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Master of Business Administration

E-Commerce Challenge and Opportunity in Ethiopia

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Certification

This is to certify that Yonas Lemma has carried out his research work on the topic entitled "**E-Commerce Challenge and Opportunity in Ethiopia.** The work is original in nature and is suitable for the submission for the reward of General Master of Business Administration (MBA).

Advisor: - Asst. Professor Zemenu Ayenadis, _____

DECLARATION

I, Yonas Lemma hereby declare that this study entitled, e-commerce: opportunities and challenges in Ethiopia is my own work. All information in this document has been obtained and presented in accordance with academic rules and ethical conduct. This study has not been submitted for award of any degree or diploma program in this or any other institution and, I have fully cited, acknowledged and referenced all material and results that are not original to this work.

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By

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Abstract

The rapid proliferation of the Internet gave rise to the concept and practice of electronic, which has become a common phenomenon in the world today. Internet-based economic structures and information groups are the new business reality, as organizations and individuals revel in the ease of purchasing commodities and services from foreign shores. Most developing countries, however, are far from experiencing this reality due to many factors which act as obstacles for e-commerce to flourish.

This thesis aims to examine opportunities and challenges in Ethiopia with respect to the barriers which can influence a county from taking advantage of E-commerce system and expected benefits derived by adopting the system. A research framework developed based on technology organization environment framework and Technology acceptance model to guide the study. The result of the study indicated that, the major challenge Ethiopian ecommerce industry faces in the adoption of Electronic commerce are, security risk, lack of trust, lack of legal and regulatory frame work, Lack of ICT infrastructure and absence of competition. The study also identified perceived ease of use and perceived usefulness as a driver of adopting E-ecommerce system.

The study suggests a series of measures which could be taken by the private industry and by government to address various challenges identified in the thesis. These measures include: Establishing a clear set of legal frame work on the use of technology in ecommerce, supporting ecommerce industry by investing on ICT infrastructure needs to be focused on technological innovation competition rather than traditional bases of retail commerce competition.

Contents

CHAPTER ONE

INTRODUCTION

1.1   Background of the study

The rapid change in technology, products, processes, severe competition, and trends towards globalization, force organizations to do business in new ways in order to survive and be successful. One of these new trends is e-commerce, a form of entrepreneurial activity, which transforms the manner in which firms operate using the Internet. The new technology has been used mostly as a tool to deliver value to the customer as a way to increase the core competencies (Starr, 2003).

The world continues to witness a revolution in the way business is conducted, and the uncharted area of e-commerce presents many opportunities and challenges to a newly emerging world economy. E-commerce is an inevitable reality as the prime promoter of commerce & trade, and become one of the most essential components for current international trade; it greatly changed the ordinary manner of international trade (UNCTAD, 2003).

Electronic commerce looms large on the horizons of tomorrow, and it promises to transform trade and industry in ways not yet imagined or comprehended. For several countries it continues to be perceived as a double-faced blessing one promising and the other threatening (Singh, 1999). Organizations are embracing e-commerce as a means of access or expanding to global markets, improving customer service, reducing costs, and enhancing productivity and efficiency (Wenninger, 1999). However, the range of benefits offered by e-commerce to transactional businesses has also given rise to key issues, especially on privacy of users and security of information shared online. These issues emerged because of the wide accessibility, openness and interconnectivity as innate features of the Internet (Smith et.al., 1996).

E-Commerce can be viewed from different perspectives. According to Turban et al (2008), E-Commerce can be defined from different perspectives which include but not limited to: From a **communications perspective**, E-Commerce is perceived as the delivery of information, products and services and/or payments over varied communication lines i.e. telephones, computer networks, or other electronic channels. From a **business perspective**, E-Commerce is perceived as the application of technological applications towards the automation of business

transactions and flow of work. From a **service perspective**, E-Commerce is perceived as a tool that caters for consumers, management of firms to reduce service costs in an effort to improve quality of goods and foster the speed of delivering services. From an **online perspective**, E-Commerce makes possible an enabling atmosphere for products transaction, services and information via the internet and other services that are available online.

The definitions above however reflects the many different views and perspectives of E-Commerce proposed by varied authors and commentators, are we want to believe they all have a point depending on which perspective we view this from. However for the purpose of this research work, E-Commerce will be looked at from a perspective that involves transactions that maybe either commercial or non commercial and also if there is either a corresponding payment or otherwise thereby making E-Commerce synonymous with E-Business. In the light of all the above, E-Commerce is all about fully integrating the operations of an organization in such a way that all its various external activities and its internal business processes of research and development, sales and marketing, manufacturing, finance and accounts, inbound and outbound logistics, human re-sources management using information and communication technology (Jelassi & Enders 2005).

Different scholars forward different ideas about growth of electronic commerce and its role on different aspect of business. Over the past decade, electronic commerce on the technological foundation of the Web-Internet compound has entered extensive areas of organizational and social activity. Advances in information and communication technologies and the emergence of the internet have revolutionized business activities enabling new ways of conducting business referred to as electronic commerce (Zwass , 2003; Turban, 2000).

Guilherme et.al. (2007) pointed out that developing countries have fallen behind in the early stages of technology acquisition because of inefficient use of related knowledge, lack of investment within firms to acquire technology, lack of promotion policies that develop these technological areas and high costs of importing technology. Moreover, recent technological developments such as the introduction of digital signatures may widen the gap in the use of e-commerce technologies. Developing countries have poor telecommunication, poor transport systems, poor electronic payment systems, no security, and no skilled workforce (Odedra , 2003). As report by the international telecommunications union (ITU World Telecommunication

Indicators, 1995) show that developing countries like Ethiopia were represented to be among the least developed in terms of the state of their telecommunication networks and limited range of services offered.

Despite the global reach of e-commerce, not all countries have taken advantage of or benefited from e-commerce. With Internet, different characteristics of infrastructural, socioeconomic and socio-cultural have created a significant level of variation in the adoption and growth of ecommerce among countries. There is a big gap in Internet and ecommerce adoption between the developed and developing countries (Licker & Motts, 2000); as it known the developed countries have an advantage using ICT infrastructure due to their economical strength and also have started the usage of technology earlier time than developing countries and which means many other factors gives them adopting the ecommerce as business supports drives and use it as a tool accelerating for their economic benefits and growth; the developing countries in earlier time could not able to use the technology due to lack of technology infrastructure for their usage of ecommerce and the weak economy that could been a barrier for the ICT infrastructure usage and also many other related factors, such as monopolized telecom services, lack of technology skill, awareness, legal framework; thus creating a digital divides and this study is initiated in view of the fact that undertaking a research in the area can provide a useful insight regarding the opportunities, challenges ecommerce in Ethiopia.

1.2 Statement of the problem

The problem studied in this thesis is exploring the role of ecommerce for the growth of Ethiopia to discover its potentials, anticipated opportunities and challenge. Ethiopia has involved already in the IT business industry for striving to survive and prosper in the ecommerce and it is ecommerce to adopt strategies that would help to achieve this goal. Whether small or big, almost all businesses in Ethiopia face competition and need to look for ways to win the requirements of their customers. One of the major developments of our time that could provide an opportunity for businesses in Ethiopia to arrive at their desired goals using ecommerce as a tool for such challenge compared to the developed countries, research regarding the diffusion and adaptation of ecommerce is under-developed countries has not been conducted much. Few studies are conducted on countries like Kenya and Uganda among which are the study with the topic of 'Diffusion of E-commerce adoption in manufacturing SMEs in Kenya' by (Migiro, 2006); and

'Adoption and usage of ecommerce in developing countries: Case of Ugandan firms' by (Sewanyana and Busler, 2007).

Thulani, Tofara, and Langton (2010, p. 2) argue in their studies on which they discuss the benefits of e-Commerce taking Zimbabwe's case that little or no research has been carried out in most of the developing countries whereas much of the studies on the subject of the diffusion and assimilation of e-commerce have been conducted in developed countries. The study is one of the few researches done on some of the developing countries in Africa contributing to the specific subject though there needs to be a great deal to be investigated on the e-commerce development.

Apparently, the importance of e-commerce technologies in the development of international trade is immense and has a tendency to grow: under modern globalization circumstances, the application of information and telecommunication technologies has become a crucial factor of development in both international trade and economy in general (Aurelija, 2011).

Ethiopia is not fully utilizing their capacities to introduce this new paradigm, to be competitive internationally and to exploit the benefit it offers. Additionally, this technology is not yet applied in optimal way. At present there is low adoption of e-commerce, As well as the fully-fledged ecommerce has not yet been achieved in Ethiopia. In other words, these situations call for better understanding by the researcher. Thus the aim is that, by understanding opportunities associated with e-commerce, will contribute to filling the gap identified, and thereby lay the foundation for a coherent body of knowledge, in the field, attempting to investigate the opportunities and practical challenge of electronic commerce activity in Ethiopia.

My study similarly attempts to contribute some records by performing inquiries on the area by exploring the opportunity level and benefits of electronic commerce as well as the prevailing challenge in the business within the context of developing country, Ethiopia. The importance of this study is adding to the body of knowledge in the area by showing the prevailing reality, its features and potentials to help business and enterprises in Ethiopia register growth through e-commerce.

In particular, by use of appropriate research methodologies and relevant theories as well as models, with this study conducted survey along with research questioners for information on business and service enterprises in Ethiopia to: Describe how receptive they are towards usage of e-commerce; Scrutinize how well they are utilizing the technology the opportunity its present;

Establish where they are challenged on their level of exploiting e-commerce; Observe what roles do e-commerce provides for their growth and what are the benefits gained; Describe what prospects they are looking for and what they anticipate from e-commerce; And find out what problems they are facing on their way and what possible solutions are evident to overcome the setbacks.

1.3   Basic Research questions

The research explores the level of utilization, expected growth, and anticipates as well as problem of e-commerce in Ethiopia. The questions raised here seen separately are:

- ➢ What is the current situation of Ethiopia's e-commerce market?
- ➢ What are the e-commerce challenges?
- ➢ What are the opportunities for ecommerce development?
- ➢ What are the growth factors of e-commerce?

1.4   Objective of the study

1.4.1   General Objective

The main objective of this research is to assess the opportunities and challenges of E-commerce in Ethiopia.

1.4.2   Specific Objectives are:
- ➢ To examine the challenge of e-commerce in Ethiopia.
- ➢ To analyze the present opportunities of e-commerce in Ethiopia.
- ➢ To find out the growth factors of e-commerce's in Ethiopia.
- ➢ To suggest suitable action to be taken to promote e-commerce in Ethiopia.

1.5   Significance of the study

This paper aim is to investigate the current situations as well as the prevailing problems and to come up with possible, attainable and relevant solutions. In general the study will have the following significance.

Identification of opportunity and challenge can impact positively on the performance of companies that wish to adopt and/or have adopted e-commerce applications in Ethiopia.

The finding provides a framework for the companies for the design of their future directions and to adjust their goals and objectives as per real opportunities and challenges. Additionally, it enables government, organizations and trade associations to develop company's e-commerce that are designed to address the factors identified by this research.

Provide an opportunity for decision-makers and managers of the organizations to consider and evaluate the opportunities and challenge observed in the existing practices, in order to take appropriate corrective measures in the area or to scale-up the positive factors (if any) for involve and the promotion of e-commerce practices.

The study serve as additional source for reference and it will also serve as a spring board for other researchers and IT companies who want to conduct detailed research on the issue. So apart from providing a useful insight, is strongly expected to instigate other researchers to undertake a meaningful investigation by enlarging the scope of the issue.

1.6   Limitation of the study

Undertaking this study, would be encountered some limitations to mention some absence of well organized and documented information of e-commerce in Ethiopia, shortage of reference materials about e-commerce practice in Ethiopia. Moreover, inconsistency of the interviewee toward to the questioners and some historical data kept by different institution is another limitation that might affects the research, lack of addition evidence from different geographical location have not incorporated because of different constraints, are the limitation.

1.7   Scope of the study

The scope of this study is confined to assess the current, opportunities and challenges of e-commerce in Ethiopia, the scope will be limited to surrounding Addis Ababa, the capital city of Ethiopia which I believe reflect the ecommerce trained in Ethiopia, as a whole. And most of the companies those will be conducted in the research of Ecommerce have head office mainly based in Addis Ababa, so that targeting the company reside in Addis Ababa will have and show the reflection of the extension of those company reside in the other region of Ethiopia, E-Commerce is all about fully integrating the operations of an organization in addis ababa and its

outlying operation office to handle all its various external activities and its internal business processes, such as B2B for branches offices and third party other partner business entity, B2C for reach out customers and delivery online services for their customers; in top of that the surrounding Addis Ababa population and demography will reflect the sample population of the other city of Ethiopia, because Addis Ababa is the residential city for many other Ethiopians who are reside in different regions, that will give the convinces for the ecommerce research also ecommerce is new phenomena which most probably exercise in the capital city before it reach out other regions of Ethiopia, as well.

1.8   Definition of terms

E-commerce (electronic commerce or EC) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business. The terms e-commerce and e-business are often used interchangeably.

Collaborative commerce (e-commerce):- In this type of EC, business partners collaborate electronically. Such collaboration frequently occurs between and among business partners along the supply chain. ***Business-to-consumers (B2C):-*** In this case the sellers are organizations, the buyers are individuals. ***Consumers to businesses (C2B):-*** In this case consumers make known a particular need for a product or service, and organizations compete to provide the product or service to consumers. ***Consumer-to-consumer (C2C):-*** In this case an individual sells products (or ser-vices) to other individuals. ***Intra-business (intra organizational) commerce***:- In this case an organization uses EC internally to improve its operations. ***Government-to-citizens (G2C) and to others:-*** In this case the government provides services to its citizens via EC technologies. Governments can do business with other governments (G2G) as well as with businesses (G2B). ***Mobile commerce (m-commerce):-*** When e-commerce is done in a wireless environment, such as using cell phones to access the Internet, call it m-commerce (Turban et. al 2008).

CHAPTER TWO - LITERATURE REVIEW

1.4 Introduction

E-commerce forms part of a broader process of social change, characterized by the globalization of markets, the shift towards an economy based on knowledge and information, and the growing dominance of technology in everyday life.

E-commerce stands for electronic commerce. It means dealing in goods & services through the electronic media & internet. The rapid growth of e-commerce is being driven by greater customer choice & improved convenience with the help of internet the vendor or merchant who sells products or services directly to the customer from the portal using a shopping basket system or digital cart & allows payment trough debit card, credit card or electronic fund transfer payments. In the present scenario e-commerce market & its space is increasing in demand as well as an impressive display or range of a particular type of services. E-commerce is already appearing in all areas of business, customer services, new product development & design. E-commerce business is growing because of wide range of product with minimum price wide range of suppliers & customers internet.

This chapter examines the drivers, opportunity and challenge of e-commerce taking extracts from the literature review include books, past articles journals, previous thesis, and some documents from the government agencies and international institutions related to current e-commerce and technology issues.

2.1.1 CONCEPTS AND DEFINITIONS

Electronic commerce or e-commerce refers to a wide range of online business activities for products and services. It also pertains to "any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact." A more complete definition is: E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals.

2.1.2 DIFFERENT TYPE OF E-COMMERCE: The major different types of e-commerce are: business-to-business (B2B); business to- consumer (B2C); business-to-government (B2G); consumer-to-consumer (C2C); and mobile commerce (m-commerce).

2.1.2.1 Types of E-Commerce

*Collaborative commerce (e-commerce)***,** In this type of EC, business partners collaborate electronically. Such collaboration frequently occurs between and among business partners along the supply chain. *Business-to-consumers (B2C)***,** In this case the sellers are organizations, the buyers are individuals. *Consumers to businesses (C2B)***,** In this case consumers make known a particular need for a product or service, and organizations compete to provide the product or service to consumers. (An example would be Priceline.com, where the customer names the price and suppliers try to fulfill it.) *Consumer-to-consumer (C2C)***,** In this case an individual sells products (or ser-vices) to other individuals. *Intra-business (intra organizational) commerce*, In this case an organization uses EC internally to improve its operations. A special case of this is known as B2E (business to its employees) EC. *Government-to-citizens (G2C) and to others***,** In this case the government provides services to its citizens via EC technologies. Governments can do business with other governments (G2G) as well as with businesses (G2B). *Mobile commerce (m-commerce), w*hen e-commerce is done in a wireless environment, such as using cell phones to access the Internet, calls it m-commerce. E-Commerce as out-lined by (Turban et.al 2008).

2.1.3 Opportunity and Challenge of ecommerce

The Internet has the ability to lower some of the entry barriers to global trading, e.g. geographical location and differing time zones. E-commerce is expanding rapidly and has facilitated changes by significantly reducing the costs of outsourcing and co-operation with external entities. E-commerce has helped to break down the natural monopoly characteristic of services such as telecommunications. E-commerce is a key technology for speeding up the innovation process, reducing time scales, fostering greater networking in the economy and making faster diffusion of knowledge and ideas possible. New Economy (2002) argues that e-commerce has played an important role in making science more efficient and linking it more closely to business. Using the Internet to lower communication costs and reduce time-to-market for goods and services exports makes it a very valuable medium for firms engaged in

international trade. The ability of e-commerce to deliver information of almost any sort in digital format at low cost offers significant efficiencies that firms can pass on to customers in the form of lower prices. It can also help manage supply chains for goods and services in cross-border trade, cutting overheads associated with marketing, transport and distribution. In agriculture, the Internet is providing better information about market prices and has fostered the emergence of new online commodity markets, Eg commodity exchange in Ethiopia, in construction; it reduces the need for blueprints and allows seamless communications between contractors. In manufacturing, it is generating new efficiencies by reducing procurement costs and improving supply chain management. Its role in the services sector is linked to qualitative aspects of products, such as convenience and customization, thereby reducing costs and delays and increasing reliability (Gallagher,1999; Mehrtens et al., 2001; Kendall et al., 2001; Art-am, 2002; OECD, 2003). Given that the underlying technology of the Internet is inherently global, accessible and based on open standards, e-commerce applications are optimistically being promoted in the developing world as relatively cheap to set up and operate and flexible to configure(Kalakota and Drew, 1996; Chan and Lee, 2001). The 'optimists' argue that the impact of reducing co-ordination costs will significantly influence global trading relationships (Malone et al., 1987) and encourage firms to find the best producers regardless of location (Davidow and Malone, 1992; Wigand, 1997).

One could argue that e-commerce drivers vary from one country to another. Some drivers that are seen in some developed countries are not yet evident in many developing countries and in some cases those drivers in a developed country could be barriers in other countries. Some additional drivers were realized for the first time in this research according to the researcher's best knowledge. There are a number of barriers to the adoption e-commerce such as security, cost and taxation or even in some circumstances, too much business for a company to cope with. Furthermore, one of the traditional barriers cited by many organizations to the growth of e-commerce is the relatively high telephone charges for Internet access, the tariffs payable and the cost of connection. Other costs, such as hardware and web-design, remain beyond the reach of many people's ability to pay for the service.

Reed (2004) argued that broad-level support for the technology is lacking, both in the initiation of e-commerce projects and in the allocation of targeted budgets. There are further barriers specifically related to developing countries. Accessing the Web is possible only when telephone

lines and computers are available, but these technologies are still in very scarce supply in many developing countries. In addition to this problem, Internet access is still very costly - both in absolute terms and relative to per-capital income in most developing countries. While computer prices have fallen dramatically over the last decade, they are still too expensive in developing countries (UNDP, 2006). Add to this the human capital cost of installing, operating, maintaining, training and support and the costs often become beyond the means of many enterprises in developing countries. Moreover, skilled personnel are often lacking, the transport facilities are poor, and secure payment facilities non-existent in many countries (Straub, 2003). Users in developing countries are likely to be engaged in making improvements to their operations, often focusing on production management, financing and accounting, product development and marketing rather than paying attention to e-commerce and e-business strategies. Additionally, many Internet users in developing countries do not speak or write good English as well as displaying poor English on web-sites or in emails. Slow responses generally have the effect of pushing away potential customers (The Asian Foundation Report, 2002).

There are many issues that could count as drivers and barriers to e-commerce and economic development at the same time. This is analyzed and discussed in the e-commerce chapters. These issues are cost, payment systems, legislation and regulation, infrastructure, culture and religion, government, employment, competition, traditional business, economic activities, knowledge of e-commerce, time and information.

2.1.4 Payment Systems

Payment systems are another main factor for e-commerce adoption and economic development. Payment systems, as some other factors, could be drivers or barriers. Having a payment system will encourage people to do business all over the world and speed up transactions and other banking activities as well as providing new opportunities to businesses to provide online services. Djankov et al., (2003) argued that payment systems constitute part of the basic structure of a country's economy and financial markets. For e-commerce to be used successfully in a country, electronic payment has to be installed and ready. It speeds up payments, transfers and improves the quality of payment transmission (Lipis et al., 1985). And offers institutions alternative and better delivery channels through which banking products and services can be provided to consumers. Compared with traditional methods of transmitting payments, the new

systems involve significant economies of scale and rationalisation gains (Llewellyn, 1999). and are helping to enhance the planning and monitoring of bank liquidity (Djankov , et al., 2003).

2.1.5 Legislation and Regulation

Legislation and regulation are barriers and drivers to e-commerce. It was been argued that e-commerce needs legislations and regulation to control of the flow of business over the Internet (Awad, 2004). There are a large number of goods and commodities that can be bought and sold illegally online. Piracy of products is also a major problem. The absence of legislation and regulation has led to difficulty in finding a total solution. One of the most controversial aspects of the increase of e-commerce on the Internet is that there is no regulation of goods, allowing pornography, piracy of products, and other illegal activities to create security and legal issues that may never have total solutions (Mark 2003; Hamed,2004). Furthermore, online viruses are also becoming a serious matter that is under scrutiny, since many major corporations have had their computer mainframes broken into by hackers (Vernon, 2000). In addition, the full range of pirated software available in the market at low or no cost requires copyright and other issues to be considered (Fredricks,2001).

The regulation of e-commerce will build customer's trust and show the possible way forward to deal with technology and international suppliers and customers.

2.1.6 Infrastructure

Infrastructure refers to ICT infrastructure, postal infrastructure and any other infrastructure needed in a country to support e-commerce. If the infrastructure is in a poor condition then the expectation to see an improvement in the e-commerce adoption is significantly low. Additionally, the potential for e-commerce is low because of the control of networks by monopolies or dominant firms in many developing countries (Thorbjornsen & Decamps, 1997). These monopoly companies limit competition by blocking lower prices and improvement the quality of the services. The infrastructure of a country could be a main driver to attract international companies and foreign direct investors to do business in that particular country.

However, infrastructure costs are significant and need new strategies, planning and management which will drive many developing countries to seek FDI and other assistance from wealthier

nations. FDI will result in moving regulation and control of a country's infrastructure from the government to the international investors.

2.1.7 Culture and Religion

If e-commerce conflicts with a country's culture and religion then certain barriers may be created, e.g. intervention to ban the sale of certain items that violate such culture, traditions and values (Laudon and Traver, 2003). Culture is the 'broadcast' factor in consumer behaviour because it shapes basic human values, wants, perceptions and behaviours (Kotler, 2000). For example, selling alcohol in a Muslim country or offering credit-card services with interest rate could possibly result in driving people away from using that part of technology. There are many items on sale which contain materials which are obscene or offensive to a country's traditions and values, and hence intervention by the system to ban their sale might be perceived by some as a barrier, and their purchase should be left to individuals. There is some consensus that some materials should not be sold online, and certain barriers to get access to them should be in place to protect young people and children from moral corruption. Culture and religion could be a driver for e-commerce, e.g. in some Arab countries where women are not encouraged to work with men, e-commerce could help in providing paid work from home for the women. Such action could be seen as being in keeping with culture, tradition and values.

2.1.8 Government

Governments are usually the main customer of small businesses and will support all investments and improvements in a country's infrastructure as well as being responsible for setting legislation and regulation for trade and securing the sustainability of economic growth (Well, 2005). Therefore, governments should think carefully about e-commerce adoption and put strategies for the adoption in place before hand. Thus e-government strategies would provide citizens, other government departments and companies with significant advantages and efficiency.

E-government is a significant factor for e-commerce as it delivers services to businesses and the public. According to Daniel (2002), e-procurement (one of the e-government services) and an online supplier exchange are among the services included in G2G and G2B services. This allows transparency in the bidding process and gives opportunities to smaller businesses which otherwise are not able to bid on big government procurement projects. Also, once the e-government strategy of a country has been formulated, agencies, bureaucracies and public

services may be aligned towards promoting those sectors which have been pinpointed for growth.

 Additionally, there are many possible reasons and goals for e-government, such as improving services to citizens, improving the productivity and efficiency of government agencies, strengthening the legal system and law enforcement, promoting priority economic sectors, improving the quality of life for disadvantaged communities, and strengthening good governance and broadening public participation. However, e-commerce could affect any economy and its activities. E-commerce will work with capitalism and globalisation, therefore countries which have adopted the communist and socialist approaches should be aware that e-commerce may change the economic approach adopted into capitalism. Additionally, governments tend to support monopoly organizations and limit the opportunities for private companies which could affect the adoption of e-commerce. Thus local private companies would not have the support and experience to compete with large international organizations.

2.1.9 Employment

Employment is an important factor in any economy. It has been argued that e-commerce may result in job cuts. However, adopting e-commerce technology may result in creating new job opportunities and encourage employment education and gaining new skills (UNCTAD, 2003). Hawkins, et al., (1998) argued that ICT seems to offer the greatest benefits when ICT investment is combined with other organizational assets, such as new strategies, new business processes, new organizational structures and better worker's skills. He argued that the contribution of ICT capital to output and labour productivity growth has been significant and rising in relative terms. Therefore for a country to maximize the benefit of e-commerce adoption training and education should take place before-adoption.

2.1.10 Competition

Competition could drive the economic development of a country by providing cheaper products and services which could result in many savings that could be reinvested in the economy and speeding up economic development (Todaro, 1999). According to Hagel and Armstrong (1997), lower production costs will encourage the entry of new businesses and thus increase competition and pressure to pass lower costs on to consumers as lower prices. In addition, consumers will be able to search among thousands of merchants for the lowest prices, thereby increasing the

downward pressure on prices and leading to a shift in market power from producer to consumer (Hawkins, et al., 1998). On the other hand competition could destroy small local businesses. These businesses could go elsewhere or cease to exist. In either case this will affect economic activities, such as taxation and employment.

2.1.11 Traditional business

Traditional businesses in most developing countries were established long before e-commerce. These companies are the main economic contributors in the economy. Therefore government and companies have to work together in monitoring technological and strategic development in the use of e-commerce in order for these companies to maintain their place in international competition and restructure their organisations. A failure to involve traditional businesses could work against e-commerce adoption and against economic development. Traditional businesses and e-commerce businesses could work together

2.1.12 Economic Activities

Gurstein (2000) argued that a free market and the cost of adopting e-commerce technology could result in delays to e-economic development. He also suggested that a result of adopting e-commerce technology could be the shift of economic activities away from marginal or disadvantaged regions towards advantaged regions. The success of e-commerce can be at the expense of local enterprises in direct competition with international suppliers.

Additionally, the range of goods available on the Internet is very large and cannot be matched by any one supplier let alone smaller local suppliers thus putting these local enterprises at a significant disadvantage in certain sectors. Furthermore, Kenny (2002) argues that government returns (e.g. taxation) might be even lower than company-level returns because of two negative externalities linked to e-commerce sites. First, the Internet allows online businesses to gain new customers from traditional businesses. Second, and perhaps of greater concern to developing countries' companies with less access to the new technologies, Internet investment involves defending market share, so that social returns to this investment are lower than private returns. Therefore a government should encourage the use of a country's resources to provide cheaper prices than anywhere else in the world.

On the other hand the adoption of e-commerce will result in a significant reduction of costs and providing a variety of products from all over the world. For countries which are importing more

than exporting, e-commerce could develop the economic activities and allow users to enjoy the reduction of costs which could be reinvested in the economy and help development (Todaro, 1999).

2.1.13 Developing countries e-commerce experiences

2.1.13.1 E-commerce in Egypt

A study in Egypt (El-Nawawy and Ismail, 1999) found main contributory factors to non-adoption of e-commerce which include: awareness and education, e-commerce infrastructure, telecommunications infrastructure, financial infrastructure, the legal system, and social and psychological factors. Sherif and Maha (2001) identify number of challenges that face the growth of e-commerce in Egypt. According to them awareness is a critical challenge for e-commerce implementation in Egypt from the consumer and the corporate perspectives. Beside this e-commerce infrastructure is not yet fully in place. The non-existence of an appropriate and secure e-commerce enabled environment is a disincentive to the sector. Telecommunications Infrastructure is growing but still lagging behind in terms of being capable of providing the required infrastructure for the Internet. It is perceived that the cost of the telecommunications services is rather expensive. Lack of trust remains challenge for e-commerce diffusion.

In their latter studies Sherif and Maha (2002) relate e- commerce challenges in Egypt in to a variety of social, technical, financial and legal challenges. 26With respect to the social challenges, there is lack of awareness, lack of training, lack of trust, resistance to change and the language barrier. With respect to the technological challenges, there is the problem of relatively weak resources with respect to the telecommunications infrastructure. This includes bandwidth cost that is almost two and half times more expensive than the international tariff with low capacity level, which is extremely modest, leading to long waiting time for access and downloading. With respect to the financial challenges, there is the lack of electronic payment systems. For e-commerce to succeed, electronic payment systems should be available, efficient and secured. However, to date the electronic payment system is non-existent in Egyptian banks. With respect to the legal challenges, the non-existence of an Egyptian certificate authority is a major problem. Zeinab (2005) also undertake research and Analyzed Barriers that Face Egypt in Implementing E-commerce and forward the following major hindering factors.

Low level of Consumer awareness, The lack of corporate awareness of the conceivable business advantage of e-commerce, The nonexistence of an appropriate and secure e-commerce-enabled environment, Low Financial services and infrastructure, The lack of existing SET compliance mechanisms in the country financial transactions on the Internet. The cost of international bandwidth is expensive, the Egyptian the pricing structure is still very expensive, Language barrier, many web sites are in English and that is a huge obstacle for Arabic speaking natives who can only write and read rabic. Lack of certificate authority: The nonexistence of a certificate authority, (CA) in Egypt serves as an impediment toward the adoption of e-commerce on a national level, and more importantly, an international level.

2.1.13.2 E-commerce in China

Xiong (2010) research result reveals the following Problems of development of e-Commerce in China.

Low level of computer and internet usage in Chinese companies E-Commerce is practiced by less than 10% of Chinese companies, which is far from a popular form of business transaction as compared to developed countries like US.

Technical barriers Similar to lots of other developing countries, China suffers both low technical level of and market share by the Chinese native IT industries. Key hardware and software used in major e- Commerce application and engineering projects are dependent on foreign companies. System integration and information service level has lots to improve, while IT application and ecommerce standardization awaits lots of work for solutions. Wide band connection and quick response on line have been so far a luxury. But it is not only IT side which constitutes the technical barriers. Three problems have been haunting Chinese companies in their acceptance and application of e-Commerce:

A. National credit rating system for both companies and individual consumers not yet completed.

B. Electronic payment means on line not up to security expectation

C. Logistically underdeveloped distribution and delivery system to conclude the demand and supply chain.

Human resources issues one of the outstanding issues is Chinese companies have very few access to personnel familiar with both IT technology and the business sector the companies are

involved. It is a problem of education system not yet responding to the market demand, combined with lack of financial incentives for training and preparing such type of engineers. There has been no adequate training of employees, including senior management, on application and significance of e-commerce, which may be one of reasons for lack of motivation towards e-business in lots of Chinese companies.

CHAPTER THREE

Research Methodology

This section describes the methodology undertaken in relation to justification of the research design, questionnaire design, sampling process and data collection, administration and the intended analysis strategy.

The purpose behind this research was to ascertain the opportunity and challenge of using e-commerce in the economic development of developing countries, such as Ethiopia.

In order for research surveys to be effective they need to be correctly targeted, that is directed at individuals or organizations that could provide the information needed to explain the phenomena.

3.1 Research Design:

A research design, which is a function of the research objectives, is defined as "a set of advance decisions that makes up the master plan specifying the methods and procedures for collecting and analyzing the needed information" (Burns & Bush, 2002, p.120). An appropriate research design is essential as it determines the type of data, data collection technique, the sampling methodology and the budget (Hair et. al., 2003).

In an attempt to assess e-commerce practices, opportunities and challenges of e-commerce in Ethiopia, the researcher used descriptive type of research design. Descriptive research is a type of research that is mainly concerned with describing the nature or condition and the degree in detail of the present situation. Creswell (1994) stated that the descriptive method of research is used to gather information about the present or existing condition.

3.1.2 Sampling technique and size determination

The sample sizes of 170 were chosen as we try to engage people from different parts of the sample location and organization. Technique analysis; as it is discussed in the methodology part of this study, data collected by using different techniques and analysed using triangulation approach. A total of 172 questionnaires were distributed to state ownd bank, commercial bank of Ethiopia and private banks, MICT, Telecom, and Private owned Companies. In order to analyse the research results, Statistical Package for the Social Sciences (SPSS) software is used. The principle governing the sample size is to choose such sample which would scientifically represent the larger population

as we tried to get as much diverse responses as possible. The sample size will be chosen as tried to engage people from different parts of the sample location, main target people essentially using E-Commerce platforms at that particular time.

The level of utilizing e-commerce varies with great deal among different types of organizations mainly due to the non homogeneous character of businesses based on the size, age, sector, motivation, mode of organization, location, knowledge base and the like (Taylor and Murphy 2004, p. 281). Ecommerce stand in different levels of Enterprises' utilization based on their volume in financial or human capital on top of the preceding factors and the end users' extent of ecommerce usage.

Sample size is a process of selecting a sufficient portion of the population for the purposes of generalizing the findings. The aims of using sampling method according to adequately manipulate the large number and reduce the cost of producing the questionnaire to the entire population. This research use the formula for estimating the sample size provided by Yaro Yamane (1969) which was cited in Obasi and Ekwueme (2011).

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size N= population 1 = constant e = error estimate (0.05%) at 95% confidence interval

The sampling process involves the drawing of individuals or entities in a population about the phenomena of ecommerce from the sample of the population or entity. The most critical element of sampling is choosing the sample frame in such a way that it is representative of the population and entity from which it is drawn. Sampling is used usually where the population of interest to the researcher is too large or where the researcher has limited time, finance or human resources to be able to investigate each and every element within the selected population or entity.

3.1.3 Data type and source

In order to conduct this research basically primary data collection on a number of companies' involved in general enhancing ecommerce. In addition secondary data used in support of primary data mainly and secondary as well.

The questionnaires were used to gain general picture of ecommerce practices, opportunities and challenges. In order to gather pertinent information with respect e-commerce opportunities and challenges in Ethiopia, the questionnaires were distributed to selected entity and top level management of respective organizations which are included in the sample. To achieve the aim of this research, twenty two questions are designed and administered to managers of the company in three parts. The first part of questionnaire is used to collect demographic data such as gender, age, level of education and experience. The second part of the questionnaire was designed with the purpose of collecting data about e-commerce practices, opportunities and challenges of in Ethiopia and third one for who are involved IT industries. In order to ensure the comprensiveness of data, these questionnaires consist of open ended and close ended statements, some of which are statements evaluated on a 1-5 Likert scale. Closed questions obtain responses by selecting from a given set of options such as yes or no, agree or disagree, or by checking preferred answers . Open ended part of the questionnaire consists of questions where the respondents are asked to describe the answers on the space provided for additional explanation and comments.

Secondary data

According to Saunders *et.al*., (2003), secondary data is information that has been previously gathered for some purpose other than the current research project. Saunders *et al.,* (2003) stated that few researchers consider the possibility of re-analyzing data that have already been collected for some other purpose. He explained that secondary data includes both raw data and unpublished summaries. For example, government departments undertake surveys and publish official statistics covering social, demographic and economic topics.

Primary Data

According to Collis and Hussey (2003) original or primary data can be obtained and collected through a variety of ways. These may include observation, interviews and questionnaires, conversation and discourse relative to a specific research study. Ghauri and Gronhaug (2002) maintained that a significant advantage of primary data being collected is that it enables a focus on the specific requirements of the research. For example through questions requiring particular responses, such as opinions and attitudes, or observed behaviors', questions should be answered by the chosen sample of people.

3.1.4 Data collection technique

Questionnaires is prepared in paper forms and handed out as same, the questions have spaces for respondents to fill up in other to answer the questions. Statistics software and also used descriptive analysis and simple relative percentages to get an accurate interpretation of the responses; this is because of the peculiar nature of the questions.

Limitation of Methodology: - Challenges experienced in the administration of the questionnaires were largely due to the busy and rowdy nature of our sample, it is very difficult to get people to fill out our questionnaires, as people are busy transacting different businesses. Our aim is to get a wide opinion of the selected customers views in other to be able to get as much and varied opinions as possible thus our choice of Broad Street, as it is a meeting point for people from different walks of life and varied background.

The questionnaires designed after reading a number of literatures extensively. Some of them are adapted from prior studies and previously designed questioners but with certain modification to feet with Ethiopian context and the objective of the research.

To make easy the interpretation, the following values are assigned to each scale, which was used to interpret the total responses of all the respondents for likert scaled survey question by computing the weighted mean:

1=strongly disagree, 2=disagree, 3= Neutral,4=agree, 5=strongly agree (Level of agreement)

3.1.4 Data analyzing technique

The questionnaire was   designed and distributed. And analysis of the interview data and observation issues identified the main issues. These compared to the issues discussed in the literature review. These issues investigated and explored the researcher and designed the questionnaire. Considering the peculiarity of this research work, the questions carefully selected and designed to feel the pulse of the consumer who is really uses these services and E-Commerce platforms that indicated the present trend and opportunity, examined the challenge and found out the growth factors in Ethiopia. In other to avoid complexities and ensure thoroughness in this research work, I decided to design the questionnaire and analyzed data by:

Gender, which allowed us know which gender actually uses E-Commerce platform more; Age group which gave me which particular age group uses E-Commerce plat-forms more frequently, why?, and the relationship that exists among these groups; and E-Commerce platforms, education qualification, experienced and non experienced on the study subject, and also system developer or owners are also considered, grouping data this way, able to have a clearer view of type of transactions and which platforms are used to make these transactions by which gender and age group as we able to navigated easily through the data and cross tabulate among different issues and challenges with regards to benefits/difficulties, trust/safety, and also essentially how E-Commerce has been able to affected the level of business transactions among the respondent in a developing market if any which clearly show us the present trends of e-commerce in Ethiopia..

CHAPTER FOUR

4. Results and Discussion

A combination of several methods is used to achieve the above stated objectives. Primarily, the studies attempted to review the company's practice of e-commerce and technology usage. Existing ICT and e-commerce statistics were also reviewed and analyzed. Information gathered from interviews undertaken with technical, political and scientific personalities, the business community and ICT service providers were also assessed for the study. Researchers generated primary data from firm level sample surveys that were conducted on randomly selected banks, IT companies, Telecom, MICT, technology users. This presents major findings related to challenge and opportunity in Ethiopia. These case studies were organized to complement the research findings from the study itself. In general this chapter presents the results and analysis of data collected via questionnaire, interviews and document analysis. The remaining part of this chapter is organized as follows.

Section.4.1 presents the overview of the chapter and followed by demographic information of the respondents, in section 4.2 Ethiopian company practice of e-commerce and technology, Section 4.3 presents the result and discussion of the challenge of e-commerce. 4.4 Information regarding the opportunities of ecommerce 4.5 the growth factors of the ecommerce.

4.1. Introduction

As it is discussed in the methodology part of this study, data collected by using different techniques were analyzed in this chapter by using triangulation approach. A total of 170 questionnaires were distributed to different sampled companies such as united bank staffs, Ministry of information technology staff, telecom staff, private IT Company and Osaka manufacturing company. Out of the total 170 questionnaires, 145 Useable questionnaires were obtained, which is around 34 questioners for each conducted companies. In addition to questionnaire, the researcher conducted an interview with random clients of supermarket and reviews some bank documents regarding banking system. In order to analyse the research results,

Statistical Package for the Social Sciences (SPSS) software is used. Descriptive measures of each questions response and an interview conducted with customers of selected super market results are presented in the following sections.

4.1.1. Demographic information of the respondents

The participants on survey questionnaire have different personal information; besides these differences they introduce different responses towards E-commerce usage, and the factors that influence E-commerce. The following shows these differences.

Table 4.1.1 Demographic information of respondents

Variable	Classification	Number	Percentage
Gender	Male	92	63.5 %
	Female	52	35.9 %
	Missing	1	0.7%
	Total	145	100%
Age	18-25	33	22.8%
	26-30	52	35.9%
	31-35	32	22.1%
	36 -40	16	11%
	>40	10	6.9%
	Missing	2	1.4%
	Total	145	100%
Educational Qualification	Certificate	0	0%
	Diploma	0	0%
	Degree	114	78.6%
	Masters or more	31	21.4

	Missing	0	0%
	Total	**145**	**100%**
Job Position	Junior	74	51%
	Senior	51	35.2%
	Manager	12	8.3%
	Other	0	0%
	Missing	8	5.5%
	Total	**145**	**100%**
Work experience	Less than One Year	8	5.5%
	1-2 Years	23	15.7%
	3-5	51	35.2%
	more than 5 years	63	43.5%
	Missing	0	0%
	Total	**145**	**100%**
Employment	Employee	138	95.2%
	Business owner	3	2%
	Missing	4	2.8%
	Total	**145**	**100%**

Source: survey data (2016)

As it is shown on the above table 4.1.1, the highest percentage of participants in this study was males who form 63.5% of respondents. In the case of classification of respondents by age the highest percentage of participants are young (26-30 years old) who form 35.9% of total respondents. Regarding the educational level of the study participants, the highest percentage of

them has bachelor degree that form 78.6% of total participants and job position of junior 51 %, Senior 35.2 % and manager 8.3%. On the other hand, the highest percentage of participants has work experience between 1-more than 5 years; employee 98.6% and few business owners; their percentage in participation is 2%.

The following section discusses the company practice of ecommerce and technology in Ethiopia. These company practice of ecommerce and technology based on basic frameworks, technology usage that ecommerce mainly based on and strategy framework of technology acceptance model.

4.1.2 Ethiopian companies practice of e-commerce and technology

E-commerce in Ethiopia has shifted the gear on how business is done. For instance, primary internet transaction introduced at full scale by banks through mobile and card banking services would play considerable. These technologies follow the launch of centralized, online real-time, electronic banking solutions advancing the banking service which increased bank revenue as their clients number increased. And also e-commerce for shopping and products is growing and bounds among customers. It plays a significant role in the development and economic growth of country. Moreover, many companies are more active in focusing on online trade. It is very important to focus on the consumer acceptance towards e-commerce. Consumer acceptance is one important ingredient for the companies to be successful and profitable in the e-commerce service.

Table 4.1.2 Ethiopian companies practice of e-commerce and technology

Item	Respondents Response			
	YES	NO	Do not know/ cannot say	TOTAL
The company have its own Web site/homepage	115 (79.3%)	28 (19.3%)	2 (1.3%)	145, 100%
The company have an IT department	110 (75.7%)	35 (24.1%)	0 (0%)	145, 100%

you have awareness and knowledge about the concept of ecommerce	72 (49.7%)	39 (27%)	34 (23.5%)	145, 100%
Does your company is using e-commerce	31 (21.4%)	44 (30.4%)	70 48.2%	145, 100%
Do the company have information systems strategies, long term strategic, and short term plans been formulated to support the overall E-Commerce adoption and information systems requirements	12 (8.8%)	51 (35.2%)	82 (56.6%)	145, 100%
Do you think e-commerce application can simplify trading activities	96 (66.2%)	0 (0%)	49 (33.8%)	145, 100%
Transaction and money is not physical in nature, do you lacks trust and confidence on the transaction.	28 (19%)	67 (46%)	50 (34.5%)	145, 100%
Your Company serves more than 8 hours its customers per day	64 (44%)	81 (55.9%)	0 (0%)	145, 100%
Do you agree that electronic commerce has substantial advantages over traditional face-to-face, paper-based commerce	71 (49%)	42 (29%)	32 (22%)	145, 100%
Total output of company practice of ecommerce and technology	**40.4%**	**32.4%**	**24.4%**	**100%**

Source: survey data (2016)

As per the table 4.1.2, Ethiopian company practices of e-commerce and technology item there are some of the companies (79.3%) have its own Web site/homepage and (19.3%) do not have website. According to respondents also there are some companies (75.7%) have an IT department and (24.1%) have not. Users and employee need to have ecommerce awareness in order to understand and use of ecommerce advantage its offers however some of respondents have (49.7%) awareness and knowledge about the concept of ecommerce and (23.5%) are not knowledgeable of ecommerce advantages. As the same time tried to identify if their company are using the ecommerce platform in their company and as per the respondents (21.4%) use e-commerce and (30.4%) do not use ecommerce and also (48.2%) have no idea whether their company is using ecommerce nor not.

It seems like few of respondents are knows their company is having information systems strategies, long term strategic, and short term plans been formulated to support the overall E-Commerce adoption and information systems requirements and many of them weather do not have access such information or do not know it at all the company directives. (8.8%) responded yes and (35.2%) have responded No and also (56.6%) are do not know/can't say. Concerning ecommerce application advantages (66.2%) knows and think e-commerce application can simplify trading activities, (0%) do not think ecommerce would make much difference for trading activities and (33.8%) do not know the ecommerce impact and benefit or disadvantages of it.

The nature of ecommerce activities are not physical rather it is virtually so that some of respondents (19%) are not comfortable of Transaction and money is not physical in nature, have lacks of trust and confidence on the transaction. (46%) are responded that they are comfortable and (34.5 %) are not sure. E-commerce would provide a chance for company 24 hours business activities and service for customers, as per the respondents (44%) their Company serves their customer does business 8 hours, (55.9%) does not operated more than 8 hours per day. In general (49%) respondents are agreed that electronic commerce has substantial advantages over traditional face-to-face than paper-based commerce, 29% not believe and 22% are not sure of the benefit of ecommerce it offers. In total percentage of company practices of e-commerce and technology has responded 44.4% "Yes". 32.4 % "No" and 24.4 % do not say/can't say. Which is indicating ecommerce practice is coming to the surface as a benefit and business tools. The total output of company practice of ecommerce and technology in Ethiopia shows 40.2%, which is greater than the total out of "No" 32.4% and "can't say" 24.4%, according to the above table 4.1.2 measurement. Hence, the above output indicates that the practice of ecommerce in Ethiopia is exercising much better than earlier time, which shows ecommerce is becoming of the economical tools that serving the economy growth developing country like Ethiopia.

4.1.3 Purpose of company usage of E -commerce and computer technology

E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals.

Table 4.1.3 Purpose of e-commerce usage at the companies

Item	Respondents Response			
	YES	**NO**	**Do not know/ cannot say**	**Total**
To see actual prices compare prices to reach new customers	69 (47.6%)	38 (26%)	38 (26%)	145 (100%)
Manage internal operations electronic ordering to customer	50 (34.5%)	50 (34.5%)	45 (31%)	145 (100%)
Electronic payment from customer electronic ordering from suppliers'	24 (16.6%)	75 (51.7%)	46 (31.7%)	145 (100%)
Electronic payment to suppliers	78 (54%)	32 (22%)	35 (24%)	145 (100%)
Total %	**38.2%**	**33.5%**	**28.2%**	**100%**

Source: survey data (2016)

To identify company use of E -commerce and computer technology for sellers and its product evaluate products and services E-commerce in this sense means using internet and other ICT tools from simple information searching, comparing price of product, information exchange with customer and supplier, electronic ordering and payment even more, consider different application of ICT to simplify business operation are responded 38.2% ''Yes'' in total percentage, 33.5% ''No'' and 28.2 % answered do not know/can't say in total as it shown the above table 4.1.3. E-commerce is in the use of electronic communications and digital information processing in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals in Ethiopia.

4.1.4 Methods of payment for foreign market

Payment systems are another main factor for e-commerce and economic development. Payment systems, as some other factors, could be drivers or barriers. Having a payment system will encourage people to do business all over the world and speed up transactions and other banking activities as well as providing new opportunities to businesses to provide online services

Table 4.1.4 Payment usage for foreign market

Item	Respondents Response			
	YES	**NO**	**Do not know/ cannot say**	**Total**
Using debit card online/ giving direct debit authorization online	23 (15.9%)	121 (83.5%)	1 (0.8%)	145 (100%)
Advance payment, you transfer money (via bank, SWIFT transfer)	67 (46.2%)	47 (32.4%)	31 (21.4%)	145 (100%)
Payment carried online, internet banking	12 (8.3%)	122 (84.1%)	11 (7.6%)	145 (100%)
By using a credit card online (typing in your credit card details on the seller's website	0 (0%)	132 (91%)	13 (9%)	145 (100%)
By in your bank account details and authorizing the seller to transfer the money from your bank account) Letter of credit Cash	27 (18.6%)	19 (13.1%)	99 (68.3%)	145 (100%)
Methods of payment for foreign market	17.8%	60.8%	21.4%	100%

Source: survey data (2016)

One of paying for Foreign market in ecommerce infrastructure facilities are debit card / direct debit authorization online, advance payment, transfer money (via bank, SWIFT), and using a credit card online (typing credit card details on the seller's website and also bank account details and authorizing the seller to transfer the money and Letter of credit Cash, internet banking were

question and 17.8% replay "Yes", 60.8% "No" and 21.4% do not know or can't say. This shows that as per respondents on the table 4.1.4, there is least practice of the use of ecommerce, in Ethiopia, currently. This might have many external factors and cause for the effect the ecommerce practice in the payment usage for foreign market, such as the regulation and policy of national bank and other related best interested of the Ethiopian economic control and stability against external influence, would affect the payment practice indirectly of ecommerce payment process.

4.2 Discussion of the challenge of e-commerce.

Table 4.2.1: The infrastructure and related condition

Infrastructure refers to ICT infrastructure, and any other infrastructure needed in a country to support e-commerce. These monopoly companies limit competition by blocking lower prices and improvement the quality of the services. The infrastructure of a country could be a main driver to attract international companies and foreign direct investors to do business in that particular country.

The infrastructure and related factors	SDA	DA	NTR	5-AG	4 SAG	Mean	SD
Lack of e-payment systems	21	35	18	49	22	29	12.94
The government is not playing an important role in e-commerce development	34	26	20	40	25	29	7.94
Lack of skilled workers to handle/maintain E-commerce system	18	42	5	58	22	29	20.95
Low internet penetration and internet Access	28	42	0	53	22	29	20.22
Computer technology not widely used	65	42	2	18	18	29	24.68
Frequent power disruption	16	30	0	77	22	29	29
Relatively High cost of Internet	2	1	4	51	87	29	38.68

Lack of adequate banking infrastructure and services to facilitate e-commerce	25	8	6	75	31	29	27.86
The challenge for transportation of goods delivery	20	36	9	52	28	29	16.29
Lack of competition	24	37	0	72	12	29	27.69
High rates of illiteracy of customers	36	23	8	66	12	29	23.37
English language is challenge to use for online shopping.	33	20	5	69	18	29	24.46
Customer awareness level is low	13	11	2	96	23	29	28.19
Mean,	Mean =25.8	Mean =27.9	Mean =6.1	Mean=59.0	Mean=26.3	29	

Source: survey data (2016)

In the discussion of challenge under The infrastructure and related condition ICT many related factors are considered as drivers of using E-commerce and E-payment systems, Telecommunication infrastructure is considered to be the backbone through which a companies can implement and develop its information to provide service through communication technologies infrastructure, such as e-commerce, moreover communication infrastructure enables the people to access the global infrastructure, and as its listed on the table 4.2.1, the Lack of e-payment systems standard deviation is 12.94, shows that there is no much significant difference of the respondents agreements that e-payments is recognize as the hindering factor, but compare to earlier time in Ethiopia many banks have started e-payment service locally for their clients, currently. And also there are supplementary infrastructure for the success of ecommerce include involving government role and as the respondents majority (40) 27.5% have agreed that the government is not playing an important role in e-commerce development, however these days government giving more attention for ICT service such as ecommerce are give attention more this days then early time ,since ICT is already recognized a tool for economic growth which is ecommerce majorly dependent on it.

human resource with the required skilled for the use of ecommerce the 58 (40%) respondents have agreed that Lack of skilled workers to handle/maintain E-commerce system exist in Ethiopia, and however more computer science students are coming to the market these days to fill this gap while the quality of the skill labor is still in question in developing countries.

internet access service the 53 (36.6%) respondents also agreed that Low internet penetration and internet Access one of the cause for the ecommerce and other ICT service challenges, and also on the question of "computer technology not widely used" 44.8% respondents strongly disagree that was not the case for the challenge of ecommerce growth, this show that computer usage is high and common use of computer these days for many and different kind of business and this shows respondents are very familiar or the use of computers.

The bank industry which has direct impact in the service of ecommerce, the power infrastructure supply sustainability respondents agreed 51.3% and 53.1% respectively, which is indicating that ecommerce infrastructure is not sustain and reliable and insufficient as respondents' perspective which is a great concern and need to be addressed this issue in order to restore or give the users confidence and reduce the challenging that hindering the ecommerce growth in Ethiopia. and also transport road infrastructure for goods delivery and mainly which considered and It is known that the of telecommunication infrastructure acts as a challenge in the growth of ecommerce. Considering the table 4.2.1 records and outputs which I believe one way another all the cumulative effect of those factors are the base challenge for ecommerce challenge in Ethiopia. And also that the average overall 59 mean agreement level have agreed, that shows in average more than 59 out of 145 respondents believe strongly the infrastructure is the major cause for the challenge of e-commerce growth in Ethiopia.

As its observed compare to earlier time in Ethiopia there are many private bank have come to in the bank business industry along with e-banking service availability. As it shows above points such as e-payment system, the government is not playing an important role in e-commerce development, Lack of skilled workers to handle/maintain E-commerce system, Low internet penetration and internet Access, Computer technology not used widely, Frequent power disruption, High cost of Internet, Lack of adequate banking infrastructure and services to facilitate e-commerce, challenge for transportation of goods delivery, Lack of competition, High rates of illiteracy of customer, English language is challenge to use for online shopping.

Customer awareness level is low seen as cumulative effective the ecommerce challenge infrastructures that needs to be in place in order to tackle the challenge exist in the country. Hence, as it showed on the above table all the average been done and as the interpretation Mean

$$\overline{x} = \frac{1}{N} \sum_{i=1}^{N} x_i = \frac{x_1 + x_2 + \cdots + x_N}{N}$$

shows that 'Agree" is the point where most respondents agreed on.

Table 4.2.2: The absence of legislation and regulation

Legislation and regulation are barriers and drivers to e-commerce. It has been argued that e-commerce needs legislations and regulation to control of the flow of business over the Internet (Awad, 2004).

The absence of legislation and regulation	SDA	DA	NTR	AG	SAG	Mean	SD
Inadequate legal framework for businesses using e-commerce	12	8	21	72	32	29	25.75
A failure to involve traditional businesses against e-commerce adoption and economic development	33	12	23	52	25	29	14.88
Mean	Mean= 25.5	Mean= 10	Mean= 22	Mean= 62	Mean= 28.5	29	

Source: survey data (2016)

As per the above table 4.2.2 in average 72 (49.7%) respondents' agreed, the absence of legislation and regulation, Inadequate legal framework for businesses using e-commerce is one of the ecommerce challenge and also mean 52 (35.9%) is a failure to involve traditional businesses against e-commerce adoption and against economic development consider the factors of challenge for ecommerce growth and according to the average mean 62 (42.8%) interpretation

as shown in the table 4.2.2 is "Agree". Hence, these factors also considered one of the ecommerce challenges as per respondents.

As of interviewed and communicated with The Ministry of Communication and Information Technology staff, and indicated that Ethiopia is preparing a national draft law to govern electronic commerce, e-Commerce. E-Commerce should also play an important role in allowing Ethiopian business and investors become more competitive internationally by modernizing. the challenges associated with the absence of a regulatory framework which has limited the promotion and implementation of an e-commerce system.

Table 4.2.3 E-commerce fear of risk, security and privacy

Online viruses are also becoming a serious matter that is under scrutiny, since many major corporations have had their computer mainframes broken into by hackers (Vernon, 2000). There are many items on sale which contain materials which are obscene or offensive to a country's traditions and values, and hence intervention by the system to ban their sale might be perceived by some as a barrier, and their purchase should be left to individuals.

E-commerce fear of risk, security and privacy	SDA	DA	NTR	AG	SAG	Mean	SD
e-commerce will result in job cuts	23	18	10	64	30	29	20.88
E-commerce conflicts with a country's culture and religion	27	60	0	32	26	29	21.35
Competition destroy small local businesses	16	26	12	63	28	29	20.14
Fear of technology	13	17	0	86	29	29	33.50
Fear of risk product/orders delivery	8	16	5	96	20	29	37.93

It is high degree of the challenge of E-Commerce application to undertake trading activity?	22	47	15	36	25	29	12.58
E-commerce technology result delays to economic development	29	59	7	30	20	29	19.14
Would it be the challenge buying online?, If online shopping service is available	32	49	0	52	12	29	22.74
Mean	Mean=21.3	Mean=36.5	Mean=6.1	Mean=57.4	Mean=23.8	29	

Source: survey data (2016)

Under E-commerce fear of risk, security and privacy there are some factors have considered using ecommerce or to use ecommerce for their day to day business activity and benefit against the fear of risk, security and privacy, such as if e-commerce result in job cuts as showed in the table 4.2.3, 64 respondents agreed in average out of 145 which is 44.1% that the ecommerce would cut a job, this shows the fear of losing a job over the technology is a concern, however it shows also in the other side of the coin that efficiency will come to the surface and benefits organization or business people and make them more profitable than ever.

As shows from the survey 60 (41.4%) disagreed that ecommerce would not be the conflicts factors for country's culture and religion as per respondents perspective, which is the good sign of the acceptable level of the technology in Ethiopia. In the other perspective the 63 (43.5%) respondents have considered that competition destroy small local businesses which is the e-commerce acceptable level in the business level is lower. This might show the 86 (59.3%) respondents actually have a Fear of technology which is the blurry picture and conflicts of

interest showed on this part, also 96 (66.2%) agreed that and shows how the users are sees product/orders delivery as risk, which might reflect on the trust level goods exchange on the ecommerce service. However, It is high degree of the challenge of E-Commerce application to undertake trading activity as per users or respondents is perspective is negative which conflict the respondents agreement is 47 respondents which is 32.4% disagreed of E-commerce technology actually result delays to economic development and after all providing the chance would it be the challenge buying online, recognized as a disagree by 59 (40.7%) respondents, but in the regardless of the above interest of conflicts 52 (35.9%) respondents are willing to use ecommerce service If online shopping service is available. As per the above table 4.2.3 results, the collective factors measure of mean (average) of E-commerce fear of risk, security and privacy, the respondents' comes to interpretation of "agree" with the 57.40 mean or average. Which is actually shows the challenge is acceptable level to strive the ecommerce service on the country.

Actually E-commerce fear of risk, security and privacy matters is a serious issue in electronic commerce, no matter what source one examines. (Fisher , 2001) reported "Forty-one percent of Web buyers surveyed last year by Forrester Research of Cambridge, Mass., said they have contacted a site to be taken off their databases because they felt that the organization used their information unwisely. A Business Week/Harris Poll found that over forty percent of online shoppers were very concerned over the use of personal information, and 57% wanted some sort of laws regulating how personal information is collected and used (Harris, 2000). Similarly, (Culnan , 2000) argued that privacy concerns were a critical reason why people do not go online and provide false information online.

4.3 The present opportunity of ecommerce

Table 4.3.1 Legislation and regulation are drivers to e-commerce

Legislation and regulation are drivers to e-commerce	SDA	DA	NTR	AG	SAG	Mean	SD
Governments always play an	4	5	0	29	107	29	45.07

important role in economic development							
adoption of e-commerce will result in a significant reduction of costs and providing a variety of products from all over the world	3	8	26	86	22	29	33.25
E-commerce services will bring an opportunity to full scale adoption of e-commerce with existing Ethiopian business environment	2	8	7	89	39	29	26.58
Adopting e-commerce technology may result in creating new job opportunities and encourage employment education and gaining new skills	4	3	7	72	59	29	33.66
Mean	M=3.5 SD =1.2	M=6 SD =2.5	M=10 SD =11.2	M=69 SD =27.7	M=56.8 SD =36.8	29	

Source: survey data (2016)

In the present opportunity of commerce of Legislation and regulation are drivers to e-commerce considered it can be a part of the opportunity framework of the ecommerce usage, as per the above table 4.3.1 the 107 (73.8%) respondents believe that the Governments can play an important role in economic development, and also 86 (59.3%) respondents agreed adoption of e-commerce will result in a significant reduction of costs and providing a variety of products from all over the world believing that ecommerce integrate Ethiopia with the rest of the world, and E-commerce services will bring an opportunity to full scale adoption of e-commerce with existing Ethiopian business environ even considered Adopting e-commerce technology may result in creating new job opportunities and encourage employment education and gaining new skills with 72 (49.7%) oppose to the job cuts result in the above table 4.2.3. "Agree" is the interpreted 56.8 mean result of the table 4.3.1 which indicted the respondents collectively agreed that Legislation and regulation are drivers of an opportunity for e-commerce.

Table 4.3.2 ICT infrastructure, create e-commerce opportunities

ICT infrastructure, create e-commerce opportunities	SDA	DA	NTR	AG	SAG	Mean	SD
Having a e-payment system will encourage people to do business in Ethiopia and speed up transactions and other banking activities as well as providing new opportunities to businesses to provide online services	9	11	2	82	41	29	33.18
Traditional businesses and e-commerce businesses could work together	1	0	16	98	30	29	40.48
Employment, there are enough of skilled workers to handle/maintain E-commerce system	37	53	11	30	14	29	17.24
There is a degree of the opportunity of E-Commerce application to undertake trading activity	5	22	20	63	35	29	21.78
Do you think advisor or training of e-commerce, will help start selling its products on the Internet?	0	0	3	25	117	29	50.29
Mean	M=10.4 SD =15.3	M=17.2 SD =22	M=10.4 SD =7.9	M=59.6 SD =31.9	M=45.4 SD =41.2	29	

Source: survey data (2016)

ICT infrastructure, create e-commerce opportunities table 4.3.2, having an e-commerce system will encourage people to do business in Ethiopia and speed up transactions and other banking activities as well as providing new opportunities to businesses to provide online services

as it show on the table 4.3.2 with 82 (56.6%) respondents response, and also the survey data shows 98 (67.9%) response the traditional businesses and e-commerce businesses could work together which is indicating that still working the both old and new way of doing business is very much applicable to consider at the moment of Ethiopia general situational factors. even on the specific point the 53 (36.6%) respondents disagreed or not believe there are no enough of skilled workers to handle/maintain E-commerce system in Ethiopia. 117 (80.9%)Highly believe that advisor or training of e-commerce, will help start selling its products on the Internet, which is the good sign that there is a will to change with the right support of tools that help the ecommerce can be achieved using the opportunity of the willingness to change with the help of advisory. the overall perspective the survey shows 59.60 mean result agreements level is the opportunity that need to be exploited for the growth of ecommerce. Specially comparing earlier time than now and being exposed for different technology, influence the degree of the opportunity of E-commerce application to undertake business activity, and also majorly advisory or training of e-commerce, will help start selling its products on the Internet. Over all ICT infrastructure creates e-commerce opportunity as show on the table 4.3.2 above respondents, which shows the positive output of respondents.

Table 4.3.3 Privacy and security

Privacy and security	SDA	DA	NTR	AG	SAG	Mean	SD
Would you be comfortable or consider shopping online, if potential challenges are minimized and guarantees	4	4	32	77	28	29	29.84
E-commerce with a country's culture and religion could help in providing paid work from home, keeping with culture, tradition and values.	8	7	10	78	42	29	31.04
If you are provided regardless of the discussed points would you agree to take the advantage of using your	19	18	34	52	22	29	14.35

businesses online?							
Mean	M=10.3 SD = 7.8	M=9.7 SD =7.4	M=25.3 SD =13.3	M=69 SD =14.7	M=30.7 SD =10.3		

Source: survey data (2016)

Conceding Privacy and security respondents were requested of if they consider shopping online, if potential challenges of privacy are minimized and guarantees and the survey shows that 77 (53.1%) respondents are willing to consider using the ecommerce and also requested whether E-commerce with a country's culture and religion could help in providing paid work from home, keeping with culture, tradition and values the 78 (53.8%) have agreed that it will help. On top of that regardless of the above challenge 52 (35.9%) respondents will take the opportunity and advantage of using their businesses online, as it shows on the above table 4.3.3, the mean/average is 69 which is the interpretation is "Agree", so that addressing the privacy and security defiantly open up and become the opportunity factor to able to use ecommerce in Ethiopia.

Table 4.3.4 E-commerce service

E-commerce service	SDA	DA	NTR	AG	SAG	Mean	SD
Do you observe opportunity as to enabling environment for ICT and e-commerce in the current Ethiopian socio, economic, political and business environment	17	11	20	69	28	29	23.18
E-commerce services will bring an opportunity to full scale adoption of e-commerce with existing Ethiopian business environment	12	13	18	68	34	29	23.51
E-commerce competition could drive the economic	20	20	10	63	32	29	20.54

development of a country by providing cheaper products and services							
E-commerce technology result make it faster to economic development	0	2	0	46	97	29	42.79
Mean	M= 12.3 SD = 8.8	M=11.5 SD =7.4	M=12 SD =9.1	M=61.5 SD =10.7	M=47.75 SD =32.9		

Source: survey data (2016)

E-commerce services conducted as per an opportunity driver for ecommerce in Ethiopia and 69 (47.6%) respondents have responded positively, they see the opportunities and observe as to enabling environment ICT and e-commerce is in the current Ethiopian socio, economic, political and business environment. And according to survey table 4.3.4 E-commerce services 68 (46.9%) responded that ecommerce will bring an opportunity to full scale adoption with existing Ethiopian business environment. In the concept of E-commerce competition many of the 63 (43.5%) respondents believe it could drive the economic development of a country by providing cheaper products and services, and also believe E-commerce technology result make it faster to economic development practices in Ethiopia as per the survey table 4.3.4 in above 97 (66.9%) respondents have agreed. It seems like most of them respondents have agreed as per shown on the survey that ecommerce service provide the opportunity for the factors indicated in the above table 4.3.4.

4.5 The growth factors of ecommerce.

Table 4.5.1 Infrastructure

Infrastructure	SDA	DA	NTR	AG	SAG	Mean	SD
E-banking and E-payment systems are more available then earlier time	0	2	13	99	31	29	41.01
The infrastructures are being in a good condition now	21	38	23	48	15	29	13.58
The government is playing an important role in e-commerce development compare to before	27	33	1	50	34	29	17.81
Regarding the statement that public monopoly of Ethiopian Telecommunication Corporation contribute for infrastructural development use of electronic commerce for business	22	45	0	55	23	29	21.55
Mean	M=17.5 SD=12	M=29.5 SD =13	M=9.3 SD =10.9	M=83 SD =24.2	M=25.8 SD =8.5		

Source: survey data (2016)

As a growth factor, survey has been conducted and whether E-banking and E-payment systems are more available than earlier time, The study observed that there was more government commitment expressed in the country with 99 (68.3%) respondents, also 48 (33.1%) responded the infrastructures are being in a good condition now, and also 50 (34.5%) respondents believe

that government is playing an important role in e-commerce development compare to before. The surprise perception of the respondents regarding the statement that public monopoly of Ethiopian Telecommunication Corporation contribute for infrastructural development use of electronic commerce for business are responded by 55 (37.9%) respondent are positively agreed. As per respondents collective response show that averagely 83 respondents have agreed that there is a growth of ecommerce in Ethiopia.

Table 4.5.2 Legislation and regulation

Statements	SDA	DA	NTR	AG	SAG	Total
Legislation and regulation						
The legislation and regulation of ecommerce is now better than before.	16	28	52	30	19	145 (100%)
Total Percentage%	11%	19.3%	35.7%	20.7%	13.1%	

Source: survey data (2016)

In the growth factors, have considered whether the legislation and regulation of ecommerce is now better than before nor not were questioned, Legal frameworks to build security and trust are common issues that both consumers and businesses find difficult in adapting e-commerce as their business strategic tool. Ensuring legal and regulatory environments are critical for the complete functioning of e-commerce in a country. This is potentially a transnational activity and it seems like the 52 (35.7%) of respondents have responded as **"neutral",** which shows that most of the respondents are not aware of the current ecommerce legislation and regulation frame work status.

Table 4.5.3 Privacy and security

Privacy and security	SDA	DA	BTR	AG	SAG	Mean	SD

Country's culture and religion are changing and globalization effect have seen much stronger than before	0	12	12	27	94	29	37.57
E-Commerce is improved customer service Overcome geographical limitations	8	9	15	87	26	29	33.20
E-Commerce Providing up-to-date information Encourages price transparency	13	21	37	53	21	29	16
Do you think advisor or training of e-commerce, have improved to start selling its products on the Internet?	2	2	9	100	32	29	41.55
Mean	M=5.8 D=5.9	M=11 D=7.9	M=18.3 D=12.7	M=66.6 D=33.1	M=43.3 D=34.1		

Source: survey data (2016)

Privacy and security have been considered for the impact for the implication that contribute as growth factors and it include country's culture and religion changing and globalization effect that how the respondents have seen it in order to ecommerce is how much stronger than before and it becomes a heart matter of users and 94 (64.2%) respondents have conformed ecommerce exercise better than before. also 87 (60%) respondents agreed E-Commerce improved customer service Overcome geographical limitations that how the Ethiopians see with the rest of the world is the challenge for the growth factors for ecommerce usage. on top of that according to table 4.5.3 survey the E-Commerce providing up-to-date information price transparency and inconveniency for business man and sellers as well as clients 53(36.6%) responded positively.

Including 100(69%) respondents are comfortable accepting supports and advisor or training of e-commerce that believe improves to start selling its products on the Internet. With all above consideration the respondents in average 66.6 have agreed that the privacy and security mainly will set the growth factor for the ecommerce as per the above table 4.5.3, and optimistically there is a growth of ecommerce and also if the above factors are addressed then defiantly there will be a growth defining factors for ecommerce in Ethiopia.

Table 4.5.4 E-commerce service

Statements	SDA	DA	NTR	AG	SAG	Mean	SD
E-commerce service							
Competition is stronger than before	0	0	24	90	31	29	36.85
traditional businesses against e-commerce adoption is higher involvement than before	6	16	0	93	30	29	37.54
E-commerce technology result growing to economic development	0	0	7	95	43	29	40.98
Adopting e-commerce technology creating new jobs	10	37	16	48	34	29	15.65
E-commerce facilitating a Competition b/w small local businesses and big international business grow.	20	11	21	68	25	29	22.39
E-Commerce is improving shopping quality and Potential to Increase Company	7	7	43	62	26	29	23.78

Profits							
You are a user of E-Commerce service than before	5	25	51	42	22	29	17.98
Mean	M=6.7 D=6.9	M=13.7 D=13.6	M=23.1 D=18.3	M=71.1 D=21.9	M=30.1 D=7		

Source: survey data (2016)

Ecommerce services have been surveyed conducted how the ecommerce competition is stronger than before and 90 (62%) respondents responded with agree degree which is believed that ecommerce practice is coming to the surface and E-commerce in Ethiopia has shifted the gear on how business is done. Traditional businesses against e-commerce adoption is higher involvement than before as showed on table 4.5.4 with 93 (64.1%) respondents agreeable response. In the E-commerce technology result growing to economic development backed up by 95 (65.5%) respondents. For instance, primary internet transaction introduced at full scale by banks through mobile and card banking services would play considerable. These technologies follow the launch of centralized, online real-time, electronic banking solutions advancing the banking service which increased bank revenue as their clients number increased and also whether traditional businesses against e-commerce adoption is higher involvement than before and responded positively, Clearly, e-commerce is being utilised and even thou much needs to be done to rightfully take advantage of it to support and even grow the Ethiopian economy. E-commerce technology is result growing to economic development, on top of that ecommerce service if adopting e-commerce technology is creating new jobs receipted as benefit of it, also believed contributed E-commerce facilitating a competition b/w small local businesses and big international business grow. The questioners also involve if E-Commerce is improving shopping quality and Potential to Increase Company Profits as per respondents perspective is responded positively with 68 (46.9%) respondents, lastly if respondents are using E-Commerce service than before 51 (35.2%) response the neutral, which indicate the lack of awareness of their day to day use of technology type used for, in general company and clients are enjoying the benefit of the ecommerce service which is showed in the above table 4.5.4 that collective response of the respondents that shows 71.1 mean or average have agreed upon it.

CHAPTER FIVE

SUMMARY, CONCLUSSION AND RECOMMENDATION

1.5   SUMMARY

This study has identified a number of challenge and opportunity for Ecommerce adoption. The technological challenges, identified in this study were infrastructure, security risk and lack of trust on the technological innovation, and related factors was identified main challenge factors of the developments of ecommerce in Ethiopia, such as insufficient of e-payment systems, government involvement in e-commerce development of legal framework for businesses usage of e-commerce, the ability to involve traditional businesses against e-commerce adoption and economic development. public monopoly of Ethiopian Telecommunication Corporation contributing for infrastructural development use of electronic commerce for business it has huge portion of challenge for the growth of ecommerce, as it indicated there is no added value service are available as an option for the people wanted to used ecommerce as well as end users since its internet connation cost is unrealistic and unaffordable, high cost of Internet have not considered the reality of the economic and income of people and for many technology's users are the main challenges that are identified for ecommerce development in Ethiopia.

The finding identified under technological factor was also consistent with other studies on technology adoption in different countries. In the case of organizational factor, financial cost as well as human resource is considered, on the other hand lack of technical managerial skills to use and implement the system is considered as challenge for the adoption of Ecommerce in the country. Most challenge to E-commerce adoption identified in this study were come from external Environments; specifically those are lack of legal framework regarding Ecommerce system at national level, lack of ICT infrastructure, and Absence of competition. Interestingly, lack of Government support was taken as challenge for the adoption of E-commerce system in Ethiopia.

The study also identified basic benefit a developing country could get from the adoption of E-commerce system. Those benefits were considered as a driving force for the opportunity of the ecommerce. These are two basic benefits that drive ecommerce to adopt technological innovations. In general the finding of the study, offer other benefit for the adoption of E-ecommerce, such as enhancing customer satisfaction, increase reliability and accessibility of service, creating good relationship between clients & business and also used as a better information control.

5.2   CONCLUSSION

This study aims at investigating the main challenge and opportunity of ecommerce in Ethiopia. Over the past decade, access to ICT in developing countries has challenge due many factors, which is technology's dependents service deliver such as ecommerce, a development enabled by changes in technologies, policies, and markets. Increased access has unleashed the transformative potential of ecommerce, affecting the ways in which people, governments, and businesses interact. The changes in those interactions, and ecommerce itself, promise to enhance economic opportunities for the improve delivery of services to the business community, enhance government efficiency and transparency, and accelerate social change. On the challenge and on the opportunity of ecommerce questioners overlapped questions have been set to identify the tendency of the respondents and for the purpose of cross checking the real meaning of the respondents toward to the e-commerce perception in general.

And also there are no other options service are available so that technology innovation, quality of service and added value for customer is too week. As it is observed from the survey perception there is lack of skilled workers to handle E-commerce system, in top of that low internet penetration and internet Access specially. Also many related factors are identified for the challenges in Ethiopia are, lack of competition in the ICT service provider for the users who wanted to use such facilities for their business, E-commerce fear of risk, security and privacy taken as well, as a known challenge factors for those who are aware of the technology benefits, and fear of risk product/orders delivery it came in play concerning the security and transportation of goods delivery, lastly Customer awareness level is low, the high rates of illiteracy of

customers that poses English language is a challenge to use for online shopping in Ethiopia was identified as the challenge for e-commerce in Ethiopia as well.

As to identify the human elements impact toward for using ecommerce opportunity, that E-commerce services believed in many respondents agreed that ecommerce will bring an opportunity to full scale adoption of e-commerce with existing Ethiopian business environment, against to respondents earlier response of luck of skill for ecommerce service and solution, and also fear of risk and security, it shows that human elements are positive towards to technology and one way another willing to go along with the technology it offers such as ecommerce.

Compare to earlier, these days the bank industry have grown and brought many technology framework that accelerate the usage of ecommerce, so that e-banking system will encourage people to do business in Ethiopia and speed up transactions and other banking activities as well as providing new opportunities to businesses to provide online services. The perception of taking the advantage of using businesses online is one of the evidence that if legislation and regulation are set as a driver to e-commerce in the country which will give the convenience for the risk and the security matters involved with it. Involving as advisor/consultancy and providing training is considered that will help the usage of ecommerce opportunity to be utilized. e-commerce service, have been observed as an opportunity in Ethiopia as to enabling environment for e-commerce in the current socio, economic, political and business environment.

In the growth factor Infrastructure of E-banking and E-payment systems are more available than earlier time and there is an observation the infrastructures are being in a good condition now, the government is trying and initiating to play an important role in e-commerce development compare to before as the information found from Ethiopian information communication technology minister (MICT) working on the draft level of the legislation and regulation of ecommerce framework. This is believed that ecommerce as a service will bring strong competition than before, a way to of E-commerce technology growing for economic development in Ethiopia. On top of that the new generation will be a major factor for the growth of ecommerce because technology usage for personal purpose for the youngster is becoming a day to day activities which drives the new young generation will be a part of the market which will create more demand of the ecommerce service which really bring for individual and as a

nation convenience and remedy for the time wastage to accomplish certain task so that human force usage optimized and will have more time to use its time and effort for more other economical activity which will contribute huge changed for economical growth in Ethiopia.

Technology is growing faster than ever, as we are discussing the ecommerce concept the technology gone too far on the other side of the world and E-commerce "Virtual reality shopping experience" are happing currently.

5.3   RECOMMENDATION

In this paper an attempt has been made to study mainly e-commerce opportunities and challenges in Ethiopia. In general problem of this thesis, the concept of e-commerce had been thoroughly explored, a review of the related literature, reports of different institution and statistical data, in addition to questioner, was carried out. With the direction of the growth of electronic commerce accelerating growth and entering the world economy, as one of the most important features of the modern digital economy Ethiopia has to adapt ecommerce policies and regulations to the rapid changes in technology and market structure. The challenges to adaptation included lack of regulation, uncompetitive telecommunication markets. Focused on spectrum allocation, introduce competition, ensuring workable interconnection arrangements, and ensuring ICT access for all and making affordable and underserved, among others, and are needed. Furthermore,

To be able to reap the benefits of ecommerce growth and its transformative potential, governments needed to support the development of ecommerce and adopt ICT themselves for better delivery of education, which tackle the limitation of skill, and other services and to enhance business and government efficiency and transparency. While progress has been made on many of these challenges, some important challenges have yet to be mastered. These include recognize ICT access, and use of the Internet very important for business, and ICT skills, and the adoption of ecommerce applications in the sector.

Maintain the focus on competition combined with promoting stability and predictability of the ecommerce regulatory environment; and enabling policy makers and regulators to deal with next-generation policy and regulatory issues, new business models, and convergence of

technologies. Support catalytic public-private partnership investments to accelerate the ecommerce usage and acceptance; identify and support effective approaches to promote access to the technology end users with affordable rate, Strengthen the capacity to respond to clients demands for ecommerce applications. Increasing access to information infrastructure by mobilizing and leveraging private sector investments and extend access. E-commerce frameworks reform and a strong regulatory environment, policy reform and private investments will increase competition and access faster.

This evaluation finds that ecommerce can be a tool to advance development objectives under the right circumstances and when policy makers consider enabling factors, local context, constraints, and capabilities. The findings are in line with the body of evidence linking investment in ecommerce to productivity and growth and the potential of e-commerce to transform the way business function or the manner in which added value services are delivered to the public. The mobile phone offers the potential for this medium to evolve for ecommerce facility and growth.

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Appendices

St.MARY UNIVERSITY
MASTERS OF BUSINESS ADMINISTRATION
GRADUATE PROGRAM (MBA GENERAL)

Dear Respondents,

First of all I would like to forward my heartfelt gratitude and respect to you for administering this questionnaire honestly and responsibly. The questionnaire is designed to collect the necessary information to undertake a research on the topic " Electronic commerce: Practices, Opportunities and Challenges in Ethiopia" for the partial fulfillment of the requirements of the degree of Masters of Business Administration at St.mary University.

Thank you very much ahead for your cooperation!

(**Note**: - E-commerce in this sense means using internet and other ICT tools from simple information searching, comparing price of product, information exchange with customer and supplier, electronic ordering and payment even more, your answer should consider different application of ICT to simplify your business operation,)

I.   *Personal Information/ Pro*

1. Sex: Male ☐   Female ☐

2. Age (Years): 18-25   26-30   31-35   36 -40   >40

3. Educational Qualification

   Certificate ☐   Diploma holder ☐   First Degree ☐   Masters or more ☐

4. Your current position in the organization

   Junior ☐   Senior ☐   Manager ☐   Other ☐

5. Your work experience in the organization with this position

   Less than One year ☐   1-2 Years ☐   3-5 ☐   more than 5 years ☐

6. Are you employee or business owner?

   Employee ☐   Business owner ☐

II.   *Company Information*

1. Does the company have its own Web site/homepage?   Yes ☐   No ☐

2. Does the company have an IT department?   Yes ☐   No ☐

3.   Do you have awareness and knowledge about the concept of ecommerce?

   Yes ☐   No ☐

4. Does the company use e-commerce? Yes ☐ No ☐

5. Your company use E -commerce and computer technology for

   5.1 To Identify sellers and its product evaluate products and services Yes☐ No

   5.2 To see actual prices compare prices to reach new customers Yes ☐ No ☐

   5.3 Manage internal operations electronic ordering to customer Yes☐ No ☐

   5.4 Electronic payment from customer electronic ordering from suppliers' Yes☐ No ☐

   5.5 Electronic payment to suppliers Yes ☐ No ☐

   5.6 Do not know/ cannot say ☐

6. Does your company is using e-commerce?

   Yes ☐   No ☐   Do not know/ cannot say ☐

7.   Do the company have information systems strategies, long term strategic, and short term plans been formulated to support the overall E-Commerce adoption and information systems requirements   Yes ☐   No ☐   Do not know/ cannot say ☐

8. Do you think e-commerce application can simplify trading activities?   Yes ☐   No ☐

9. If your organization plans to use e-commerce applications, Yes ☐   No ☐

10. How do you used to pay for Foreign market

   10.1   Using debit card online/ giving direct debit authorization online Yes ☐   No ☐

   10.2   Advance payment, you transfer money (via bank, SWIFT transfer) Yes ☐   No ☐

   10.3   Payment carried out off-line (cash on delivery, by cheque…) Yes ☐   No ☐

   10.4   By using a credit card online (typing in your credit card details on the seller's Website) Yes ☐   No ☐

   10.5   By in your bank account details and authorizing the seller to transfer the money from your bank account) Letter of credit Cash. Yes ☐   No ☐

   10.6   Do not know/ cannot say ☐

11. Transaction and money is not physical in nature, do you lacks trust and confidence on the transaction. Yes ☐   No ☐

12. Your Company serves more than 8 hours its customers per day?

   Yes ☐   No ☐

13. Do you agree that electronic commerce has substantial advantages over traditional face-to-face, paper-based commerce?

   Yes ☐   No ☐

II. Challenge of E-commerce

Please tick/select in the following table or indicate the extent you agree or disagree of the

Potential challenge that affect to use or extend use of e-commerce technologies.

Statements	Strongly Disagree	Disagree	Neutral	Strongly Agree	Agree
The infrastructure condition and related factors					
Lack of e-payment systems					
The government is not playing an important role in e-commerce development					
Lack of skilled workers to handle/maintain E-commerce system					
Low internet penetration and internet Access					
Computer technology not widely used					
Frequent power disruption					
Relatively High cost of Internet					
Lack of adequate banking infrastructure and services to facilitate e-commerce					
What would be the challenge for transportation of goods delivery?,					
Lack of competition					
High rates of illiteracy of customers					
English language is challenge to use for online shopping.					

Customer awareness level is low					
The absence of legislation and regulation					
Inadequate legal framework for businesses using e-commerce					
Lack of confidence in after sale service					
A failure to involve traditional businesses against e-commerce adoption and against economic development					
E-commerce fear of risk, security and privacy					
e-commerce will result in job cuts					
E-commerce conflicts with a country's culture and religion					
Competition destroy small local businesses					
Fear of technology					
Fear of risk product/orders delivery					
Iit is high degree of the challenge of E-Commerce application to undertake trading activity?					
E-commerce technology result delays to economic development					
What would be the challenge buying online?, If online shopping service is available					

III.   Opportunity of E-commerce

Please tick/select in the following table or indicate the extent you agree or disagree of the Potential challenge that affect to use or extend use of e-commerce technologies.

Statements	Strongly Disagree	Disagree	Neutral	Strongly Agree	Agree
Legislation and regulation are drivers to e-commerce					
Governments always play an important role in economic development					
adoption of e-commerce will result in a significant reduction of costs and providing a variety of products from all over the world					
E-commerce services will bring an opportunity to full scale adoption of e-commerce with existing Ethiopian business environ					
Adopting e-commerce technology may result in creating new job opportunities and encourage employment education and gaining new skills					
ICT infrastructure, create e-commerce opportunities					
Having a e-payment system will encourage people to do business in Ethiopia and speed up transactions and other banking activities as well as providing new opportunities to businesses to provide online services					
Traditional businesses and e-commerce businesses could work together					
Employment, Lack of skilled workers to handle/maintain E-commerce system					
The degree of the opportunity of E-Commerce application to undertake trading activity					
Do you think advisor or training of e-commerce, will help start selling its products on the Internet?					

Privacy and security					63
Would you be comfortable or consider shopping online, if potential challenges are minimized and guarantees					
E-commerce with a country's culture and religion could help in providing paid work from home, keeping with culture, tradition and values.					
If you are provided regardless of the discussed points would you take the advantage of using your businesses online?					
E-commerce service					
what is the main opportunity would you expect from this line of business					
Do you observe opportunity as to enabling environment for ICT and e-commerce in the current Ethiopian socio, economic, political and business environment					
E-commerce services will bring an opportunity to full scale adoption of e-commerce with existing Ethiopian business environment					
E-commerce competition could drive the economic development of a country by providing cheaper products and services					
E-commerce technology result make it faster to economic development					

IV.   Growth of e-commerce

Please tick/select in the following table or indicate the extent you agree or disagree of the Potential growth factors use of e-commerce technologies in Ethiopia

Statements	Strongly Disagree	Disagree	Neutral	Strongly Agree	Agree
Infrastructure					
E-banking and E-payment systems are more available then earlier time					
The infrastructures are being in a good condition now					
The government is playing an important role in e-commerce development compare to before					
Regarding the statement that public monopoly of Ethiopian Telecommunication Corporation contribute for infrastructural development use of electronic commerce for business					
Legislation and regulation					
The legislation and regulation of ecommerce is now better than before.					
Privacy and security					
Country's culture and religion are changing and globalization effect have seen much stronger than before					
E-Commerce improved customer service Overcome geographical limitations					
E-Commerce Providing up-to-date information Encourages price transparency					

Do you think advisor or training of e-commerce, will improve start selling its products on the Internet?					
E-commerce service					
Competition is stronger than before					
traditional businesses against e-commerce adoption is higher involvement than before					
E-commerce technology result growing to economic development					
Adopting e-commerce technology creating new jobs					
E-commerce facilitating a Competition b/w small local businesses and big international business grow.					
E-Commerce is improving shopping quality and Potential to Increase Company Profits					
You are a user of E-Commerce service than before					

1. What would be the challenge the delivering type of service for the purchasing you have

   just made online, for your home delivery service?

   Internet service availability ☐   skill of use of ecommerce ☐

2. What would be the challenge for transportation of goods delivery?,

   Messenger ☐   Vehicle ☐   Infrastructure ☐ Other_____

3. If you provide e-commerce service, what is the main opportunity would you expect from this line of business?

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4. What opportunities do you observe as to enabling environment for ICT and e-commerce in the current Ethiopian socio, economic, political and business environment? --------------

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5. Finally, if you would like to add any comments or ecommerce's practices in Ethiopia?----

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