# IMPACT OF TECHNOLOGICAL ADVANCEMENT ON THE FINANCIAL PERFORMANCE OF BANKING INDUSTRY IN SRI LANKA



### NAGODA WITHANAGE HARSHA MADUSHANI CHAMALI



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

#### **ABSTRACT**

This study was attempted to investigate the impact of technological advancement on financial performance of banking industry in Sabaragamuwa province. The objectives of this study is to identify the impact of mobile banking innovation on financial performance of banking industry in Sabaragamuwa province, to identify the impact of internet banking innovation on financial performance of banking industry in Sabaragamuwa province, to identify the impact of debit and credit cards innovation on financial performance of banking industry in Sabaragamuwa province, to identify the impact of ATM banking innovation on financial performance of banking industry in Sabaragamuwa province and to examine whether the financial performance and technological advancement vary among the banks. In this study literature part explained independent variables, dependent variable and the relationship between those variables clearly defined by using previous literature reviews.

Conceptual model is developed based on the existing literature. This study was implemented with five variables. Mobile banking innovation, Internet banking innovation, Debit and credit cards innovation and ATM banking innovation are identified as independent variables. Financial performance in banking industry is the dependent variable of the study.

This research study was implemented in Sabaragamuwa province and the 200 respondents were selected from banking employees those who are working as branch managers, Assistant managers, Executive officers, banking assistant and other staff. All selected respondents are participated to the survey and stratified random sampling technique used to select the sample. The data used in this study is primary data obtaining through questionnaire. Data were collected from five commercial banks namely Bank of Ceylon, Hatton National Bank, Peoples bank, Sampath bank and Commercial bank. The collected data were analyzed by using descriptive statistics, correlation analysis, regression analysis and ANOVA analysis using SPSS 19.0. Measurement of the data was five point likert scales.

Based on the findings of the study, it can conclude that mobile banking innovation, debit and credit cards innovation and ATM banking innovation are significant impact on financial performance of the banking industry. And also mobile banking innovation is the most influencing factor on the financial performance of banking

industry in Sabaragamuwa province. When consider the technological advancement is positively correlated with the financial performance in banking industry. Mobile banking innovation and ATM banking innovation have strong positive correlation with financial performance in banking industry. Internet banking innovation and Debit and Credit cards innovation have moderate positive correlation with financial performance in banking industry. Further, financial performance and technological advancement were not varying among the banks in Sabaragamuwa province.

The study recommended that banks must be focused in terms of their needs and using the right technology to achieve goals, rather than acquiring technology. Government participation in ensuring focused telecommunication industry must be visible to reduce or remove avoidable cost of implementing technology innovation. Regulatory authorities like Central Bank of Sri Lanka must stipulate standards for the banks to follow to avoid making banking sector a dumping ground for the outdated technological infrastructures.

### TABLE OF CONTENTS

	nowledgement		i	
Abst	stract			
Table	ble of Contents			
List	of Tables		ix	
List	of Figures		хi	
List	of Equations	*****	хi	
Abbr	reviations		хi	
CHA	APTER ONE: INTRODUCTION	01 -	07	
1.1	Background of the study		01	
1.2	Problem Statement		03	
1.3	Research Questions		04	
1.4	Objectives of the study		05	
1.5	Significance of the study		05	
1.6	Scope of the study			
1.7	Outline of the Study		06	
1.8	Chapter summary	total tutotus	07	
CHA	APTER TWO: LITERATURE REVIEW			
CIIA	TIER I WO: LITERATURE REVIEW	08-	17	
2.1	Introduction		17 08	
2.1	Introduction		08	
2.1 2.2	Introduction  Banking Industry in Sri Lanka		08 08	
<ul><li>2.1</li><li>2.2</li><li>2.3</li></ul>	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.		08 08 08	
<ul><li>2.1</li><li>2.2</li><li>2.3</li></ul>	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.		08 08 08	
<ul><li>2.1</li><li>2.2</li><li>2.3</li></ul>	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.  2.4.1 Mobile banking innovation.		08 08 08 09	
<ul><li>2.1</li><li>2.2</li><li>2.3</li></ul>	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.  2.4.1 Mobile banking innovation.  2.4.2 Internet banking innovation.		08 08 09 10	
<ul><li>2.1</li><li>2.2</li><li>2.3</li></ul>	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.  2.4.1 Mobile banking innovation.  2.4.2 Internet banking innovation.  2.4.3 Debit and Credit Cards innovation.		08 08 09 10 11	
2.1 2.2 2.3 2.4	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.  2.4.1 Mobile banking innovation.  2.4.2 Internet banking innovation.  2.4.3 Debit and Credit Cards innovation.  2.4.5 ATM banking innovation.		08 08 09 10 11 11	
2.1 2.2 2.3 2.4	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.  2.4.1 Mobile banking innovation.  2.4.2 Internet banking innovation.  2.4.3 Debit and Credit Cards innovation.  2.4.5 ATM banking innovation.  Various Theories of Technological Advancement.		08 08 09 10 11 11	
2.1 2.2 2.3 2.4	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.  2.4.1 Mobile banking innovation.  2.4.2 Internet banking innovation.  2.4.3 Debit and Credit Cards innovation.  2.4.5 ATM banking innovation.  Various Theories of Technological Advancement.  Relationship between Technological Innovation and Financial		08 08 09 10 11 11 12 13	
2.1 2.2 2.3 2.4 2.5 2.6	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.  2.4.1 Mobile banking innovation.  2.4.2 Internet banking innovation.  2.4.3 Debit and Credit Cards innovation.  2.4.5 ATM banking innovation.  Various Theories of Technological Advancement.  Relationship between Technological Innovation and Financial Performance.		08 08 09 10 11 11 12 13	
2.1 2.2 2.3 2.4 2.5 2.6 CHA	Introduction.  Banking Industry in Sri Lanka.  Financial Performance in the banking sector.  Defining Technological Advancement.  2.4.1 Mobile banking innovation.  2.4.2 Internet banking innovation.  2.4.3 Debit and Credit Cards innovation.  2.4.5 ATM banking innovation.  Various Theories of Technological Advancement.  Relationship between Technological Innovation and Financial Performance.  Chapter Summary		08 08 09 10 11 11 12 13	

3.2	Con	Conceptualization.			
3.3			tion of variable		
	3.3.1		e banking innovation		
	3.3.2		et banking innovation		
	3.3.3		& Credit cards innovation		
	3.3.4		oanking innovation		
	3.3.5		ial performance		
3.4	Oper	perationalization of Variables			
3.5					
CHA	APTER	FOUR:	METHODOLOGY 27 -	35	
4.1	Intro	duction		27	
4.2			nd study design		
4.3					
	4.3.1		oopulation	28	
	4.3.2	Sampli	ng technique and Sample Size	28	
4.4	Data			29	
4.5			asurements	29	
	4.5.1		nnaire	30	
4.6	Data		on	31	
	4.6.1	Data pre	esentation for personal factors	31	
	4.6.2		esentation for Technological advancement and Financial		
	*	Perform	ance	31	
4.7	Metho	od of Data	Analysis	31	
	4.7.1		nte Analysis	32	
	4.7.2		e Analysis	32	
		4.7.2.1	Correlation analysis	33	
		4.7.2.2	Multiple regression analysis	33	
		4.7.2.3	ANOVA Analysis	33	
4.8	Metho	ds of data	evaluation	33	
	4.8.1		criteria for descriptive statistics	34	
	4.8.2		criteria for bivariate analysis	34	
	4.8.3		criteria reliability analysis		

4.9	Sumi	nary	***************************************		
CHA	PTER	FIVE:	DATA PRESENTATION AND ANALYSIS 36.		
5.1	Intro	Introduction			
5.2 Analysis of Reliability of the Instruments					
5.3	Frequ	iency Ana	alysis of respondents` Personal information		
	5.3.1	Age			
	5.3.2	Gender			
	5.3.3	Educati	on level		
	5.3.4	Departr	ment		
	5.3.5	Time po	eriod of banking service		
	5.3.6	Name o	f the bank		
5.4	Data 1	presentati	on for variables of the research		
	5.4.1	Financi	al Performance		
	5.4.2	Mobile	Banking Innovation		
	5.4.3	Internet	Banking Innovation		
	5.4.4	Debit &	Credit Cards Innovation		
	5.4.5	ATM B	anking Innovation		
.5	Univa	riate Ana	lysis		
	5.5.1	Mean a	nd Standard deviation for Financial Performance		
	5.5.2	Mean a	nd Standard deviation for independent variables		
		5.5.2.1	Mean and Standard deviation for Mobile banking		
			Innovation		
		5.5.2.2	Mean and Standard deviation for Internet banking		
	*		Innovation		
		5.5.2.3	Mean and Standard deviation for Debit and Credit card		
			Innovation		
		5.5.2.4	Mean and Standard deviation for ATM banking		
			Innovation		
6	Bivaria	ate Analy	sis		
	5.6.1	Correlat	ion Analysis		
	5.6.2	Regress	ion Analysis		
		5.6.2.1	Multiple Regression Analysis		
		5.6.2.2	Simple Regression Analysis		

		5.6.2.2.1	Mobile banking Innovation	5
		5.6.2.2.2	Debit & credit cards Innovation	5
		5.6.2.2.3	ATM banking Innovation	5
5.7	7 ANOVA analysis			
5.8	Chap	ter summary		5.
CH	APTER	SIX: DISCUSSION	56 -	6
6.1				
6.2	Discu		ors	
	6.2.1		pondent	
	6.2.2	Gender of the respor	ident	56
	6.2.3		e respondent	57
	6.2.4	Department		57
	6.2.5	Time period of bank	ing service	57
	6.2.6			57
6.3	Discu	ssion on research varia	bles	57
	6.3.1	Financial Performanc	e in banking industry	57
	6.3.2	Technological Advan	cement	58
	6.3.3		independent and dependent variable	58
6.4	Implementation of research objectives			
	6.4.1	Discussion on objecti	ve one	59
	6.4.2 Discussion on objective two			
	6.4.3	Discussion on objecti	ve three	60
	6.4.4	Discussion on objecti-	ve four	60
	6.4.5	Discussion on objecti	ve five	61
5.5	Chapte			61
CHA	PTER	SEVEN: CONCLUS	ONS AND RECOMMENDATIONS 62 -	65
7.1	Introdu	action		62
'.2	Conclusions			62
'.3	Recommendations			
.4	Limitations of the Study			
.5			***************************************	64
.6	Chapter summary			

REFERENCES	7
APPENDIX	,

APPENDIX 01: Questionnaires of the study APPENDIX 02: The Output of the Analysis