IDENTIFYING FACTORS AFFECTING DIGITAL TECHNOLOGY ADAPTATION OF SMEs: SPECIAL REFERENCES TO SMEs IN RATNAPURA DISTRICT



By

KUDA MANAGE THILINI MADHUSANI GUNARATHNA

REG NO: EU/IS/2017/MS/065

INDEX NO: MS 2025





A Project Report submitted to the Faculty of Commerce and Management, EasternUniversity, Sri Lanka as a partial fulfillment of the requirement of the Degree of Bachelor of Business Administration Honours.

DEPARTMENT OF MANAGEMENT
FACULTY OF COMMERCE AND MANAGEMENT
EASTERN UNIVERSITY, SRI LANKA

ABSTRACT

This research investigates the Identifying factors Affecting Digital Technology Adaptation of SMEs: Special References to SMEs in Ratnapura District. In this research, there are seven independent variables such as relative advantage, compatibility, perceived ease of use, organizational readiness, security risk, perceived cost and managers characteristics and the dependent variable is digital technology adaptation. The study accompanies with Quantitative research approach. Primary data as well as secondary data had been practiced by this study. Structured questionnaire was used as the method of data collection and questionnaire consist two parts as personal information of the respondent and research information. Questionnaire included 40 questions with five point Likert scale ranging from strongly disagree to strongly agree. Pilot study was conducted to test the reliability of the questionnaire. Population of the study is 250 owner/managers of SMEs in Ratnapura district. Collected data were analyzed using SPSS 25.0 analysis. The data were measured using descriptive statistics, correlation and multiple regression analysis.

The findings indicate that there is good reliability of relative advantage, compatibility, perceived ease of use, organizational readiness, security risk, perceived cost and managers characteristics and digital technology adaptation and high level of relative advantage, compatibility, perceived ease of use, organizational readiness, manager characteristics, digital technology adaptation. In Ratnapura district, SMEs have a low level of security risk and perceived cost. The results also showed that there is a strong positive relationship with relative advantage, compatibility, perceived ease of use, organizational readiness, managers characteristics and digital technology adaptation. There is a strong negative relationship with security risk, perceived cost on digital technology adaptation. Furthermore, the study discovered that relative advantage, compatibility, perceived ease of use, organizational readiness, and managers characteristics are positive impact on digital technology adaptation. security risk and perceived cost are negative impact on digital technology adaptation.

Key words: Digital Technology Adaptation, Relative Advantage, Compatibility, Perceived Ease of Use, Organizational Readiness, Security Risk, Perceived Cost And Manager Characteristics.

TABLE OF CONTENTS

ACKNOWLE	DGEMENT	¾	i
ABSTRACT		••••••	ii
TABLE OF C	ONTENTS		iii
LIST OF TAE	BLES		viii
LIST OF FIG	URES	••••••	X
LIST OF ABB	BREVIATIONS	•••••	xi
CHAPTER -	1 INTRODUCTION	,	1
1.1 Backgr	round of the Study		1
1.2 Problem	m Statement		
1.3 Research	ch Questions		6
1.4 Objecti	ives of the Study		6
1.5 Signific	cance of the Study		7
1.6 Scope	of Study		8
1.7 Organi	zation of Chapters		9
1.8 Chapte	r Summary		9
CHAPTER - 2	2 LITERATURE REVIEW		10
2.1 Introdu	ction		10
2.2 Digital	Technology	, , , , , , , , , , , , , , , , , , ,	10
2.3 Digital	Technology Adaptation		11
2.4 Digital	Technology Adaptation by SM	1Es	12
2.5 Factors	Affecting Digital Technology	Adaptation	12
2.5.1 R	Relative Advantage	***************************************	12

	2.5.2 Compatibility	13
	2.5.3 Perceived Ease of Use	14
	2.5.4 Organizational Readiness	14
	2.5.5 Security Risk	16
	2.5.6 Perceived Cost	17
	2.5.7 Managers Characteristics	17
	2.6 The impact of Variables	17
	2.6.1 Relative Advantage and Digital Technology Adaptation	17
	2.6.2 Compatibility and Digital Technology Adaptation	
	2.6.3 Perceived Ease of Use and Digital Technology Adaptation	
	2.6.4 Organizational Readiness and Digital Technology Adaptation	19
	2.6.5 Security Risk and Digital Technology Adaptation	
	2.6.6 Perceived Cost and Digital Technology Adaptation	21
	2.6.7 Managers Characteristics and Digital Technology Adaptation	21
	2.7 Gender Inequality and Digital Technology Adaptation	22
	2.8 Chapter Summary	23
C	CHAPTER - 3 THEORIES, CONCEPTUALIZATION AND	
	PERATIONALIZATION	24
	PERATIONALIZATION	
	3.1 Introduction	
		24
	3.1 Introduction	24
	3.1 Introduction3.2 Theories Related to the Variables3.2.1 The Technology Acceptance Model (TAM)	24 24 25
	3.1 Introduction 3.2 Theories Related to the Variables 3.2.1 The Technology Acceptance Model (TAM) 3.2.2 The Diffusion of Innovation Theory (DOI)	24 24 25 26
	3.1 Introduction 3.2 Theories Related to the Variables 3.2.1 The Technology Acceptance Model (TAM) 3.2.2 The Diffusion of Innovation Theory (DOI) 3.3 Conceptualization	24 24 25 26
	3.1 Introduction 3.2 Theories Related to the Variables 3.2.1 The Technology Acceptance Model (TAM) 3.2.2 The Diffusion of Innovation Theory (DOI)	24 24 25 26
	3.1 Introduction 3.2 Theories Related to the Variables 3.2.1 The Technology Acceptance Model (TAM) 3.2.2 The Diffusion of Innovation Theory (DOI) 3.3 Conceptualization 3.4 Definition of Variables	24 24 25 26 26
	 3.1 Introduction 3.2 Theories Related to the Variables 3.2.1 The Technology Acceptance Model (TAM) 3.2.2 The Diffusion of Innovation Theory (DOI) 3.3 Conceptualization 3.4 Definition of Variables 3.4.1 Factors Affecting Digital Technology Adaptation 	24 25 26 26 27
	 3.1 Introduction 3.2 Theories Related to the Variables 3.2.1 The Technology Acceptance Model (TAM) 3.2.2 The Diffusion of Innovation Theory (DOI) 3.3 Conceptualization 3.4 Definition of Variables 3.4.1 Factors Affecting Digital Technology Adaptation 3.4.2 Digital Technology Adaptation 	24 25 26 26 27 27
	 3.1 Introduction 3.2 Theories Related to the Variables 3.2.1 The Technology Acceptance Model (TAM) 3.2.2 The Diffusion of Innovation Theory (DOI) 3.3 Conceptualization 3.4 Definition of Variables 3.4.1 Factors Affecting Digital Technology Adaptation 3.4.2 Digital Technology Adaptation 3.5 Operationalization 	24 24 25 26 26 27 31 31
	 3.1 Introduction 3.2 Theories Related to the Variables 3.2.1 The Technology Acceptance Model (TAM) 3.2.2 The Diffusion of Innovation Theory (DOI) 3.3 Conceptualization 3.4 Definition of Variables 3.4.1 Factors Affecting Digital Technology Adaptation 3.4.2 Digital Technology Adaptation 	24 24 25 26 26 27 31 31

CI	HAPTER - 4 RESEARCH METHODOLOGY	35
	4.1 Introduction	35
	4.2 Research Philosophy	35
	4.3 Research Approach	36
	4.4 Research Strategy	36
	4.4.1 Survey	37
	4.5 Methodological Choice	37
	4.6 Time Horizon	37
	4.7 Research Site/ Area Selection	38
	4.8 Population of the Study	38
	4.9 Sampling Technique/ Method	39
	4.10 Sampling Framework and Sample Size	39
	4.11 Method of Data Collection and Source	40
	4.11.1 Primary Data	40
	4.11.2 Secondary Data	40
	4.12 Research Instrument	41
	4.12.1 The Rational for the Question	41
	4.13 Source of Measurement	41
	4.13.1 Method of Measured the Personal Information	42
	4.13.2 Method of Measuring the Research Informatio	n43
	4.14 Reliability of Instrument	43
	4.15 Unit of Data Analysis	45
	4.16 Method of Data Analysis	45
	4.17 Method of Data Evaluation	46
	4.17.1 Method of Data Evaluation for First Objective	46

4.17.2 Method of Data Evaluation for Second Objective	47
4.17.3 Method of Data Evaluation for Third Objective	
4.17.4 Method of Data Evaluation for Fourth Objective	
4.18 Method of Hypotheses Testing	
4.19 Data Presentation	52
4.20 Ethical Consideration	53
4.21 Chapter Summary	53
CHAPTER - 5 DATA PRESENTATION AND ANALYSIS	54
5.1 Introduction	54
5.2 Reliability Test	54
5.3 Data Presentation	55
5.3.1 Data Presentation of Personal Information	55
5.3.2 Data Presentation and Analysis of Research Information	
5.4 Chapter Summary	
CHAPTER - 6 DISCUSSION	77
6.1 Introduction	77
6.2 Discussion of Personal Information of the Respondents	77
6.2.1 Age of Respondents	77
6.2.2 Gender	78
6.2.3 Educational Level of Respondents	78
6.2.4 Primary Activity of the Respondents	78
6.2.5 Number of Employees	78
6.2.6 Years in Business Operation	79
6.2.7 How often have you used the following technologies in yo	ur business?
6.3 Research Information	
6.3.1 Discussion for Objective One	79
6.3.2 Discussion for Objective Two	

6.3.3 Discussion for Objective Three	84
6.3.4 Discussion for Objective Four	85
6.4 Discussion of Hypotheses Testing	
6.5 Chapter Summary	90
CHAPTER - 7 CONCLUSIONS AND RECOMMENDATIONS	91
7.1 Introduction	91
7.2 Conclusions	91
7.2.1 First Objective	
7.2.2 Second Objective	91
7.2.3 Third Objective	92
7.2.4 Fourth Objective	
7.3 Contributions of the Study	
7.4 Recommendations	93
7.5 Limitations of the Study	95
7.6 Directions for Future Study	95
LIST OF REFERENCE	97
APPENDIX	109
RESEARCH QUESTIONNAIRES	109
Questionnaire (A)- English	. 109
Ouestionnaire (B)-Sinhala	115