Chapter 6

6. Conclusion and Recommendations

This chapter will answer research questions from the interpretations of the analysis done and based on this; a general conclusion will be drawn. The conclusion would explain and discuss the findings of the research in a concise manner to the objectives defined in the first chapter. Thereafter, the recommendations will be discussed with reference to the factors affecting adoption of E-Commerce among Sri Lankan private sector executives. The scope and limitations will be discussed to identify research boundaries and to address various issues that were raised during the investigation. Finally, the author will discuss future extensions which would enable the reader to be aware of what is expected in future by the author in this area of interest.

6.1 Conclusion

This study was aimed at integrating two well known technology adoption models, the TAM and the TPB, and their relationship with the trust factor or the Perceived Risk associated with E-Commerce in order to develop a model for measuring E-Commerce adoption factors among Sri Lankan private sector executives. The framework for adoption and diffusion of E-Commerce (Uzoka et al., 2007) was selected as the research framework and the conceptual model was built based on that. The proposed model helped in exploring factors affecting it and ranking them with respect to its significance in making decisions for using E-Commerce.

A sample of 389 private sector executives in three different economic sectors, IT and Telecommunications, Banking and Finance, and Manufacturing was selected for the study and interviewed using a questionnaire which was developed to measure the influence of each selected variable towards E-Commerce adoption. Eleven different hypotheses were proposed in order to measure the relationship between E-Commerce adoption factors and their rate of adoption. The model results revealed that Perceived Ease of Use, Perceived
Usefulness, Trust, Subjective Norm and Perceived Behavioral Control are factors that are positively related to the attitude towards using E-Commerce frequently.

Acceptance of alternative hypotheses H3 which represented a strong positive correlation between Perceived Ease of Use and E-Commerce adoption, H4 which represented a strong positive correlation between Perceived Usefulness and E-Commerce adoption and H5 which represented a strong positive correlation between Perceived Usefulness and Perceived Ease of Use further established the findings of the TAM of Davis (1989). The developed model further revealed that variables that have highest significance for measuring E-Commerce adoption are Perceived Ease of Use and Perceived Usefulness. Further, acceptance of those aforementioned hypotheses aligned with findings of previous literature done by Klopping and McKinney (2004), Delafrooz et al. (2008) and Sulaiman et al. (2008) which proved the impact of Perceived Usefulness and Perceived Ease of Use in E-Commerce adoption.

Acceptance of alternative hypotheses H9 which represented a moderate positive correlation between Perceived Behavioral Control and E-Commerce adoption, H10 which represented a moderate positive correlation between Subjective Norm and E-Commerce adoption and H11 which represented a moderate positive correlation between Subjective Norm and Perceived Behavioral Control further established the findings of the TPB of Ajzen (1991). The developed model further revealed that the two next most significant variables for measuring E-Commerce adoption are Perceived Behavioral Control and Subjective Norm. By accepting those aforementioned hypotheses, research results aligned with findings of previous literature done by Uzoka et al. (2007) and Hernandez et al. (2009).

Acceptance of alternative hypothesis H6 which represented a small positive co-relation between trust and E-Commerce adoption further established findings of Olusegun et al. (2006), Wang et al. (2008), Connolly and Bannister (2007), Slyke et al. (2004), Jahangir and Begum (2008), Chang and Zhu (2006) and Sulaiman et al. (2008) who discussed the impact of trust or Perceived Risk in E-Commerce adoption.
Further, the rejection of alternative hypothesis H8 revealed that there was no impact on Subjective Norm by the trust factor in E-Commerce adoption. Anyway, the acceptance of alternative hypotheses H1, H2 and H7 revealed that there was a small positive impact on Perceived Ease of Use, Perceived Usefulness and Perceived Behavioral Control respectively by the trust factor in E-Commerce adoption. In other words, the increase of Perceived Risk or the decrease of trust on E-Commerce transactions negatively correlated with Perceived Ease of Use, Perceived Usefulness and Perceived Behavioral Control.

The analysis of E-Commerce experience of private sector executives revealed that people use E-Commerce mainly for purchasing goods and services, and paying utility bills and installments. Further, it emphasized that people tend to use E-Commerce mainly for purchasing hi-technology products and digital products from the web market space. In other words, instead of buying daily consumer products, people use E-Commerce for purchasing some specific products that need more comparisons and observations. When analyzing factors affecting adoption of E-Commerce, research results indicated that the attitude factor which can be further described by Perceived Usefulness and Perceived Ease of Use has the highest significance on the selected group in the decision making process. Other factors that contribute to the decision making process in using E-Commerce were Subjective Norm and Perceived Behavioral Control. The most interesting thing was that no one had decided to refuse E-Commerce in future applications. The majority was willing to use it or experiment with it, in future situations.

Two demographic variables, disposable income and education level, are positively related to Internet shopping while people in age group 20-40 dominated in purchasing products and services over the Internet. In other words, young educated professionals who have higher disposable income are using E-Commerce more frequently than others. People who pay more household bills displayed a significantly high volume of E-Commerce transactions.
However, the spending on Internet and frequency of online purchases were on very low levels, because of less availability of buying options and low trust associated with E-Commerce sites. Development of Telecommunications infrastructure which can create high awareness and opportunities will improve the Internet usage and the E-Commerce involvement of people in Sri Lanka. With a matching E-Commerce model, there is a high possibility in creating a very active E-Commerce community in future, if authorities take the correct actions soon.

6.2 Recommendations

E-Commerce companies as well as those planning to start E-Commerce operations should take into consideration the needs and wants of each consumer group as well as the factors preventing them from involving in dealing online. Those companies should take steps to minimize the fear for online transactions in the consumer’s mind. In other words, individual online transactions should be secure enough for someone to reduce his Perceived Risk and use credit card numbers in the web market. Improving the reputation and brand image as well as providing specific warranties, will also help in improving consumer confidence. On the other hand, credit card providers should take enough security measures to prevent unauthorized transactions.

Online stores must demonstrate that online shopping is not only convenient, safe, easy and fun; they must also offer other incentives and motivations to attract consumers. Thus, in addition to building consumer confidence, offering more rewarding shopping experiences than what is presently available, would benefit in increasing a number of consumers to shop online and to continue doing so in the future. Some of the banks have already taken steps to promote online transactions and decided to provide rewards to their customers who use online facilities to pay utility bills and installments. Further, all web stores should enhance the quality of their products and come up with innovative ideas to cater to different consumer needs. It is necessary to deliver a product that shows same quality and capability to what is displayed in online product catalogs.
The proposed model of E-Commerce adoption will not only help managers to grasp the whole process of E-Commerce from the viewpoint of consumer behavior; but will help them to focus appropriately on the factors affecting each process. Moreover, the results of customer interests in Perceived Usefulness, Perceived Ease of Use, Subjective Norm and Perceived Behavioral Control, and Perceived Risk in E-Commerce show that online customers interacted with each process in the E-Commerce model differently depending on their individual characteristics. These differences will yield insights that can help a manager to serve better in different customer segments. As an example a web store can achieve the top level management of a particular firm and by making an E-Commerce awareness and impressing its usefulness, the store can increase its online transactions and customer base.

Most private sector executives do their financial transactions and shopping through internet in order to increase the productivity and save time. They perceived significantly greater benefits in terms of convenience, wider selection and usefulness. Therefore, online retailers need to ensure that the online shopping process through their websites is easy, simple and convenient for consumers to shop online.

Further, online retailers need to provide competitive price advantages for products in order to attract online customers to their websites and encourage them to make a purchase decision. In order to avoid intense price competition, online retailers need to find other ways to differentiate themselves from their competitors. Therefore, the findings of the research suggest that web stores need to provide more convenience and product ranges in order to attract more online customers. Further, the availability of intelligent search engines and comparing shopping agents will enable the consumer to easily obtain product information and compare product offerings from various online retailers.

It should be noted that web site developers and designers have to carefully evaluate how and why a visitor uses their sites. More specifically, what shopping process or task is the site needed to support, and how well does the site and the underlying technology fit that specific shopping task? Users can visit a web site for different purposes. For example,
users may visit the site to seek data on one product, to find information about criteria for comparison, to compare products with competitors in terms of price differences, quality, performance etc, to obtain information about future developments of the product, to make one purchase, or to make multiple purchases. In order to achieve these potential tasks that a website has to serve, the web site designers and the top level management in cooperate marketing should assess how well the web site fits these needs and how far the web site can achieve these needs.

It is necessary to make sure that product information is sufficiently detailed, accurate and easy to find. Further, web stores need to be updated regularly in order to provide latest information to the customer. They should be readable and easy to access in terms of performance. The ultimate objective of the web store in increasing revenue should be to increase the proportion of actual transactions to the number of web hits.

6.3 Scope and Limitations

Subjects selected for this study were private sector executives working in three leading economic sectors in the country, IT and Telecommunications, Banking and Finance, and Manufacturing. Collecting data from all other sectors to represent the entire population of private sector executives in Sri Lanka was a tedious task, as there is no exact figure about the entire population. In other words, the target sample does not represent private sector executives in all sectors in the country.

Further, the research has not considered all variables associated in E-Commerce adoption. It has not considered some economic variables like economic growth, GDP per capita etc, and political influence of the country. The scope was limited to key behavioral variables indentified by the framework for adoption and diffusion of E-Commerce (Uzoka et al., 2007). The entire research was based on five key variables namely Perceived Usefulness, Perceived Ease of Use, Subjective Norm, Perceived Behavioral Control and Trust in E-Commerce. The sample size was decided on 95% confidence level and a confidence interval of 5.
Investigating E-Commerce adoption in Sri Lanka is a relatively new process and because of this, the previous studies which have addressed this issue in the Sri Lankan context are limited. Hence, there is a limitation in the area of sampling and identifying sampling groups who have enough experience in E-Commerce usage. When considering the data collection process, some of the recipients did not even return the questionnaire, sent to them and some of the respondents did not know much about E-Commerce and hence filled the questionnaire the way they understood it. Because of this, the questionnaire had to be distributed in order to satisfy the minimum sample size. The response rate for the questionnaire sent to private sector executives in all three sectors were around 44%. The lowest response rate which is 37% was recorded from private sector executives working in the manufacturing sector while the highest 53% was recorded from the IT and Telecommunications sector.

6.4 Future Research Directions

Based on the research context done up to now, the author would like to comprehend the future extensions that could be incorporated to the area of interest.

The current research about E-Commerce adoption factors had to be conducted in a broad way because existing literature related to the selected subject in the Sri Lankan context was limited. Yet there is no proper identification of how Sri Lankan Internet users’ expectation in this field is matched with a more sophisticated E-Commerce environment. Consumer attitudes identification can also be further studied in relation to E-Commerce as that was influenced a lot by previous trading patterns that they have been involved in. Therefore, very good opportunities exist for researchers to do in depth studies and identify patterns in the area of E-Commerce transactions and purchasing habits.

The current research result is basically a general view point from private sector executives in three different economic segments in the country, IT and Telecommunications, Banking and Finance, and Manufacturing. For the future, it would
be more attractive to evaluate the feedback from other sectors also, by extending sampling groups into different economic segments to get a more diversified sample. In addition, each operational variable could be measured more comprehensively by expanding the questionnaire and including more questions from different perspectives in each industry to address various scenarios in E-Commerce usage and adoption factors like organization culture, social status etc.,

Further, there are other factors that can influence on E-Commerce adoption, which have not been included in this study. Enhancement of the proposed conceptual model by adding other relevant variables will give more clarifying power to the study. Therefore, a future research needs to select the other essential variables such as an entire web system and its architecture, customer service, cultural differences etc, that influence consumers’ E-Commerce adoption behavior. Further, it can address vendor related matters like brand name, sustainability in the industry, future growth, product innovations etc.