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Assessment of performance of mobile banking business: a case of Dar es Salaam city

Mnenwa, Alfred

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**ASSESSMENT OF PERFORMANCE OF MOBILE BANKING
BUSINESS**

A CASE OF DAR ES SALAAM CITY

By

Alfred Mnenwa

**A Dissertation Submission in Partial Fulfillment of the Requirements for the Master
in Business Administration (MBA) Of University of Dodoma**

University of Dodoma

August, 2013

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the University of Dodoma, a dissertation entitled; '**Assessment of Performance of Mobile Banking Business; A Case of Dar es Salaam City**' in partial fulfillment of the requirement for the degree of Master of Business Administration of the University of Dodoma.

.....

Dr. Chrispinus D.K. Rubanza

(SUPERVISOR)

Date.....

DECLARATION AND COPYRIGHT

I, **Alfred Mnenwa**, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or other degree award.

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Special thanks should go to my supervisor Dr. C.K Rubanza without him nothing could be done about this study.

DEDICATION

This study is dedicated to my beloved family and friends. I am happy that I have you in this world.

ABSTRACT

Despite mobile banking business being a fast growing ICT-based innovation in line with the face to face traditional banking industry little is known on the performance of mobile banking business among many countries including Tanzania. A study was conducted among four mobile network operators (MNOs), namely, Vodacom M-Pesa, Tigo Pesa, Airtel Money and Zantel ZAP, and five banks (NMB PLC, CRDB PLC, Exim Bank, TPB and BOA), to assess the mobile banking business performance in Dar es Salaam City. The study was carried out based on specific objectives: 1) to identify mobile banking services being offered, 2) to assess mobile banking business organizational benefits, 3) to analyze potential strengths, weaknesses, opportunities and threats (SWOTs associated with mobile banking businesses, and 4) to assess customer's satisfaction on service delivery. Both structured and unstructured questionnaires coupled with interviews, documentary review and observations were employed among mobile banking business customers, MNOs and banks management, and MNOs agents in Dar es Salaam city. A total of 150 respondents were both randomly and purposively selected for the study. Data obtained on m-banking service delivery, organizational benefits, SWOT and customer satisfaction were analyzed into simple descriptive statistics using Statistical Package for Social Sciences (SPSS) version 15.0.

Findings revealed that there are various mobile banking services that are offered in the Dar es Salaam City innovated from the banks and MNOs. These including ATMs, NMB mobile, Sim-banking, Exim mobile, M-pesa, Tigo pesa, Airtel money and Ezy pesa. The latter cause these organizations benefit in terms of increasing number of customers in the industry 88% (N=44), increasing financial profit

trend 70% (N=105) and good reputation 78.7% (N=118). The strengths of the mobile banking business including customer zero liability 70.6% (N=106) and easy customer registration processes 86% (N=129) while the weaknesses are such as lack of clear legal base 22.7% (N=34) as well as unstable and high service charges 32.7% (N=49). Opportunities such as high demand of services 21.3% (N=32) and high business collaboration with easier tariff partitioning in mobile banking services 28.6% (N=43) whereas the threats in mobile banking business include cybercrimes 16.7% (N=25) and criminal financing 28% (N=42). Customers' satisfactions were 20% (N=30) of the respondents satisfied with the customer services from MNOs and banks.

It could be concluded that mobile banking industry is performing well in serving both banking and unbanked customers but the identified internal weaknesses and external threats impede their efficiency and utilization.

TABLE OF CONTENTS

CERTIFICATION	i
DECLARATION AND COPYRIGHT	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iv
ABSTRACT	v
LIST OF TABLES	xiii
LIST OF ABBREVIATIONS	xv
CHAPTER ONE	1
1.0 INTRODUCTION	1
1.2 Statement of the problem	6
1.3 Objectives of the study.....	9
1.3.1 General objectives.....	9
1.3.2 Specific Objectives	9
1.3.3 Research questions	9
1.4 Significance of the study.....	10
1.5 The Scope of the study.....	11
CHAPTER TWO	12
2.0 LITERATURE REVIEW	12
2.1 Definitions of key terms.....	12
2.1.1 Bank	12
2.1.4 Electronic Business	13
2.1.5 Electronic commerce	13
2.1.6 Automated Teller Machine Card.....	14
2.1.7 Electronic Money.....	14

2.1.8 Mobile Money	15
2.1.9 Electronic Banking.....	15
2.1.10 Business performance	15
2.1.11 Mobile banking	16
2.1.11.1 Western Union Money Transfer	17
2.1.11.2 CRDB Simbanking and Card less services	17
2.1.11.3 NMB Mobile	18
2.1.11.4 Exim Mobile	18
2.2 Theoretical framework.....	18
2.2.1 Theory of Reasoned Actions.....	19
2.2.2 Theory of business	20
2.2.3 Theory of Diffusion of Innovation.....	21
2.3 Empirical Literature Review	23
2.3.2 Mobile banking in developed countries	23
2.3.3 Mobile banking in Africa.....	24
2.3.4 Mobile banking in East Africa.....	25
2.3.4 Mobile Banking in Tanzania.....	26
2.3.4.1 Mobile banking in other parts of Tanzania	28
2.3.4.2 Mobile banking in Dar es Salaam City	29
2.5 Strengths, weaknesses, opportunity and threats in mobile banking.....	30
2.5.1 Strengths	30
2.5.1.1 Zero liability.....	31
2.5.1.2 Customer registration.....	31
2.5.1.3 Accessibility of mobile banking services.....	31
2.5.1.4 Organization business collaboration	32

2.5.1.5 Fund security and customer protection.....	33
2.5.2 Weaknesses	33
2.5.2.1 Legality of mobile banking.....	33
2.5.2.2 Unclear terms and conditions.....	34
2.5.2.3 Unstable signal and Network addiction	35
2.5.2.4 High charges for the mobile banking services	35
2.5.3.1 Integration of the mobile banking and utility services providers.....	36
2.5.3.2 Utility Payments.....	36
2.5.3.3 Publicity of the Banks and MNOs	37
2.5.3.4 High service demand.....	38
2.5.3.5 Favorable business environment.....	38
2.5.4 Threats for mobile banking	39
2.5.4.1 Criminal financing	39
2.5.4.2 Illiteracy among the users	39
2.5.4.3 Money laundering	40
2.5.4.4 Customers High Expectations.....	40
2.5.4.5 Cyber crimes	41
2.5.4.6 Irresponsibility of companies.....	41
2.5.4.7 Competition among the business companies	42
2.6 Customers Reactions on mobile banking business I Dar es Salaam City	42
2.7 Research Gap	43
2.8 The Conceptual Framework.....	43
2.8.1 Independent variables	43
2.8.2 Intervening variables.....	44
2.9 Conclusion	45

3.0 RESEARCH METHODOLOGY	46
3.1 Study area.....	46
3.1.1 Location	46
3.1.2 Area.....	46
3.1.3 Demography.....	47
3.1.4 Economic activities	47
3.2 Methodology	47
3.3 Type and Source of Data.....	49
3.3.1. Primary Data	49
3.3.2 Secondary Data	49
3.3.3 Data collection methods.....	49
3.3.3.1 Questionnaires.....	49
3.3.3.2 Interview Schedule.....	50
3.3.3.3 Observations	50
3.3.3.4 Documentary Review.....	51
3.4 Sampling design.....	51
3.4.2 Sample Size.....	51
3.4.3 Sampling frame	52
3.4.5 Sampling unit	52
3.4.6 Sampling Procedures.....	53
3.4.6.1 Probability Sampling.	53
3.4.6.2 Non Probability Sampling Technique.....	53
3.5 Ethical Consideration.....	54
3.6 Data Processing, Analysis and Presentation	54
3.6.1 Data Processing.....	54

3.6.2 Data Analysis	54
3.6.3 Data Presentation	54
3.7 Validity and reliability	55
3.7.1 Reliability.....	55
3.7.2 Validity	55
3.8 Conclusion	55
CHAPTER FOUR.....	56
4.0 RESULTS, ANALYSIS AND DISCUSSION OF FINDINGS	56
4.1 Results.....	56
4.1.1 Socio-demographic characteristics	56
4.1.1.1 Sex of the respondents	56
4.1.1.2 Education level of the respondents	57
4.1.1.3 Age of the Respondents	58
4.1.1.4 Occupation of the Respondents.....	59
4.1.2 Services provided in Mobile banking business.....	59
4.1.3 Mobile banking organizational benefits.....	60
4.1.3.1 Increasing Customer trend for different mobile banking service providers from 2008 to 2012.....	60
4.1.3.2 Organizational Profit trend.....	61
4.1.4 Potential Strengths, Opportunities, Weaknesses and Challenges Analysis	63
4.1.4.1 Potential Strengths	63
4.1.4.1.1 Zero liability.....	63
4.1.4.1.2 Customer registration process in mobile banking business.	63
4.1.4.1.3 Accessibility of mobile banking services.....	64
4.1.4.1.4 Organization Business Collaborations	65

4.1.4.1.5 Fund Security and Customer protection.....	65
4.1.4.2 Opportunities in mobile banking services.....	66
4.1.4.3 Weaknesses in mobile banking business in Dar es Salaam City	66
4.1.4.4 Threats in mobile banking business in Dar es Salaam City.....	67
4.1.5 Customers reactions to different mobile banking service providers.....	68
4.2 Discussion of the findings.....	69
4.2.1 Socio-demographic characteristics	69
4.2.2 Services provided by mobile banking business	71
4.2.3 Mobile banking organizational benefits.....	72
4.2.4 Opportunities in mobile banking business	73
4.2.5 Customer satisfaction.....	75
CHAPTER FIVE	78
5.0 CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH	78
5.1 Conclusion	78
5.3 Recommendations	79
5.4 AREAS FOR FURTHER RESEARCH.....	81
REFERENCE.....	83

LIST OF TABLES

Table 1: Sex of the Respondents (male=95 and females=55).....	57
Table 2: Level of education of the Respondents (male=95 and females=55).....	58
Table 3: Age of the Respondents	58
Table 4: Occupation of the respondents.....	59
Table 5: Services provided in mobile banking business	60
Table 6: The trend of the number of customers from 2008 to 2012 for	61
Table 7: Profit increasing trend.....	62
Table 8: Profit Trend of the mobile banking business	62
Table 9: Possibility of recovering of the fund lost in mobile banking.....	63
Table 10: Registration difficulties.....	64
Table 11: Is it possible to access mobile banking services	64
Table 12: Organizational Collaboration and linkage	65
Table 13: Possibility of recovering of the fund lost in mobile banking.....	66
Table 14: Opportunities in mobile banking services in Dar es Salaam City	66
Table 15: Weaknesses in mobile banking business in Dar es Salaam City	67
Table 16: Mobile banking business challenges in Dar es Salaam City	68
Table 17: Customers reaction on mobile banking business.....	69

LIST OF FIGURES

Figure 1: The Conceptual Framework	45
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LIST OF ABBREVIATIONS

AML	:	Anti-Money Laundering
ATM	:	Automated Teller Machine
BOA	:	Bank of Africa
BoT	:	Bank of Tanzania
CRDB	:	Community Rural Development Bank
DoI	:	Diffusion of Innovation
DSTV	:	Daily Serving Television
EAC	:	East Africa Community
EFT	:	Electronic Fund Transfer
ICT	:	Information Communication Technology
IT	:	Information Technology
MNO	:	Mobile Network Operator
MoF	:	Ministry of Finance
MoU	:	Memorandum of Understanding
NBC	:	National Bank of Commerce
NMB	:	National Microfinance Bank
PIN	:	Personal Identification Number
PLC	:	Public Limited Company
PoS	:	Point of Sales
TANESCO	:	Tanzania Network Electrical Supply Company
TCRA	:	Tanzania Communication Regulation Authority
TTCL	:	Tanzania Telecommunication Company Limited
TV	:	Television
TRA	:	Tanzania Revenue Authority
URT	:	United Republic of Tanzania

CHAPTER ONE

1.0 INTRODUCTION

Despite mobile banking business being a fast growing ICT-based innovation in line with the face to face traditional banking industry little is known on the performance of mobile banking business among many countries including Tanzania. The mobile banking sector could similarly be undermined by the general lack of clear legal basis as related to their establishment, financial misconducts, criminal financing, cybercrimes, money laundering and illiteracy among customers. Despite the recent technological improvement in mobile banking business, for instance, on service delivery as related to fast current speed of the typical virtual operations to cope with the ever increasing number of customers and utility service payments such as electricity bills (LUKU™, Water utility charges such as for the case of Dar es Salaam (DAWASCO), Government tax and TV license such as Dstv little is known on the performance of m-banking business.

Adoption of mobile banking businesses and services by the majority firms and individuals has been geared by the spread of technological development across the world and Tanzania in particular. Many people through prepayment of different utilities such as voucher, credit and free airtime, and bonus and promotions of the voucher are enjoying making calls and sending of text messages through their mobile phones (Karjaluo, 2002). Yet, little is known about the mobile banking security of the fund and the customer protection provided by the financial institutions such as MNOs and the banks. Most of the users of the mobile phones are economic averaged individuals with little or no enough cash to enjoy the use of the financial institutions

(Porteous, 2006). The latter author stated that, across the developing world there are probably more people with mobile phones than with the bank accounts. According to, BOT report, (2010) the number of mobile banking customers is increasing with the hoist in the mobile phones subscribers.

The mobile banking services include long distance remittances, micropayments, and informal bartering schemes, and they go with different names such as mobile banking, mobile payments or mobile transfer (Donner, *et al.*, 2008). Such technology-oriented services delivery is growing so rapidly. The latter is exhibited by the first launched CRDB Agency, June in 2013 which is an extension of the CRDB Plc services delivery (CRDB, 2013).

Through the use of mobile phones financial services are being provided to the banked and unbanked customers. Contrary to the traditional face to face service delivery the mobile phone users have been integrated to the mobile transfer and mobile bank services worldwide. Many of the mobile phone users live in informal life and/or cash economies, without access to financial services that others take for granted (Porteous, 2006).

1.1 Background of the study

Mobile banking was at first designed for the customers in the developed countries (Karjaluoto, 2002). The technology was introduced as a way of offering additional means of managing money without handling bulk cash, and was implemented to complement the services offered by the banking systems, such as checkbooks,

ATMs, voicemails/ landlines interfaces, smartcards, point of sales networks, and the internet resources.

Mobile banking has been introduced worldwide among many different countries at a global scale. U.S financial institutions, for instance, like their counterparts around the world have implemented mobile banking merely as an extension of their online channels (Camner *et al.*, 2009). In fact, customers must be enrolled in online banking before they can even gain access to the mobile channel. The users of mobile banking in the developed world are concerned with the convenience while those in the developing world are more interested in their accessibility and affordability (Cracknell, 2004; infoDEV, 2006).

In both developed and developing countries the mobile banking services are coordinated by central organization, for instance M-Com in USA. With its headquarter in Atlanta, GA, M-Com is an international mobile banking and payments solution provider with live fortune of 500 banking customers across Asia Pacific, Middle-East and North America. M-Com's core proposition is centered on delivering a positive return on investment through world-class adoption metrics for the mobile channel, while providing the lowest total cost of ownership.

Even in developed countries, there are many customers still whom don't have a bank account. For example, Paisner *et al.*, (2009), stated that, even in a developed market like the United States, only about 49 percent of consumers have a checking or savings account, leaving a large unbanked population that is accustomed to paying expensive check cashing and bill payment fees on a monthly basis (Paisner *et al.*,

2009). For controlled business, there must be an authoritative financial regulatory body.

Mobile banking is coordinated by the Central Organizations in other parts of the world like in USA. However, coordination of banking varies widely across nations in the globe. In Tanzania for instance, the mobile banking service is coordinated by Central Bank of Tanzania (i.e. Bank of Tanzania, BoT) while most of its policies and regulations are configured and provided by BoT and TCRA, (i.e. Tanzania Communication Regulatory Authority) in collaboration with the Ministry of Finance and Commission of Science and Technology for creation of the policies, rules and regulation governing mobile banking as well as other ICT based technologies and service delivery (URT, 2010). The BoT had signed an MOU with Tanzania Communications Regulatory Authority (TCRA) with the intention of sharing regulatory and supervisory information. In regard, the Bank will focus on the regulation of financial matters while TCRA will regulate issues pertaining to the Communication infrastructure¹.

Most of the mobile banking services in Tanzania have been established since 2008 by the mobile network operator (MNOs) and various Bank Plcs (BoT, 2010). Some of the current mobile phone operators include, Vodacom, Tigo, Airtel, TTCL and Zantel. All of the mobile services providers offer a wide range of mobile banking services such as mobile banking utility charge payment, as well as fund transfer. Zantel for instance launched its mobile banking service called “Z-Pesa” translated to Zantel Money, in March 2008 (Zantel, 2008). The latter was followed by M-Pesa

¹ BoT Annual report, 2011

which was launched on April, the same year by Vodacom (Vodacom, 2008). In addition, February 2009 Airtel Tanzania established Airtel-Money as its mobile banking business (Airtel, 2009). Tigo Co. Ltd also established its mobile banking business service called Tigo Pesa in 2010 (Tigo, 2010). There have been general transformations in terms of applicable technology, business and service delivery options. For example, the recently introduced/integrated CRDB Bank Plc. banking approach with mobile phones service provides, branded “*Fahari Huduma*” in addition to other options of mobile banking based service delivery which is common across banking sector.

Introduced m-banking services represent an advanced technology through which both traditional banking institution and the mobile banking sector are working hand in hand for services delivery as well as business promoting in many countries including Tanzania. However, the mobile banking as well as its time to time technological advancement represents a fast growing sector of the economy.

The traditional banking sector does not consider the existence of the mobile banking as threats rather as complement to their banking services (BoT, 2010). There has been a wide range of mobile banking technology adoption since its establishment in Tanzania; although, less is known about its performance. From, the former cue banking, mobile banking services were developed so as to remove inconveniences in case of the customer (Paisner *et al.*, 2009). Various m-banking services were innovated. For example, NMB mobile in 2009, CRDB Simbanking in 2012, TPB mobile banking and Western Union money transfer through which mobile phones owners are able to make bank inquiries and money transfers and the bank customers

can send money to the unbanked customer through the mobile phone for example in Simbanking and Cardless services. Money is paid from bank account to the mobile phone in which a person is capable of withdrawing money from the ATM without using ATM card or even if the person does not have bank account.

Mobile banking services have many benefits among individual customers and the service providers as well. Benefits could be in terms of time spent, and speeding of transactions in making payment of bills such as school fees, electricity and water utilities, mainly through an established link with the Tanzania Network Electrical Supply Co. Ltd (TANESCO) and its LUKU electricity utility. Through mobile phone facility a face-to-face banking is now omitted by obtaining similar banking service through an appointed agent.

1.2 Statement of the problem

The booming electronic services and associated mobile banking services such as mobile money transfer; mobile phone account inquiry; peer to peer/international remittances, Western Union monetary transaction services and internet banking technology has resulted from the need of financial institutions and the mobile phones corporations to offer convenience services in communication of the business and the customers (Shittu, 2010). The increase in the mobile banking services has resulted into increase in number of customers (CRDB, 2012).

The banks and mobile phones companies create value by being the middle actor in the clients' financial transactions. Within the informal sector in the developing world including Africa, and Tanzania in particular mobile phones play a prominent role in

creating and exchanging information, thus allowing SMEs to communicate with clients and suppliers (Esselaar *et al.*, 2006). Through the use of the mobile phones, computers and other information communication technologies (ICT), different financial transaction can be simplified and achieved. It is argued that the simplification does not necessary add to good performance of organization, as Davis (1991) argues that information systems investment does not necessarily mean an increase in productivity since it can as well retard performance.

Despite the existing guidelines on operation of banking industry, as regulated by the Bank of Tanzania, there are a number of guidelines from BoT that are relevant to mobile banking businesses including the National Payment Systems Guidelines for retail payments, rules and regulations for Retail payments and the Guidelines for introducing electronic payments (BoT, 2012).

However potential customers are skeptical and thus, they don't buy, sell or transfer or make payment through mobile money due to the perceptions that mobile banking is too insecure for their money and it is accompanied with inconveniences like poor signals and weak networks/ connectivity. The time lag as a response on success transaction has similarly been noted as of great concern.

The tariff charges for the mobile banking services are questionable among the majority customers, for example, a highly variable tariff charges to effect various m-banking through different service providers such as, M-Pesa, Tigo Pesa, Airtel money, Ezy Pesa, and ATMs services are perceived among many clients as being too high.

Similarly there are concerns that, the line between the bank premises and the mobile banking is not clearly defined among the majority of stakeholders of the mobile banking business. Also, it is not well understood on whether the mobile banking services stand as a bank by itself thus competing with the traditionally known banks or the former are the supplement of the traditional banks services (Shittu, 2010). Performance of the profirelating m-banking in Tanzania is hampered by the lack of comprehensive data on their efficiency as well as customer satisfaction and the associated socio-economic impacts.

Scholarly research on the adoption and socio-economic impacts of mobile banking/m-payments systems in the developing world including Africa, East Africa and Tanzania is limited (Maurer, 2008). Available studies in Tanzania for instance include; the prospects and legal challenges posed by the adoption of mobile banking in Tanzania (Abdallah, 2011), mobile banking and the unbanked (Esselaar *et al.*, 2006). In addition, other studies include those on customer satisfaction (Porteous, 2006) and regulatory framework (Abdallah, 2011). Also, less is known on the mobile banking analysis of available strengths and opportunities as well as the weaknesses and threats that could undermine the emerging of mobile banking business.

The booming mobile banking business could still be limited to certain extent by the lack of appropriate marketing techniques in terms of the clarity and time frame of the various promotions and advertisements; lack of clarity of the terms and conditions stated in their advertisements. There are also concerns among customers that the mobile companies benefit more than the customers that seem to worry the customers, that m-banking services was carried out be straight forward. The current research

was therefore carried out to assess mobile banking business performance, among selected customers and m-banking industry using a case of Dar es Salaam City, Tanzania.

1.3 Objectives of the study

1.3.1 General objectives

The main objective of the current study was to assess the mobile banking business performance in Dar es Salaam City.

1.3.2 Specific Objectives

The current study was carried out based on specific objectives:

1. To identify mobile banking services being offered by the different services providers.
2. To assess benefits of the organization after implementation of mobile banking business.
3. To identify potential strengths, opportunities, weaknesses and threats in mobile banking industry (SWOTs)
4. To assess customers' satisfaction on different mobile banking services delivery

1.3.3 Research questions

1. What are the services being provided by the different mobile banking service providers?
2. What are the organization benefits after adopting mobile banking business?
3. What are the potential strengths, weaknesses, opportunities and threats of

mobile banking businesses in Dar es Salaam City

4. What are the customers' reactions towards the mobile banking businesses in Dar es Salaam, City?

1.4 Significance of the study

The results presented in the current study contribute to the existing knowledge and awareness on the mobile banking business. The current study was accountable for the contribution in existing debate over the benefits of mobile banking business, mobile banking SWOTs, quality of the services offered by mobile banking that satisfy the customers.

Findings from this study will assist to impart and enhance knowledge on mobile banking service to the general public. Presented results in the current study will contribute to the existing knowledge on the performance of mobile banking industry in Tanzania. Results in the current will inform the policy makers such as Tanzania Communication Regulatory Authority (TCRA), Ministry of Finance (MoF) and Bank of Tanzania (BoT) about the mobile banking business platforms and the policies for improving efficient and effectiveness and economic of scale of the mobile banking service delivery. The presented results will impart potential information and knowledge about mobile banking to stakeholders such as financial institutions and telecoms providing mobile banking services on the customers' satisfaction and associated reactions as related to the tariffs charges of the services.

1.5 The Scope of the study

The current study was limited to Dar es Salaam City where the assessment of mobile banking business performance was done. This is because it is the most urban area in Tanzania where various businesses including mobile banking businesses are located. The current research was limited to five (5) traditional Banks including (CRDB, NMB, Exim, BOA and TPB) and five mobile phones service providers (Vodacom, Tigo, Airtel, Zantel and TTCL). The assessment was purely confined on business performance, available SWOTs analysis, system performance and users' reaction to the mobile banking services. Types of adopted systems and system performance are beyond the scope of the current study.

CHAPTER TWO

2.0 LITERATURE REVIEW

This chapter presents a review of literature on the assessment of mobile banking on the performance of the businesses. The chapter is divided into eight sections, the first being definite on of key terms, followed by the mobile banking theoretical framework; General overview on mobile banking is presented. Fourth section will be technology in mobile banking, followed by the reviews on the mobile banking. The chapter also includes SWOTs analysis and conceptual framework. The last two sections are the conclusions and the methodological review

2.1 Definitions of key terms

2.1.1 Bank

According to COED (2002), bank means financial establishment money deposited by customers for investment; pays it out when required, makes loans at interest; and exchanges currency. Also Glenn, (1973) defined a bank as any organization engaged in any or all of the various functions of banking through receiving, collecting, transferring, paying, investing, dealing, exchanging and servicing (safe deposit, custodianship, agency, trusteeship) money and claims to money.

2.1.2 Banking

Banking is defined by COED (2002) as the business conducted at the bank and/or the artificial or embankment bank; which suit the name of the mobile banking.

2.1.3 Information technology

Information Technology refers to the machine technology that is controlled by or uses information (Jessup, 2006). The IT systems are those systems whose purpose is to store and manage data. According to Gates (1997), technology will allow banks to get closer to their customers; to deliver the wide range of the services at the lower costs; offer 24 hour online banking support to customers and improving their internal systems. The technology of using mobile phones in banking transactions has led to decrease services costs and profits (Bughin, 2004). Technology will help the bank and the non-bank customers to access to banking services at lower costs, and full time services. Examples of the technology in the banking industry are the digital cash and the card system such as the Credit card, Debit card and the ATMs card (Automatic Teller Machines) and card less services.

2.1.4 Electronic Business

Is the broader definition of the Electronic commerce that including selling and buying of goods and services and also servicing customers, collaborating with partners, conducting e-learning and conducting electronic transaction within an organization (Kottler and Armstrong, 2003).

2.1.5 Electronic commerce

Electronic commerce describes the buying selling and transferring or exchanging of products, services or information via computer networks, including the internet (Jobber and Lancaster, 2007). Mobile banking being part of Electronic Commerce refers to the provisions of the banking products and services through electronic delivery channels in three forms; ATM, phone banking and internet banking

(Mashhadi *et al.* 2007). Mishra and Kiranmai (2009), also defined mobile banking as the services that fall into three types, namely, Automated Teller Machine (ATM), Electronic Payments through credit cards, Debit Cards, Smart Cards, etc and EFT (Electronic Fund Transfer). The latter was introduced by “Maxcom Africa” and utilized EFT in prepaid TV license, utility bills, money transfer, mobile recharge, Government taxes and online money, the functionalities formerly provided by through the Maxmalipo Swipe Card (Maxcom Africa, 2012). Mobile banking however can be defined simply as the form of electronic services in which the customer can make fund transfer, utility payments, savings and withdrawing of money through the use mobile phones and other ICT equipments and infrastructure.

2.1.6 Automated Teller Machine Card

An Automated Teller Machine (ATM) Card is the chip device consisting of the circuit element on a single silicon chip (Adagunodo *et al.*, 2007). The ATM Card is complex circuits that process microprocessors with single chips that contain the complete arithmetic and logic unit of computers. The card helps the bank customer to make fund withdraws, balance inquiry, Mini Statement, fund transfers and payments at different point of sales (POS) or the Automated Teller Machines (ATM). The ATM has made it possible for the bank customers to access cash irrespective of the bank business hour (Akrani, 2011)

2.1.7 Electronic Money

The money that is transacted in Electronic Business is called Electronic Money which according to (Shitu, 2010) it referred to the monetary value measured in currency units stored in electronic form on electronic devices in the consumer’s

possessions. The Author added that electronic value can be purchased and held on the electronic device until reduced through purchase or transfer.

2.1.8 Mobile Money

Mobile money refers to the money stored using the SIM (Subscriber Identity Module) in a mobile phone as an identifier as opposed to an account number in conventional banking (UNCTAD, 2012). Vodacom M-Pesa taking for instance, customers can deposit and withdraw money from network of the agents that include airtime resellers and retail outlets acting as banking agents, providing services such as deposit and withdraw money, pay bills, purchase airtime, transfer money between the services and a bank account (Porteous, 2006).

2.1.9 Electronic Banking

Electronic banking is a product that enables the bank leverage on the internet banking system module in-built on the new banking application (Banks) implemented by the bank to serve the internet needs of the banks customers (Shittu, 2010). It should be understood that the current study is concern on mobile banking business performance.

2.1.10 Business performance

The business performance is conceived as the increase of profitability, employees and customer's satisfactions; operations simplification in terms of time and control as well as increase in the competitive advantage of the business. The organizational performance depends much on the applied technology in the area of production, marketing, operation, human resources and other subsectors. Increase in financial

business performance has resulted from the new emerged technological services that link computer and information technology in the production of goods and services (Moutinho and Phillips, 2000). A further issue that encounters managerial impacts on organization performance is the lack of a precise definition performance (Gary, 2011). Folan, Browne and Jagdev (2007) argued that there is no precise definition of the meaning of performance in the context of management science and as a result financial measurements continue to be default indicator of business performance. Young (2007) claimed that while profitability is unambiguous criterion for commercial ventures, no comparable standard exists for not-for-profit organization (NPOs). Banking business performance for the year 2010 was satisfactory, as the total assets of the banking sector grew by 25.5%, moreover the sector was profitable and maintained satisfactory liquidity position (BoT, 2010)

2.1.11 Mobile banking

Mobile banking is the form of electronic commerce in which the clients can make money transfers, payments, and savings; in the handsets or in the bank account through the mobile phones. Ovia, (2001) argues that mobile banking is a product of e-commerce in the field of banking and financial services. The mobile banking services that were assessed in the current study includes Western Union Monetary transfer, CRDB Simbanking and cardless services, NMB mobile and Exim mobile, Vodacom m-Pesa, Tigo-Pesa, Airtel money and Ezy-Pesa. The former five being established by the banks and the last four originated from the mobile network operators.

2.1.11.1 Western Union Money Transfer

Western Union Money Transfer is the product that allows people with relatives in Diaspora who may be remitting money home for family up-keep, project financing, school fees etc. People having relatives earning money from far place of the world (abroad) creates the venerable markets for the Western Union Money Transfer.

2.1.11.2 CRDB Simbanking and Card less services

Simbanking is the service that allows the customers to carry out banking transactions using mobile phone. The service has various features such as intra banking funds transfer to any bank account within CRDB bank network; funds transfer to any mobile phone in the country; funds transfer to the mobile money; bills payments and utilities. Other transactions performed through the CRDB Simbanking and Cardless services include balance inquiry, mini statement, airtime purchase and PIN change. All of these services are user friendly by allowing change of languages, mainly Swahili, English and Bilingual for the latter two languages. The benefits of the Simbanking includes the accessibility of accounts anywhere anytime, transfer funds without hassles of visiting the bank every time, maximize the uses of mobile phones, and saving time in making of the transactions, making payments to the partners without the tress, as well as enjoying the CRDB innovations (CRDB, 2012).

To access Simbanking service one must have the saving or current account number of CRDB bank or must open new account with CRDB bank. Registration is done on the customers phones by dialing *150*03# and following the instructions. Currently, Simbaking has been integrated with Vodacom m-Pesa and Airtel money through that the user makes transaction between the banks and mobile phones.

2.1.11.3 NMB Mobile

National Microfinance Bank (NMB mobile) deals with provision of mobile banking services such as the balance inquiry, money transfer to both NMB and non NMB accounts via the mobile phone number branded as NMB Pesa fasta, Mini-Statement, and purchase of prepaid services airtime for TIGO, AIRTEL, VODACOM and ZANTEL mobile phone service providers; as well as prepaid electricity utility purchase (LUKU) as the former offered services. Currently various services have been added including bills payment for water bills (DAWASCO), TRA property tax and income tax and DSTV payment.

2.1.11.4 Exim Mobile

Exim bank being the sixth largest bank in terms of the total deposits and assets launched its mobile banking in the end of March, 2013². The service helps the bank customers to access their bank accounts via their mobile phone. EXIM mobile involves provision services such as the balance inquiry, money transfer to EXIM accounts, and money transfer to non EXIM customers via the mobile phone numbers, Mini- Statements, Full-Statements, check book request and utility payments such as electricity utility prepaid purchase (LUKU) as well as bills payment for water (DAWASCO).

2.2 Theoretical framework

Three theories were taken into consideration as they are direct related to the study. These theories include Theory of Reasoned Actions (TRA) (Fishbein and Ajzen,

² www.tanzaniainvest.com>Banking and Finance>ews

1975); Theory of business (Drucker, 1994), and Theory of Diffusion of Innovation (DoI) (Rodgers, 1973).

2.2.1 Theory of Reasoned Actions

The theory of Reasoned Actions (TRA) states that, “a person's behavioral intentions (BI) are based on the person's attitude (A) and subjective norms (SN). If it is put in an equation it would look something like this $BI = A + SN$.”

Fishbein and Ajzen (1975) developed the latter theory. Perhaps this theory is the most important theory among the theories that are used to explain human behaviors especially consumer behavior. Pushel and Mazzon (2010), suggest that according to the theory, behavioral intention (use technology) is explained by people's attitudes towards that behavior and subjective norms.

People's attitudes towards a behavior includes behavioral beliefs; assess the consequences of the behavior, subjective norms, normative beliefs and motivations must be answered (Riivan, 2005). As long as the behavior is voluntary controlled by the individual, can accurately explain the factors influencing the technological adoption (Venkatesh and Davis, 2000). The theory can be used to explain the behavioral change of the mobile phone owners and their adoption to the new technologies including mobile banking services.

Based on Reasoned Actions theory (TRA) behavioral intention of the customers to register and use their mobile phone SIM cards for the purpose of using m-banking services is to be attributed to customer's attitudes (*i.e.*, sum of beliefs about a

particular behavior and the evaluation of each of those beliefs combined). Normally customers tend to assess and inquire the pros and cons of the particular mobile banking service before they take a step of registering in it.

According to the latter theory, the mobile business performance depends on the way the service providers attend clients' attitude and norms, through provision of the necessary education on the benefits and the technological service they offer. The success of the business is expected to come from the customers' adoption to that business after they have acquired positive attitude and norms towards the business or the technology being offered.

Subjective norm can be described as to how influential the people around a particular person would view their actions and think of them. The mobile banking providers should present the mutually beneficial image before the customers. This is because in decision making on whether to adapt to mobile banking services or not the customers depend on others opinions. Subjective norm is based on the significance of the individual as well.

2.2.2 Theory of business

The mobile banking business performance can be explained by the theory of business. The theory of business was developed by an early entrepreneur known as Peter Drucker in 1994 (Wheelock and Wohar, 2009); the theory is explained as the model. The tenet of this model is that, many businesses tend to decline and fail because the assumptions they make that form the basis of their fundamental business decisions (about customers, society, markets, technology, their mission, etc.),

become obsolete or invalid. According to the theory the environment of the businesses keep changing and since the future is uncertain, every organization should periodically examine their fundamental assumptions to evaluate whether they still reflect the realities they face, and if not, how they should be changed.

2.2.3 Theory of Diffusion of Innovation

Diffusion of Innovation theory (DoI) by (Rodgers, 1983) states that, “an innovation diffuses or spreads through our society in a predictable pattern”. Members of the society mainly adopt an innovation as soon as they hear of it; while take longer to try something new and still others take much longer. The Diffusion Innovation Theory includes the four key steps namely Knowledge, Persuasion, Decision and Conformation that effectively summarize the diffusion process wherein the innovation in involvement mobile banking business is going through.

The first step is “Knowledge”, wherein the mobile banking business customers are made aware of the process and procedures of registration. The next step is “Persuasion” where the diffusion process takes place mostly within the mind of the adopter. The individual weighs the advantages that the new innovation, in the regard, mobile banking technology would bring to him or her personally. Based upon these evaluations and discussions with others, the individual begins to learn toward either adoption or rejection of the innovation. This is where the customers analyze the advantages and the disadvantages of the mobile banking compared to the traditional banking premises.

The third step is “Decision”. The individual customers make the final decision of whether to adopt or reject. The last step is “Confirmation” where the individual seeks validation and register the chip for mobile banking.

Mobile banking is an innovation that has to be diffused to or adopted by the mobile phones’ users in the developing world Rogers, (1983); Brown, *et al.* (2003). The work of Taylor and Todd (1995) adopted a planned behavior to predict mobile banking take-up in South Africa.

Two studies from the economic development/practitioner literature (Ivatury and Pickens, 2006; Porteous, 2007) suggested that mobile banking users in South Africa are wealthier and better educated than the average South African with a bank account, let alone the average unbanked South African. Porteous (2006) suggested that the profile of the typical mobile banking user in South Africa still for instance resembles that of the early adopters. Drawing on representative survey data, Porteous cites mistrust and unawareness among the primary reasons. The latter presentation suggests that South Africans might choose not to adopt mobile banking.

However, delivery costs, customers costs of using the bank services due to the use of mobile phones and convenience (as they use bank 24 hours at anywhere they are). Also, Alawadwini (2001) highlight that faster, easier and more reliable service for customers and improvement of the Banks competitive position to be the most important drivers of online banking among Bank and IT managers in Kuwait.

2.3 Empirical Literature Review

2.3.1 Overview on mobile banking

Mobile-banking includes the provision of the banking products and services through electronic delivery channels in three forms; ATM, phone banking and internet banking (Mashhadi *et al.* 2007). According to Mishra and Kiranmai (2009), Mobile banking services falls into three categories; Automated Teller Machine (ATMs), E-payments through Credit Cards, Debit Cards, Smart Cards, etc and EFT (Electronic Fund Transfer); also known as Phone banking, Mobile Banking and Internet Banking. Moreover, the term mobile banking as been defined as the activity whereby a customer uses their mobile phone to interact with their bank either directly or indirectly via mobile financial service provider (BFA, 2008).

The empirical review of the study will cover global, regional, national, sub-national (zonal) and local mobile banking businesses activities.

2.3.2 Mobile banking in developed countries

Across the developed world majority of their population and businesses are enjoying the mobile and internet banking services due to their high technological improvement. In USA many people own the Smart phones, such as iPhones, Blackberry (RIM) and Android for the purposes of using the internet and mobile banking services (Javelin, 2010). Shevlin (2011) noted that, in 2010 roughly two out of ten U.S customers checked their checking or prepaid card account balances using a mobile device. While 40% banked online and the same percentage use neither mobile nor online banking. The latter author also added that, most of the customers of the mobile money bankers are the migrant away from the checkers. This shows

that the traditional FIs have the task to introduce and to improve their mobile banking businesses.

In UK, various research surveys by mobile money specialists Monetized revealed that the UK mobile banking industry was growing at 30% per annum, outpacing credit cards, ATMs and online banking in mass-market penetration (Finacle, 2011).

2.3.3 Mobile banking in Africa

Compared to the developed countries, mobile banking was established in Africa in late 1990s and early 2000s. Vodafone and Safaricom's mobile money transfer in Kenya launched M-Pesa in September 2005, targeting 200,000 customers in first year (Rasmussen, 2009). In 2008 nearly two million users registered with Safaricom M-Pesa system which is within a year of its nationwide rollout (Ivatury and Mas, 2008; Vaughan, 2007).

MTN mobile banking on the other hand was launched in South Africa in 2005 as a joint venture between the country's second largest network operation MTN and the large commercial bank, Standard Bank (Porteous, 2007). In April 2006 Wizzit mobile banking started with 25000 clients (Gary, 2006). According to Vaughan (2007) high variability exists on extent of adoption of m-banking mainly as related to available infrastructure and technological development.

The development of the mobile-banking has followed the market economy policies in the banking industry. Despite the need to gain the competitive advantages the bank institutions and the telephone network providers launched mobile banking services

so as to increase customer's satisfaction. Although the accurate number do not exist yet at the continental level it is likely that there were more than one million mobile banking users in early 2006 (Gary, 2006).

2.3.4 Mobile banking in East Africa

The East African Community (EAC) has been ahead of other regions of Africa in electronic money transfer with M-Pesa which started in Kenya in 2007, having taken the lead in terms of innovation for providing more inclusive access to finance to a large part of the population who hitherto had been without a bank account (UNCTAD, 2012).

In August 2011 Kenya, Uganda and Tanzania (members of EAC) totaled four mobile money platforms for each. Kenya has four MNO and four mobile banking platforms; Uganda has six MNO and four mobile banking platforms. On the other hand Tanzania has seven MNO having four mobile banking platforms compared to Rwanda that has two MNO and two mobile banking platforms while their neighbors Burundi have five MNOs and one mobile banking platform.

The central bank for the individual country in EAC is responsible to regulate the mobile money using the strategy similar to that of central bank of Kenya, thus the central bank of Kenya act as the exemplar to be followed by the central banks of the other jurisdictions of EAC in way it regulate M-PESA and other mobile banking platforms in Kenya³. The EAC countries for instance will take charges per

³ Interview with George Sije, Bank of Tanzania/UNCTAD/DTL/STICT/2012/02

transaction authorized to be paid in Kenya and convert it in their local currency and charge it in their countries (UNCTAD, 2012).

The uses of mobile banking services in the EAC are similar to those in other part of the world, which includes local and international remittances, merchant, bill and salary payments. These activities are enabled through effective partnership between the mobile network operators with banks, microfinance institution, insurance companies and other organization. Domestic remittances involve that money transferred within the jurisdiction of the country, while the international remittances involve that transaction across different national business borders. International money transfer by Western union in partnership with M-Pesa is example of the latter⁴.

2.3.4 Mobile Banking in Tanzania

The vast amount of research on mobile financial transactions in general, business conditions and dynamics, as well as the recent survey on financial inclusion in Tanzania (FSD Tanzania, 2009) provides valuable contextual insights in diffusion and adoption in society of mobile transactions. Mobile banking services in Tanzania are used to connect the bank premises and their clients. These include EXIM mobile from EXIM bank, which is found in 13 regions with 24 branches and 52 ATMs in Tanzania (Exim, 2012). EXIM mobile is the technology that enables clients via their mobile phones to balance enquiry, to make utility payments, and day-to-day-transactional banking and Intra bank funds transfer. This is done through dialing the telephone numbers given to the customer by the bank. The computers on the phone

⁴ <http://safaricom.co.ke/index.php?id=254>

will require special codes given to the customers as a means of identification of authentic users before they can receive any information they requested for. Simbanking mobile services from CRDB bank and NMB mobile banking services are the same mobile banking service offered by the bank premises in Tanzania. The cellular network companies namely Vodacom, Airtel, Zantel and Tigo are the main players in mobile payment services in Tanzania with mobile payments service providers including Vodacom (T) Limited (M-Pesa), Airtel (T) Limited (ZAP), Zantel (Z-Pesa) and MIC (T) Limited (Tigo Pesa) as reported by BoT, 2010. The number of users of mobile payments services in 2010 had reached 10.4 million as compared to 4.08 million reported in 2009; the increase was attributed to the role of ICT in enhancing access to financial services (Finscope, 2009). Ovia, (2001) mobile banking service was introduced into the banking balance as the result of computer telephone technology being made available. Another platform of mobile banking in Tanzania is the Automated Teller Machines; involves the use of the use of the mobile phones to save, transfer and pay the money through mobile money services providers. This may or may not involve the regular banks in their operations, as they belong to the mobile phone network and service providers (telecoms companies). According to the Finscope survey of 2009, the use of ATMs, branchless banking, mobile banking and new savings accounts drove the increase in financial inclusion to 12.40% compared to the 2006 survey, whereby only 9.10% were served by formal institutions.

In Tanzania the regulatory of communication is under Tanzania Communication Regulatory Authority (TCRA) which was established in 2003. TCRA deals with telecommunication policy, interconnection, agreements and empowerment of the

TCRA. The latter is also concerned with issuing license to private telecoms companies that provide variety of telecom services in Tanzania. Tanzania has started using the mobile banking since 2008 (Gunner and Emily, 2009). At present, the situation seems to have shown some significant improvement. Whereas about 90 percent of the banks in the country offer different forms of mobile-banking services like telephone banking, ATM and electronic fund transfer. Mobile banking brings the bank services near the customers, it does not require the customer to have his or her premises; interactive voice response becomes a regular feature of operations; text-to-speech capability have become reality; a uniformed messaging capability has become permanent features of the bank.

2.3.4.1 Mobile banking in other parts of Tanzania

Banks and MNOs continued to extend services through Automated Teller Machines (ATMs) and point of sales devices (POS). Bank of Tanzania, 2010 reported that, there was 995 ATMs and 1,304 POS in Tanzania whereas a large proportion of the ATMs and POS were located in the large cities like Mwanza (35 ATMs) and Arusha (34 ATMs). NMB is leading in coverage of network systems with branches in every region of Tanzania. An NMB mobile service is obtained in other parts of Tanzania. With NMB Pesa Fasta the customers in the rural and villages are able to withdraw money from the available NMB ATMs. Airtel money is the most recommended mobile service that is spread to the unbanked in rural areas (Airtel, 2012).

2.3.4.2 Mobile banking in Dar es Salaam City

The impact of the mobile banking is not limited to industrially powerfully and developed economies. The customer issues instructions, authenticates themselves and or receives information through their mobile phone.

Mobile banking has established new products and services such as mobile payments and savings in Dar es Salaam City. These services can help those bank customers and non-bank customers through the use of internet, mobile phones, and computers. The mobile banking customers to complete their day to day transactions may use M-Pesa, Tigo Pesa, Airtel money, and EZY Pesa, (as mentioning common m-banking services) or all of them. The customers seem to benefit from the mobile banking systems and services as most of the people frequently attain easy access of bank services and speed of receiving and sending information about their money and businesses. Some of mobile banking services have been used by banking customers to check bank account balances, to contact customer services, and for transaction of money; these includes EXIM mobile, from EXIM Bank PLCs, Simbanking established by CRDB Bank PLCs, Internet banking and the like.

2.4 Organization Organizational benefits

2.4.1 Increasing profit

The mobile banking business is still at infancy stage but growing too fast due to the promising and wide spreading technology in the world. The profit of the m-banking business keep increasing as the demand for the service is high most of the time. People make payments, save their funds, and transfer or receive the money through mobile banking throughout of the year. The charges for the use of the mobile

banking services are increasing with changes in the business environment so as not to alter the profit.

2.4.2 Increasing number of the customers

Mobile banking business services usage has increased due to the high demand of the mobile phone communications. Once a person bought a handset the Sim card from MNO will provide an option to join the mobile banking services. Registering of the Sim card and mobile banking services is free of charge and enhanced through the MNO Mobile banking agents. Despite some of the structural difficulties in the Tanzanian market there are signs that over the past year it may have finally turned a corner, with now a reported one million active m-money users in this country of some 41 million (BOT, 2009).

2.5 Strengths, weaknesses, opportunity and threats in mobile banking

An account on potential strengths, weaknesses, opportunities and threats that could the mobile banking financial industry as presented.

2.5.1 Strengths

Mobile banking business grows rapidly as compared to other businesses, maybe it's because the product sold and bought is money itself. Mobile banking business growth is due to the need of communication through mobile phones. The notably strengths of the mobile banking business includes their zero liability, customer registration, accessibility of mobile banking services, organization business collaboration, fund security and customer protection.

2.5.1.1 Zero liability

Zero liability is defined as the situation of less or no legal responsibility on the part involved in the agreement or contract. The mobile banking business provides no obligation to the customers in terms of the money lost in the SIM if the PIN remains the secret of the owner of the mobile phone (UNCTAD, 2010). NMB bank claims that the NMB mobile is obligation free but the customers should keep the PIN number self-confidently.

2.5.1.2 Customer registration

The use of the mobile banking services require two important steps, which are registration and account activation (NMB, 2009). The customer is supposed to visit the MNOs agent or the MNOs service centre to complete registration processes. The later involves filling of the form and presenting of the ID card to the agent. The Agent will take the form and copy of the ID card. If the customer does possess ID card, other documents such as a local village council letter, Government issued IDs, company/employee issued IDs, a driver's license, a valid passport, a tax certificate and voter's card (BoT, 2008). There is free customer registration in mobile banking services in Tanzania, this is because the industry still in growth stage. After registration, the copy of the ID or valid document and the registration form are presented to the MNOs office for checking and verification. After MNO verification, the account is activated to be used in mobile transaction.

2.5.1.3 Accessibility of mobile banking services

Most of the MNOs and ATMs in Tanzania offer users a menu item on their SIM. Through this menu a user can accomplish the variety of transactions by issuing

commands to the item of the need. The Unstructured Supplementary Service Data (USSD) which initiate a session between a mobile phone and a server is guided through a series of steps to accomplish a transaction that is applied by M-Pesa in Tanzania, Short Message Service (SMS) the menu which support SMS commands sent to a short code, for example [PIN code] SEND [amount to send] [recipient phone number] to short code 444 and SIM-Toolkit (STK) this approach is supported by most platforms is supported by most platforms (example, M-Pesa in Tanzania, Orange Money in Kenya MTN Mobile Money)⁵ are the menu provided for the user to access mobile banking transaction.

2.5.1.4 Organization business collaboration

Bills payments play important role in enabling informal economic activity. The mobile banking business are currently being involved in the payments of the various bills such as water bills, electrical bills (LUKU), TV licensing such as Dstv multichoices and Startimes some cities like Dar es Salaam, Mwanza and Arusha they are being accepted for payments of school fees and shopping in some identified shops in town. Jack and Suri (2011) reported that about 75% of the customers use M-Pesa for saving purposes. NMB mobile had joined Vodacom, Tigo Airtel and Zantel to provide mobile banking services (NMB, 2013). The latter collaboration indicates that, NMB mobile customers can subscribe M-Pesa, Tigo Pesa, Airtel Money and Ezy Pesa. NMB mobile which was started in 2006 as customer salary alert, it has now expanded as a mobile bank to provide such services like Government tax

⁵ Mobile for business for business development in the EAC

payments (TRA), TV license bills (DSTV), water bills (DAWASCO) and Electricity utility (LUKU)⁶.

2.5.1.5 Fund security and customer protection.

Uses of the personalized accounts ensure the security in the mobile banking business. The SIM number which is personal is considered as the account number. There is no way more than one person to own the same SIM number. The access to the mobile banking service is achieved when the customer enter the PIN number in the suggested message. Both PIN and SIM numbers are personal and the former is confidential. All systems rely on the use of the Personal Identification Number (PIN) for transaction authentication (UNCTAD, 2010). Currently there is no specific protection in the event that a users mobile phone is stolen and used by the fraudsters able to figure out the user PIN, just like ATM cards and banks the users bet is to report the stolen mobile phone or SIM so that all transaction money are blocked⁷.

2.5.2 Weaknesses

The mobile money business has some weaknesses which have been identified by the current study. Mobile banking weaknesses are the internal negative conditions that might affect business performance. The weaknesses such as unclear legality, terms and conditions, network addictions and high service charges.

2.5.2.1 Legality of mobile banking

Challenges underlying integration of mobile phones ICT sub-sector into business in EAC include lack of clear policy as related to legal aspects on consumer protection

⁶ NMB News, 2011

⁷ During survey the responses from the MNOs employees on M-banking security.

law, privacy and data protection, telecommunication policy, and financial regulations (UNCTAD, 2012). In Tanzania, mobile phones companies are regulated by the Tanzania communication Regulatory Authority Act (TCRA Act of 2003). The mobile banking business is regulated under the same laws with other regulations from the central bank (BoT). One of the biggest barriers for enterprises in transition countries is the low level of the institutional development in relation to business regulation, as well as the business tax systems (Aidis and Sauka, 2005). Tanzania mobile banking service lack clear legality basis. Ally (2011) argues that license for operation of mobile companies has not been included in the Electronic and Postal Communications Act, 2010 (Act No. 3/10); and such activities can not be interpreted *ejusdem generis* with banking activities under the banking and financial institutions Act, Cap 342 R.E.2006 which provides legal framework for undertaking licensed banking operations within the United Republic of Tanzania, the Act indicate nothing concerning mobile banking services.

2.5.2.2 Unclear terms and conditions

Mobile banking and MNOs services providers have many terms and conditions that are difficult to understand. These are written terms and conditions that limit the actions and freedom of the users, or even penalize them when they disobey these terms and conditions. Most of the terms and conditions are written in technical words. The terms and conditions are normally kept with the organization and they are not even read by the customers before registration of the customer.

2.5.2.3 Unstable signal and Network addiction

Mobile banking businesses and services depends much on signals and networks from the providers. In most cases people fail to make e-payments, e-transfer and or receiving e-money just because of the failure of the signals and network from the servers.

2.5.2.4 High charges for the mobile banking services

High charges for the services which make some of the network operators to use reducing or eliminating of these charges as the competitive advantage. Airtel money is currently announcing to eliminate the charges for sending and receiving the money. In the beginning both cash-in and cash-out mobile banking transactions were associated with certain charges. However with growing economies of scale and greater competition, all MNOs in EAC now offer cash-in services for free (Mas and Morawczynski, 2009).

2.5.3 Opportunities in mobile banking

The lessons from Kenya and South Africa clearly demonstrate that there are colossal opportunities for private investment in the sector, which will increase access to financial services to the majority of African populations through expanded mobile phone banking services (Morawczynski and Pickens, 2009). The role of the international remittances in developing economies is gaining increasing global recognition and economic significance to national economies. Estimated at about US\$221 billion worldwide in 2006, sub-Saharan Africa accounted for only US\$9 billion or 4% of the total (World Bank, 2006). However the actual size of remittances would much higher if the informal remittances would be taken into account (Gupta,

Pattillo and Wagh, 2009) In mobile banking there are many opportunities to both customer and business. The latter, can capitalize on the available opportunities in order to improve their businesses' status. Items such as business integration, utility payments, publicity, high services demand and favorable business environment are the situation regarded to mobile banking opportunities.

2.5.3.1 Integration of the mobile banking and utility services providers

Partnership between banks, financial institutions, MFIs and the mobile industry players should be sought out and encouraged. In order to sustain the growth of these success stories in these countries and the rest of African countries, there is need to support a single integrated framework (between financial institutions and mobile industry) to cut costs in order to provide consumers with the convenience of banking from home, the farm or other remote areas. An example is the partnership of the Western Union bank and M-Pesa which allows international money transfers and payments.

2.5.3.2 Utility Payments

Utility payments are those charges required to be paid for the consumption of the particular services. Some of the utilities in Tanzania include the electricity, water, TV, tourism, and other valuable services. Through mobile banking platforms have increased convenience in utilities payment as compared to the traditional ways of cue hassles (BoT, 2010). TANAPA Exim cards allow the electronic entry fee payments at the Tanzania national parks gates (Exim, 2010). The CRDB Agency mobile banking offers a range of banking services including: card/cash deposit and withdrawal, cash disbursements and payments of loans, payment of utility bills,

retirement and social benefits and transfer of funds within CRDB bank network⁸. According to BoT report (2010) through mobile banking such M-Pesa, Tigo-Pesa and Airtel-money the customers are capable of paying water bills (DAWASCO), electricity bills (TANESCO), TV license (Dstv) and government tax (TRA).

Vodacom (M-Pesa) mobile banking integration with other services utility providers such as the LUKU from Tanesco, DAWASCO, Star times television signal providers, Dstv multichoices, Precision Air and Fast jet services is helpful to the customers and other stakeholders (Vodacom, 2011). This integration helps in reducing the cues at the service provider's desks. Mobile banking service integration with the traditional banks is helpful in various ways such as providing bank services every time everywhere, reducing cues at the bank teller sand increasing fund accessibility.

2.5.3.3 Publicity of the Banks and MNOs

Mobile banking provides the opportunity for the publicity of the telecoms. Currently people are moving in the telecoms due to the presence of the fair and accessible mobile banking services. The publicity involves the acknowledgement of the public of what the Organization is doing. Exim bank was nominated for various financial awards in "Sustainable Bank of the Year 2008 Awards" and "Best Workplace Practices for Training and Development" in the East Africa CSR Awards 2011, the bank was proud of these chances for the prestigious as they increase bank publicity (Exim, 2012). Another good example is "Hamia Airtel" (join Airtel) campaigns/and promotions due to fair and cost free Airtel money services. The campaigns through

⁸ CRDB Bank PLC Pioneers Agency Banking

advertising showed that the mobile banking services and the company were publicized to reach the urban and the rural population.

2.5.3.4 High service demand

High reported demand for the mobile banking services in Tanzania remittance from urban to rural, rural to urban, urban to urban and rural to rural significantly show the emerging opportunity for the mobile banking providers. In Kenya there are only 70% of the remittances reported from urban wholesalers to rural retailers. The demand of the mobile phone usage is increasing every day causing the manufacturers to produce more phones with varieties of applications. The demand of the mobile phones is due to the peoples need to communicate easily. Mobile banking businesses utilize the customers' demand of communication through the mobile phones and they provide their financial services through this media.

2.5.3.5 Favorable business environment

Doing business in Tanzania is both easy and difficult as it requires nine procedures, including taking at least 26 days and cost 28.2% of income per capital⁹. The business environment is also affected by regular change in policies and regulations in the country. Mobile banking business environment face the former regulatory problems. Heavy regulations and thick borders are barriers that tend to stifle trade among African countries even as export to developed economies remains vulnerable to global economic turmoil (TCCIA, 2012). However, the business environment in Tanzania is also favorable in terms of peace environment of the country, protecting

⁹ Doing Business- Tanzania report 2013/ International Bank for Reconstruction and Development

of investors, and adherence to the International Monetary Fund and World Bank requirements in International Trade.

2.5.4 Threats for mobile banking

Mobile banking like other kinds of the new technological business faces number of threats. These threats include criminal financing, illiteracy of users, money laundering, customers' high expectations and cybercrimes in mobile banking business.

2.5.4.1 Criminal financing

Financing convection characterizes the following as a criminal conduct; when a person 'by any means' directly or indirectly, unlawfully and willfully provide or collect funds with the intention that they should be used, or in knowledge that they are to be used, in full or in part, to carry out the acts prohibited in articles 2(1)(a) or 2(1)(b)¹⁰, Under financing convection the person commit an offense (URT, 2002). Criminal financing can be made possible by using the mobile money than the traditional face to face banking. The Economist magazine in 2005 reported the story of a woman in Democratic Republic of Congo (DRC) who settled a bribe to officials across the country by sending them airtime.

2.5.4.2 Illiteracy among the users

Approximately 70% of the Tanzanian population is literate including 77.5% of males and 62.2% of females (URT, 2007). Mobile banking business customers mostly are supposed to be literate because the service involves reading of the SMS and responding quickly. M-PESA uses branchless banking model to enable the service to

¹⁰ Financing Convection supra note 6 at art 2(1)

reach previously un served customers (Ivatury and Mas, 2008). The later, requires an Agent network formed by the literate business individuals. However, most of the mobile banking Agents have little knowledge about the business.

2.5.4.3 Money laundering

Mobile banking technology can be a new platform for money laundering and terrorism related activities in Tanzania. Section 3 of the Anti- money Laundering Act, 2006 defines money laundering as the money made or washed illegally by people and entered in the circulation. This kind of money can easily be entered by the use of the mobile banking since less or no human touch is required. Mobile banking can easily initiate the practice of money laundry although the service providers are to be keen to utilize the Anti-Money Laundering Act, CAP 423 (2006) and the Financial Intelligence Unit (FIU) in the Ministry of Finance and Economic Affairs as a unit mandated with enforcement that was created for the purpose of addressing money laundering issues.

2.5.4.4 Customers High Expectations

The reasons why people do not adopt mobile and internet banking can be the high cost of the mobile phones and Smartphone was having a moderate economic impact in the country include that Tanzanian customers are not on the average trained on for teller jobs and the working of internet banking, a situation which make transaction via internet with more errors; The majority of the customers are using the less technical mobile phones due high and unaffordable price of the more technical phones such as the Smartphone.

2.5.4.5 Cyber crimes

The growing rate of many fake websites in banks and non-banks add the related cybercrime causing more fear to the people about the security of their cash. Organizations can protect themselves against such attacks, with the use of the following techniques firewalls, authentication, encryption, digital signatures and digital certificates (Oz 2006). Cybercrime in Tanzania includes Computer Fraud, Hacking, IP Crimes, ATM Fraud and Dos, targeting the victims such as Government Agencies, Banks, Private Business, University as well as the Public. According to the Tanzania ICT policy 2003, stating that, “the government will set up legal regulatory frameworks that are appropriate to the ICT sector taking into account that electronic transactions are also susceptible to electronic criminality¹¹.

2.5.4.6 Irresponsibility of companies

The anonymous nature of payment made using software based systems makes the task of tax collection impossible for national authorities. Taxing legislation is concerned with the bottom line; the profits of a company or the annual income of an individual. It is not concerned with the details of individual transactions or the form that a company’s asset may take from time to time (Gringras, 2003).

Looking at the way these mobile banks operates, it is obvious that there is no way the profits generated through this business can be controlled and determined.

¹¹ www.tcra.go.tz/regulation/draftregulation September, 2012.

2.5.4.7 Competition among the business companies

Another threat in mobile banking business is the existence of high competing companies. BoT (2010), stated that, the mobile phones companies are in great business competition Tanzania. This competition is available in the mobile banking business which in some way hinders their collaboration. Still the existing competition is improving services delivery and innovations in most of the firms (Maniego, 2007). Each company is struggling to win the market competition through various means including advertisements, promotions, and innovations of the new technological services. The latter battle in some ways benefits both customers and the financial organizations.

2.6 Customers Reactions on mobile banking business I Dar es Salaam City

Kotler (1996) defined customer satisfaction as “the level of a person’s felt state resulting from comparing a product’s perceived performance or outcome in violation to his or her own expectations”. So the term customer satisfaction is considered as the comparative behavior of inputs beforehand and post obtainments. Moutinho and Phillips (2000), they found that Scottish bank managers considered efficient and enhancement of the customers services and satisfaction to be two perceived advantage of internet and mobile banking. The study assessed mobile banking business performance, and customer satisfaction was considered as the service quality that meets user’s expectation. Social responsibility of mobile banking services providers is among the concern of the customers, for instance Vodacom Congo positioned itself as the caring and sharing company through its social responsibility program focuses on education, health welfare, environment, culture and art. The company has invested US\$3.5 million in various social projects such as

school benches, scholarship bursary programs, school renovation, hospital renovation, blood donation and new program rewarding best primary school teachers of DRC with a bicycle¹²

2.7 Research Gap

Many researchers have to investigate about internet banking, electronic banking and mobile banking trends and developments as well as their role in customer satisfactions. These include the “The mobile banking the impact of M-Pesa in Kenya” by Mbiti and Weil (2011), “the Optimism for Tanzanian mobile money market” by Audience Scapes (2010), “Mobile money for business development in East Africa” by UNCTAD (2012), “M-Money Channel Distribution Case-Tanzania” by IFC (2010). Very little have been done in those fields in the Developing Countries especially in Tanzania. The researcher has seen the gap that more have to be investigated about the mobile banking business performance in Tanzania.

2.8 The Conceptual Framework

From review of the literature it is understood that introduction of mobile banking has impacted various business performance.

2.8.1 Independent variables

The causative variable is the adoption of mobile banking business which includes ATMs, mobile phones money transfer and payments and internet banking. Thus the organization chooses to enter into providing and or utilizing the mobile banking with the aim of making profit, increase customers as well as its reputation. Customers

¹² Operational Review-Vodacom DRC

adapt to mobile banking business and services as they are seeking for a convenience and accessible financial services.

2.8.2 Intervening variables

The intervening variables on the current study are such as effectiveness and efficiency of the mobile banking business, observed as business collaboration, competition, cybercrimes, criminal financing and money laundering practices.

2.8.3 Dependent variables

The dependent variables on the current study, is increasing business performance which is considered to include increase in organizational profit, increase in number of customers and good reputation of organization.

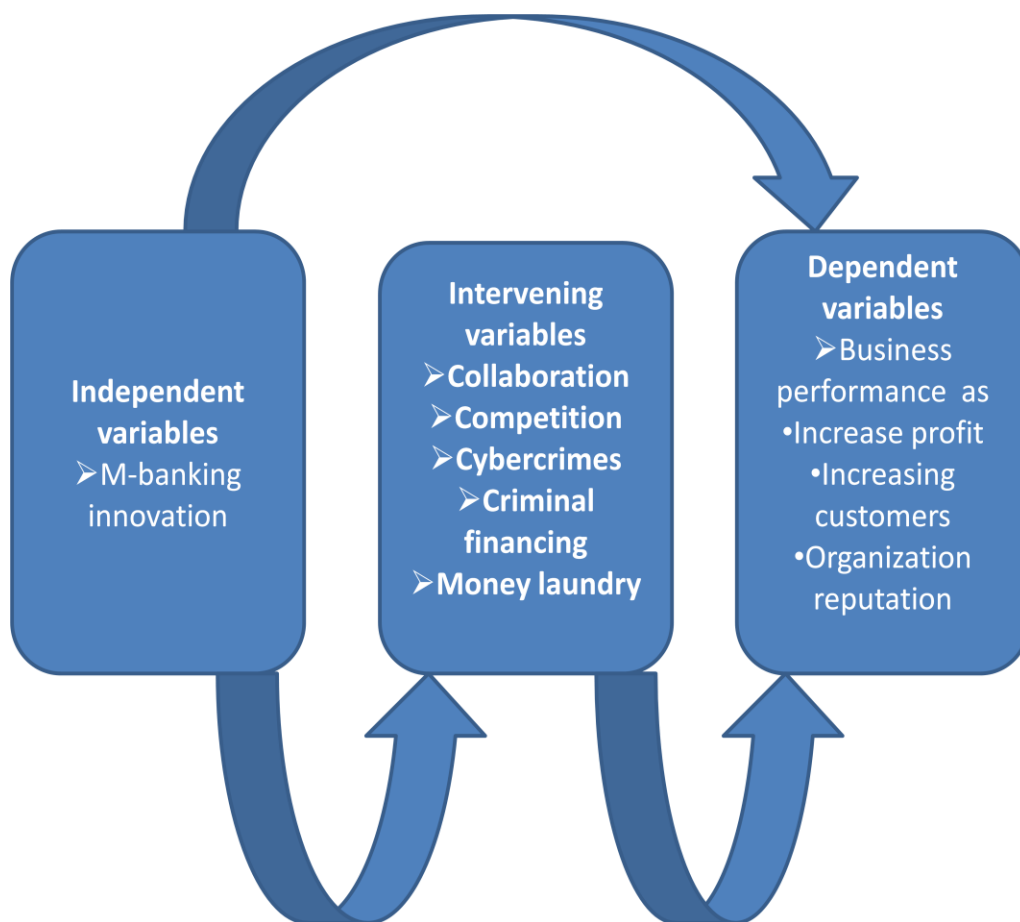


Figure 1: The Conceptual Framework

The above variables can be further explained by the above diagram. Performance of business depends on the on the adoption of innovative mobile banking services. The intervening variables are such as business collaboration, Competition, cybercrimes, criminal financing money laundry, as they affect the dependent variable.

2.9 Conclusion

This chapter gives the definitions of the key terms of the study, the theoretical perspective, empirical literature review and the conceptual framework. The chapter provides wide description of each of the concepts and the theories related to the mobile banking business and that of business performances.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

This chapter presents methods and procedures used in the current study. It begins with the presentation of the study area and then, the design of the study. Sample and sampling, and sampling techniques were presented as well. Study population employed in the current study was presented as well. Validation of the research instruments and the data collection and analysis methods are included.

3.1 Study area

The study was conducted in the central metropolitan area of Dar es Salaam City, among mobile banking business including banks CRDB, EXIM, NBC, Exim, Bank-M, TPB, BOA, Barclays, KBS and Western Union. The mobile corporations in Dar es Salaam city include Vodacom, Airtel, Tigo, Zantel and Tritel.

3.1.1 Location

The city is on the coastal region located between the latitudes 6.36° degrees and 7.0° degrees to the south of the Equator and longitudes 39.0° and 33.33° to the east of the Greenwich. It is bounded by the Indian Ocean on the east and by the Coastal Region on the other sides.

3.1.2 Area

The total surface area of Dar es Salaam City is 1800 square kilometers, comprising of 1,393 square kilometers of land mass with eight offshore islands, which is about 0.19% of the entire Tanzania mainland's area. Temeke municipality had the largest

land surface area, 652 square km, followed by Kinondoni, 531 sq. km while Ilala has the smallest area of 210 sq. km¹³

3.1.3 Demography

Based on the 2012 Population and Housing Census, Dar es Salaam has 4,364,541 inhabitants, of whom 2, 125, 786 were males and 2,238,755 were the females. Of the three Municipalities, Kinondoni had the highest Population with the total of 1,775,049 inhabitants followed by Temeke with 1,368,881 inhabitants and Ilala with 1,220,611 inhabitants.¹⁴

3.1.4 Economic activities

Communities in Dar es Salaam region involve themselves in various economic activities including agriculture, fishing, mining and business activities such as the bank sector and mobile phones industry. Local industries include fishing, textiles, bottling, and light manufacturing. Despite Dar es Salaam's big size, the city centre is compact and easy to navigate on foot.

3.2 Methodology

3.2.1 Research design

Research design is a structure of the research or the glue that holds all of the elements in research project together (Orodho, 2003). The latter author also added that, research design can be defined as a scheme, outline or plan that is used to generate answers to research problems. Kothari, (2003) added that research design constitutes the blueprints for the collection, measurement and analysis of data.

¹³ City Profile for Dar es Salaam, URT November 2004

¹⁴ 2002 Population Census Report

There are various research designs such as Descriptive research design, Case study research design, and Experimental research design, Correlation research design and Cross cultural research design. Each of the design can serve different research according to the nature of research concerned. However, based on the purposes of the current study, descriptive research design was employed. Descriptive design was adopted in the current study because it is systematic and logical, as it effectively addresses the questions raised in the study.

3.2.2 Descriptive survey

Because of the nature of the study, cross-sectional descriptive survey was adopted. The former design used research materials such as personal interview, observations, focus group discussions and documentary review. Cross-sectional research was adopted in which data were collected at a single point in one time from different sample groups of respondents (Creasey, 2006: Miller, 2006). It is further recommended as the most common design used in survey research for producing good results (Donald and Delno, 2006). Qualitative and quantitative data collection techniques were employed to assess the mobile banking business performance.

Data on organization profits, reputation, number of customers and customer satisfaction was collected using the descriptive survey. Descriptive survey was preferred to other technique based on the fact that the method applied in collection of data include, interviewing and administering questionnaire to a sample of individuals (Orodho, 2003). Descriptive survey is also used when collecting information about people's attitudes, opinions, habits or any of variety of education or social issues

(Orodho and Kombo, 2002). The design was selected because it enables a researcher to access required information very easily (Shuttleworth, 2008).

3.3 Type and Source of Data

3.3.1. Primary Data

Primary data are the data that are gathered directly from the respondents (Kombo and Tromp, 2006). In the current study, primary data were obtained from the respondents through survey questionnaires, interviews and observations.

3.3.2 Secondary Data

Secondary data were collected by reviewing of different books, articles, journal and websites. The information in secondary data was more based on mobile banking business in Dar es Salaam City in particular and other parts of the world in general.

3.3.3 Data collection methods

Any research must be accomplished by a collection of data (Best and Khan, 1989). Many different methods and procedures were developed to aid in acquisition of data. The methods that were used include Questionnaires, Interview, Observations and Document Review.

3.3.3.1 Questionnaires

According to Ary *et al.* (1992) Questionnaire refers to the formatted set of questions that are drawn up to meet the objectives of the survey. Various questions were developed to suit the prospective study objectives. The questionnaires were tested among respondents of Dar es Salaam City in institutions namely CRDB bank

Ubungo Kinondoni, St. Joseph College of Engineering and Kimara Stop Over-Street. This was done so as to ensure the reliability of the study findings. The questionnaire was administered to the 25 banks and 25 MNOs employees, 50 mobile banking customers and 50 MNOs mobile banking-agents in Dar es Salaam City.

3.3.3.2 Interview Schedule

Cohen *et. al.* (2001) an interview is an interchange of views between two or more people on topic of mutual interest and emphasizes the social situations of research data. Structured interviews were conducted as suggested by Fontana and Fray (2005). Both closed and open ended questions were adopted as described by Fray (2005). The interview schedule was conducted in this study through verbal interaction with different key informants such as managers and IT personnel at the mobile banking business locations. The questionnaire and interview schedule was prepared before data collection in both English and Swahili because these are common languages in Tanzania.

3.3.3.3 Observations

The number of the mobile banking customers was observed at the bank plcs, at the ATMs and at the retail MNOs agents. Through observation data on the accessibility and availability of the mobile banking services was collected. Observation was used to collect data on the sex of the respondents. Consumers' reactions on mobile banking services were more observed than asking questions.

3.3.3.4 Documentary Review

The information about the Banks, the MNOs and mobile banking businesses were collected through the review of the various documents from library such as newspapers, journals, books as well as different Dissertations. Some more information was obtained from MNOs and Banks Annual Reports. Most of the documents were obtained from the Internet.

3.4 Sampling design

Sampling is the procedure a researcher uses to gather people, places or things to study (Kombo and Delno, 2006). It is a process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group (Orodho and Kombo, 2002). MNOs agents were selected by systematic random sampling approach. Every third agent Kariakoo, Mwenge and Ubungo was purposively included to form the sample, this is because the places are close and is popular business areas. The study also employed random sampling technique to obtain mobile banking customers from the same areas Kariakoo and Mwenge and Ubungo.

3.4.2 Sample Size

A sample is small representative group of population in which the researcher is interested in gaining information from and drawing conclusions about the universe (Kothari, 2002).

The sample size of informants of this study was 25 banks employees and 25 MNOs employees and 50 m-banking customers and 50 MNOs agents. The total of 150

respondents was adopted in this study. The reason behind was to facilitate generalization and to achieve current results within such short period of time and selection.

3.4.3 Sampling frame

A sampling frame is a list of individuals or objects from which a sample for the study is drawn. All these individuals will have the same property that we could identify in every single element (Kombo and Tromp 2006). The sampling frame was established from the study area such as MNOs, Banks and Retail businesses. The population for the planned study was drawn from popular mobile banking businesses, including banks. The study involved 25 bank employees from five different banks which were purposively selected. These banks included CRDB, NMB, and EXIM, TPB and BOA and the mobile phones companies (Vodacom, Tigo, Airtel, Zantel, and TTCL).

A total of 150 informants from Dar es Salaam city formed the sample for this study; and they were involved to respond to the pre-prepared questionnaires and interviews. Informants such as 25 bank employees, 25 MNOs employees, 50 m-banking customers and 50 mobile banking agents were included in the sampling frame.

3.4.5 Sampling unit

The sampling units of the study chosen were business and individuals who were being involved with mobile banking business in Dar es Salaam City.

3.4.6 Sampling Procedures

Both probability and non probability sampling technique were employed. Simple random sampling, stratified sampling (probability sampling) and purposive sampling (a non probability), procedures were adopted in the current study.

3.4.6.1 Probability Sampling.

Simple random sampling was employed based on the fact that the study involved a well defined population of banks and MNOs employees, agents as well as the customers. The banks CRDB, NMB, EXIM, TPB and BOA branches were selected using stratified sampling technique.

3.4.6.2 Non Probability Sampling Technique

Purposive sampling technique was employed based on the fact that the technique entails a criterion cases whereby specific cases are selected deliberately (Patton, 1987). From each branch five staffs that represented respondents from the bank were obtained purposively from the department dealing with mobile banking. The total of 25 banks employees were employed in the study.

Five mobile phones companies' service providers were purposively selected due to their influence in the mobile banking business. These include Vodacom, Tigo, Airtel, Zantel and TTCL mobile network operators. From each company 5 respondents was selected purposively based on their.

3.5 Ethical Consideration

Ethical issues were ensured as the research requested for the University Of Dodoma clearance permit after the proposal being approved by the supervisor, also requested organizations permits to collect data. The researcher ensure confidentiality and the information obtained was kept confidential.

3.6 Data Processing, Analysis and Presentation

3.6.1 Data Processing

This involved data coding, editing, classification and tabulation. The processing of data was done at the field in the office. Editing of data was conducted manually.

3.6.2 Data Analysis

Kothari (2002) stated that; data analysis is a process which involves editing, summarization, coding, classification and tabulation of collected data. In the current study data was analyzed manually using hand calculators and using appropriate computer programs. Qualitative data on mobile banking services and service delivery, mobile banking organization benefits, SWOCs and customers reactions were analyzed by using themes related to the specific objectives. Quantitative data on the mobile banking services and service delivery, mobile banking organization benefits, SWOCs and customers reactions was analyzed using Statistical Package for Social Science for window version 15.0 and Microsoft office Excel 2007.

3.6.3 Data Presentation

The results of analyzed data were presented in a text and descriptive forms such as the tables, statistical charts and graphs so as to simplify interpretation of findings.

3.7 Validity and reliability

Simco Warin (1997), argued that, reliability and validity are tools of an essentially positivist epistemology.

3.7.1 Reliability

To establish reliability the questionnaire was tested among the respondents in Dar es Salaam City.

3.7.2 Validity

To achieve the validity reviewing of the literature was done. This was performed to ensure the relevant of the study.

3.8 Conclusion

Different methodological facts have been presented in this chapter. The chapter began with the vital part of the methodology (research design), then area of the study. Followed by data collection methods, ended with validity and reliability of the study.

CHAPTER FOUR

4.0 RESULTS, ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Results

This chapter presents research results data analysis and discussion of the main findings. Results and discussion are presented on demographic characteristics of respondents of assessment of mobile banking business performance among various organizations in Dar es Salaam City eastern-coast of Tanzania.

The findings were based on the following specific objectives, to identify services being provided by the different mobile banking service providers; to assess benefits of the organization after implementation of mobile banking business, to identify potential strengths, opportunities, weaknesses and challenges on the mobile banking business performance in Dar es Salaam City (SWOCs); and to assess customers' reaction to different mobile banking service provider.

4.1.1 Socio-demographic characteristics

The socio-demographic characteristics that were studied among the selected respondents in Dar es Salaam City included sex, age, level of education and occupation of the respondents.

4.1.1.1 Sex of the respondents

Results revealed that, 63.33 % (N=95) of the respondents were males as compared to females 36.67% (N=55) of the respondents found in Dar es Salaam city centre.

Table 1: Sex of the Respondents (male=95 and females=55)

Category	Male		Female		Total	
	Frequency	%	Frequency	%	Frequency	%
Agents	30	60	20	40	50	100
Bank employees	17	68	8	32	25	100
Customers	35	70	15	30	50	100
MNOs employees	13	52	12	48	25	100
	95	63.3	55	36.67	150	100

Source: Fieldwork Survey, 2013

4.1.1.2 Education level of the respondents

Table 2 presents level of education of the respondents in the current study. One-third of the mobile banking customers 30% (N =15) and 24% (N=12) of the MNOs agents had attained primary education level. Likewise, 40% (N=20) of the mobile banking customers, and 36% (N=18) of the MNOs agents had attained secondary education. Representing 15 (30%) of m-banking customers and 40% (N=20) of MNOs agents have attained college education including University level of education.

Bank employees with secondary education were representing 52% (N=13) compared to 40% (N=10) of MNOs employees who had attained secondary education level. 48% (N=12) of the Bank employees as compared to 60% (N=15) had attained college education level (including the university level of education).

Table 2: Level of education of the Respondents (male=95 and females=55)

Category	Primary Level		Secondary Level		College Level		Total	
	N	%	N	%	N	%	N	%
Agents	12	24	18	36	20	40	50	100
Bank Employees	n.a	n.a	13	52	12	48	25	100
Customers	15	30	20	40	15	30	50	100
MNOs employees	n.a	n.a	10	40	15	60	25	100

Source: Survey 2013

4.1.1.3 Age of the Respondents

Age of the respondents in the study area is presented in Table 3. Respondents who were aged between 18 and 34 years corresponded to 50.6% (N=76), as compared to the respondents aged between 35 and 54 years who represented 38.7% (N=58). However, respondents aged between 55 and 64 years were representing 8.6% (N=13) as compared to the low representing group of respondents aged 65 years and above 2% (N=3).

Table 3: Age of the Respondents

Age (years)	MNOs		Bank		Agents		Customers		Total	
	N	%	N	%	N	%	N	%	N	%
18-34	12	48	9	36	26	52	29	58	76	50.6
35-54	11	44	15	60	19	38.7	13	26	58	38.7
55-64	2	8	1	4	5	10	5	10	13	8.7
≥ 65	n.a	n.a	n.a	n.a	n.a	n.a	3	6	3	2
Total	25	100	25	100	50	33.3	50	100	150	100

Source: Fieldwork Survey 2013

4.1.1.4 Occupation of the Respondents

The occupations of the respondents are indicated in the Table 4. Both of the respondents from the MNOs and Banks employees were employed officially in those institutions. About 36% (N=18) of the mobile banking customers were officially employed in various institutions including both public/government and private institutions while 50% (N=25) were students. Most of the MNOs and Banks agents 80% (N=40) were officially employed and 20% (N=10) were self employed (small business owners).

Table 4: Occupation of the respondents

Respondents	Bank		MNOs		Customers		Agents	
	N	(%)	N	(%)	N	(%)	N	(%)
Employed	25	100	25	100	18	36	40	80
Students	n.a	n.a	n.a	n.a	25	50	N/A	N/A
Self-Employed	n.a	n.a	n.a	n.a	7	14	10	20
Total	25	100	25	100	50	100	50	100

Source: Survey, 2013

4.1.2 Services provided in Mobile banking business

Eight (8) mobile banking services were reported by the surveyed respondents in Dar es Salaam City as indicated in the Table 5. Majority of the respondents were ATM users representing 23% (N=34). The latter was followed by the Airtel money 15% (N=22), M-Pesa 13% (N=20) and Tigo Pesa 13% (N=19). NMB mobile and Simbanking services, both represented 9% (N=14). Exim mobile was lagging behind with 7% (N=10) of the surveyed respondents in Dar es Salaam city.

Table 5: Services provided in mobile banking business

Services	Banks		MNOs		Customers		Agents		Total	
	N	(%)	N	(%)	N	(%)	N	(%)	N	%
M-Pesa	4	17	2	8	7	14	7	14	20	13
Tigo-Pesa	3	13	3	12	7	14	6	12	19	13
Airtel Money	3	10	2	8	8	16	9	18	22	15
Ezy Pesa	1	5	3	13	6	12	7	14	17	11
ATM	8	34	11	45	7	14	8	16	34	23
Simbanking	3	11	1	5	4	8	6	12	14	9
NMB Mobile	2	8	2	8	5	10	5	10	14	9
Exim Mobile	1	2	1	4	6	12	2	4	10	7
Total	25	100	25	100	50	100	50	100	150	100

Sources: survey 2013

4.1.3 Mobile banking organizational benefits

The studied organizational benefits were increasing customer trend and profit increase due to the adoption to the mobile banking business.

4.1.3.1 Increasing Customer trend for different mobile banking service providers from 2008 to 2012.

About 78.7% (N=118) of the respondent agents were of the opinion that there was an increase of the mobile banking customers between and 2008 and 2012. The increasing trend of the respondents is indicated in Table 6. Majority of the respondents 88% (N=44) of the mobile banking customers said that, the customers in the mobile banking business were increasing. The same increasing trend was

suggested by large proportion of the bank employees 72% (N=18) and 80% (N=20) of MNOs employees respondents.

Table 6: The trend of the number of customers from 2008 to 2012 for different mobile banking business

Trend	MNOs		Bank		Agents		Customers	
	N	(%)	N	(%)	N	(%)	N	(%)
Increasing	20	80	18	72	36	72	44	88
Decreasing	3	12	5	20	14	28	4	8
Not Sure	2	8	2	8	n.a	n.a	2	4
Total	25	100	25	100	50	50	50	100

Source: Fieldwork Survey 2013

4.1.3.2 Organizational Profit trend

The trend of the organization profit was increasing as suggested by 70% (N=105) of the respondents during survey in Dar es Salaam city. About 68 % (N=17) of the bank employees suggested that there is increasing trend of the organization profit, comparing with 72% of the MNOs employees that presented the profit increasing trend.

Profit increase was presented by the respondents at the Banks Plcs, for instance CRDB Bank reported 5% profit increase in 2009 from 2008 (which is Tshs 48.4 billion)¹⁵.

¹⁵ CRDB Bank, Annual Report 2010

Table 7: Profit increasing trend

Responses	Banks Profit		MNOs Profit	
	N	(%)	N	(%)
Increasing	17	68	18	72
Decreasing	5	20	5	20
I don't know	3	12	2	8
Total	25	100	25	100

Source: Fieldwork Survey 2013

The MNOs agents as part of the stakeholders in the mobile banking industry, also agree suggested that, profit was increasing in both MNOs and banks dealing with the mobile banking business. According to Operations Review-Vodacom Tanzania (2008) the customers in Tanzania were increasing at the rate of 29.6% reaching 4.2 million in 2008. About 80% (N=40) of the MNOs agents presented the profit increasing in both MNOs and banks involving in mobile banking businesses in Dar es Salaam City. Table 8 presents the responses of mobile banking customers and Agents.

Table 8: Profit Trend of the mobile banking business

Responses	Agents Profit		Customers Profit	
	N	(%)	N	(%)
Increasing	40	80	30	60
Decreasing	n.a	n.a	18	36
I don't know	10	20	2	4
Total	50	100	25	100

Source: Fieldwork Survey 2013

4.1.4 Potential Strengths, Opportunities, Weaknesses and Challenges Analysis

4.1.4.1 Potential Strengths

The strength of mobile banking businesses among studied in the current study include zero liability, free of charge and registration, accessibility of m-banking services, organization link as well as fund security.

4.1.4.1.1 Zero liability

Zero liability was determined through the response of whether it is easy to restore fund lost in the mobile banking services. About 66% of the respondents commented that it was easy to restore such fund lost in mobile banking business, which shows that majority of the respondents believe zero liability in mobile banking business.

Table 9: Possibility of recovering of the fund lost in mobile banking

Responses	MNOs		Banks		Agents		Customers	
	N	(%)	N	(%)	N	(%)	N	(%)
Possible	14	56	12	48	36	72	44	88
Impossible	8	32	13	52	14	28	4	8
Not Sure	3	12	n.a	n.a	n.a	n.a	2	4
Total	25	100	25	100	50	100	50	100

Source: Survey, 2013

4.1.4.1.2 Customer registration process in mobile banking business.

One of strength in mobile banking business is a relatively uncomplicated way of customer registration as suggested by 86% (N=129). Majority of the bank employees 92% (N=23) suggested that registration is not difficult process as it involve just two processes, which includes registration and activation processes. The latter was followed by 88% (N=44) of the mobile banking business customers and 84% (N=42)

mobile network operator agents who suggested it is easy to register new customers with valid IDs or documents.

Table 10: Registration difficulties

Response	MNOs		Banks		Agents		Customers	
	N	(%)	N	(%)	N	(%)	N	(%)
Easy	20	80	23	92	42	84	44	88
Difficult	3	12	2	8	8	16	4	8
Not Sure	2	8	n.a	n.a	n.a	n.a	2	4
Total	25	100	25	100	50	100	50	100

Source: Survey 2013

4.1.4.1.3 Accessibility of mobile banking services

The responses of survey questionnaires on availability and accessibility of the mobile banking services 48.7% (N=73) presents that the service is accessible and available. About 68% (N=17) of the MNOs agents suggested that the mobile banking services are widely spread across Dar es Salaam City. The latter was followed by 60% (N=15) and 44% (N=22) of the MNOs employees and agents respectively. Majority 38% (N=19) of the m-banking customers suggested that the services was not accessible and claimed of having a poor signal.

Table 11: Accessibility of mobile banking services

Responses	MNOs		Banks		Agents		Customers	
	N	(%)	N	(%)	N	(%)	N	(%)
Yes	15	60	17	68	22	44	19	38
No	10	40	6	24	18	36	23	46
Not Sure	n.a	n.a	2	8	10	20	8	16
Total	25	100	25	100	50	100	50	100

Source: Survey 2013

4.1.4.1.4 Organization Business Collaborations

The responses on the integration of the mobile banking business are presented on Table 12. Majority of the MNOs employees and agents were certain about collaboration in mobile banking business. About 88% (N=22) reported the existence of business linkage between financial institutions and MNOs through mobile banking business platforms. At least, 52% (N=26) of the mobile banking customers were reported to make utility payments by using mobile banking services.

Table 12: Organizational Collaboration and linkage

Responses	MNOs		Banks		Agents		Customers	
	N	(%)	N	(%)	N	(%)	N	(%)
Yes	25	100	22	88	50	100	26	52
No	n.a	n.a	3	12	n.a	n.a	24	48
Total	25	100	25	100	50	100	50	100

Source: Survey 2013

4.1.4.1.5 Fund Security and Customer protection

About 60% (N=90) of the customers suggested that mobile banking service has improved money security from being lost or stolen from their wallets and pockets. NMB bank employees said that even if the mobile phone with the money in it is lost or destroyed, still the m-banking customer will recover his/her fund after renewing the SIM. At CRDB bank the employees were concern of the PIN, thus they advise the customers to put safe and confidential their mobile account PIN so as to assure their fund security in CRDB Simbanking service. Table 13 shows the concern of the respondents about the fund security.

Table 13: Possibility of recovering of the fund lost in mobile banking

Responses	MNOs		Banks		Agents		Customers	
	N	(%)	N	(%)	N	(%)	N	(%)
Possible	20	80	12	48	32	64	26	52
Impossible	5	20	13	52	18	36	24	48
Total	25	100	25	100	50	100	50	100

Source: Survey 2013

4.1.4.2 Opportunities in mobile banking services

Responses on opportunities of mobile banking businesses in Dar es Salaam City are presented on Table 14. The most presented mobile banking opportunities were utility payments services and business integration 28.6% (N=43) and 28% (N=42). The latter was followed by high service demand and favorable business environment 21.7% (N=32) and 15.3% (N=23) respectively. Business publicity was the least identified representing 11% of the respondents.

Table 14: Opportunities in mobile banking services in Dar es Salaam City

Responses	MNOs		Banks		Agents		Customers		Total	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
Integration	8	32	6	24	12	24	16	32	42	28
Utilities	7	28	4	16	19	38	13	26	43	28.6
Publicity	1	4	3	12	5	10	1	2	10	6.7
Demand	2	8	5	20	8	16	17	34	32	21.3
Environment	7	28	7	28	6	12	3	6	23	15.3
Total	25	100	25	100	50	100	50	100	150	100

Source: Survey 2013

4.1.4.3 Weaknesses in mobile banking business in Dar es Salaam City

The weaknesses of the m-banking business were found to be of interest among many respondents as it is indicated in the Table 15. Network addiction 31.25% seen to be

the most weakness of the mobile banking followed by the unclear terms and conditions 28.75% and high service charges 22.75% responses. Other group 14.75% respondents were concern about legality basis of the mobile baking business in Dar es Salaam City.

Table 15: Weaknesses in mobile banking business in Dar es Salaam City

Responses	MNOs		Banks		Agents		Customers		Total	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
Legality	4	16	5	20	12	24	13	26	34	22.7
Terms and Conditions	6	24	5	20	18	36	9	18	38	25.3
Network	9	36	7	28	6	12	7	14	29	19.3
High Charge	6	24	8	32	14	28	21	42	49	32.7
Total	25	100	50	100	50	100	50	100	150	100

Sources: Survey 2013

4.1.4.4 Threats in mobile banking business in Dar es Salaam City

Responses on the challenges of the mobile banking business are presented on Table 16. Cybercrime and high customers expectations 25.5% and 20% was the most reported challenges followed by criminal financing 19.75% and illiteracy of the customers 17.75%. Money laundering 17% was less reported as the mobile banking challenge in Dar es Salaam

Table 16: Mobile banking business threats in Dar es Salaam City

Responses	MNOs		Banks		Agents		Customers		Total	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
Criminal Financing	8	32	6	24	14	28	14	28	42	28
User illiteracy	3	12	3	12	14	28	7	14	27	18
Money Laundering	6	24	4	14	16	32	6	12	32	21.3
Customers Expectations	2	8	5	20	4	8	13	26	24	16
Cybercrimes	6	24	7	26	2	2	10	20	25	16.7
Total	25	100	25	100	50	100	50	100	150	100

Source: Survey 2013

4.1.5 Customers reactions to different mobile banking service providers

The common customer reactions were reported as presented in the Table 17. As was expected both customers and agents reported as satisfied with the mobile banking services 23.5% and customer care provided by the MNOs and banks 21% while, 20% of the respondents were satisfied with the charges for the mobile banking services in Dar es Salaam City. 17% were satisfied by the policy and regulations of the mobile banking while 18.5% of the respondents were satisfied with the terms and conditions provided by the banks and MNOs.

Table 17: Customers reaction on mobile banking business

Responses	MNOs		Banks		Agents		Customers		Total	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
Customer care	6	24	6	24	8	16	10	20	30	20
Service delivery	7	28	6	24	12	24	9	18	34	22.7
Charges	4	16	4	16	12	24	12	24	32	21.3
Policy and regulation	5	20	6	24	6	12	6	12	23	15.3
Terms and Conditions	3	12	3	12	12	24	13	26	31	20.7
Total	25	100	25	100	50	100	50	100	150	100

Source: Survey 2013

4.2 Discussion of the findings

4.2.1 Socio-demographic characteristics

Presented results on more participation of men than women could be explained by the typical unequal business appropriation among sex of which majority of the business ventures are owed by men. The latter could similarly be explained by both the nature that more men would be spokes persons, as well as some existing socio-cultural dominance of men than women in many events probably due to the existing customs and traditions among many societies in Tanzania as well other African countries as related to differences that exist among societies on gender and gender roles (Reeve and Baden, 2000). The noted more participation of men than women in the current study could similarly be explained by the existing nature of men being more willing to provide information as compared to women.

The observed majority of the respondents aged between 18 and 54 (89.3 %; N= 134) explain better the fact that an adult age is essential for someone to have enough knowledge and experience on business issues, including mobile banking business. The 18 to 55 years old represents an energetic which is capable to participate in economic production and are thus in position to adopting new technological innovations including m-banking. According to Msuya *et al.* (2008), age of an individual is usually a factor that can explain the level of production and efficiency participates well in development of projects. It is therefore envisaged that, the noted age of majority of respondents place them in a better position to deal with different socio-economic matters including business investment. However, the emerging e-business is an opportunity as sources of employment among many youths due to their expected high ICT skills.

The noted high literacy among the respondents as reflected among majority of the respondents (82%) being educated at secondary and college levels suggest high awareness among the society as related to m-banking and the associated business ventures. The society is better placed to engage themselves in m-banking related business opportunities as the inherent promising education could operate different transactions and are better placed of being employed as Banks and MNOs employees. Since the society is well educated also stands a better chance of being banks and MNOs agents and even represent potential customers due to the expected minimal skepticism I investing in e-business such as m-banking. The noted high literacy among the society pave a way for m-banking business which required Banks and MNOs employees, agents as well as m-banking customers. The employees require secondary and college level of education.

Majority of the respondents being employed by MNOs and Banks managements compared to MNOs and banks agents whom are contracted the firms suggest firm business managements and thus sustainability of the m-banking sector. Permanent and contractual employment suggests firm business platforms as opposed to temporal employments which partly suggest closure of business at any moment.

4.2.2 Services provided by mobile banking business

The noted eight mobile banking service providers in the current study, namely, M-Pesa, Tigo-Pesa, Airtel Money, Ezy Pesa, Western Union, Simbanking, NMB Mobile and Exim Mobile Banking operating in Dar es Salaam City suggest existing potential in the banking sector as well as a promising business investment in the m-banking in Dar es salaam and elsewhere in the country as most MNOs operate in all administrative regions of Tanzania as well as African countries. The inherent strength and the booming m-banking industry is further exhibited by the high number of the mobile phone subscriber in Tanzania estimated at 26,978,436 million (TCRA, 2012) as compared to 45%, (15 million) in 2009 (www.afi-global.org) as well as high number of customer networks involved in a wide range of m-banking transactions such as money transfer, both online and mobile phone-based payments for different utilities, saving and withdrawing money.

The different m-banking services through the fast growing ICT in Tanzania, Africa and other developing countries is seen as coherence between families through regular and efficient regular remittances (Mas and Morawczynski, 2009). Despite few cases of cyber crime m-banking business industry is ensured by adoption of m-banking service as supported by easy registration and accessibility of the services. The reason

for their choice of the services was the charges as well as availability of variety of services. The latter is further supported by both additional services such as the recently introduced ‘*Fahari Huduma*’ by the CRDB Bank PLC (www.crdb.tz), and e-payments of government taxes such as the most recently launched (August 2013) MNOs- based mode of payment of motor vehicle taxes by the TRA (www.tra.go.tz). Firm m-banking business is further shown by the existing wide range of integrated utility payment services for water bills for some cities such as the case of DAWASCO for Dar es Salaam, electricity, TV license such as the case of DSTV Multichoice™, Star Times™, Zuku™.

4.2.3 Mobile banking organizational benefits

The noted high number of the registered customers of mobile banking could be attributed to the increased role of ICT enhancing access to financial services. The most ideal reason is that the majority of the m-banking customers are either the Bank or MNOs customers due to available business integration as pointed out in CRDB Bank PLC annual report (CRDB, 2012).

The results on the increasing number of customers suggest that there is high demand of the mobile banking services caused by new evolving technological innovations of the Bank Plcs and MNO companies. The noted increase in mobile banking profit was among the fruits of the increasing trend of the customers.

4.2.4 Opportunities in mobile banking business

The noted high possibility of making utility payments provides an opportunity to the mobile banking businesses as well as the customers. This because individuals neither travel to find financial services away from their location nor do they take long cue awaiting for paying for utilities such as electricity, water bills, government tax, as well as TV licenses bills.

Thus MNOs are now operating in collaborations with the banks providing mobile banking services. The customers of the MNOs and banks through this link are capable of transferring fund from their banks to their mobile phones. Customers are using mobile banking to pay for utilities like LUKU, Dstv, DAWASCO and school fees. The latter results can be explained by the desire of the people to secure their funds.

Results indicated that the businesses are gaining publicity from the mobile banking businesses. The latter is contributed by the fact that some customers are joining the banks or MNOs because of the presence of the particular mobile banking business available.

The reported high demand of the mobile banking services indicates an obvious opportunity for the industry. The mobile banking services demand is resulted from various transaction simplification including utilities payments, sending and withdrawal of money with little or no inconveniences as compared to traditional Bank transactions.

According to (BoT, 2010), Promising business environment that favors m-banking businesses provides a room for mobile banking innovations. The latter is due to existing peaceful environment, adherence to investors' protection policy and IMF and World Bank requirements in international trade.

Network addiction, was perceived by majority of the respondents to be weakness, as every MNO or the bank provides mobile banking services depend highly on the network and signal availability. The latter results was attributed by is no other way to transfer cash from bank to the mobile phone in absence of the signal/network. For instance to access CRDB Sim Banking service, WAP/Internet access and a wireless device with internet connection is needed. Something to note is that for the device to access Sim Banking service must have internet connection.

The noted results indicated the inadequate legal framework in mobile banking industry. The legal environment in Tanzania is still inadequate for mobile banking in the country. This is because the existing laws were developed before the development of computer technology. For instance, mobile banking cannot legally be regarded as a bank nor can it be interpreted as the company by itself according to the law (URT, 2010). Despite of the amendment of Evidence Act which accommodate the validity of electronic evidences and the Electronic and Postal Communication Act, EPOCA, (TCRA, 2010), the Government of Tanzania has established Cyber Crime Unit in the Police Force, regulation of the telecommunication sector through TCRA, and establishment of CERT. More effort underway includes the development cyber law and ICT commission. High charges cut per transaction present a weakness in mobile banking services. This is because the charges keep varying with amount

been transacted in MNOs. The charges of the mobile banking services for banks are constant regardless the amount being transacted, but for MNOs the charges varies according to the amount that is transacted.

The findings reported that it is easy to send money that can be used to finance criminal activities such as terrorism without being noticed through mobile banking services. This is because only the handset is required for one to send or receive money. Money laundry was reported as a threat of the mobile banking business in which illegal money can be made clean; for instance money obtained through bribery and corruption through mobile banking services it become clean after withdrawn. Various laws such as Anti-Money Laundering were formulated so as to reduce these malpractices in the ICT innovations.

4.2.5 Customer satisfaction

The observed results on majority of the customers 22.7 % (N=34) being not satisfied with the mobile banking business service delivery. The latter is explained by the existing huddles in m-banking services delivery such as poor network/signal between the MNOs and the Banks that causing a delay of transaction responses. The noted skepticism among the public to register in the mobile banking business and services could be associated to both high ad unstable tariffs, lack of clarity on the “terms and Conditions” that apply to a wide range of services. Organizational behavior must go together with the customers’ behaviors so as to satisfy the needs of the customers (Kottler, 2009).

Some of Banks are collaborating with the MNOs in serving the customers with new innovative mobile banking services such as Sim banking and Card less services, NMB mobile and Pesa Fasta (faster money), Exim mobile banking, 'TPB *Popote*, which is translated as a wide range of TPB services network following a wide range of network coverage.

Customer satisfaction is further strengthened by the existing online customer care as most solutions are provided either online or over the phone and the combination of the two as opposed to the traditional face-to-face customer care and the associated customer solutions. In the online customer, the role of the traditional face-to-face consultations is kept to a minimum only limited to few cases that need physical contacts.

4.2.6 Summary

This chapter presented findings of the study, its analysis as well as discussion of the main results. The chapter presented findings on demographic characteristics of the respondents and the findings based on the specific objectives of the study. Results on the sex of the respondents indicate that the majority of the respondents were males as compared to females. From the results of the study majority of the respondents had attained some sort of formal education. The results also indicate that the majority of the respondents were aged between 18 and 54years of age and were officially employed (few of the respondents were students and others were unemployed).

In identifying the services offered by the banks and the MNOs in Dar es Salaam, the findings revealed that there are many mobile banking services in the Dar es Salaam

City. The customers can transfer, send, receive and save the money using their mobile phones through various mobile banking businesses. Majority of the respondents were the ATM users (although they also use mobile phones monetary services such as M-Pesa, Tigo-Pesa, Airtel Money and Ezy-Pesa). The findings revealed the benefits of the MNOs and banks as great rate of the increasing trend of customers, the organization profit as well as organization reputation due to mobile banking service delivery.

The findings identified zero liability, free registration, and accessibility and organization service delivery collaboration to be among the strengths of the mobile banking businesses. The weaknesses of the later being lack of legality basis, unclear terms and conditions, network and signal reliance and high tariffs of the services especially now when majority of the customers use mobile money to make the frequent buying and selling.

According to the findings, business integration, utility payment, publicity, service increasing demand, and favorable business environment are the opportunities available of the mobile banking businesses. The utility payments such as LUKU, DAWASCO, TV licensing, and TRA motor vehicle and tax payment made through mobile phones currently are used by majority of the respondents. The threats of the mobile banking business was also found as criminal financing, user illiteracy, money laundering, customers high expectations, business competition and cybercrimes.

The chapter provided the findings on the customer satisfaction basing on customer care, policy ad regulation, tariffs and charges, service delivery as well as terms and conditions.

The chapter also included the discussion of the findings and provides some explanation on characteristics of the obtained results.

CHAPTER FIVE

5.0 CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

5.1 Conclusion

The study findings presented MNOs and banks mobile banking businesses such as M-Pesa, Tigo-Pesa, Airtel-money Ezy-Pesa, Simbanking, NMB mobile, Exim mobile, and TPB Popote operating in Dar es Salaam City. The mobile banking services in Dar es Salaam city are available and accessible to the potential customers in the most part of the City. The latter is due to Dar es Salaam being metropolitan, developed industrial and business City. It can be concluded that there is good performance of the mobile banking business as it is revealed by current study by assessing mobile banking business performance in Dar es Salaam City.

Reported findings in the current study revealed increasing number of mobile banking customers which is translated through increased organizational profit and reflected the organizational reputation among the customers.

Mobile banking services were found used to make different transactions including saving, withdrawing, sending or making payments of money. In addition, mobile money are being used to buy or pay for various utilities such as LUKU, Dawasco, TV licensing such as Dstv and Startimes, Government tax payment (TRA), and school fees in various schools and colleges in the City.

Accessibility, zero liability, free registration, organization link possibility, as well as fund security and customer protection were found to be the strengths of the mobile

banking services. Meanwhile, mobile banking business, have some weaknesses such as doubted clarity of the terms and conditions, high charges, network addiction and legal aspect of the mobile banking services. For instance, terms and conditions are written in technical words, and not accessible to majority of the customers. High charges cut per transaction provide another weakness of the mobile banking services. Opportunities such as business collaborations, high services demand, publicity, utilities payments and desired business environment were identified by the current study. MNOs and Banks publicity also was identified as opportunity of mobile banking in the current study.

Criminal and terrorism financing and money laundry was identified among threats of mobile banking services. It was found easier to send money that can be used to finance criminal activities such as terrorism without being noticed through mobile banking services. This is because only the handset is required with little information about the sender and the receiver.

5.3 Recommendations

Banks and MNOs should increase and improve their mobile banking services. This will eventually result into the rise of the number of the customers. The banks and MNOs should capitalize on the available strengths of mobile banking and capture the various opportunities while striving to control/remove the weaknesses and challenges of the mobile banking services. The current study recommends the following;

- i. Banks should increase collaboration with MNOs through mobile banking services so as to extend their profit margins as well as that of the MNOs.

Banks should strive to make money through financial intermediation than through transaction fees.

- ii. Policy makers and regulators should ensure that the new emerging mobile banking systems serve the broader objective of economic growth and development as well as protect consumer interests, while creating environment that encourage innovation.
- iii. The government should put more emphasize on development programs to ensure the accessibility of education, better health as well as the reduction of poverty of the community. This will allow people to be able to enter in various innovations with necessary equipments such as mobile banking innovations.
- iv. MNOs and banks should clearly state the terms and conditions of the mobile banking business in way that will attract the potential customers to read and understand.
- v. The government should improve the mobile banking business policies and regulations so as to increase the efficiency and effectiveness of the services. This should involve reduction of the taxes that will eventually cause the banks and MNOs to reduce the charges of mobile banking business hence increasing the customers' satisfactions on the services.

- vi. MNOs and banks should adjust their charges on the mobile banking business so as to reduce the burden of the charges to the potential customers. Banks and MNOs should also improve their customer care services by increasing personal based help than computer based help.

- vii. The government should speed up the process of formulating laws concerning mobile banking business so as to solve various disputes in this area. Matters like cyber crimes, criminal financing, money laundering and breaching of contracts in mobile banking industry currently are left unresolved or even solved using inappropriate Acts due to the absence of law governing the mobile banking business in Tanzania.

5.4 AREAS FOR FURTHER RESEARCH

During survey in 2013, there were special issues that might need further investigations so as to understand them in detail. These issues need further researches, and the suggested topics are such as

1. Assessment of barriers on the mobile and internet banking businesses in Dar es Salaam City. These include both government oriented barriers such as changing of policies and regulations, national ideology as well as authorities.

2. Examine factors that lead to reluctant of the society in adapting mobile banking business. The level of illiteracy among members of the society, their economic backgrounds, interests are to be assessed.

3. Examine the efficiency of mobile payments on public and private sectors.
The study should investigate speed and accuracy of the service delivery of various mobile banking services adopted by the public and private sectors.
4. Evaluation of the social responsibility practices of the MNOs and banks in.
The study should capture the CSR practices to the society, these involve improving various social services like education, health centre, sports and environmental conservation practices.
5. Reasons on the government reluctant on formulation of laws, policies and regulations on mobile and internet banking.
6. Effects of the varying tariffs imposed on mobile banking services to the development of the SMEs.

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APPENDICES

QUESTIONIRE (MANAGERS)

As a partial fulfillment of the study of the degree of Masters in Business Administration, A student is required to submit a dissertation at the end of the study.

Mnenwa Alfred will be conducting a study of “**Assessment of Mobile Banking Bussiness Performance; A Case study of Dar es Salaam city**” and supervised by Dr. Rubanza C.K.

The objective of the research is to assess the mobile banking business performance in Dar es salaam City.

This questionnaire is intended to be filled by the staffs, working at the banks and mobile phones companies.

The research findings will be used purely for academic purposes and all findings will be treated with maximum confidentiality.

- **Your position**

.....

.....

Instructions:

Please answer the following question by filling the blanks or putting a check mark () in the appropriate box.

1. What are the mobile banking services your organizations currently have?

LIST	TICKS
MOBILE MONEY	
M-PESA	
TIGO –PESA	
AIRTEL MONEY	

EZY –PESA	
SIMU BANKING	
NMB MOBILE	
INTERNET BANKING	
ATM	
CARDLESS	

2. What is the trend of the number of customers for the past five (5) years?

- Increase
- Decline
- Fill the table of the trend of number of the customers

YEARS	NO. OF CUSTOMERS	CUSTOMERS WITH M-BANKING SERVICES
2012		
2011		
2010		
2009		
2008		

(ii) Is a trend of number of customers resulted from m-banking services you are offering?

- (a) Yes
- (b) No
- (c) I don't know

3. What is the trend of the organization net profit after adaption of m-banking business for past five (5) years?

- a. Increase
- b. Decrease
- c. Table of the net profit for the past five (5) years

YEARS	NET PROFIT
2012	
2011	
2010	
2009	
2008	

4. Does mobile banking services provision cause such trend as shown above?

- a. Yes
- b. No
- c. I don't know

5. Does your organization link mobile banking business with other business through mobile payment and transfer.

- a. Yes
- b. No
- c. Mention the organization services your organizations link with?
 - i.
 - ii.

6. What are the challenges resulted from this business link?

- a.
- b.

7. Does your organization provide ICT and banking related education to the users such as customers, agents and staff?

- a. Yes
- b. No
- c. I don't know

8. How does your organization provide such ICT and m-banking related knowledge?
 - i. Through seminars
 - ii. Through workshops
 - iii. Through advertisement and promotions
 - iv. Through customer services

9. What kind of education organization in providing to users such as agents, employees and customers?
 - i.
 - ii.

10. Is your business Environment favorable?
 - i. Yes
 - ii. No
 - iii. I don't know

11. Do the terms and conditions clear to the potential users such as customers, agents and employees?
 - i. Yes
 - ii. No
 - iii. I don't know

12. What are the important terms and conditions as related to the mobile banking services provided?
 - i.
 - ii.

13. What are the efforts currently made to make the terms and conditions clear to the users.

- i.
- ii.

14. Does your organization involve in corporate social responsibility programs?

- i. Yes
- ii. No
- iii. I don't know

15. What kind of services does your organization offer as part of social responsibilities programs?

- i.
- ii.

16. Does your organization provide any potential protection to customer and organizations using its mobile banking services?

- i. Yes
- ii. No
- iii. I don't know

17. What are the potential strategies your organization is using to protect customers against cyber crimes in ICT and banking sector.

- i.
- ii.

18. Does the cost of mobile banking services suffice the services you are providing?

- i. Yes
- ii. No
- iii. I don't know

19. Does your customer convince other people to join your mobile banking services?

- i. Yes

- ii. No
- iii. I am not sure

20. Is there any difficulty in registering and using of mobile banking service?

- i. Yes
- ii. No
- iii. I am not sure

21. Is it possible for the customer to recover the money that is wrong paid or sent or lost or stolen when using mobile banking services?

- i. Yes
- ii. No
- iii. I don't know

22. Is there any business integration or collaboration between the mobile phone network providers and the traditional banks?

- i. Yes
- ii. No
- iii. Name the banks/mobile phones and network companies you are currently collaborating with

- 1.
- 2.
- 3.

23. Does your organization benefit from such collaboration (or integration) with local banks/mobile phones and network organizations?

- i. Yes
- ii. No
- iii. Name the benefits obtained

- i.
- ii.

24. Does your organization adhere to National ICT and Banking policies and regulations (TCRA policies)

- i. Yes
- ii. No
- iii. Name any policy of TCRA that you know
 - 1.
 - 2.

DODOSO KWA WATEJA WA BENKI ZA SIMU ZA MKONONI
DODOSO KWA MTEJA WA HUDUMA YA BENKI ZA KWENYE SIMU ZA
MKONONI KATIKA JIJI LA DAR ES SALAAM KUHUSU KUPIMA
UTENDAJI KIBIASHARA WA BENKI ZA KWENYE SIMU ZA MKONONI

Utangulizi

Lengo la dodoso hili ni kukusanya maoni ya mteja wa huduma za benki ya kwenye simu za mkononi katika jiji la Dar es salaam juu ya kupima utendaji biashara wa benki za hizo hapa jijini Dar es Salaam. Ushirikiano wako mteja ni muhimu katika utafiti huu. Utafiti huu ni wa kielimu na taarifa zitakazopatikana hazitatumika vingenevyo.

Taarifa za Ujumla

1. Jina la Mteja (si lazima)
2. Mahali unapoishi
3. Jinsia
4. Umri
5. Elimu yako.....
6. Huduma ya benki za simu ya mkononi unazotumia kati hizi zifuatazo
 - (i) Airtel
 - (ii) Tigo
 - (iii)Vodacom
 - (iv)Zantel

(v) TTCL

(vi) Nyinginezo.....

7. Kiwango cha pesa unachoweka au kutoa mara nyingi katika benki ya simu unayotumia

(i) Chini ya shilingi 10,000

(ii) Shilingi 10,000 hadi 50,000

(iii) Shilingi 50,000 hadi 100,000

(iv) Juu ya shilingi 100,000

Maswali maalumu

(1) Je kunaongezeko la wateja katika huduma za benki ya simu ya mkononi unayotumia?

(i) Ndiyo

(ii) Hapana

(iii) Sijui

(iv) Eleza.....

.....

(2) Je, unapata faida kipesa kwa kwa kutumia huduma ya benki ya simu za mkononi?

(i) Ndiyo

(ii) Hapana

(iii) Eleza.....

.....

(3) Je, kampuni ya simu inayokupa huduma inapata faida kutoka kwako?

(i) Ndiyo

(ii) Hapana

(iii) Sijui

(4) Unalipa kiasi gani cha pesa kwa huduma ya bank ya simu unayotumia?

KIASI	HUDUMA		
Chini ya 10,000 Tshs			
10,000-50,000 Tshs			
50,000-100,000Tshs			
100,000-500,000Tshs			
100,000-1000,000Tshs			
1000,000-Above			

(5) Je, unaridhika kwa malipo unayokatwa kwa kutumia huduma za benki za simu za mkononi?

(i) Ndiyo

(ii) Hapana

(iii) Eleza.....

.....

(6) a) Je, unatumia benki ya simu za mkononi kupata huduma zingine kutoka makampuni tofauti tofauti?

(i) Ndiyo

(ii) Hapana

b) Taja huduma zingine unazopata kupitia huduma ya benki za simu za mkononi ?

HUDUMA	BENKI YA SIMU	KAMPUNI INAYOTOA HUDUMA
Malipo ya Dawasco		
Malipo ya Luku		
Malipo ya Ada za shule		
Kulipia bidhaa dukani		

(7) Kuna changamoto zozote unazozipata kutokana na kutumia huduma ya Benki ya simu unayotumia kufanya malipo?

- (i) Ndiyo
- (ii) Hapana
- (iii) Zitaje

7. Kuna changamoto zozote unazozipata kutokana na kutumia huduma ya Benki ya simu unayotumia wakati wa kutuma, kupokea au kutunza pesa?

- (iv) Ndiyo
- (v) Hapana
- (vi) Zitaje baadhi

1.,

2.,

(8) Je, kuna mafunzo au elimu ya TEHAMA uliyopewa na watoa huduma wa Benki ya simu za mkononi unayotumia?

- (i) Ndiyo
- (ii) Hapana
- (iii) Ni mafunzo gani

1.
2.

Je, kuna sera na sheria zozote za kitaifa za TEHAMA zinazo kunufaisha kama mteja wa benki ya simu za mkononi?

- (i) Ndiyo
- (ii) Hapana
- (iii) Zitaje unazozijua

1.
2.

Je, makampuni yanayotoa huduma ya benki za simu za mkononi unazotumia yanawajibika kurudisha kitu (yanatoa misaada yoyote) kwa jamii yako?

- (i) Ndiyo
 - (ii) Hapana
 - (iii) Eleza.....
-

(9) Upo ushirikiano /uhusianowa kibiashara na kiutendaji baina ya huduma ya benki za simu za mkononi unazotumia na benki za kawaida?

- (i) Ndiyo
- (ii) Hapana
- (iii) Ni upi?.....

(10) Gharama za benki ya simu mkononi unazotumia zinaendana na ubora wa huduma unayoipata?

- (i) Ndiyo
- (ii) Hapana
- (iii) Sijui

(11) Umewahi kumshawishi rafiki au ndugu au mtu mwingine kujiunga na benki za simu za mkononi unazotumia?

- (i) Ndiyo
- (ii) Hapana
- (iii) Kwa

nini?.....
.....

(12) Kuna ugumu wowote au upungufu katika kusajili au kutumia huduma ya benki za simu za mkononi

- (i) Ndiyo
- (ii) Hapana
- (iii) Ni ugumu

upi?.....
.....

(13) Ni rahisi kurejesha pesa ambayo imeibiwa au imepotea au kutumwa kimakosa katika benki za simu za mkononi unazotumia?

- (i) Ndiyo
- (ii) Hapana
- (iii) Eleza ugumu

huo.....

(14) Kuna sheria au sera zozote za TEHAMA za nchi zinazokulinda kama mteja ikiwa umepoteza pesa katika benki ya simu za mkononi?

(i) Ndiyo

(ii) Hapana

(iii) Zitaje

1.

2.

(15) Je unayaelewa masharti na vigezo yanayotolewa na makampuni ya simu kuhusu huduma za benki ya simu unazotumia?

(i) Ndiyo

(ii) Hapana

(iii) Eleza

.....

.....