

**EVALUATION AND ANALYSIS OF
MOBILE PAYMENT ADAPTATION IN SRI LANKA**

MASTER OF BUSINESS ADMINISTRATION



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Sri Lanka

December 2007

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The dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfillment of the requirements for the Degree of Master of Business Administration.

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December 2007

DECLARATION

The work submitted in this dissertation is the result of my own investigation, except where due acknowledgment has been made. The work has not been submitted previously, in whole or in part to qualify for any other academic work.

The content of this thesis is the result of work which has been carried out since the official commencement date of this research program.

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I endorse the declaration by the candidate.

Dr. Chathura De Silva

ACKNOWLEDGEMENT

I would like to express my deep and sincere gratitude to my supervisor, Dr. Chathura De Silva, Senior Lecturer, Department of Computer Science & Engineering at the University of Moratuwa, Sri Lanka. His wide knowledge and logical way of thinking have been of great value for me. His understanding, encouraging and personal guidance have provided a good basis for successfully completion of this research.

My sincere thanks go to the academic staffs who serve in both Computer Science & Engineering Department and Management of Technology Department of University of Moratuwa, for helping in various ways to clarify the things related to my academic works in time with excellent cooperation and guidance.

During this work I have collaborated with many colleagues for whom I have great regard, and I wish to extend my warmest thanks to all the staff those who have helped me with my work in the Department of Computer Science & Engineering and the Department of Management of Technology at the University of Moratuwa, Sri Lanka.

Finally, my sincere thanks go to my family and all my friends who help me in various ways to complete this research successfully.

Madhura Perera
(12 November 2007)

TABLE OF CONTENTS

ABSTRACT	1
CHAPTER 1: INTRODUCTION	3
1.1. Importance to Sri Lanka	4
1.2. Problem Definition and Research Objectives	6
CHAPTER 2: LITERATURE REVIEW	7
2.1. Mobile Payment Definition and Model	7
2.2. Players in the m-Payment Market and Their Expectations	9
2.2.1. Customers	10
2.2.2. Merchants	11
2.2.3. Mobile Operators & Service Providers	11
2.2.4. Device Manufacturers	11
2.2.5. Financial Services Firms	12
2.3. Factors Affecting in m-Payment Adaptation	12
2.3.1. Technological Factors	12
2.3.2. Economic Factors	13
2.3.3. Social Factors	13
2.4. m-Payment Technologies for Consumer	14
2.4.1. Characteristics of the Mobile Phone as a Means of Payment ..	14
2.4.2. Wireless Application Protocol (WAP)	15
2.4.3. Short Messaging Service (SMS)	15
2.4.4. General Packet Radio Service (GPRS)	15
2.4.5. Near-Field Communication (NFC)	16
2.5. Barriers and Issues in m-Payment Adaptation	16
2.6. Case Studies	16
2.6.1. SMS Banking in Sri Lanka	16
2.6.2. eZReload: Dialog Telekom, Sri Lanka	17

2.6.3. eZPay: National Development Bank (NDB) & Dialog Telekom (2007 August)	17
2.6.4. Mobile Cash – Sampath Bank, Sri Lanka (2007 September)	18
2.6.5. Global Money Transfer Pilot Project – GSM Association (GSMA) (2007 February)	18

CHAPTER 3: THEORITICAL FRAMEWORK & GENERATION OF HYPOTHESES

.....	19
3.1. Theory on Adoption of Technology & Mobile Payment Services and Hypothesis	19
3.1.1. Technology Acceptance Model (TAM)	19
3.1.2. Theory of Perceived Risk	21
3.1.3. Switching Barrier Theory	22
3.1.4. Perceived Switching Cost	23
3.1.5. Task-Technology-Fit	24
3.1.6. Awareness	24
3.1.7. Merchant Acceptance	25
3.1.8. Personal Factors	25
3.2. Research Model	26

CHAPTER 4: RESEARCH METHODOLOGY

4.1. Sampling	27
4.2. Measurement of Variables	31
4.3. Pilot Test	34
4.4. Data Collection & Main Survey	34

CHAPTER 5: RESULTS

5.1. Descriptive Data	36
5.2. Reliability Analysis	38
5.3. Central Tendencies and Dispersions	39

5.4. Correlations	40
5.5. Regression Analysis	44
CHAPTER 6 : ANALYSIS & DISCUSSION	46
CHAPTER 7 : CONCLUSION & RECOMMENDATION	52
7.1. Limitations	54
7.2. Future Research Direction	54
REFERENCES	56
APPENDIXES	63
Appendix 1: Questionnaire for MBA Research	63
Appendix 2: Survey Result	72
Appendix 3: Frequency Distribution Curves	73
Appendix 4: Mobile Technology Usage	76



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LIST OF FIGURES

Figure 1: Subscriber Base during the Period of Year 1996 To 2006 (March) ...	4
Figure 2: Growth Rate of Mobiles per 100 people	5
Figure 3: m-Payment Reference Model	8
Figure 4: m-Payment Transaction Model	9
Figure 5: Players in the m-Payment Market	10
Figure 6: Evaluating the Payment Systems over the m-Commerce	13
Figure 7: Davis' Technology Acceptance Model	19
Figure 8: Proposed Research Model	26
Figure 9: Research Methodology	30
Figure 10: Age Distribution of the Sample	37
Figure 11: Gender Distribution of the Sample	37
Figure 12: Significant Correlations between Dependent and Independent Variables ..	43



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LIST OF TABLES

Table 1: IT Workforce by Job Category	28
Table 2: Measures of the Variables	31
Table 3: Data Collection Statistics	35
Table 4: Sample Characteristics (N = 238)	36
Table 5: Reliability Statistics – Cronbach’s Alpha	38
Table 6: Descriptive Statistics	40
Table 7: Correlations Analysis of Variables	42
Table 8: Regression Analysis for Structural Model	45
Table 9: Hypothesis Testing using Correlation – Intention to Use m-Payment ...	47
Table 10: Hypothesis Testing using Correlation – Perceived Usefulness and Perceived Ease of Use	48
Table 11: Hypothesis Testing using Regression Analysis	49



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LIST OF ABBREVIATIONS

PDA	Personal Digital Assistant
GSM	Global System for Mobile communication
EC	Electronic Commerce
POS	Point Of Sale
ATM	Automatic Teller Machine
NFC	Near Field Communication
SMS	Short Message Service
WAP	Wireless Application Protocol
SIM	Subscriber Identity Module
GPRS	General Packet Radio Service
TAM	Technology Acceptance Model
PU	Perceived Usefulness
PEOU	Perceived Ease of Use
ICT	Information and Communication Technology
CEO	Chief Executive Officer

ABSTRACT

The dramatic increase in mobile phone usage and mobile application usage within the last decade has shifted the world from e-commerce to m-commerce era. As a result today lots of research have being conducting on m-commerce in all over the world. Mobile payment (m-Payment) is one of the latest services of the m-commerce technology and is becoming more and more popular. The main objective of this research is analyzing and evaluating the factors that affect m-Payment adaptation in Sri Lanka.

When compared to the other countries in the region, Sri Lanka has a highest mobile penetration of 30% of the population. Therefore m-Payment can be used as an alternative for micro payments to break the infrastructure barrier in other technologies such as internet. But it is really important to identify the critical success factors and the correct technological and business model for m-Payment service in the context of Sri Lanka.

There are lots of research and theories on m-commerce technology adaptation such as Davis' Technology Adaptation Model [29], theory of perceived risk [39], switching barrier theory [44] etc. In this research, 14 concepts have been developed based on the previous research findings and theories and hypotheses have been developed base on those concepts to evaluate the effect on those factors on m-Payment adaptation.

Even though the target population is the mobile phone users in Sri Lanka, due to various limitations such as time, cost and resources ICT (Information and Communication Technology) professionals have been used as the sampling population for this research. Data were collected using a questionnaire and both hard copies and soft copies were distributed to more than 600 ICT professionals. There were 238 valid respondents which were used for the further analyzing and results and conclusions were developed based on those data. It was found that the Cronbach's Alpha of the collected data is 0.867 which can be considered as a very high reliability factor.

Pearson Correlation was used to analyze the relationship between individual concepts and regression analyze method was used to analyze the relationship between the dependent variable and the multiple independent variables and to develop a model for the variables.

Analysis proved that the usefulness, ease of use, risk factor, attractiveness of alternatives and personal factors such as age, gender and usage of mobile applications and services have a greater impact on the adaptation of m-Payment services. And it was found that the perceived ease of use and perceived usefulness are directly affected by the awareness, perceived switching cost, merchant acceptance, task technology fit and perceived confidentiality. During the analysis it was revealed that there is a huge usage of SMS (Short Message Service) applications when compared to WAP (Wireless Application Protocol) and GPRS (General Packet Radio Service) applications.



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