DEVELOPMENT OF A MOBILE CASH ACCEPTANCE MODEL: STRUCTURAL EQUATION APPROACH

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Department of Mathematics

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DECLARATION

I declare that this is my own work and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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ABSTRACT

Development of a mobile cash acceptance model: structural equation approach

This study intends to develop a conceptual model integrating the dimensions of mobile service quality (MSQ) in to other determinants of usage intension (UI) of Mobile Cash (MC) services using Partial Least Square - Structural Equation Modeling (PLS-SEM). The Extended Unified Theory of Acceptance and Use of Technology (UTAUT2) has been selected as the theoretical base for the study. Considering both functional and technical quality aspects of MSQ, seven dimensions have been used (Reliability (REL), Responsiveness (RES), Assurance (ASU), Empathy (EMP), Tangibles (TAN), Convenience (CON), and Customer Perceived Network Quality (NQT)). A survey was carried out in a Higher Education Institute with a sample of 272 MC users. The measurement model assessment has revealed an adequate level of reliability, and validity in the measurement instrument. Therefore, eight different models have been formulated and tested using PLS-SEM to identify a statistically significant model. The standardized root mean square residual (SRMR) used as the determinant of model goodness of fit and bootstrapping procedures were used to determine the significant paths within each model. Based on the indications of the Recommended model, it was concluded that only five UTAUT2 variables (Performance Expectancy, Social Influence, Facilitating Conditions, Price Value and Habit) have direct effects (p<0.05) on UI and only the six dimensions that represent the functional quality aspect of MSQ (RES, ASU, CON, TAN, EMP and REL) have shown significant indirect effects (p<0.05) on UI where RES alone showed a negative effect. Since the technical quality dimension (NQT) did not show any significant effect on UI, the service providers are recommended to pay more attention on the functional quality rather than technical quality to improve future usage of Mobile cash services.

Key words: Mobile Cash Services, Mobile Service Quality, PLS-SEM, Usage Intension,

UTAUT2

DEDICATION

This dissertation is dedicated to my beloved mother and all my dearest teachers for teaching me the very difficult subject of life

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LIST OF ABBREVIATIONS

AVE Average Variance Extracted

CMV Common Method Variance

GoF Goodness of Fit

HTMT Heterotrait-Monotrait Ratio

IT Information Technology

MMT Mobile Money Transfer

MP Mobile Payments

MSP Mobile Service Provider

PLS Partial Least Squares

SEM Structural Equation Modelling

SQ Service Quality

SRMR Standardized Root Mean Square Residual

TAM Technology Acceptance Model

TRA Theory of Reasoned Action

TRCSL Telecommunication Regulatory Commission of Sri

Lanka

UTAUT Unified Theory of Acceptance and Use of Technology

UTAUT2 Extended Unified Theory of Acceptance and Use of

Technology

VAS Value Added Services

LIST OF APPENDICES

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