

**AN ANALYSIS OF CONSUMER  
ACCEPTANCE OF E-BANKING IN  
SRI LANKA**

by

**Mestiyage Don Dinusha Tharanga Goonetilake**

**(5266FM2009030)**

A research submitted to the University of Sri Jayewardenepura in  
partial fulfillment of the requirements for the Degree of Master of

**Business Administration on .....**

## Candidate Declaration

The work described in this research was carried out by me under the supervision of Dr.K.M.S.D.Kulatunga and a report on this has not been submitted in whole or in part to any university or any other institution for another Degree/ Diploma.

A handwritten signature in blue ink, appearing to read 'M.D.D.T. Goonetilake', is written over a dotted horizontal line.

M.D.D.T.Goonetilake

(5266FM2009030)

Date: 21-11-2011

## Supervisor Declaration

I certify that the above statement made by the candidate is true and that this research is suitable for submission to the University for the purpose of evaluation.

  
.....  
Dr. K. M. S. D. Kulatunga

Date: 21.11.2011

Table of Content.....	i
List of Tables and Figures.....	vi
Acknowledgement .....	ix
Abstract .....	x

## Table of Contents

1	Introduction.....	1
1.1	Overview of the Study.....	1
1.2	Problem Statement.....	3
1.3	Problem Justification.....	3
1.4	Objective of the study.....	5
1.5	Significance of the study .....	5
1.6	Limitations of the Study .....	7
1.7	Scope of the study .....	8
2	Literature Review.....	11

2.1	Introduction .....	11
2.2	Banking.....	11
2.2.1	Introduction to Banking .....	11
2.2.2	Functions of a Commercial Bank.....	12
2.3	Internet.....	15
2.4	Internet banking.....	16
2.4.1	Introduction to Internet banking.....	16
2.4.2	Services offered from Internet banking.....	18
2.4.3	Benefits of Internet banking.....	24
2.4.4	Challenges of Internet banking .....	27
2.5	Internet banking in Sri Lanka .....	32
2.6	Technology Acceptance Model (TAM) .....	36
2.7	Previous Research Findings .....	38
2.7.1	Perceived Usefulness.....	38
2.7.2	Perceived Ease of Use .....	39
2.7.3	Perceived Self Efficacy .....	41

2.7.4	Perceived Credibility .....	42
2.7.5	Amount of Information .....	44
2.7.6	Internet Connection .....	45
2.7.7	Demographic Factors .....	45
2.8	Summary .....	46
3	Methodology .....	47
3.1	Introduction .....	47
3.2	Proposed research approach .....	47
3.3	Conceptual Framework.....	48
3.4	List of Hypothesis.....	49
3.5	Population.....	55
3.6	Sample .....	55
3.7	Operationalisation of variables.....	57
3.8	Proposed Statistical Methods .....	61
3.8.1	Factor Analysis.....	63
3.8.2	Regression Analysis .....	64



3.8.3	Correlation Analysis.....	64
3.9	Summary.....	65
4	Analysis.....	66
4.1	Introduction .....	66
4.2	Results of Factor Analysis.....	66
4.3	Results of Correlation Analysis.....	77
4.4	Results of Regression Analysis .....	78
4.5	Factor analysis for the dependent variable: Internet banking usage.....	80
4.6	Correlation Analysis with the Dependent Variables identified through factor analysis.....	87
4.6.1	Correlation Analysis: Fund Transfer.....	87
4.6.2	Correlation Analysis: Check Balance .....	88
4.6.3	Correlation Analysis: Investment.....	89
4.7	Regression Analysis with the Dependent Variables identified through factor analysis.....	90
4.7.1	Regression Analysis: Fund Transfer .....	90
4.7.2	Regression Analysis: Check Balance.....	93

4.7.3	Regression Analysis: Investment .....	95
4.8	Demographic Analysis of Internet banking Usage.....	98
4.9	Summary.....	102
5	Discussion .....	103
5.1	Introduction .....	103
5.2	Statistical Findings .....	103
5.3	Managerial Implications and Suggestions.....	106
5.4	Limitations and Future Research.....	110
5.5	Summary.....	111
6	Summary and Conclusion .....	113
7	References .....	115
	Annexure .....	121



## List of Tables and Figures

Table i : Internet and Email Subscribers in Sri Lanka (Telecommunications Regulatory Commission of Sri Lanka, 2011) .....	33
Figure i : Cumulative No. of email and Internet subscribers (Telecommunications Regulatory Commission of Sri Lanka, 2011).....	34
Figure ii : Conceptual Framework .....	48
Table ii : Hypothesis .....	54
Table iii : No. of Internet banking Users.....	56
Table iv : Statistical Methods used by previous researches .....	62
Table v: Communalities: Independent variables .....	68
Table vi : Total Variance Explained associated with Independent variables.....	70
Table vii : KMO and Bartlett's Test - Independent variables.....	71
Table viii : Rotated Component Matrix - Independent variables.....	74
Table ix : Correlation Analysis - Internet banking Usage with Independent variables	77
Table x : Model Summary with Dependent Variable Internet banking Usage .....	78
Table xi : ANOVA Table with Dependent Variable Internet banking Usage .....	79

Table xii : Coefficients with Dependent Variable Internet banking Usage .....	80
Table xiv : Total Variance Explained associated with dependent variables .....	83
Table xv : KMO and Bartlett's Test: Dependent Variables.....	85
Table xvi : Rotated Component Matrix – Dependent Variables .....	86
Table xvii : Correlation Analysis – “Fund Transfer” with Independent variables.....	88
Table xviii : Correlation Analysis – “Check Balance” with Independent variables .....	89
Table xix : Correlation Analysis – “Investment” with Independent variables.....	90
Table xx : Model Summary – Fund Transfer .....	91
Table xxi : ANOVA Table – Fund Transfer .....	91
Table xxii : Coefficients – Fund Transfer .....	92
Table xxiii : Model Summary – Check Balance .....	93
Table xxiv : ANOVA – Check Balance .....	94
Table xxv : Coefficients – Check Balance .....	95
Table xxvi : Model Summary – Investment.....	96
Table xxvii : ANOVA – Investment .....	96
Table xxviii: Coefficients – Investment .....	97

Figure iii : Internet banking Usage and Age .....	98
Figure iv : Internet banking Usage and Gender .....	99
Figure v : Internet banking Usage and Income Distribution.....	100
Figure vi : Internet banking Usage and Educational Background .....	101

## **Acknowledgement**

At the outset, it is my duty to acknowledge with gratitude the generous help and guidance that I have received from my supervisor, Dr. K. M. S. D. Kulatunga. He is very supportive and his encouragement and excellent advice have strengthened me to carry out this research successfully.

My gratitude goes to Mr. Dias in helping me with the Statistics and data analysis. I really appreciate his support.

Much appreciation goes to management and the employees of Sampath Bank, Bank Of Ceylon, Hatton National Bank, Commercial Bank, NDB Bank, HSBC, National Savings Bank, Union Bank, Nations Trust Bank, Standard and Chartered Bank and Seylan Bank for giving me countless support, opportunities and encouragement to develop this research to a success.

I would like to extend my gratitude to Dr P.D. Nimal, Coordinator of our MBA program, for the guidance and support that he has given us throughout the research. I must also thank all the MBA staff, my colleagues for their valuable support throughout this study.

## **ABSTRACT**

The rapid growth of technology enabled banks to offer banking services to the customers via the Internet. In Sri Lanka, most of the banks in the public and private sector provide Internet banking for their customers. However, despite the rapid development in technology in the banking sector customers are still getting themselves acclimatized to Internet Banking and thus the usage is low in Sri Lanka in comparatively to the west.

Research has been conducted in other parts of the world in regard to Internet banking and they have identified many factors affecting the Internet banking sector. However in Sri Lanka, there are only few research in this field and many of them have addressed the barriers of adopting Internet banking in the local context. Therefore, there is a research gap on identifying the factors affecting Internet banking usage in Sri Lanka.

The main objective of this research was to identify the factors affecting Internet banking usage in Sri Lanka. Further, to analyze the current situation in Internet banking and to investigate the acceptability of the conceptual model and also to suggest recommendations to improve the usage of Internet banking in Sri Lanka.

A literature review was conducted to find out the factors affecting Internet banking in previous studies and to analyze the current situation of Internet banking. It was uncovered that most of the previous studies have been based on the Technology Acceptance model. Perceived usefulness and perceived ease of use are the main factors used in the TAM model. Consequently, the conceptual model used in this study consisted of these two factors as independent variables. Further, four other variables



(perceived self efficacy, perceived credibility, amount of information and Internet connection) taken from other studies were included as independent variables. The dependent variable of this model was the Internet banking usage.

In Sri Lanka, twenty two local and foreign banks provide Internet banking facility. The population of the research included all the Internet banking users in Sri Lanka. Among them 200 Internet banking users were randomly selected. A questionnaire was prepared to collect data and hypotheses were formulated in order to identify the relationships between the usage of the Internet banking and the independent variables. The statistical methods used for this research were factor analysis, correlation analysis and regression analysis.

Factor analysis confirmed that the questionnaire had correctly measured the independent variables. According to the correlation analysis it was found that the Internet banking usage was significantly correlated with perceived usefulness, perceived ease of use, perceived self efficacy, amount of information and the Internet connection. The ANOVA analysis confirmed that the conceptual model was statistically significant and acceptable. According to the regression analysis it was revealed that around 12.4% of the variation of Internet banking usage was explained by this model. This indicated that there are many other factors that affected the Internet banking usage.

Further, an exploratory factor analysis was conducted for the dependent variable and it revealed the existence of three factors. Based on their nature, they were named as check balance, fund transfer and investment.



# **1 Introduction**

## **1.1 Overview of the Study**

The rapid growth of technology enables banks to offer banking services to the customers via internet. As a result, the emergence of Internet banking took place globally. Adaptation to the new technology enables Banks to provide its services to its customers more conveniently and economically.

Few years back, it was mandatory to visit the bank to do banking transactions. Customers have to wait in long queues to perform banking transactions within the limited banking hours. Nowadays due to the emergence of Internet banking customers have the facility to perform banking transaction without visiting the bank. Since the Internet banking is available twenty four hours seven days a week banking transactions can be performed any time of the day.

According to Turban et al. (2002), electronic banking is where banking done via the internet or private lines. Banks offer Internet banking facility to their customers through their banking web sites. Customers have to sign up for online account. After the confirmation by the bank, they can log on to the Internet banking website by using the username and password. Consumers can perform banking activities from their home or other location.

Offering Internet banking, the banks can reduce their costs and increase their coverage around the country or worldwide because internet has no geographical barriers and if the customer has an internet connection, they can access to the banking via the banking