6 – 15
  - C. 16 – 25
  - D. Over 25

**Revenue**

6. What is the average amount of sales generated monthly?  
 \_\_\_\_\_
  
7. How do you monitor revenue within the organization?
  - a. Book Keeping
  - b. Software Application
  - c. Other
  
8. What are the challenges are facing in the current system in terms of sales?

---



---



---



---

9. What is your mode of payment?

APPENDIX 1/3

a. Debit and Credit card b. Mobile transaction

10. Do you know of any other kind of innovation that can help improve your business?

A. Yes

B No.

## APPENDIX 2/1

Dear respondent,

Thank you for taking time off your busy schedule to answer this survey. The questionnaire seeks to get some information from you as a consumer who transact through the e-commerce. It will be much appreciated if all questions are answered for better analysis.

This questionnaire takes maximum of five minutes and all information provided are confidential. It is part of an academic process for the completion of Master's in International Business Management. Entrepreneurs and the government will have a greater perspective on what needs to be done.

Best Regard  
Farjana Akhtar  
Centria University of Applied Sciences  
MBA – International Business Management.

## APPENDIX 2/2

1. Which country do you come from?
  - a. Bangladesh b. Finland
2. How regular do you use e-commerce to carry out your transactions?
  - a. Daily b. Monthly c. Annually d. Never
3. Do you get satisfied by carrying out your transactions through the e-commerce?
  - a. Yes b. No
4. Which type of e-commerce do you regularly use?
  - a. Business to Consumers b. Business to consumer c. Consumer to Consumer d. Other
5. Do you face any challenge in transacting through the e-commerce?
  - a. Yes b. NO if Yes what are those challenges? \_\_\_\_\_
6. What is your gender?
  - a. Male b. Female
7. What is your age?
  - a. between 11 and 20 b. between 21 and 30 c. Between 31 and 40 d. Between 41 and 50 e. Above 50
8. What do you use to transact?
  - a. Debit and credit cards b. Mobile banking c. Other
9. What changes do you want your country to make in the e-commerce sector?  
\_\_\_\_\_
10. Does the amount of income you earn limit you from using e-commerce?

a. Yes

b. No