Chapter 1

1. Introduction

This thesis is an in depth discussion about E-Commerce adoption factors among Sri Lankan private sector executives. The first chapter of the thesis will introduce the background of the selected research area. This will be followed by the research problem that will help the reader to understand the overview of the research. The problem discussion ends with specific research questions and research objectives. A brief introduction about previous literature related to the selected topic will be discussed thereafter. Finally, the importance of the study and the approach to achieve research objectives will be discussed in detail. In addition, an overview explanation about thesis structure which discusses the purpose of the next chapters will be presented at the end.

1.1 Background

For over thousands of years people were engaged in commercial activities with one another and adapted to tools and technologies that were available in particular eras of history. As a result of this, payment methods for exchanging goods and services have been changed from goods and services having equal financial value to virtual money that can be transferred electronically between two accounts which are located in two geographically different locations. Because of that, technology has played a pivotal role and become the driver of the financial service industry. Online banking, Telecommunications, Information Technology (IT), phone banking, smart cards and such, have now made it possible to deliver banking and financial services, at a lesser cost than before.

As a country, Sri Lanka has been a well known location for trade and commerce among both East and West, for thousands of years, because of its geographical location. It has been used as a commercial center for exchanging goods and services and has become a kind of hub for both Eastern and Western traders. Because of this,
as a nation, Sri Lankans who lived in various eras should have used different kinds of payment methods used at that particular time.

After the invention of Internet, World Wide Web technologies and other electronic devices, led to the development of Electronic Commerce (E-Commerce). The use of Internet along with a range of other Information and Communications Technologies (ICT), is transforming the way business is done locally and globally. In every region of the world, businesses are examining the ways in which they can benefit and maximize profit from the new economy and in particular from E-Commerce. The fundamental difference between the old economy and the new economy is how the business models are built. The business models in the new economy are built on IT infrastructure.

The IT industry can be broadly categorized into hardware, software and services. Most governments view the IT sector as an important sector of the economic growth, and are taking measures to stimulate sector output as a means of accelerating economic growth. Many countries paid attention to developing E-Commerce but the adaptation of developing countries to E-Commerce is a challenge because of the infrastructure limitations and other issues related to consumers like domain knowledge, security concerns etc..

In Sri Lanka, Internet penetration is being increased dramatically due to some key influencing factors like infrastructure development, increase of IT literacy level of the people and reduction of Internet and Telecommunications charges. People have realized the use and benefits of Internet and are using it for various purposes like education, entertainment, business and communication. Although there is a growth in the Internet penetration level, Sri Lanka has not yet passed the medium level of E-Readiness because of the low coverage of Internet and low computer and Internet literacy levels. However the existing Internet users display comparatively high adaptability to E-Commerce transactions. The Sri Lankan Internet user has a moderate level of Internet shopping usage, while more people pay bills through Internet and access Internet banking application. The purpose of using Internet varies from person to person depending on interests and requirements. Due to the increase in the use and popularity of certain web sites, companies are willing to put their advertisements on
Internet and try to create an awareness of certain products in people’s minds. All of these factors have led to the development of E-Commerce in Sri Lanka. At the moment, although there is a considerably large growth, the Internet penetration and E-Commerce development has still been centralized only in Colombo and adjacent districts (Lane et al., 2004).

Most private sector executives in Sri Lanka are highly educated and skillful people in using various IT applications and tools. As a result of the latest developments in the secondary and the tertiary education sector in Sri Lanka, people who are known as young professionals are well equipped with IT knowledge, required by the industry. Their working environment and job tasks are tightly coupled with IT and its related services. E-Commerce has become a part of their day to day life and some people use it extensively according to their professional requirements. Since the emergence of E-Commerce has reduced the time and effort needed to spend on acquiring goods and services compared to the traditional touch and feel based business model, some professions like Banking and Finance encourage to use only E-Commerce in certain situations.

Due to professional and social requirements, many young professionals had to work late in the evening and work hard to accomplish goals related to their professions. The effects of such a busy life style and the high disposable income that they earned have led to some distinguished purchasing patterns. These young professionals have already been satisfied with their basic needs and are looking for superior goods and services. When they get settled in their professions for 2-3 years, they tend to consume luxury items, fast foods and also high-tech products. Professionals who are working in IT and Telecommunications, Banking and Finance, Manufacturing, Education and Hotel industries have enough access to Internet and have some need to use E-Commerce. Most of such organizations have 24 hour access to Internet and encourage their employees to use electronic communications for professional matters. These young professionals like to spend their money on products and services which will distinguish them from other such individuals.

By considering all those factors, the growth of the IT and Telecommunications sector, business requirements for transforming to electronic transactions and emerging social
communities like young professionals as discussed above, it is interesting to study the
use of E-Commerce and factors affecting people to decide whether the way that
people are using it, is continuing or not. Further, since businesses also started using E-
Commerce because of the positive impacts gained by it compared to the existing
methods, it will be useful to identify emerging opportunities in this market segment,
for companies who are willing do electronic businesses and promote their products
and services over Internet.

1.2 Problem Statement

The human factor is a key element in E-Commerce and involved a person or a
business to sell products and services and a person or a business to buy those products
and services. Because of this, the consumer plays the primary role in making a
business complete from both buying and selling sides. There are various factors
influencing a person to use E-Commerce. Some factors are within the control of that
person while others are not. The factors are directly associated with decision
making while some are not. Factors that cannot be controlled or are external to the
person are associated with his/her immediate social environment like the organization
that the particular individual works in and the influence generated from colleagues,
subordinates and superiors in the working place.

Concerns related to the trust factor or Perceived Risk associated with E-Commerce is
a key to develop E-Commerce involvement in a country. Even though there are
studies related to this field in different countries, the outcome of those studies cannot
be directly applied to the Sri Lankan context, as personal attitudes and priorities in
decision making are getting different from country to country and depend on the
different culture in each country (Brachear et al., 2008). Various dimensions in
personal attitude like Perceived Usefulness and Perceived Ease of Use, and the
Perceived Risk associated with web technologies are within the control of the person
and depend on the human behavior. Based on that, the main problem of this research
is identifying factors affecting adoption of E-Commerce among Sri Lankan private
sector executives to use E-Commerce continuously. These factors can be both
internal and external to the person.
1.3 Research Questions

Based on the research problem the following research questions are developed.

1. What are the factors affecting private sector executives in Sri Lanka to use E-Commerce?
2. For what purposes do people use E-Commerce frequently in Sri Lanka and what kinds of products and services do they frequently purchase when shopping online?
3. What is the current level of E-Readiness in Sri Lanka?
4. What will be the matching model for E-Commerce adoption for a country with this type of E-Readiness indicators?

1.4 Research Objectives

Previous researchers have identified issues related to privacy, confidentiality and authenticity, limitations in accessibility and awareness, influencing factors of the current organization, opinions from peers and superiors, Perceived Ease of Use and Perceived Usefulness are factors affecting adoption and diffusion of any new technology. The main objectives of this research are to identify those aforementioned factors in the case of E-Commerce and their effectiveness in adoption of E-Commerce among Sri Lankan private sector executives. Further, examining and investigating a common model which categorizes those factors into one framework is another objective of this research.

Other than that, identifying key products that these young professionals purchase frequently via Internet and finding out the main barrier that they come across when using E-Commerce are the other key objectives of the research. People who have used E-Commerce previously may have pleasant or unpleasant experiences and hence the likelihood of future use could depend on current experiences. Identifying the likelihood of using E-Commerce in future applications is also an objective of this research. The sample will be considered from three different economic sectors in the country, IT and Telecommunications, Banking and Finance, and the Manufacturing.
In addition to this, current E-Readiness indicators in Sri Lanka and recent initiatives taken by regulating and policy making bodies to improve E-Readiness level need to be investigated as those are key factors in developing an E-Commerce business environment in the country.

1.5 Previous Studies

Previous studies on E-Commerce adoption have been addressed in various academic practices using different models and frameworks. Two models are widely applied in the adoption approach: the Technology Acceptance Model (TAM) (Davis, 1989) and the Theory of Planned Behavior (TPB) (Ajzen, 1991). Each model has been constructed using different sets of determinants and moderators. The trust factor or the Perceived Risk associated with E-Commerce has widely been discussed in E-Commerce adoption literature. Olusegun et al. (2006), Wang et al. (2008), Connolly and Bannister (2007), Styke et al. (2004), Jahangir and Begum (2008), Chang and Zhu (2006) and Sulaiman et al. (2008) have discussed the risk factor in online transactions extensively and proved the impact associated with E-Commerce adoption.

Further, Klopping and McKinney (2004), Delafrooz et al. (2008) and Sulaiman et al. (2008) have discussed the main key factors in the TAM namely Perceived Ease of Use and Perceived Usefulness, and their relationship with E-Commerce Adoption. The key factors in the TPB, Perceived Behavioral Control, Attitude and Subjective Norm, have also been discussed extensively in its related literature by Uzoka et al. (2007) and Hernandez et al. (2009). Literature discussed by Mutum and Ghazali (2006) and Brachear et al. (2008) were mainly focused on comparing online shoppers with non-online shoppers and identifying distinguished characteristics of online shoppers from other people who do non-online shopping.

When it comes to the Sri Lankan context, it was very difficult to find published research papers related to research objectives. Kapurubandara and Lawson (2007), Lane et al. (2004) and Gamage (2001) have done investigations mainly related to E-Commerce infrastructure and challenges in implementing E-Commerce in the country.
1.6 Significance of the Study

A country which is planning to promote E-Commerce or a business, an institution or a government entity which is trying to use E-Commerce as a marketing channel, should be well aware of E-Commerce readiness of current Internet users and the penetration rates of the same. Research on Internet consumer behavior is still very much in its infancy and only a few authors have started to map the structure of the factors influencing consumers’ attitudes towards on-line shopping. Almost all of them have focused on developed countries and regions so far and they cannot be used to interpret the situation in Sri Lanka directly. Factors affecting people in one continent of the world can be different from the factors in other continents. Thus the need for methodical study which explores the E-Commerce readiness, factors affecting to use it and reasons underlying such a behavior for the Sri Lankan context remains high.

Private sector executives in Sri Lanka contribute significantly to the gross national product of the country. Sometimes more than half of their daily time is spent with computers and Internet. Their purchasing power is high due to the nature of the industry in which they are employed. This is beneficial for companies like automobile, fast food, property and land sales, and high-tech electronic equipment producers who target this market segment to promote their products and services through Internet.

The research is focused on the factors affecting positively and negatively on the targeted community to adopt E-Commerce. Identifying negative factors on adopting and barriers encountered in using E-Commerce frequently, will allow regulating and policy making bodies to think more on their roles and take necessary steps to improve those areas. Identifying what kinds of products, these people purchase frequently over Internet would benefit the business environment to re-brand and re-launch their products on the web market space.

This study also looks into the ways of improving E-Commerce in the country by identifying the needs and concerns of both current and potential users. The research project mainly looks into the area of Business to Consumer (B2C) E-Commerce set up in the country. Further, the study will investigate general perceptions and impacts of E-Commerce in the country.
1.7 Research Design

A decision was made to conduct a research to fulfill the above research objectives and to facilitate the main research problem. Literature related to the E-Commerce, E-Readiness in Sri Lanka and technology adoption models were studied prior to the research and a thorough understanding of the selected domain was gathered. Two well known IT adoption models, TAM and TPB, and their pre-tested research frameworks were used to build the conceptual model. This helped in identification of research variables according to the objectives and it was decided to do a questionnaire based research to find the factors affecting adoption of E-Commerce among Sri Lankan private sector executives. Five independent variables, Perceived Ease of Use, Perceived Usefulness, Perceived Behavioral Control, Subjective Norm and Risk associated with E-Commerce, were identified to measure the relationship with E-Commerce adoption. The questionnaire was developed to address different aspects of each independent variable and to test derived hypotheses.

In order to minimize the population and to get a diversified small sample, private sector executives in three different economic sectors, Banking and Finance, IT and Telecommunications, and Manufacturing, were identified as the target population. The questionnaire was distributed among 900 private sector executives that work in the aforementioned sectors in order to extract the required sample of 382. Their responses were analyzed and interpreted to answer research questions and to test 11 derived hypotheses.

1.8 Thesis Chapter Structure

The thesis report contains six chapters including an introduction with all the details of the research namely, the objectives, the significance and the methodology adopted in the study with limitations. A detailed literature review which explores E-Commerce and its developments, technology adoption models and their relationship with IT adoption, present situation of the ICT sector in Sri Lanka and its future directions is included in the second chapter. The third chapter is allocated to explain the research methodology used for this research. It will enhance the research framework and the
conceptual model used throughout the research. This chapter will further explain the hypotheses development based on research variables and questionnaire development for testing those hypotheses. The fourth chapter describes results in tabular format and in various charts to further enhance the outcome of the questionnaire while the chapter five gives the findings of the study in detail with relevant statistical outputs to attainment of the general objectives. Conclusions and recommendations derived from the study are described in chapter six. It will further discuss the future research directions for in depth investigations on the topic.