

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

MASTER OF BUSINESS ADMINISTRATION



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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

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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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