# CASHLESS POLICY AND OPERATIONAL EFFICIENCY OF PAYMENT TERMINAL SERVICE PROVIDERS IN LAGOS STATE, NIGERIA

BY

# ADUAIRO ELOHOR B.Sc. BENSON IDAHOSA UNIVERSITY, BENIN ADP/11/12/H/1439

BEING THESIS SUBMITTED TO THE DEPARTMENT OF MANAGEMENT AND ACCOUNTING, FACULTY OF ADMINISTRATION, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE (M.Sc.) DEGREE (BUSINESS ADMINISTRATION) OF OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE, NIGERIA.

2015



# AUTHORISATION TO COPY OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE, NIGERIA HEZEKIAH OLUWASANMI LIBRARY

POST GRADUATE THESIS

<b>AUTHOR:</b>	ADUAIRO ELOHOR (	ADD11/12/1/30)	
AUTHUK:	ADUAIRO ELOHOR (.	ADP11/12/1439)	j

TITLE: CASHLESS POLICY AND OPERATIONAL EFFICIENCY OF PAYMENT

TERMINAL SERVICE PROVIDERS IN LAGOS STATE, NIGERIA

<b>DEGREE:</b>	MASTERS OF SCIENCE (M.Sc), BUSINES ADMINISTRATION
YEAR:	2015

I, ADUAIRO ELOHOR, hereby authorize the Hezekiah Oluwasanmi Library to copy my thesis in whole or in part in response to request from individual researchers or organizations for the purpose of private study or research only.

Date	Signature



#### **CERTIFICATION**

This is to certify that this study was carried out by ADUAIRO ELOHOR, in the Department of Management and Accounting, Obafemi Awolowo University,

Ile– Ife, Osun State, Nigeria.

Supervisor Prof A. A. Agboola
Department of Management and Accounting,
Faculty of Business Administration,
Obafemi Awolowo University,
Ile – Ife, Nigeria.

Prof. A. A. A Agboola
Date
H. O. D, Management and Accounting

Obafemi Awolowo University,

Ile – Ife, Nigeria



# **DEDICATION**

This research work is dedicated to My Abba Father God Almighty, My Beloved. To my lovely parents Chief Godfrey Aduairo and Deaconess Rhoda Aduairo



#### **ACKNOWLEDGEMENTS**

My profound gratitude goes to God Jehovah overdo who gave me the gift of life, strength and perseverance to complete this task. I honour the Holy Spirit for divine inspiration, comfort, guidance, favor and ability to achieve this great success.

With a heart full of appreciation, I acknowledge the immense contributions of my supervisor, Prof A.A. Agboola. I am grateful for his concern, encouragements, sourcing of materials, time devoted despite his tight schedule. I am highly honoured and privileged to work with you Sir. My God will reward you a hundredfold.

I acknowledge my indebtedness to my wonderful lecturers in the Department of Management and Accounting. Seminar coordinator, Dr. Akindele R.I., Mr Inneh .E., Mr Monday .J.U, Dr Akinlo .Y., Dr Akinola.G.O, Prof Adetayo.J. Prof Osotimehen .K. and the secretaries.

I greatly appreciate Dr Adegoke.J.F. for his time, knowledge, wealth of expertise and immense contribution to this study. My God will not forget your labour of love.

My heart-felt gratitude goes to my family, my parents chief Godfrey and Deaconess Rhoda Aduairo for their sponsorship; financially, morally and prayers made the burden of this work and my academic pursuits relatively light and easy, and also my wonderful siblings Mrs. Ewoma .A, Mrs. Uyoyo .F. Oroh .A. Obaro.A. Awore.A. and Oke. I appreciate the prayers and moral support of Pst Adekunle,K., Pst Precious.O., Pst Dayo, Pst Segun .O. Pst Dickson .O. Pst Gasu .G and Pst Obadje. S.



I equally thank my colleagues and friends; Mr Femi, Mrs Muma, Mrs Wumi, Mrs Brigdet, Mrs Toun, Miss Bukky, Mr Idowu, Miss Ebun, Miss Pauline, Miss Ebi, Mr Samuel, Mr Emmanuel, Mr Ajibike, Miss Titi and Miss Chidinma for their encouragement and others for their exchange of knowledge, experience and for their contributions to this study.



# **TABLE OF CONTENTS**

Title Page	ii
Authorization to Copy	ii
Certification	iii
Dedication	iv
Acknowledgments	
Table of contents	vii
	x
List of Figures	xi
List of Abbreviations	xii
Abstract	xiii
CHAPTER ONE: INTRODUCTION	
1.1Background to the Study	1
1.2 Statement of the Problem	4
1.3 Research Questions	6
1.4 Objectives of the Study	6
1.5 Hypothesis of the Study	6
1.6 Jusistification of the Study	6
1.7 Scope of the Study	7



1.8 Op	3 Operational Definition of Terms 8	
Chapt	ter Two: Literature review	
2.1.1	Evolution of Payment System	- 10
2.1.2	Emergence of a Cashless Society	- 14
2.1.3	Electronic Payment System (EPS)	-17
2.1.4	Electronic Fund Transfer	- 18
2.1.5	Electronic Banking System	- 19
2.1.6	Infrastructures of Cashless Policy	22
2.1.7	Payment Terminal Services Providers (PSTPs)	25
2.1.8	Nigeria Interbank settlement Systems (NIBSS)	
2.2	The Review of Related Studies	29
2.2.1.	Cashless Policy Implementation and Criticism in Nigeria	
2.2.2.	Review of Related Studies of Other Countries	31
2.2.3.	Cashless Policy and Economic Development	36
2.3	Review of Related Theories	- 37
2.3.1	Monetary Policy Theory	- 37
2.3.2.	Technology Acceptance Model and Diffusion of Innovation (DOI) Theory	40
2.4	Conceptual Framework	- 41
2.4.1	Issues under Consideration Pertaining to PTSPs Operations	
	42	
СНАН	PTER THREE: Methodology	
3.1	Area of Study	- 46
3.2	Research Design	- 47



3.3	Population, Sample Size and Sampling Techniques	48
3.4	Research Instrument	49
3.5	Validation of Research Instrument	49
3.6	Variables and Measurement	
3.7	Data Analyses Techniques	51
	PTER FOUR: Presentation, Analysis and Interpretation of Data	
4.1 Sc	ocio Demographical Characteristics	52
	resentation and Analysis of Data According to Research Objectives	
4.2.1.	Statutory Responsibilities of Payment Terminal Service Providers	57
4.3. 0	Correlation between Statutory Responsibilities and PTSPs	59
4.4 T	he Level of Efficiency of PTSPs in Cashless Operations (Merchants)	61
4.5. T	The Level of Efficiency of PTSPs in Cashless Operations (End-users)	63
4.6. R	Relationship of the Level of Efficiency and PTSPs in Cashless Operations	65
4.7. P	Prospects of Payment of Terminal Service Providers Operations	67
4.8. R	Relationship between Prospects and PTSPs cashless Operations	69
4.9	Hypothesis Testing	71
СНА	PTER FIVE: Summary, Conclusion and Recommendations	
5.1	Summary	77
5.2	Conclusions	79
5.3	Recommendations	79



BIBLIOGRAPHY	- 81
APPENDIX	88
LIST OF TABLES	
Table 3.1 Population and Sample Distributions of POS Merchants and End Users	48
Table 4.1 Socio Demographical Characteristics (Merchants)	54
Table 4.2 Socio Demographical Characteristics (End-users).	56
Table 4.3.1 Statutory Responsibilities of Payment Terminal Service Providers	58
Table 4.4 Statutory Responsibilities and Payment Terminal Service Providers	. 60
Table 4.5 Level of Efficiency of PTSPs in Cashless Operations (Merchants)	62
Table 4.6 Level of Efficiency of PTSPs in Cashless Operations (End-Users)	64
Table 4.7 Anova Level of Efficiency of PTSPs in Cashless Operations	66
Table 4.8 Prospects of Payment Terminal Service Providers	68
Table 4.9 Chi-Square Prospects of Payment Terminal Service Providers	70
Table 4.10 Statutory Responsibilities of Payment Terminal Service Providers	72
Table 4.11 Level of Efficiency of PTSPs in Cashless Operations	75



#### **LIST OF FIGURES**

Figure 2.1 Schematic Diagrams for Research Framework-----

45

# LIST OF ABBREVIATIONS/ACRONYMNS

CBN	Central Bank of Nigeria	-
	1	
PoS	Point of Sale	. 2
PTSPs	Payment terminal service providers	-2
NIBSS	Nigeria Inter Bank Settlement System	2
DOI	Diffusion of Innovation	10
<i>ECB</i>	European Central Bank	-
	10	
NPS	Nigeria Payment System	12
EPS	Electronic Payment System	17
GDP	Gross Domestic Products	32
DΒΛ	Reserve Rank of Australia	- 3/1



#### **ABSTRACT**

The study examined the statutory responsibilities of payment terminal service providers in Lagos State; investigated the level of efficiency of payment terminal service providers in cashless operations in the state; and examined the prospects of the payment terminal service providers cashless operations in the state. This was with a view to ascertaining the efficiency of payment terminal service providers (PTSPs) in cashless operations in Lagos state

The study used both primary and secondary data. Primary data were obtained through the administration of questionnaire to 40 Point of Sale terminals (PoS) merchants and 160 end-users who were purposively selected. Secondary data such as guidelines on PoS terminals and statutory responsibilities of payment terminal service providers were sourced from the Central Bank of Nigeria and Manuals on expected standards of PTSPs from the Nigeria Inter-Bank Settlement System. Data collected were analysed using percentages, frequencies, correlation, analysis of variance and chi-square.

The results of the analysis revealed that 62.5% respondents agreed that their payment terminal service providers were operative in delivering their statutory responsibilities. The implication was that PTSPs were diligent in carrying out their statutory responsibilities. Also 88.75% of the study accepted that the PTSPs were deficient in rendering efficient services to PoS merchants and end-users. The implication was that payment terminal service providers were still lacking in their level of operations offered to PoS merchants and end-users. In addition, also showed that 70% of the respondents were of the opinion that there were positive prospects (network reliability, speed, improved technology and efficiency) in payment terminal service providers in cashless operations. It is therefore interpreted that the PTSPs would improve



on their performance in cashless operations. This indicates that the PoS terminals were productive and will be highly useful in the future for maximal operations. The high R value (75.39, df = 44, p < 0.05) showed that the growth in statutory responsibilities executed by the PTSPs to merchants and end-users will lead to (75%) increase in cashless operations. (F  $_{(13, 146)} = 10.57$ , P<0.05) This implies that an increase in efficiency of payment terminal service providers will result to growth in cashless operations to PoS merchants and end-users. In addition  $(X^2 = 730.7, df = 208, p < 0.05)$  represents likehood ratio of greater operation and efficiency in the activities of PTSPs. The study established that there were prospects in payment terminal service providers' cashless operations.

The study concluded that while payment terminal service providers were effective in delivering their statutory responsibilities, they were not efficient in rendering their optimum services to merchants and end-users due to lack of awareness, high usage of cash, insufficient sensitization and interoperability of cards on the platforms.



#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background of Study

Proponents of electronic payment system for a developing nation like Nigeria envisaged a reduction in the load of cash management, safety and security of the populace and their hard earned money, drastic reduction in the incidence of money laundering, forestalling transaction losses owing to fraud and counterfeit among other challenges, especially when paying for services, making item purchases, subscribing for services, collecting from one or more payer and aggregating deductible funds (Akano, 2012). These benefits galvanized the design and implementation of strategies geared towards entrenching the cashless policy in the country, with the pilot project launched in Lagos in April 2012.

The Central Bank of Nigeria (CBN) early 2011 announced a new cash policy with the objective of reducing cash payments and encouraging electronic payments, that the country would from June 1st 2012 join the committee of nations that embrace the electronic means of payment and limit the use of cash to the barest minimum. The apex bank has gone ahead with the commencement of its "cashless policy" in Lagos, Abuja and Port Harcourt to demonstrate the CBN's seriousness about the policy which generated a huge debate from Nigerians. While the apex bank is of the view that the cashless policy is the way to go in line with global trends, many Nigerians both informed and uninformed have divergent views about the policy (CBN, 2011).

For years, analysts have predicted the transition of physical cash as a transaction medium to an electronic cash transaction medium referred to as a "cashless policy" which is



substituted in the place of cash system known as the electronic payment system. Some analysts look at such a prospect optimistically, believing that a cashless society would increase the efficiency of the economy. While others view it pessimistically, believing that it would subject the most private details of our lives to scrutiny and publication. Whatever the outcome, such a radical transformation will undoubtedly have a substantial effect on the credit card processing industry according to (David, 2012).

Cashless policy which has been in operation in developing countries of the world(such as United Kingdom, United State of America, Japan) came gradually through few bankers and consultants in the 1950s through the introduction of check, debit cards, credit cards, promissory notes, smart cards, online banking and mobile banking. They foresaw how their recently adopted computers and telecommunications equipment would revolutionize the way consumers exchanged money.

As a corollary, the adoption and infusion of cashless financial cum economic tools into Nigeria economy presupposes the existence of enabling institutions among which are deposit money banks, merchants (eateries, stores, hospitals, schools, etc), cardholders, card schemes, switches, Point of sale (PoS) terminal owners, payments terminal service aggregator, payment terminal service providers, processors (Nigeria Inter-Bank Settlement System, NIBSS) and independent system operators (CBN, 2011). This shows that the whole idea of cashless economy involves a web of interconnectivity among these indispensable institutions. Though all these institutions play crucial roles in the running of a cashless system, the activities of some are more germane and central than some other ones. Thus, we cannot but specially acknowledge the position of central institutions such as the NIBSS, payment terminal service aggregators and payment terminal service providers.



NIBSS and payment terminal service aggregators are important because they are government institutional regulators. While the activities of the payment terminal service providers (PTSPs) occupy a central position where it interlinks with the institutional regulators, the acquirers, the merchants as well as the consumers. Their basic product which is point of sale terminal has a significant role to play in driving a cashless initiative owing to the fact that they are ubiquitous, easy to use and portable. PoS are found in stores, restaurant, hospitals, schools, churches and other service centers. Besides, the responsibilities of PTSPs in POS terminal management and support (part of which are purchase and replacement of spare parts, provision of connectivity, training, repairs, and development of value added services) put their activities in a position where it should be given maximum scrutiny, if the whole cashless scheme will be successful. This fact thus necessitates a periodic evaluation of the operational efficiency of the payment terminal service providers.

In Nigeria, it was reported that the CBN already plans to issue ten more payment terminal licenses in addition to the six in existence (Unified Payment Services Limited, ITEX, ETop, EasyFuel, Citiserve, Paymaster) (National Mirror, 2013). This is coming on the heels of several complaints about the inadequacy of the present service providers to meet up with the deployment as well as the connectivity requirement of PoS merchants. The NIBSS (2013) reported that only 115, 475 (representing 72 per cent) of the total registered PoS machines have been successfully deployed and connected. The CBN also reported to have initiated talks with the Nigerian Communication Satellite Limited on a better connectivity platform (other than GPRS) for the PoS. Other arguments for these additional licenses include inadequate enlightenment of merchants and consumers of these financial services, low capacity of PTSPs and merchant apathy. These and other challenges confronting these PTSPs border on their



operational capabilities, especially if they have optimized the market potential in Nigeria for deployment and connectivity, the maintenance cost they charge the acquirers and merchants, the quality and reliability of the network provided, the accuracy of transactions reconciliation, prompt settlement of acquirers and many such other efficiency related matters. These no doubt have a strong bearing on the success or otherwise of the nascent cashless policy. Therefore this proposal seeks to assess and investigate the cashless policy and operational efficiency of payment terminal service providers in Nigeria.

For more information, please contact ir-help@oauife.edu.ng