THE EMERGENCE OF MOBILE BANKING AND ITS LEGAL IMPLICATIONS IN TANZANIA

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF THE MASTER OF LAW IN INFORMATION TECHNOLOGY AND TELECOMMUNICATION (LLM IT & T) OF THE OPEN UNIVERSITY OF TANZANIA

2013

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for examination a Dissertation entitled, “The Emergence of Mobile Banking and its Legal Implications in Tanzania” in partial fulfillment for the Award of Master of Law Degree of the Open University of Tanzania.

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Professor David Mellor

(Supervisor)

Date……………………................

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DECLARATION

I, Haider Twahir Mwinyimvua, declare that this Dissertation is my own original work and that it has not been presented and it will not be presented to any other University for a similar or any other degree award.

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Signature

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Date

DEDICATION

This work is dedicated to my parents Mr. Twahir Haider Mwinyimvua and Masiti Ramadhan Kizoka who took special efforts to send me to school and teaching me on how to live with neighbours and the community in general.

Special dedication goes to my wives –Mwamtoro Mohammed and Sophie Ramadhan, children –Ahmed, Siti, Rahma, Hidaya and Twahir as well as our new member of the family Fathiya for their patience, perseverance and understanding throughout the period of eighteen months of intensive study for my LL.M degree.

ACKNOWLEDGEMENTS

Many people have made this work come true. I am therefore indebted to thank them, though it is impossible to mention all of them by names. First and foremost, I humbly thank Allah for the gift of life and intelligence and further, for protecting, loving and giving me strength throughout the period of my study at the Open University of Tanzania.

Furthermore, in a special way, I extend my sincere gratitude to my research supervisor Professor David Mello for his tireless guidance and constructive contribution of ideas, criticism which facilitated the completion of my LL.M degree and this research paper in particular. It is not easy to forget our course coordinator – Mr. Gervas Yeyeye who has always been inspiring and guiding me during the difficult times all along from March 2012 to date. It is his inspiration that is encouraging me to pursue further academic journey in few months to come.

Again, I would like to convey my thanks to my colleagues in the banking industry and those in telecommunications industry for their assistance of providing me some information during data collection and the means of reaching the intended people. Fourthly, I extend my thanks to all those who supported me throughout the course including my employer FBME Bank Limited.

I further thank my ex-school mate Adam Mambi and fellow LL.M student Noel Chikwindo for their encouragement and assistance of how the ideas could be arranged so as to bring sense during preparation of this dissertation. Last but not least, my deepest thanks go to my family members, my wives, children and my elder parents for their encouragement and support from the beginning of this research and in general on my journey in academic life back from 2008 when I enrolled in LL.B program of the Open University of Tanzania.

ABSTRACT

This dissertation is specifically based on the researcher's study about the emergence of Mobile Banking and its legal implications in Tanzania. The data was obtained through interviews and library research with focus on the mobile banking; the data was obtained from BOT, TCRA, commercial banks, MNOs, bank and MNO customers, mobile agents, experts in IT, finance, banking and lawyers. The results of this study have revealed that the advent of mobile banking in Tanzania has brought immerse benefits to the country, however there are a number of legal challenges which the innovation is facing and the law has shown some lacuna which need to be addressed. Therefore, the study embarked on long journey in studying experiences of other jurisdictions and our current legal framework, pinpointing the significance of the innovation and the challenges it faces; thereafter recommending what is required to address the current legal challenges.

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LIST OF ABBREVIATIONS AND ACRONYMS

AML	Anti Money Laundering
ATM	Automated Teller Machine
BOT	Bank of Tanzania
BSP	Bangko Sentral ng Pilipinas- Central Bank of Philippines
CBK	Central Bank of Kenya
CCK	Communications Commission of Kenya
CTF	Counter Terrorist Financing
FFIEC	The Federal Financial Institutions Examination Council
OFAC	Office of Foreign Asset Control
KYC	Know Your Customer
MFS	Mobile Financial Services
MNO	Mobile Network Operator
SMS	Short Messaging Service
TCRA	Tanzania Communications Regulatory Authority
WAP	Wireless Application Protocol
UNCTAD	United Nations Conference on Trade and Development

CHAPTER ONE

1.0 INTRODUCTION

It is no doubt that ICT has fuelled the growth and development in many sectors of the economy - social, political and financial sectors have all been impacted. The financial sector, in particular banking has moved from the times when the bank records were being kept in manual ledgers and registers to electronic records maintained, stored and available for easy retrieval at any point when needed. Technological innovations that impacted banking sector had a long way, from the times when ATMs were discovered and used for the convenience of bank customers, reducing queues in the banking halls to withdraw and deposit money and subsequently introduction of internet in the 1980s.

The introduction of the internet enabled banks to have applications which enabled their customers to access their accounts, including view of account balances, initiation of transfers and order of cheque books, booking of deposits and such services that provided convenience and flexibility to the customers. This was an era of online Banking, to be able to use such facility, bank customer should either have personal computer or laptop that is connected to the internet and that is why it was referred as Internet Banking.

Today, the new innovation in the banking sector is mobile banking; it is the use of mobile phones to make financial transactions. A number of mobile financial applications have been developed and there have been drastic increase in the usage of mobile phones to facilitate financial transactions. The earliest form of mobile financial service[1] was SMS Banking that enabled customers to access their accounts through mobile phones by SMS messaging, though this form is still applicable in some banks; WAP technology that enables 'mobile web' has made it possible for the banks and non-banks to offer mobile banking in its current form.

Eric Schmidt, chairman of Google once came with slogan 'Mobile First'[2] and by then most people did not understand what it was all about. Now, the time has come when it is evidently seen how the mobiles have become important tools in our day to day life. We are now dependent on our mobile phones in a number of ways from storage of personal and private information to accessing our financial information through the mobiles.

1.1 Models of Mobile Financial Services[3]

There are possibly two common models of mobile financial services:

1.1.1 Bank based Model

This model is rather an extension of the convectional banking system that offers additional facilities like ATMs, online banking. By this model, banks offer to their customers services through non-convectional low cost delivery channels. Mobile banking falls under this model, as it involves provision of formal banking services to bank customers through mobile phones. "In the bank-based model of m-banking,

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[1] In some cases, the term 'mobile financial services, 'mobile money' and 'mobile banking' are being used interchangeably

[2] His first ever keynote address at the Mobile World Congress tradeshow in February 2010

[3] In some cases, the term 'mobile financial services', 'mobile money' and 'mobile banking' are being used interchangeably

banks make some of their services available through the use of a mobile device. A bank enters into an arrangement with a mobile operator to offer financial services either through text messaging or more elaborate smart phone applications. Customers can carry out a range of financial transactions without having to go to a physical bank facility." [4]

1.1.2 Non-Bank based Model

In this model, telecommunications service providers play active role in the day to day management of individual customers and control account management functions and banks are only limited to safe keeping of the funds. This is a typical case of M-PESA being run by Safaricom in Kenya and Vodacom in Tanzania.

1.1.3 Definition of Mobile Banking

" Mobile banking is an application of mobile computing which provides customers with the support needed to be able to bank anywhere, anytime using a mobile handheld device and a mobile service such as Short Message Service (SMS)." [5] In simple terms, mobile banking is a mechanism that facilitates doing a number of banking related activities using mobile phones, personal digital assistants (PDAs), tablets and other smart communication devices. It is 'mobile' because one can do it anywhere and at any time without a need to visit the bank or its affiliated branches

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[4] http://www.itu.int/net/itunews/issues/2011/07/32.aspx

[5] Mobile Banking Adoption and Benefits Towards Customers Service 1Sunil Kumar Mishra & Durga Prasad Sahoo 1DRIEMS School of Professional Studies, DRIEMS, Tangi, Cuttack-754022 2Modern engineering and Management Studies(MEMS), Balasore.

and agencies.

Mobile Banking enables customers to perform a number of financial transactions and such transactions will have the impact on the customers' accounts either debiting or crediting their accounts. Furthermore, 'mobile account holders' can as well perform cash in/cash out, transfers and payments for services, goods and utilities through mobile phones without having bank account, just mobile account will do all that.

There could be a number of definitions on mobile banking but the bottom line is undertaking of financial transactions through mobile phones and other similar devices.

1.1.4 Key features of Mobile Banking

Mobile Banking has a number of features:

i. Security, privacy and Trust: it is a system that has facility for secure 'sign in/sign out', user will have to have access rights and once given the user login id, one will be able to access the facility within allowable parameters and limits

ii. Suitability and usability: accessing of bank accounts and mobile accounts by customers 24 hours a day from anywhere; customer will not have necessarily to visit the bank or its branches. It is possible to view mini statements and statements at any time.

iii. Cost and efficiency: mobile banking is in most cases less costly than other payment mechanisms. It is faster and effective.

iv. Effecting transfers to own accounts or third parties; ability to view transfers history and also ability to schedule the transfers. All such transfers can be initiated electronically.

v. Settling utility bills payments and ability to view the history.

1.1.5 Significance of Mobile Banking

Offering of banking services through mobiles has a number of advantages not only to the customers but also to the banks and MNOs:

i. One of the key advantages of mobile banking is that it does not rely on the internet connection as has been the case with 'online or internet banking'; it relies on the availability of mobile connection; this is a very useful, particularly in the developing countries where internet connection is still a challenge.

ii. Settling of utility payments had been in the past a major headache, however with the introduction of mobile banking, customers can initiate payments from their accounts to the utility companies electronically, thus saving time and other resources. Moreover, the system can keep history of the transactions that have been effected.

iii. Effecting transfers to own accounts or third parties within the country and even across the national boundaries. Such transfers can be initiated by the customers electronically from anywhere.

iv. It is simpler, friendly and always keeps the track records, as well as saves and keeps records of the transactions.

v. It is cost effective to both the banks and MNOs and the customers; customers need not visit the banks and queue up thereby cutting down the cost of providing services to the customers.

vi. Customers get ‘SMS alerts’ whenever there is activity in their accounts- deposits, withdrawals, funds transfers thus reducing the chances for fraudulent transactions.

vii. It is easier for the banks to send notices and promotional news and be in touch with their customers through mobile banking.

viii. It is convenient, secure and safer, and it is lower cost ‘service delivery channel’ to the customers.

Therefore, it is worth noting that mobile Banking has been useful and provided a number of benefits to all stakeholders in the economies.

1.2 Background of the Problem

The history of Mobile Banking in Tanzania goes back over last six years in 2007, when local company E-Fulusi came up with M-banking solution known as Mobipawa that was ‘bank independent model’ with such features as mobile banking, branchless banking and mobile based microfinance services provision. A local Bank FBME Bank Limited did facilitate the transactions that were being processed through Mobipawa.

In the neighbouring East African country Kenya, Safaricom – Telecommunications Company was pioneer in the mobile financial services. Safaricom started M-PESA in 2007 with few hundred subscribers, now Safaricom has 15 million M-PESA subscribers who account for the 78 per cent of all users of mobile money services[6]. Vodacom Tanzania started offering mobile financial services in 2008 with its M-PESA brand; Zain now Airtel followed with Zap Money (Airtel Money) and the third to join the race was Zantel with Z-Pesa, now Ezy Pesa, Zantel is deploying E-Fulusi solution. In 2010, Tigo officially launched its mobile money product – Tigo Pesa bringing the number of telecommunication companies to four competing in the **'non-bank led model'**, in offering mobile financial services in the market.

According to BOT, by September 2010, there were 5.4 million registered mobile money accounts and by September 2012 was 15 million subscribers and the total value of mobile money transactions was 1.7 trillion shillings equivalent to almost 14 per cent of commercial banks' total private sector deposits[7]. This shows how mobile financial services have been impressively adopted in a short period of time; millions of Tanzanians are now able to use the services (MFS) without having bank accounts. The mobile money subscribers use MFS to make payments, send remittances and store funds for shorter periods at low cost. Utility companies-DAWASCO, TANESCO have linked with Mobile Network Operators platforms to allow customers pay for their bills. Even Precision Air and FastJet have linked with MNO platforms to facilitate payments for air tickets. Tanzania Revenue Authority has as well linked with MNO platforms to allow easier and faster remittances of some taxes; Western Union has partnered with some MNOs to facilitate delivery of international transfers directly to the recipient's e-money account.

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[6] Communications Commission of Kenya (CCK, July 2012)
[7] Bank of Tanzania-BOT Quarterly Report September 2012

Up to June 2013, there are 46 [8] commercial banks licenced to undertake banking operations in Tanzania; out of 46 banks, 12 banks have deployed mobile banking platforms. NMB, the number one bank in the country in terms of branch network (with over 150 branches within Tanzania) was the first to launch its mobile banking product under 'bank based model'. Other banks, CRDB, Exim Bank, Akiba Commercial Bank, Amana Bank, Barclays Bank Tanzania, Standard Chartered Bank Tanzania, Kenya Commercial Bank Tanzania, Tanzania Postal Bank, Bank of Africa have also launched their mobile banking products. Primarily, most banks that launched mobile banking products had started with their own account holders but slowly there are opening up to non-bank account holders using ATMs as cash points. The entry of commercial banks in the provision of mobile financial services has broadened the access of mobile financial services to the bank account holders and non-bank account holders; both person to person (P2P) and business to business (B2B) money transfers have steadily increased[9].

All the above indicate how significant mobile payments are to the financial sector and national economy as a whole; however mobile banking faces some challenges. Mobile banking is such technological innovation that its existence and sustenance is inevitable than its extinction; what is required to be done is to address the areas of challenges that are currently facing the mobile banking.

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[8] http://www.bot-tz.org/BankingSupervision/RegisteredBanks.asp

[9] BOT Governor's keynote address – Professor Benno Ndulu at 16th Conference of Financial Institutions 26th to 27th November 2012

1.3 Statement of Research/Study Problem

There are two pieces of legislations which govern the Banking industry in Tanzania- The Bank of Tanzania Act 2006 and Banking and Financial Institutions Act 2006. According to section 5 (1) of the Bank of Tanzania ACT 2006 "the principal functions of the Bank shall be to exercise the functions of a central bank and ...... to regulate and supervise banks and financial institutions"

> *"... Banks are authorised to start operations in Tanzania upon obtaining licences from the Bank of Tanzania".*[10]

Section 6(1) (a) of the Bank of Tanzania Act stipulates that

> *"the Bank shall regulate, monitor, and supervise the payment, clearing and settlement system including all products and services thereof."*

It is the duty of the BOT to ensure to maintain the stability, safety and the financial soundness of the financial system and to reduce the risk of loss to depositors[11]. On the telecommunications angle, there is TCRA-Tanzania Communications Regulatory Authority established under TCRA Act 2003 which has been empowered to regulate and supervise the telecommunications sector from licencing to other routine supervisions.

Apparently, the regulatory set up of the mobile banking that is run by MNOs and banks cut across two regulatory regimes – Bank of Tanzania and Tanzania Communications Regulatory Authority. Should a bank wish to operate mobile

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[10] Banking and Financial Institutions Act 2006 section 4 (1) to section 5
[11] Banking and Financial Institutions Act 2006 section 5.

banking products, it has to obtain approval of the Central Bank of Tanzania -BOT as financial regulator of payment systems in the country. On the other hand, the mobile telecommunications companies-MNOs have to obtain TCRA approval and then clearance and approval from BOT to run mobile financial services schemes.

Apart from the regulatory paradox discussed above, there are a number of issues which need to be addressed; as commercial banks operate under strict compliance guidelines, the telecommunications companies being licenced by TCRA are not under such strict compliance requirements. For instance, ‘mobile money subscriber’ does not go through strict KYC rules when opening mobile money account, mere introduction from local leader will do as against ‘bank account holder’ who will have to undergo full KYC requirements that involve obtaining reference from employer, lawyer, other account holder(s), providing proof of physical address and furnishing a number of forms and documents to the bank.

As a part of AML- Anti Money Laundering Act, transfers being initiated from banks are normally required to have some supporting information or documents to substantiate the rationale for such transfers; in case of mobile transfers such strict rules do not apply, thus may expose the banks and MNOs to the breach of AML however how small the amounts could be. There could be not guarantee that such small amounts could find themselves landing into the hands of money launderers and terrorists after series of multiple transfers.

Customers sometime get confused as to whom could have be responsible for the missed transfers; is it the bank or telecommunications company which is responsible for the missed or delayed transfer; where and how will the consumers rights be addressed is another issue which has not been addressed in the current regulatory and legal framework on the mobile transfers. There are a number of legal challenges as hinted above as far as mobile banking is concerned; therefore this research will attempt to critically analyse current and potential legal and regulatory issues in the mobile banking.

CHAPTER TWO

2.0 LITERATURE REVIEW

Generally, the growth of 'Mobile banking' technology has been moved by the technological innovations and advancements, the regulatory and legal framework have been trailing behind the technological innovations. This has been a major challenge in the most recent innovations that have left the legal framework to follow what the technology wants and not what are the legal requirements. It is worth saying that, the development of mobile banking despite impacting great economic social and political changes, the speed technological changes happen has outpaced the laws and the regulations they govern which are more or less non-existent in the country and other parts of the world.

According to the book- 'Mobile Banking & Mobile Law' authored by Duggal Pavan that as 'mobile banking is just beginning to emerge in a significant manner, there are no international or global treaties or arrangements on mobile banking per se.'[12] The author, Duggal Pavan, has attempted to highlight some of the legal issues which 'mobile banking' faces; one of the common issue is the KYC regulations which requires every customer identity to be verified. In some countries like India, the operations of mobile banking are restricted to the bank accounts holders because it is banks which comply to the requirements of KYC regulations; Whether SIM card registration of mobile banking customers sufficient enough to meet KYC regulations is an issue which raises a lot of concerns because different countries have different

[12] Duggal, Pavan (2013-05-29), Mobile Banking & Mobile Law (Kindle Locations 380-381) Saakshar Law Publications. Kindle Edition

requirements on the SIM card registration.

‘Electronic authentication’ and ‘mobile physical security’ are other legal challenges that mobile banking faces, so far there is no unanimity pertaining to user identification/password authentication at a global level[13]. Should the physical device be lost or misplaced what are the legal implications as far as mobile banking is concerned is unanswered issue yet in the mobile banking. Another legal challenge on mobile banking is on data transmission, encryption and storage because in most jurisdictions, the subject of encryption (which is very essential in mobile banking) has not been adequately addressed; as far as data protection is concerned, it has been observed that different countries have varied parameters on the legal and regulatory frameworks and other countries do not have at all data protection laws and policies.

The book-Mobile Banking & Mobile Law also has written on the challenge of missed payments, missed payment can happen when customer submits the payment but the mobile device or mobile network provider or the Bank fails to process it causing inconveniences and in some cases exposing the customer to liability for the delay in effecting the payment. Furthermore, Mobile banking crimes are also on the rise and in case of fraudulent use of mobile banking facilities, who will be liable, is it the bank, customer or mobile network operators (MNOs). In the mobile banking, there is risk of unauthorised use of customers’ accounts which is less in traditional

[13] Duggal, Pavan (2013-05-29), Mobile Banking & Mobile Law (Kindle Locations 405-406) Saakshar Law Publications. Kindle Edition

banking, there has to be agreed way of reducing such risk by banks for its mobile customers.

The author, Mr. Duggan Paval has discussed on the challenge of consumer protection as far mobile banking is concerned as banks and telecommunications companies tend to escape from any potential liability mainly on missed payments and mobile crime transactions. Analysing what the author – Daggan Pavan wrote in his book 'Mobile Banking & Mobile Law', it is observed that the emerging mobile banking technology has left a lot of unanswered questions as far as regulatory and legal context is concerned. Most issues and challenges discussed are relevant in India and Asia but the same have much relevance in developing countries, particularly those countries that have adopted the mobile banking technology, Tanzania being one of such countries.

Additionally, in the book titled 'Mobile Banking: Financial Services Meet the Electronic Wallet' co-authored by Knowledge@Wharton and Ernst & Young which discussed on the challenges of regulating mobile money and how to keep it safe; the book noted down "If you're looking to develop mobile money, you have to get the authorities to build a regulatory environment."[14] The book further notes down that the current legal and regulatory regime is still immature to provide guidance and govern the mobile banking. Generally, the whole mobile financial services industry is new and the world is in the process of establishing the fundamentals.

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[14] Knowledge@Wharton and Ernst & Young (2013-04-10). Mobile Banking: Financial Services Meet the Electronic Wallet (Kindle Locations 649-650). Knowledge@Wharton. Kindle Edition.

One of the challenges is who to regulate the mobile financial services because the industry cuts across a number of sectors, there are arguments that it should be regulated by the telecommunications regulators because it also involves the telecommunications companies; others argue that it should be regulated by the financial sector regulators (Central Banks) because it involves financial transactions through the banks and others argue that it should be based on the activity which implies there can be multiple regulators for mobile banking. So far, there appears to be a sense of regulatory uncertainty in the mobile banking.

There is question of compliance to the laws on Anti money laundering and aid to terrorism, mobile financial services industry in general is vulnerable to the money laundering, and compliance and law enforcement agencies find themselves in a difficult situation in tracking such illegal activities; because in mobile banking ”there is movement of money through different vehicles with telecoms involved, technology companies, banks—in short, a number of lesser-regulated, non-financial services companies become party to the transaction.

So there is increased complexity of payment. There’s less transparency than there would be otherwise.” [15] The book has also discussed on the issue of vulnerability of the mobile phones and the security of the mobile banking as a whole; the mobile banking provider’s servers could be compromised to hackers during data transmission causing non delivery of the money to the ultimate beneficiary, in some

[15] Knowledge@Wharton and Ernst & Young (2013-04-10). Mobile Banking: Financial Services Meet the Electronic Wallet (Kindle Locations 682-684). Knowledge@Wharton. Kindle Edition.

cases, mobile phone could be lost or misplaced raising the question of where the liability will lie-is it to customer, bank or mobile network operator-MNO.

Mobile money transactions leave some trails behind and if there are no data protection laws consumers' private data could be compromised and may end up in the hands of unscrupulous persons. Therefore, it is then recommended to have data protection laws in place that will provide guidelines on how the data being transmitted, stored, will be protected. The authors have also discussed on the KYC requirements highlighting how less strict are the regulations at the expense of compromising Anti Money Laundering laws and other laws.

From the above paragraphs which reviewed the book **'**Mobile Banking: Financial Services Meet the Electronic Wallet'**,** it has been observed that there is a need to have proper regulatory environment that will address the key issues and the challenges of mobile banking. It is important to determine what and how will the mobile banking be managed without compromising other laws like those on Anti Money Laundering and terrorism and the same time the technology should not cause compromising of customers' data. As crimes are perpetrated in the convectional banking context, the mobile banking is not spared, it is also subject to the crimes, hackers may attack the bank or telecommunications company systems. In case of crimes or other irregular events, who is liable is an issue discussed and so far the banks and MNOs try to play smarter at the expense of the customers.

UNCTAD June 2012 report on East African mobile money stated that "unlike traditional bank regulators, those dealing with mobile money have no models from elsewhere in the world to use. Kenya and its neighbors in East Africa have no one to copy; when it comes to mobile money, they are blazing the trail" [16]. The report further recommends on the need to bolster consumer protection, because customers have no clear idea how to get redress in the event of problems. As mobile banking involves dealing with the agents, the report recommends on the need of their training to minimise the risks associated with the mobile financial services on KYC procedures.

The above UNCTAD report has highlighted the state of affairs of mobile banking in East African region that requires to establish ideal model on mobile banking, same time to have in place laws that will ensure protection of the consumers as far mobile banking is concerned. The article, Mobile Banking Legal Considerations by Justin B. Hosie and G. Clinton Heyworth Chambliss, Bahner & Stophel, P.C. has also underlined the need for the banks going into mobile banking to review the legal risks. It also discusses how the mobile banking in the absence of proper regulatory and legal framework could be prone to money laundering and terrorist activities.

Furthermore, the question of liability for missed payments poses another challenge and therefore there need be a proper regulations and mechanism to address the issue. In the same article, the issue of hacking has been discussed; hacking has been a great threat in the mobile banking as the technology can easily be accessed by the hackers, having proper laws and regulations can minimise such malpractices to a great extent.

[16] UNCTAD Report on Mobile Money for Business Development in East African Community – A Comprehensive Study of Existing Platforms and Regulations

Furthermore, in USA under the Federal Financial Institutions Examination Council IT Examination Handbook, Retail Payment Systems Booklet ("FFIEC guidance"), encryption is a very essential part of mobile banking in trying to curb hacking activities.

World Bank Policy research paper has also discussed on the question of which organisation should regulate the mobile banking stating "Financial regulators are the most competent for banking and financial services, and depending on the country prudential regulation and business conduct regulation may be under the same roof or carried out by different agencies (the "twin-peak" model of regulation" [17]. This implies that it is in the interest of mobile banking to let it be regulated through financial regulators and in this case Central banks because they have sound skills and expertise on financial matters and they assist to detect the dangers in advance; therefore legal framework should mandate the central bank to regulate mobile banking.

The article, Mobile Banking in India: Practices, Challenges and Security Issues[18] by Vishal Goyal and others, challenges of mobile banking have been discussed, one of the challenges is regulatory challenge; RBI- the Reserve Bank of India has put up restrictions that only financial. Institutions and banks are allowed to offer mobile banking and that all the mobile money transactions must be in the India's national currency - Rupees. In India, only existing bank account holders would be allowed to

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[17] Mobile Banking and Financial Inclusion The Regulatory Lessons by Michael Klein & Colin Mayer

[18] ttp://academia.edu/2958786/Mobile_Banking_in_India_Practices_Challenges_and_Security_Issues

do mobile banking.

The above implies that the regulator in India favours ‘bank based model' of mobile banking as against ‘non-bank based model’ which is dominant in Kenya and Tanzania – M-PESA.

CHAPTER THREE

3.0 RESEARCH DESIGN AND METHODOLOGY

The researcher used documentary review and field research methodology. Library and internet were actively used to download e- books and various reports, articles and journals of relevance to the study. The researcher also used own library which has a number of books-hard copies and e-books, articles, journals and reports which have been collected from March 2012 till date, when he joined LLM-IT &T program with the Open University of Tanzania.

3.1 Collection of Data

Data collection by Interview: The researcher interviewed consumers of mobile banking, officials of the banks that offer mobile banking, officials of the telecommunications companies that are engaged in mobile banking, officials of the regulatory bodies – BOT (Bank of Tanzania) and TCRA (Tanzania Communications Regulatory Authority). Experts in banking, IT, finance and lawyers were also interviewed.

Documentary review: the researcher reviewed a number of works of different authors both available at the libraries and mainly with the increased use of the ICT in the country through the internet with is very rich in academic and other study materials. Use of the internet is relatively cheaper, effective; therefore this method was the most preferred. Data collection by questionnaires: the researcher could not use questionnaires to get some data because of limited time involved, therefore confined the research to the interview method. Therefore, this study involved fieldwork, interviews, library, ICT (internet) and observations of mobile banking activities.

3.2 Objectives of the Study

i. At the very outset of this study, the general objective is to examine and identify the effect of mobile banking in Tanzania.
ii. Secondly to examine what are the legal implications (challenges) that mobile banking have caused in the country
iii. Thirdly to study the rationale for the banks and financial institutions to go for mobile banking and what are inherent legal risks to the banks and financial institutions.
iv. To study and understand the scope of consumer protection in the mobile banking.
v. Thirdly to examine what is the legal and regulatory framework required to ensure sustenance of mobile banking in the country
vi. To study the efforts which the regulators and the government have so far taken in the regulation of mobile banking in the country
vii. To recommend on appropriate banking and telecommunications law and policies aimed at improving the applicability of the mobile banking
viii. To recommend on appropriate consumer protection law as far as mobile banking in concerned.

3.3 Hypothesis

This research was guided by the assumption that:

The emergence of mobile banking in Tanzania has brought a number of legal and regulatory challenges in the current legal and regulatory frameworks that need to be addressed in the right manner.

3.4 Scope and Limitations

The study focused on emergency of mobile banking in Tanzania and its legal implications. The study was conducted in the banks and their bank customers, MNOs and their customers as well as the regulators. Due to the limited time and resources required in the completion of the study, it was only confined within Dar es Salaam Region; otherwise the researcher would have gone through different banking institutions in different regions in Tanzania. The study aimed at examining to what extent the mobile banking has impacted the legal and regulatory framework in the country and propose on how the challenges can be addressed.

3.6 Significance of the Research

The researcher expects that this study will be of a immerse significance to the Central Bank as regulator of financial institutions and banks; commercial banks, MNOs, TCRA (Tanzania Communications Regulatory Authority, consumers of mobile banking products and services and the government and its various agencies which in one way or another deal with the mobile banking. The research is expected to be of value to the existing and new investors in the mobile banking because it has attempted to give insights of the legal and regulatory issues that affect the mobile financial innovation. What challenges mobile banking faces in Tanzania and around the globe have been discussed and analysed in the context of the Tanzania and proposed solution to the issues have been suggested.

The thorough analysis and ideas which have been expounded in the study surely will increase the better understanding, and mostly benefit students and academicians in the furtherance of their academic practices, so it will be used as a study reference. It is expected all stakeholders in the mobile banking will have benefit to understand the what, how and why of mobile banking and understand the position of each party-both rights, duties and liabilities. It is the humble concern and expectation of the researcher that this work will yield fruitful results by bringing possible solutions to cure the problem if worked out.

Lastly, it is expected that this research will enable the researcher to fulfill the requirements for an award of LL.M in IT &T, in addition to being a valuable literature review in the field of mobile banking development in the country.

3.5 Chapterisation

Chapterisation gives the work lay out of the study. The whole study has been organised in five chapters: The first chapter has covered the introductory part, definition of mobile banking, its models, benefits and significance; background of the problem and statement of the problem. The second chapter has covered literature review; whereby a number of books, articles, journals and other writings of value to the study have been reviewed.

The third chapter has covered research methodology outlining how the research has been conducted, data collection, hypothesis; objectives and the significance of the research; scope and limitations of the research and organization of the study (chapterisation). The fourth chapter has covered on the discussion and the results of the study. Key issues have been analysed here, the chapter is divided into three parts, he first parts ellaborates the general concept of mobile banking has been discussed covering: historical background of mobile banking; mobile banking-banks vis-à-vis telecommunications companies; what are legal issues on mobile banking in other countries (jurisdictions); global challenges of mobile banking have also been discussed.

The second part is on mobile banking in the context of Tanzania has been discussed covering: the advent of mobile banking in Tanzania and its significance to the country; mobile banking - the key players in Tanzania and what is current legal framework on mobile banking in the country. The last pars explains the research findings, analysis and presentation: whereby the findings of the research have analysed and presented in an orderly manner.

The last chapter has covered conclusion and recommendations. In this chapter, conclusion and recommendations have presented in the organised manner.

CHAPTER FOUR

4.0 GENERAL CONCEPT OF MOBILE BANKING

4.1 Historical Background of Mobile Banking

By 2001, SMART Money in Philippines was the only mobile payment system operator in the whole world; SMART money was being run by SMART Communications; today there are approximately over 150 operators in the world and over 90 are in the developing countries.[19] One of the reasons behind the success of the SMART Money in Philippine 'is the flexibility of the regulator to allow non-banks to offer financial services and framing rules which allowed agents to perform cash in and cash out functions'. [20]

Mobile banking system has been such financial innovation which to a greater extent the non-bank organisations have taken a step ahead of banks, forcing the regulators to relax some regulations in the financial industry and in particular banking to allow the non –banks to play active part. The great benefit behind the innovation is its ability to connect the millions of unbanked into the mainstream financial system. It can be observed where the regulators have been flexible and accommodated the non-banks in the provision of mobile banking services; the extent of growth of mobile money has been significantly higher than in the countries where regulators have been stringent on the rules. Philippines is one of such country, Kenya is another and today Kenya is taken by most emerging economies as the model country in the mobile

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[19] Knowledge@Wharton and Ernst & Young (2013-04-10). Mobile Banking: Financial Services Meet the Electronic Wallet (Kindle Locations 143). Knowledge@Wharton. Kindle Edition.

[20] http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/06/Philippines-Case-Study-v-X21-21.pdfUnited

money advancements; whereas countries like India which have been following such strict rules have observed slow pace in the development and growth of mobile money.

No doubt, the mobile money has somehow changed the way people handle the financial transactions from tapping the masses of unbanked people to the formal economy to the changing the way urban population handle their payments from P2P to B2C. It is the revolution; “the revolution is mobile banking – the use of mobile phones to make financial transactions” [21].

Originally, the advent of mobile money was characterised by transfer of funds via text messages but now there have been massive enhancements in the way mobile money transactions can be performed. Today, “It encompasses sophisticated banking transactions, payment for goods and services, and peer-to-peer payments. In Brazil, for example, customers of Banco Bradesco don’t just pay bills and check accounts via the iPhone. They can also use the device to apply for, and obtain, loans” [22]. As noted above, apart from using the technology in applying for the banks’ credit facilities; today technology has gone far ahead that one does not need to deposit cheque with the bank, a scanned image of the cheque can be transmitted to the bank and once the same has been cleared, bank customer will enjoy the proceeds of the cheque. Such advancements in the mobile money have much attracted attention of

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[21] Mobile Banking and Financial Inclusion The Regulatory Lessons by Michael Klein& C. Mayer

[22] Knowledge@Wharton and Ernst & Young (2013-04-10). Mobile Banking: Financial Services Meet the Electronic Wallet (Kindle Locations 146-148). Knowledge@Wharton. Kindle Edition Munity

other players who initially maintained low profile on the mobile money.

4.2 Mobile Banking-Banks vis ‘a vis Telecommunications Companies

Traditionally, banks made their income and revenue from large corporate and high net worth customers who could not care much of the costs involved in processing their bank transactions; therefore, the banks were not in one way or another concerned with low income earners- under-banked and unbanked. The general perception has been that it is not profitable to deal with such type of customer base.

It is the mobile money which brought the revolution by bringing into formal financial system the under-banked and unbanked population, the telecommunications companies led the revolution and since then have been reaping the fruits of such revolution. [23] Only a few banks which have released how potential the mobile banking could be in generating new source of income streams have taken steps to go mobile. As mobile money gained upper hands tapping a lot of money from informal unbanked sector and the regulator relaxing the rules of the game allowing the mobile innovation an opportunity in the area that was originally monopoly of the banks; the banks felt somehow threatened by the emerging technology. For example it is said that “today, nearly 20% of Kenya’s gross domestic product moves through M-PESA, the nation’s mobile-money system operated by Safaricom, its leading mobile network” [24].

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[23] Mobile Banking and Financial Inclusion The Regulatory Lessons by Michael Klein& C. Mayer
[24] Knowledge@Wharton and Ernst & Young (2013-04-10). Mobile Banking: Financial Services Meet the Electronic Wallet (Kindle Locations 151-152). Knowledge@Wharton. Kindle Edition
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Despite, mobile money threatening the existence of banks, there is good news on the other side; now the mobile money has brought millions of unbanked and under banked into the formal economy; banks are now in good opportunities to capitalise on this by offering other products to the people whom they could not once approach them-such products could be like ‘Group loans’. In Kenya, where Safaricom has pioneered mobile revolution, Central Bank of Kenya requires mobile money operator to maintain deposit equal to the amount of the mobile money in circulation with the Commercial Bank of Africa as a ‘float’. This implies that banking sector will still benefit from the deposits to be maintained by the telecommunications companies.

In some countries, banks have partnered with the telecommunications companies to offer mobile money services to both existing customers and vast majority potential clients that mobile money revolution has brought them into the formal sector. In those jurisdictions, where ‘non-bank based models’ prevails, the telecommunications companies somehow appear a threat to the banks as discussed above however still banks can work together with the banks in the mutual interests of the telecommunications companies and the banks.

Definitely, no telecommunications company can all alone be able to offer mobile money without support of the banks. However, in the ‘bank based models’, where banks have to play a lead role on the mobile money payments, such threats to the banks are almost non-existent. The experiences have been that in some countries both bank based models and non-bank based models run parallel to each other and both banks and telecommunications companies supplement each other rather than competing.

M-Pesa Service in Kenya and Tanzania is now using banks ‘ATMs network’ to allow its M-Pesa customers to withdraw and deposit money into their M-Pesa accounts, this is obvious indication that telecommunications companies can work together with the banks. On the other hand, commercial banks in partnership with telecommunications companies have developed mobile platforms that enable their customers to access accounts via their mobile phones. Such bank facilities range from account enquiry, balance view, own funds transfers or to third parties and so on.

Even in India, where bank based model is predominant, Indian version of M-Pesa, M-Paisa works through a partnership of the telecommunications companies and banks and none can work in isolation. One good advantage with the mobile companies is that they have technology which among other things makes traceability of the financial transaction easier and possible (where was the transaction initiated and where the transaction ended); another advantage is that, mobile companies have a network of widespread agents or merchants who facilitate mobile banking services.

4.3 Legal Issues on Mobile Banking in Different Jurisdictions

4.3.1 Philippines

As discussed in the historical background of mobile banking, Philippines was the first country to have mobile money operations under SMART Communications and the scheme was known as SMART. There are a number of factors that have contributed to early entry into mobile money; one of such factor is widespread reliable mobile coverage,[25] from year 2000, the mobile penetration in Philippines had been drastically increasing from the original 3% to 68% by 2008. High SMS literacy among the Filipino mobile users is another factor that has very much contributed to easier earlier adoption of mobile money- no wonder Philippines is popularly known as ‘ texting capital of the world’.

According to World Bank bulletin: Financial Access for All, prior to the launch of SMART money, only 26% of Filipinos had access to the formal financial services and there were larger domestic remittance providers in the form of pawnshops who offered informal financial services; therefore the presence of pawnshops network made it possible for the SMART money to grow even faster. It is estimated that two thirds of the Filipinos live in the urban areas and most of them have to send money to the rural areas where their families live, this factor did very much accelerate the growth of SMART money services. Moreover, over 8 million Filipinos work overseas and by 2004, it was estimated over 18 billion US Dollars were moved into the country, SMART Communications capitalised on this by introduction SMART Padala which enable overseas Filipino workers to send money directly to SMART Money account holders. By 2006, about 15 million US Dollar was sent through SMART Padala involving 1.5 million SMART Money users.

Bangko Sentral ng Pilipinas-BSP, financial services regulator in Philippines has been playing a key role in the development and growth of mobile money by allowing non-

[25] Mobile Money in the Philippines – The Market, the Models and Regulations

banks to engage in the provision of financial services as another channel and supplementary to the role that has been traditionally played by the banks. One of the approaches that BSP deployed in the regulation of the mobile money is ‘Test and Learn’, by which the mobile money operator would be given a ‘no objection letter’ to enable them run their operations; once the pilot operations run successful, BSP will issue formal approval to the mobile money operator.

In addition, in 2008, BSP has passed a circular that provides that only one valid ID can be accepted as far as KYC requirements are concerned; KYC is performed before opening of mobile money account and that cash in and cash out transactions can only happen upon filling of the KYC forms. Furthermore, prior to the SMART money and GCash (operated by Globe Telecom) agents becoming agents (for cash in and cash out), they have to obtain remittance licence from the Central Bank of Philippines and attend AML (Anti Money Laundering) seminar for at least one day. However, the telecommunications companies are responsible for their agents.

In 2009, following new regulations issued by BSP, SMART Money has adopted ‘Bank led model’ with BDO (bank) as issuing bank and another player- in the market - Globe following ‘non-bank based model’. As far as legal framework is concerned, in Philippines, 2000 Electronic Commerce Act recognised the validity of electronic transactions and existence of electronic signatures, and provided for the framework of prosecution in e-commerce crimes. The Central Bank of Philippines-BSP had at the same time issued circulars part of, discussed above which covered on approvals on mobile money operators, KYC and Anti Money Laundering, security procedures and consumer protections. The existence of the above legal framework created conducive environment for the smooth development of mobile banking in Philippines.

4.3.2 India

In India, mobile banking has been like an extended arm of the convectional banking, this implies that only banks can offer mobile banking, therefore the governing rules and regulations on the banks prevail on the banks offering mobile banking as could be the case for such banks that do not offer mobile banking. The position of Reserve Bank of India on mobile banking model is elaborated herein below: “Once you authorise a mobile company to accept deposits or be a part of the payment system, you should have control over its activities, you should have access to its database, which as a regulator, I will not be able to get. Whereas, if it is part of the bank-led model, all the transactions will be through the core banking system and regulators can have control.” [26]

Information Technology Act, 2000[27] has legally recognised the electronic transactions and the same Act amended Reserve Bank of India Act 1935 (Central Bank of India) to allow it to regulate electronic transfers between banks and between banks and financial institutions. Information Technology (Amendments) Act, 2008, has provided for the protection and preservation of sensitive personal and private data or information. Financial information on bank account, debit or credit card, payment systems (covering mobile banking) constitutes sensitive personal private

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[26] G. Gopalakrishna, Director of the Reserve Bank of India.
[27] Section43A- Information Technology (Amendments) Act, 2008

data. The Act obligates any one handling such information or data to do so with reasonable security practices and procedures. Should anyone in the course of handling such data be negligent and cause a loss to the aggrieved party, that negligent person will be exposed to civil liability. Section 43A has clearly defined reasonable security practices and procedures as below:

"(ii)"reasonable security practices and procedures" means security practices and procedures designed to protect such information from unauthorised access, damage, use, modification, disclosure or impairment, as may be specified in an agreement between the parties or as may be specified in any law for the time being in force and in the absence of such agreement or any law, such reasonable security practices and procedures, as may be prescribed by the Central Government in consultation with such professional bodies or associations as it may deem fit."

Furthermore, Information Technology (Amendments) Act, 2008[28] has provided on legal definition of intermediaries: ""Intermediary" with respect to any particular electronic records, means any person who on behalf of another person receives, stores or transmits that record or provides any service with respect to that record and includes telecom service providers, network service providers, and internet service providers, web hosting service providers, search engines, online payment sites, online-auction sites, online market places and cyber cafes". From the this definition, it is very much clear that all mobile banking service providers qualify as network service providers and therefore will be treated as intermediary under Section 2(1)

[28] Section 2(1)(w)- Information Technology (Amendments) Act, 2008

(w) of the Information Technology (Amendments) Act, 2008. Additionally, Information Technology (Amendments) Act, 2008 has provided for the exemption of liabilities on the intermediaries in certain situations:

"….. an intermediary shall not be liable for any third party information, data, or communication link hosted by him. (corrected vide ITAA 2008)

(2) The provisions of sub-section (1) shall apply if-

(a) the function of the intermediary is limited to providing access to a communication system over which information made available by third parties is transmitted or temporarily stored; or

(b) the intermediary does not-

i. initiate the transmission,

ii. select the receiver of the transmission, and

iii. select or modify the information contained in the transmission

(c) the intermediary observes due diligence while discharging his duties under this Act and also observes such other guidelines as the Central Government may prescribe in this behalf (Inserted Vide ITAA 2008)

(3) The provisions of sub-section (1) shall not apply if-

(a) the intermediary has conspired or abetted or aided or induced whether by threats or promise or otherwise in the commission of the unlawful act (ITAA 2008)

(b) upon receiving actual knowledge, or on being notified by the appropriate Government or its agency that any information, data or communication link residing in or connected to a computer resource controlled by the intermediary is being used to commit the unlawful act, the intermediary fails to expeditiously remove or disable access to that material on that resource without vitiating the evidence in any manner."

Explanation; for the purpose of this section, the expression "third party information" means any information dealt with by an intermediary in his capacity as an intermediary."[29] From the above, it can be said that since 'mobile banking service providers' qualify as intermediaries under the Information Technology (Amendments) Act, 2008; to be eligible for exemptions, they have to comply with section 79(2) and (3) as stipulated above.

4.3.3 United States of America

Though in United States of America, there are no specific laws on mobile banking, the existing laws and regulations somehow facilitate the operations of mobile banking. The Electronic signatures Act and E-Sign Act passed in 2000 have given recognition of validity of contracts concluded using electronic signatures; also Uniform Electronic Transactions Act needs to be complied with by the banks that wish to operate mobile banking.

In 1999, the Gramm-Leach-Bliley Act (GLB Act) was enacted with intention of enhancing competition for financial products and services; under section 502-509 of the Act, regulation P was promulgated, which obligated banks to safeguard customer

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[29] Section 79 Information Technology (Amendments) Act, 2008

data and information and in particular during transmission of mobile banking transactions. Additionally, the Bank Secrecy Act and OFAC want the banks that offer mobile banking to safeguard against misuse by elements that would cause or are likely to cause terror in United States and other parts of the world.

The Federal Financial Institutions Examination Council (FFIEC) has been issuing guidelines which require banks to provide enough safeguards to the consumers using wireless banking facilities and for the banks to have sound internal controls as far as wireless banking is concerned. Hacking has been one of the challenges in mobile banking, on that front, FFIEC guidance has insisted on encryption and customers should be advised that as they acess their accounts off the bank systems, there are risks of exposing their sensitive information to the wrong persons. The FFIEC guidance further provides that banks should advise their customers on sound practices in handling their PIN codes, downloading of mobile banking applications from their banks, avoid letting their mobile phones in the hands of strangers and switching off their bluetooths.

4.3.4 South Africa

The Central Bank of South Africa is the regulator of banking and financial systems in South Africa and it has been playing active role in the regulation and development of mobile banking. The Reserve Bank of South Africa Act has given mandate to the Central Bank to regulate payment systems in South Africa: to "perform such functions, implement such rules and procedures and, in general take such steps as may be necessary to establish, conduct, monitor, regulate and supervise the payment, clearing and/or settlement systems" [30]

To enhance national payment system in South Africa, National payment system Act was passed in 1998 "to provide for the management, administration, operation, regulation and supervision of payment, clearing and settlement systems in the Republic of South Africa; and to provide for connected matters" [31]**.**

The Bank-SARB has issued two circulars which have direct bearing on mobile banking in South Africa: position paper on Electronic Money 1999 which was amended in 2006 and of late amended in 2009; Bank circular 619 which allow banks to open mobile banking accounts without going through strict KYC requirements, such accounts will have defined transaction and balance limits-which is Rs 1,000 a day. Position paper 2009 has given the definition of electronic money "electronic money is defined as monetary value represented by a claim on the issuer which is stored on an electronic device and which is widely accepted as a means of payment by persons other than the issuer." [32]

The above definition of electronic money implies that money stored in mobile phone qualifies as electronic money. According to Position paper 2009, only banks can issue electronic money, therefore electronic money will be supervised and regulated by the Reserve Bank of South Africa. In South Africa, there are WIZZIT and MTN

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[30] Section 10(1)(c)(i) of the SARB Act no. 90 of 1989
[31] National Payment System Act no. 78 of 1998

[32] Section 3.1.1 position paper on Electronic Money 1999

Mobile money in which both banks and non-banks work together in partnership, integrating the bank account number with mobile number; thus enabling customer to use the phone in effecting mobile financial transactions. MTN Mobile Banking is run in partnership between Standard Bank of South Africa and MTN mobile offering mobile banking account; WIZZIT is mobile phone banking that does not need users to have prior bank account and users can be also offered Maestro Debit cards to be used at any ATM or retailers[33].

4.3.5 Kenya

Kenya is the country where non-bank based model of mobile banking became very successful; SAFARICOM-telecom Company was the pioneer in the M-Pesa mobile system. Having started as pilot project in 2005, M-Pesa was commercially launched in the year 2007 that followed prior authorisation from the Central Bank of Kenya. The launch of M-Pesa did unfortunately coincide with period of rioting and violence in Kenya after the general elections; most people were in fear and there was a need to have means to move money and have daily supplies in both rural and urban areas, it is M-Pesa which facilitated this, as it was not necessary for people to leave safety of their homes. This trend helped M-Pesa to take off. [34]

The unbanked people using pre-paid phone facility have been the main target of M-Pesa because of the simple process involved in the registration for M-Pesa account. M-Pesa account holder can easily deposit, withdraw and transfer money to both M-

[33] http://www.nextbillion.net/activitycapsule/wizzit
[34] Leon J. Perlman, chairman of the Wireless Application Service Providers' Association of South Africa the expert on mobile money

Pesa account holders and account holders in other mobile banking systems. Withdrawals, deposits have been quite simplified through the network of M-Pesa agents. According to Central Bank of Kenya's statistics, the number of bank accounts increased significantly between 2005 and 2008 and this is due to the fact that many unbanked people joined the formal banking sector after gaining experience through Safaricom's M-Pesa.

Apart from huge demand for mobile payments service, the success of M-Pesa in Kenya has been very much attributed by deliberate efforts taken by Central Bank of Kenya-CBK. Under Kenya's Banking Act (Revised) 2009, "banking business" means -

"(a) the accepting from members of the public of money on deposit repayable on demand or at the expiry of a fixed period or after notice;

(b) the accepting from members of the public of money on current account and payment on and acceptance of cheques; and

(c) the employing of money held on deposit or on current account, or any part of the money, by lending, investment or in any other manner for the account and at the risk of the person so employing the money;" [35]

Based on the above definition of banking business in Kenya, precautionary measures were taken from the very beginning of M-Pesa system that Safaricom does not perform the banking operations of accepting deposits and investing or lending the deposits. Funds collected by Safaricom agents are deposited into bank account (trust

[35] Section 2(1) of Kenya Banking Act (RE) 2009

account) held with Commercial Bank of Africa, the funds in the trust account do not fall under the control of Safaricom, they are regulated by Central Bank of Kenya under the Banking Act. The trust account provides mainly legal protection to the M-Pesa participants/beneficiaries.

In 2008, Kenya Communications (Amendment) Act 2008 was passed extending the functions of Communications Commission of Kenya to cover electronic transactions and giving recognition to the validity of such transactions as provided herein below:" The functions of the Commission in relation to electronic transactions shall be to: facilitate electronic transactions by ensuring the use of reliable electronic records; facilitate electronic commerce and eliminate barriers to electronic commerce such as those resulting from uncertainties over writing and signature requirements; promote public confidence in the integrity and reliability of electronic records and electronic transactions; foster the development of electronic commerce through the use of electronic signatures to lend authenticity and integrity to correspondence in any electronic medium; promote and facilitate efficient delivery of public sector services by means of reliable electronic records; and develop sound frameworks to minimize the incidence of forged electronic records and fraud in electronic commerce and other electronic transactions." 36

Furthermore, Kenya Communications (Amendment) Act 2008 provided a framework enabling Communications Commission of Kenya (CCK) to work together with the Central Bank of Kenya in the promoting growth and development of payment

[36] Section 83c of Kenya Communications (Amendment) Act 2008

systems and in particular M-Banking. Additionally, under the National Payment systems Act 2011, the Central Bank of Kenya has been entrusted with powers to regulate payment system in Kenya as stipulated below in section 17 (1): "….the Central Bank shall, in the exercise of its role of formulating and implementing such policies as best promote the establishment, regulation and supervision of efficient and effective payment, clearing and settlement systems, exercise all the powers and perform all the functions conferred and imposed on it by this Act, the Central Bank of Kenya Act, Cap. 49 and any other law".

Furthermore, section 22 of the National Payment systems Act has given powers to CBK to advise and give directions: "22. (1) The Central Bank may, from time to time, issue directives to any person regarding a payment system or a payment instrument on the application of the provisions of this Act …" Based on the CBK'S mandate in payment systems, the regulator issued regulations in 2011 which had the effect of increasing the core capital of any payment service provider other than licenced banks to Ksh 10 millions. The rules also proposed to revise the cash limit to Ksh 100,000.00 from Ksh 70,000.00; the regulations also introduced the requirement for payment service provider to apply to Central Bank of Kenya and upon approval, the provider can start operations. As per the regulations, customer's complaints against payment service provider must be addressed within 60 days.

Of late, CBK is contemplating drafting new rules on Mobile money that aims at checking on Money laundering activities. Any mobile transactions in excess of Ksh 100,000.00 will be investigated for Anti Money laundering and should the weekly limit be in excess of Ksh 300,000.00, the same will be subject to Anti Money laundering. The mobile money operator will be also required to report their mobile transactions to the regulator. Such reporting will be monthly and in such a form and such times as will be decided by the Central Bank of Kenya.

According to the Central Bank of Kenya, such regulations intend to reduce risks on mobile payments which may be exposed to Money laundering and financing of the terrorists. However, it is felt that such regulations will have effect of reducing mobile money transactions and ultimately income streams from mobile payments could be narrowed.

4.3.6 Pakistan

State bank of Pakistan is the Central Bank of Pakistan which is the regulator of all banking and financial institutions in Pakistan. In Pakistan, there are three models of mobile banking: [37] bank focused model which banks uses the infrastructure of mobile operator to offer mobile banking services; bank led model in which banks partner with telecommunications companies making use of agents to offer mobile banking services; lastly, non-bank led model in which the telecommunications companies offer mobile financial services excluding the banks.

Though the legal framework on mobile banking in Pakistan is not much advanced, the existing laws partly serve the purpose. The Electronic Ordinance 2001 has

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[37] http://www.sbp.org.pk/bprd/2007/Policy_Paper_RF_Mobile_Banking_07-Jun-07.pdf

allowed an appropriate authority to accept payment in electronic form[38]: "… Any appropriate authority should accept issue, create, retain, and preserve any document in electronic form or effect monetary transaction in electronic form… make such payment, procurement or transaction in electronic form". However, the legal framework in Pakistan has some shortcomings on operations of mobile banking: [39] violation of Banking Companies ordinance (1962), in particular when the non-banks participate in the provision of mobile banking services; again where non-banks offer mobile banking KYC and AML laws appear not to be properly followed by the mobile money operators. [40]

4.4 Global Challenges of Mobile Banking

Despite the significance of mobile banking system in some parts of the world, the system has faced a number of challenges. "Indeed, mobile money is still so new that regulators around the world are debating the fundamentals." [41] Till date, there is no in place global jurisprudence on mobile banking. On the other hand, it is said that "allowing consumers to access banking networks using a cell phone or similar mobile device can greatly increase various security, and compliance risks. As a result, before implementing a mobile banking program, banks should thoroughly review the legal risks" [42].Some of the challenges of mobile banking are discussed below:

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[38] Section 16 (1)(2) of Electronic Transactions Ordinance 2001
[39] http://www.sbp.org.pk/bprd/2007/Policy_Paper_RF_Mobile_Banking_07-Jun-07.pdf
[40] Ibid
[41] Knowledge@Wharton and Ernst & Young (2013-04-10). Mobile Banking: Financial Services Meet the Electronic Wallet (Kindle Locations 652-653). Knowledge@Wharton. Kindle Edition.
[42] Mobile Banking Legal Considerations by Justin B. Hosie and G. Clinton Heyworth Chambliss, Bahner & Stophel, P.C.

4.4.1 Know Your Customer –KYC Policy

One of the very challenging issues in mobile banking is ‘Know Your Customer’ regulations. Under KYC regulations, customer has to establish his or her identity before using the service. Should the same documents used in the opening of the bank account be used in the opening of mobile account, this is a question which is still unanswered in the mobile banking industry! So far, in most countries where mobile banking is successful, there is no agreed document that could be used to meet KYC requirements. In the ‘non-bank based model’ of mobile banking, the process of opening mobile account does not require much information on the customer.

In Philippines during earlier days of mobile banking, more than 20 different types of IDs could be used to register mobile account holders.[43] One rationale for requiring least KYC requirements in ‘non-bank based model’ of mobile banking is small transaction volumes involved; however, even in ‘bank-based model’, there are small transaction volumes. The thorny issue under KYC is that where there are minimal documents required for KYC requirements, the mobile money system has very much advanced, and where there is much insistence of full KYC requirements, the mobile banking system seems to be not much successful.

This is evidently clear with the case of India, despite its higher population, the mobile banking is not very much advanced because of ‘bank based model’ that lays emphasis on full KYC requirements; relatively, M-Pesa in Kenya has managed to

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[43]http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/06/Philippines-Case-Study-v-X21-21.pdfUnited

attract millions of users because of its non-bank based model that is not so strict on KYC requirements.

4.4.2 SIM Card Registration

SIM card registration is another challenging issue in mobile banking, in the situation where there is no agreed standard on KYC requirements, in particular what document has to be used to identify a person wishing to use mobile money, the same problem will be on the SIM card registration. What document has to be used in registration of the SIM card is still a puzzle. Different countries have different rules and regulations on SIM card registration.

Registration of SIM card in some countries that operate mobile banking has been a very recent issue that implies mobile banking had been operational without SIM card registration. It is only during the last few years that legislations were passed to enforce SIM card registration. It is worth noting how significant the registration of SIM card is, as far as mobile banking is concerned because it is the SIM card that facilitates the process of creation of mobile banking account, in the absence of SIM card, it is not possible to create mobile banking account. In addition, the security of mobile account is very much linked to the SIM card. Should criminal snatch one’s SIM card and manage to access the pin codes, definitely may access funds if any in the mobile banking account.

In Kenya, the registration of the SIM card started in July 2010 following President Mwai Kibaki’s directive as way to curb raising wave of acts associated with terrorism, money laundering, drug trafficking, SIM card thefts and other anti social elements.[44] Philippines has been left behind in the SIM card registration, with more than 85 millions mobile users by 2011,[45] there is no yet legislation on SIM card registration. Attempts by House of Representatives to pass SIM card registration bill[46] countered a court injunction thus putting the whole exercise of SIM card registration in dilemma.[47]

4.4.3 Anti-Money Laundering Policy

Anti-Money Laundering is an area where the banks and financial institutions as well as their regulators have been for decades fighting the menace; mobile banking system as new financial and technological innovation is also exposed to money laundering. “Mobile banking presents new opportunities for criminals to launder money and finance terrorism. Money launderers and terrorist financiers may gain access to a mobile banking account by stealing a mobile phone with inadequate security features, by hacking a wireless network transferring mobile financial data, or when an authorised account holder purposefully provides them access”[48].

It is very essential that for the players in the mobile banking to integrate their systems with AML and ‘counter-terrorism financing’ procedures and policies as way to mitigate risks and avoid being conduits to money launderers and terrorists. “Financial institutions must, inter alia, develop policies and procedures to detect and prevent money laundering and submit suspicious activity reports on transactions

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[44] http://www.cck.go.ke/news/2010/news_21june2010.html
[45] http://www.abs-cbnnews.com/nation/01/27/11/sim-card-registration-eyed-anti-terror-campaign
[46] http://www.congress.gov.ph/download/basic_15/HB01991.pdf
[47] http://www.abs-cbnnews.com/nation/01/27/11/sim-card-registration-eyed-anti-terror-campaign
[48] **Duggal, Pavan (2013-05-29). Mobile Banking & Mobile Law (Kindle Location 629). Saakshar Law Publications. Kindle Edition**

suspected of laundering money through such institutions". [49] Countries like Philippines, Kenya, and South Africa have somehow aligned their mobile banking systems to comply with Anti Money laundering procedures and policies. Despite the challenge of Anti-money laundering mobile banking technology has inbuilt capability to record, trace and track transactional records which help to prevent and deter anti-money laundering and other criminal activities.

4.4.4 Data Security

Transmission and storage of personal data is one of the challenges of mobile banking; there are no yet agreed standards on the transmission and data storage in the world. Different jurisdictions have different rules and regulations on the data transmission and storage. In mobile banking, data move through different hands, it may be from the bank (if it is initiated by bank account holder) or from mobile phone of M-Pesa account holder through telecommunications company to another bank and ultimately may end up to another mobile banking account holder or utility company or mobile banking agent; in such scenario what is legal protection afforded to such data, what is the responsibility of each party involved in the chain is still unanswered question.

In USA, the GLB Act and Interagency Guidelines Establishing Information Security Standards have imposed obligations on the banks and financial institutions to develop, monitor and adjust their safeguards on protection of the security, confidentiality, and integrity of customer data.

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49 **Duggal, PAVAN (2013-05-29). Mobile Banking & Mobile Law (Kindle Location 632-633). Saakshar Law Publications. Kindle Edition**

4.4.5 Data Encryption

There is issue of encryption as far as mobile banking is concerned; to initiate and process mobile banking transactions involves the whole process of encryption by mobile account holder or agent and in some cases banks concerned. So far, there is no agreed legal and regulatory policy on the encryption in the world, each jurisdiction follows own rules and regulations on the subject. In the situation, where customer transmits data either from his or her bank account or mobile money account, there are legal risks involved should the unauthorised parties access the data despite the encryption, whether the bank or mobile account holder or telecommunications company is liable or not is still unclear issue in some jurisdictions.

4.4.6 Data Authentication

As far as service providers are concerned, there is challenge of service provider authentication. “Different service providers across the world are adopting different methodologies for authenticating mobile banking transactions. Lack of an international uniform approach to service provider authentication further tends to complicate the entire scenario”. [50]

4.4.7 Liability for Fraudulent Use

There is issue of liability in case of fraudulent use of mobile banking: in situation where physical mobile device is lost, misplaced and fall into wrong hands and the

50 **Duggal, Pavan (2013-05-29). Mobile Banking & Mobile Law (Kindle Location 410-4123). Saakshar Law Publications. Kindle Edi**

same is fraudulently used where the liability lies is an issue; is it the owner of the mobile account or telecommunications company or the bank (in case of bank based model). Where the technology could provide different levels of security rather than relying on the PIN codes, it might have been easier to determine where the liability could be lying. It is a challenge on the banks and telecommunications companies to have proper methodologies that may deter fraudulent practices.

4.4.8 Cybercrime Threats

Cyber crimes have been on the rise across the globe and the crimes have been taking various forms and it has been difficult to trace and nab the culprits to face the justice. Cyber crimes and criminals are borderless, a criminal may be located not in the country of the victim which makes it difficult to prove. Cybercrimes have caused huge financial losses to the companies, individuals and countries as a whole. It is estimated that USD 245 million had been lost in five East African countries due to cybercrimes.[51] Mobile banking has not been spared in this menace and it appears to be one of the soft targets to the criminals.

Interception of wireless signals-hacking has been one of the challenges in mobile banking; hackers have been attempting to intercept financial data transmitted through wireless signals. In 2009, mobile attackers attempted to attack Android and Mobileme users; however such attacks were intercepted by Google and Apple systems[52].

51 **http://afridigital.wordpress.com/2013/06/04/mobile-banking-and-cyber-crime-in-africa/**

52 **Infoworld, Feb 17, 2009 12:21 pm,** http://www.pcworld.com/article/159665/article.html?tk=nl_dnxnws

4.4.9 Consumer Protection

Consumer protection has not been addressed thoroughly in the mobile banking; there have been tendency by the banks and telecommunications companies operating mobile banking to disclaim liability on missed payments and when mobile transactions are affected by criminal activities as well as unauthorised use. Missed payments may happen when customer' payments instructions fail to be processed due to either failure of the banking system (in bank based model) or telecommunications company system or the phone enters no signal zone; this situation may cause customer to incur late payment fees or penalties. Who will be liable in case of missed payments still remains unsolved issue; definitely, customer finds himself or herself bearing the whole burden not for his or her faults.

In USA, the FFIEC Guidance recommends to the mobile banking entities to inform customers that "they may encounter telecommunication difficulties that will not allow them to use the wireless banking products and services." In USA, under Electronic Fund Transfer Act, in case of failure to effect transfer, the financial institution will be held liable for damages.[53] In situation, where the customer transmits data through his or her mobile from bank account, hackers may attempt and manage to access such data and cause a loss; tendency of the mobile banking entities has been to run away from any arising liability.

4.4.10 Regulatory and Compliance Issues

Globally, there is no agreement as to how mobile banking should be regulated, in

53 **§ 910. Liability of financial institutions (1) of Electronic Fund Transfer Act**

some jurisdictions, it is regulated by the financial regulator-central banks in other it is telecommunications regulators and in some a mix of financial and telecommunications regulator. On the other hand, some pockets argue that it should be regulated by completely separate regulator, that is, neither financial regulator or telecommunications regulator should regulate the mobile banking but a neutral regulator.

The above situation gives rise to the situation of regulatory uncertainty, however in countries where mobile Banking has been successful, like Kenya we have seen how both the regulators –financial regulator (CBK) and communications regulator (CCK) can work together, and such model has very much contributed to the growth of mobile banking in Kenya. This model supports the argument that "Mobile payments should not be seen as a turf war between the financial and telecommunication sectors but as a complement to existing financial services..." [54]

4.4.11 Outdated Legal and Regulatory Regimes

Mobile banking technology has been engulfed in the midst of legal and regulatory regimes which have been very much outpaced by the fast growing wave of innovations. Most jurisdictions do not have proper laws that match the technology; if there are ones, there are patched in various pieces of legislations making it had to digest, nevertheless they only serve a part of the innovation.

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[54]. Mobile payments: Will Colombo keep its leadership in South Asia? By Muhammad Aslam Hayat: http://sundaytimes.lk/090712/FinancialTimes/ft323.html

4.4.12 Training of Agents

One of the success factors behind the mobile banking is the network of agents, which has outreached beyond the usual network of the convectional banking. It is through the agents, the mobile banking services have managed to reach the unbanked portion of the population; for instance M-Pesa in Kenya has a network of more than 40,000 agents. [55] However, one of the challenges of mobile banking is that a good number of its agents are not well trained on the key elements of mobile banking. It is the agents, who initiate registration of mobile account users, perform cash in and cash out, but they have not been trained on the basic KYC regulations and Anti Money Laundering laws.

4.5 The Advent of Mobile Banking and its Significance to the Country

Financial systems in Africa generally lag behind those in other developing economies, despite the fact that many significant improvements were implemented within the past decades.[56] It is estimated that only few people in Africa have access to formal banking services. According to World Bank statistics, 24% of the adults in Sub-Saharan Africa have account at formal financial institution;[57] therefore the level of account penetration is on the lower side.

There are a number of factors which contribute to that adverse trend: one of such factor is cost, is it said that the cost of opening bank accounts are on the higher side;

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[55]. http://www.safaricom.co.ke/personal/m-pesa/m-pesa-agents

[56] Financial Inclustion in Africa, an overview-Asli Demirguc and Leora Klapper, The World Bank Development Research Group,June 2012

[57] www.worldbank.org/globalfindex

another factor is distance, it is a known fact that majority of people in Africa live in the rural areas and most of financial services are available in the urban centres, thus denying the rural population the access; documentation is another factor, opening of formal bank accounts requires a number of documents which may not be easier for most of the rural people and urban uneducated to obtain and if they will able to obtain, it is after a tedious hard work.

The recent mobile banking innovation has drastically allowed millions of people in Africa who were once excluded from the formal financial system to do financial transactions at cheaper rates and more reliably. More than 68% of adults in Kenya use mobile banking service through M-Pesa. [58] The history of mobile banking in Tanzania goes back to the last 6 years, when a local company-E-Fulusi launched mobile banking service in partnership with local bank-FBME Bank Limited. Retail brand of E-Fulusi mobile service was known as Mobipawa; however the service did not last longer. M-Pesa by Vodacom Tanzania was the first formal mobile banking service that was launched in 2008 (just one year after M-Pesa was launched in Kenya by Safaricom), thereafter other mobile companies-Airtel, Tigo and Zantel followed.

In 2009, NMB Plc was the first bank to deploy its mobile banking service and other banks including CRDB, KCB, AKIBA and some more followed. In the beginning, banks were serving their customers only; of late, banks serve non-bank account holders through their networks of ATMs as cash points. The entry of mobile banking

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[58] Ibid

service in Tanzania has significantly led to much positive effects in the country's economy in a number of ways:

4.5.1 Reaching the Unbanked

Mobile banking service has brought the rural population to the mainstream financial system, it is no wonder now the rural population is able to receive proceeds of the sale of their crops through mobile financial services thus saving the time and minimising the risks of thefts; on the same note, they are now able to transfer for purchase of agricultural inputs and other household items through their mobiles. [59]

4.5.2 Linkage to the Other Financial Services

Having linked to the mainstream financial system, now, once unbanked population feel the taste of formal sector and have started opening accounts with financial institutions and banks for other financial services and products including group loans and agricultural financing. Some Micro Financial institutions are piloting provision of credit through mobile financial services. [60]

4.5.3 Widened Range of Payments Systems

Through mobile banking, it is now possible for one to pay for various utilities, from water electricity, DSTV, air tickets, school fees; pensions (GEPF-Government Employees Provident Fund) can now be remitted through mobile services. Payments of government's taxes and fees can now be smoothly effected through mobile financial services. Salaries and other operational expenses of some SMEs are all

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[59] FSDT July 2012

[60] The Evolution of mobile financial services in Tanzania Opportunities and Challenges by Sosthenes Kewe and A.Mushi

routed through mobile banking.

4.5.4 Flow of Money into the Economy

Prior to the introduction of mobile banking in the country, it was very hard to establish how much money is in the informal sector as most rural population (who form the majority of country's population) were not linked formal financial system. According to the Central Bank of Tanzania estimates by September 2012, 1.7 trillion shilling transactions were made through mobile banking from 48 million transactions. [61]

4.5.5 Widely Distributed Network of Agents

Mobile money is driven by among other things a network of agents who make access of mobile money possible. Such wide distributed network of agents has made possible for the financial services to reach millions in the rural and other peripheral areas. It is estimated that there are about 138, 000 agents in the country. [62]

4.5.6 Economic Efficiency

Mobile banking has promoted economic efficiency by enabling transfers of fund, cash in and cash out transactions to be effected instantaneously as against traditional 'brick and mortar' banking which is characterised by bureaucracy and complex procedures in effecting customers' transactions. Mobile money transactions are less costly, reliable, and convenient (as mobile agents are just door step from homes)

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[61] Bank of Tanzania-BOT Quarterly Report September 2012

[62] BOT Governor's keynote address – Professor Benno Ndulu at 16th Conference of Financial Institutions 26th to 27th November 2012

than those of the banks. Mobile banking has created new areas of employment – agents, though their number is still low, still there is scope for more employment opportunities.

4.5.7 Catalyst for the Introduction and Adaptations of Other Innovations

Because of the success story of mobile banking in the world and Tanzania in particular, the Central Bank of Tanzania (BOT) is contemplating introduction of Agency Banking in the country.[63]It is likely that the network of mobile banking agents might be used as agents in the Agency or Branchless Banking.

4.6 Mobile Banking-Key Players in Tanzania

In Tanzania, mobile banking services are to the greater extent offered by Mobile Network Operators (MNOs), although there are also some banks which also offer mobile banking services. The MNOs which are very active in Mobile banking are Vodacom Tanzania through M-Pesa, TiGo Tanzania through Tigo Pesa, Airtel though Airtel Money and Zantel through Easy Pesa or Z-Pesa. The banks offering mobile banking include NMB Bank Plc, CRDB Bank Plc, Akiba Commercial Bank, Exim Bank Tanzania Limited, Amana Bank, Standard Chartered Bank Tanzania Postal Bank, Kenya Commercial Bank and Commercial Bank of Africa. In brief, Tanzania is a market where both models of mobile banking-'non-bank based model' and 'bank based model' co-exist, however 'non-bank based model' run by MNOs is more popular with wider coverage than 'bank-based model'.

The key services offered MNOs through mobile banking include money transfers,

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[63] Ibid

cash in /cash out, airtime top ups and utility bills payments (water, electricity, DSTV etc) and payments of taxes and other government fees. Banks offer almost the same services as MNOs with exception that bank offer money transfers to bank account holders and non-bank account holders. However, mobile banking services offered by the banks are still not very popular to those offered by the MNOs because of the restricted access through limited branch, ATM network and strict KYC issues.[64] Brief overview of mobile banking services offered by MNOs and banks is discussed below:

4.6.1 Mobile Network Operators -MNOs

4.6.1.1 M-Pesa

It is the leading MNO in offering mobile banking services having started back in 2008, a year after successful launch of M-Pesa in Kenya offered by Safaricom. [65] It is estimated that about 53 percent of mobile banking users use M-Pesa services. [66] MNO offer a range of services include money transfers, cash in cash out, payments for utilities, airtime top ups. The MNO has facilities that enable receipt of funds sent through Western Union and over 65 countries in the world can remit directly to M-Pesa accounts.

In addition, M-pesa can also facilitate payments for the insurance (Faraja Insurance in partnership with Heritage Insurance Tanzania Limited), payments of school fees to some select schools, colleges and universities. Of late, M-Pesa has launched its

[64] FSDT/NMB Review, 2012

[65] http://www.vodacom.co.tz/mpesa

[66] Mobile Money in Tanzania: Use, Barriers and Opportunities, http://www.intermedia.org/wp-content/uploads/FITS_Tanzania_FullReport_final.pdf

‘Smart Banking’ brand in Swahili it is known as ‘M-Pesa Popote’ that enables cash deposits to the Bank through M-Pesa account and cash withdrawals from the banks through M-Pesa account; Vodacom has partnered with 9 nine banks-NMB Bank, CRDB Bank, Standard Chartered Bank Tanzania, Tanzania Postal Bank, Akiba Commercial Bank, Commercial Bank of Africa, Amana Bank, Exim Bank Tanzania and Diamond Trust Bank Tanzania. [67]M-Pesa has also partnered with banks to facilitate the banks to offer mobile banking services as their telecommunications network service providers

4.6.1.2 Tigo Pesa

Tigo Tanzania launched its mobile banking services in 2010 offering money transfers, cash in cash out, airtime top ups and payments for utilities-water, electricity, TV connections-DSTV, Zuku; pension payments to GEPF (Government Employees Provident Fund); air tickets- PrecisionAir and Fast jet. It is estimated that about 18 percent of mobile banking users use Tigo Pesa services.[68]Tigo Pesa has also partnered with banks offering mobile banking services as their telecommunications network service providers.

4.6.1.3 Airtel Money

Airtel Tanzania launched its mobile banking services in 2009 by then operating as Zain with its Zap Money. In 2012 Airtel re-launched its mobile banking services styled as Airtel Money offering money transfers, cash in cash out, airtime top ups

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67 http://www.vodacom.co.tz/mpesa

68 Mobile Money in Tanzania: Use, Barriers and Opportunities, http://www.intermedia.org/wp-content/uploads/FITS_Tanzania_FullReport_final.pdf

and payments for utilities-water, electricity, TV connections-DSTV; In addition, Airtel Money offer services for payments of school fees with select institutions and student 'loan application fees'; payment of government taxes and fees; payment for US Visa application fees; online purchases with online stores-www.kivuko.com and www.sailfv.com.

In addition, Airtel Money can facilitate transfer of money from Airtel Money account to bank account and vice versa; checking of balance and mini statement; payment of salaries and allowances to employees; payments of dividends and other statutory payments. It is estimated that about 13 percent of mobile banking users use Airtel Money services. [69] By January 2012, Airtel Money had more than 10,000 agents. [70] Airtel Money has also partnered with banks offering mobile banking services as their telecommunications network service providers.

4.6.1.4 Ezy-Pesa

Zantel Tanzania launched its mobile banking services in 2009 deploying the solution that was initially used by E-Fulusi, it was the third mobile network operator to offer mobile banking services that cover: money transfers, cash in cash out, airtime top ups and payments for utilities-water, electricity, TV connections-DSTV, StarTimes; payments for insurance in partnership with National Insurance Corporation; payments for medical cover; ferry tickets- Azam Marine Express. In 2012, Zantel had re-launched its mobile banking services and it is now known as Ezy-Pesa. Ezy-

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[69] Mobile Money in Tanzania: Use, Barriers and Opportunities http://www.intermedia.org/wp-content/uploads/FITS_Tanzania_FullReport_final.pdf

[70] http://www.commsmea.com/11783-airtel-has-10000-mobile-money-agents-in-tanzania/#.UfceS1pBxMs

Pesa has also partnered with banks offering mobile banking services as their one of telecommunications network service providers.

4.6.1.5.Banks

Though, there are 9 banks in the country which offer mobile banking services, only four banks which have a lead position in the field of mobile banking will be discussed in this paper:

4.6.1.6NMB Bank Plc

NMB Bank Plc. is the largest bank in Tanzania in terms of branch network with more than 150 branches and largest ATM network in the whole country. [71] NMB Bank Plc was the first bank to launch mobile solution popularly known as 'NMB Mobile' on 21st July 2009.[72] NMB mobile offers: funds transfers, payments for utilities-electricity, water and TV services, payments to the shop owners, restaurants and other service industry. It also facilitates 'check balance' and 'statement view' and payments of taxes to TRA. NMB Mobile service is linked to NMB customers' accounts. NMB has partnered with MNOs-Vodacom, Tigo, Airtel and Zantel in offering their mobile banking services to their customers who have mobile numbers with the MNOs at the same time hold bank accounts with NMB Bank Plc. NMB has also partnered with M-Pesa (Vodacom Tanzania) under its 'Smart Banking' (M-pesa Popote) to offer cash deposits and withdrawals to M-Pesa account holders through its network of ATMs.

4.6.1.7 CRDB Bank Plc

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[71] http://www.nmbtz.com/
[72] http://www.nmbtz.com/

It is the second largest bank in the country in terms of branch network with more than 100 branches of which 12 are mobile branches; the bank has more 250 ATMs of which 20 are depository ATMS. There are 900 point of sales terminals that are maintained by the bank; and the bank has partnership arrangement with a number of micro finance institutions. [73] CRDB bank mobile banking service is prominently known as 'SIM banking' launched in January 2012, it covers: funds transfers; transfers to mobile account holders; payments for utilities-electricity, water and TV services; payments of school fees with the select institutions. It also facilitates 'check balance' and 'statement view', 'notifications/alerts on Tembo cards, Visa and Master cards' usage and payments of taxes to TRA.

CRDB Bank Plc. has partnered with MNOs-Vodacom, Tigo, Airtel and Zantel in offering their mobile banking services to their customers who have mobile numbers with the MNOs at the same time hold bank accounts with CRDB Bank Plc. CRDB Bank Plc. has also partnered with M-Pesa (Vodacom Tanzania) under its 'Smart Banking' (M-pesa Popote) to offer cash deposits and withdrawals to M-Pesa account holders through its network of ATMs.

4.6.1.8 Akiba Commercial Bank

It is one of the privately owned local banks having started back in the year 1997; it has a network of 16 branches and 16 ATMs. Its main areas of speciality are SME & Institutional Banking and Retail & Microfinance Banking.[74]Akiba Commercial Bank launched its mobile banking service in April 2012 offering: funds transfers; transfers

[73] http://www.crdbbank.com/

[74] http://www.acbtz.com/

to mobile account holders; payments for utilities-electricity, payments of Taxes-TRA. ACB Mobile money offers also ‘check balance’ and ‘statement view’.

Akiba Commercial Bank has partnered with MNOs-Vodacom, Tigo, and Airtel in offering their mobile banking services to their customers who have mobile numbers with the MNOs at the same time hold bank accounts with Akiba Commercial Bank. Akiba Commercial Bank has also partnered with M-Pesa (Vodacom Tanzania) under its ‘Smart Banking’ (M-pesa Popote) to offer cash deposits and withdrawals to M-Pesa account holders through its network of ATMs.

4.6.1.9 EXIM Bank Tanzania Limited

Exim Bank Tanzania Limited is the sixth largest bank in the country with branch network of 25 branches and international presence in Comoro and Djibouti. Exim Bank launched its mobile banking in March 2013 and its services cover: funds transfers; transfers to mobile account holders; payments for utilities-electricity, water, DSTV, ZUKU and StarTimes; payments of Taxes-TRA; ‘check balance’ and ‘statement view’ and ‘credit/debit cards alerts’. [75]

Exim Bank has partnered with MNOs-Vodacom, Tigo, Zantel and Airtel in offering their mobile banking services to their customers who have mobile numbers with the MNOs at the same time hold bank accounts with Exim Bank. Exim Bank has also partnered with M-Pesa (Vodacom Tanzania) under its ‘Smart Banking’ (M-pesa Popote) to offer cash deposits and withdrawals to M-Pesa account holders through

[75] http://www.eximbank-tz.com/

its network of ATMs.

4.7 Legal Framework of Mobile Banking in Tanzania

Currently, the mobile banking operations in Tanzania cut across a number of legislations but the key one is Bank of Tanzania Act:

4.7.1 BOT Act 2006

From the above discussion in point 4.6 (Mobile Banking-key players in Tanzania), there are two models of mobile banking running in Tanzania; 'non bank based model' that is run by MNOs and 'bank based model' run by banks. The bank led model is easily regulated as it falls under the powers of Central bank-BOT; as such mobile banking services offered by banks are extensions of convectional banking (additional service delivery channel), therefore the very legal regime which govern the 'brick and mortar' banking would apply to the banks i.e. the Bank of Tanzania Act 2006 (BOT Act).

According to section 3 of Bank of Tanzania Act, bank is defined as: "bank" means an entity that is engaged in the banking business; Banking business is defined by section 3 of the Bank of Tanzania Act 2006: Banking business "means the business of receiving funds from the general public through the acceptance of deposits payable upon demand or after a fixed period or after notice, or any similar operation through the frequent sale or placement of bonds, certificates, notes or other securities, and to use such funds, in whole or in part, for loans or investments for the account of and at the risk of the person doing such business;"

Under section 5 (1) of Bank of Tanzania Act 2006, quoted herein below: “5.–(1) The principal functions of the Bank shall be to exercise the functions of a central bank …...to regulate and supervise banks and financial institutions including mortgage financing, development financing, lease financing, licencing and revocation of licences ……”

Furthermore, section 6(1) (a) of the BOT Act 2006 stipulates that: “6.–(1) The Bank shall– (a) regulate, monitor, and supervise the payment, clearing and settlement system including all products and services thereof;” The above sections of BOT Act 2006 have given powers to BOT to licence, regulate, supervise, and regulate the banks in Tanzania as well as clearing, settlement and payment systems in the country. However, in case of ‘non-bank based model’ the Central Bank-BOT in cooperation with TCRA –Tanzania Communications Regulatory Authority regulates the mobile banking services offered by MNOs.

Section 6 (1) of TCRA Act 2003 gives power to the communications regulator-TCRA:

“(i) to issue, renew and cancel licences; (g) to consult with other regulatory authorities or bodies or institutions discharging functions similar to those of the Authority in the United Republic of Tanzania and elsewhere;” Furthermore, section 6 (1) (b) of the Bank of Tanzania Act 2006 provides on the regulatory and supervisory functions of the Bank stating that: “(b) to conduct oversight functions on the payment, clearing and settlement systems in any bank, financial institution or infrastructure service provider or company.”

In May 2007, BOT under the powers conferred by the BOT Act 2006 issued Electronic Payment Schemes Guidelines which provided guidelines for any bank, financial institution or institution or company that offers direct or indirect electronic payment schemes services.[76] The guidelines did also give definition of "electronic payment schemes" to include among other things 'mobile banking'. [77]All banks and financial institutions and non-banking institutions (service providers and companies) intending to introduce or have introduced electronic payment schemes are expected to adhere to these Guidelines.[78]

Furthermore, the guidelines provide what is required to be followed before launching of Electronic Payment Scheme: Section 8.1 (1) "Subject to section 8.2 and 8.3 any bank or financial institution is eligible to operate an electronic payment scheme provided it meets the minimum requirements stipulated in section 9.0." Section 8.1(2) "A non-banking financial institutions (service providers and companies) that intends to offer electronic payment schemes which has money transfer and or deposit taking element shall submit its application through a bank or a financial institution.

Section 8.2 (1) "Notwithstanding section 8.1, a bank or financial institution shall submit a written application to the Bank for introducing and operating an electronic payment scheme or for expanding the scope of its existing electronic payment scheme or in the case of subsection 8.1(2) operating an electronic payment scheme

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[76]Part (1) 2.0 of Electronic Payment Schemes Guidelines
[77]Part (1) 3.0 of Electronic Payment Schemes Guidelines
[78]Part (1) 4.3 of Electronic Payment Schemes Guidelines

as an agent or partner of a non-bank financial institution." Section 9.1 (2) provides that banks and financial institutions to comply with the requirements of Part IV of these regulations.

A part of minimum requirements include: "(i) the operation of the electronic payment scheme shall not change or affect it operations, licensee or mandate; (xi) the electronic payment schemes shall provide an accurate and fully accessible audit trail of transactions from the origin of the payment instruction to its finality;(xii) the electronic payment scheme has the potential of providing services to a wider country outreach; (xiii) The participants to the electronic payment schemes are provided certainty of finality of their payments;"

The BOT guidelines provide for obligations by the institutions to ensure proper compliance with KYC principles; authentication methods to be used to ensure security and authenticity of the data, such methods may include PINs, passwords, smart cards, biometrics, and digital certificates[79]. For the Banks to offer mobile banking services, apart from getting licences from BOT to start banking business, they have to obtain another approval from BOT as regulator of payments system to run mobile banking, but will not be required to obtain any approval from TCRA. On the other hand, MNO that intends to offer mobile banking services will have to obtain a 'no objection letter' from TCRA and approval from the BOT as payments system regulator.

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[79] Part (1V) 11.2.1(i)(ii) of Electronic Payment Schemes Guidelines

4.7.2 Anti-Money Laundering Act 2006

Money laundering and counter terrorist financing are the global phenomena and the financial sector is very much exposed to the activities of money launderers and terrorist financing. As a part of fight against money laundering and terrorist financing, the government of United Republic of Tanzania enacted Anti-Money Laundering Act in 2006, the Act is aimed at prevention, prohibition of money laundering and disclosure of information on money laundering activities. The Act provided on the obligation upon reporting persons which include banks and other cash dealers to take reasonable measures to identify the true identity of any person with whom they intend to enter into business relationship.[80] Section 29 (1) of the AML Act 2006 has given powers to the Minister responsible for finance to make regulations that will facilitate better carrying out of the purposes and provisions of the Act; on that note, Anti Money Laundering Regulations were issued on 7th September 2012.

Detailed list of what documents required to be obtained from person intending to enter into business relationship with the reporting persons (banks and cash dealers) has been listed in the Anti Money Laundering Regulations, the list include: (a) full names and residential address; (b) date and place of birth;(c) nationality;(d) passport;(e) visa;(f) Tax Identification Number, if such number has been issued to that person; (g) any or all of, telephone number, postal and email address; and (h) signature and thumb print. [81] The above implies that any one intending to have bank

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[80] Section 15.1(a) (b) of Anti Money Laundering Act 2006-Tanzania
[81] Section 3.1 of Anti Money Laundering Regulations 2012-Tanzania

account (whether it is linked with mobile banking or not) or mobile money account with MNOs will have to comply with the Anti Money law and its regulations. Therefore, MNOs and banks have obligations to obtain the documents required before they enter into formal business relationships with their customers.

4.7.3 Law of Contract Act (Revised) 2002

The Law of Contract Act is another piece of legislation that is also related to mobile banking service; when customer intends to join mobile banking service shall have to furnish 'duly signed application form'. This is standard form that every customer has to sign to accept the terms and conditions of the mobile banking. According to section 10 of the Law of Contract Act "all agreements are contracts if they are made by the free consent of the parties competent to the contract, for a lawful consideration, with a lawful object..."

The current mobile banking structure in Tanzania relies predominantly on the agents-'mobile money agents' who enter into Agency agreements with MNOs to facilitate the key operations of mobile banking from transfers, cash in/cash out, initiation of registration for mobile money accounts. Section 134 of the Law of Contract Act defined" 'Agent' as a person employed to do any act of another or to represent another in dealings with third parties and the person for whom such act is done , or is so represented, is called the 'Principal'".

4.7.4 TCRA Act 2003

Tanzania Communications Regulatory Authority Act 2003 is another legislation that has a part to play in the regulation of Mobile Banking in Tanzania. All MNOs which are key players in the mobile banking services in Tanzania must obtain their licences from TCRA to run telecommunications networks. [82]

Furthermore, section 40 of the Act provides on the processes and procedures required in handling of complaints in relation to the goods and services being regulated by TCRA. The Authority shall establish a dedicated unit in handling customers' complaints and the authority shall have powers to order: order for specific performance; refunds, impose fines or any relief that it may find suitable and necessary. [83] Should any party to the complaint be aggrieved by the decision of TCRA, the party can appeal to the Fair Competition Tribunal within 21 days from the date of the decision of TCRA. [84]

4.7.5 The Electronic and Postal Communications Act 2010

One of the key provisions of the Act which is one way or another related to mobile banking is on 'registration of the SIMcard', this is quoted herein : Section 93.-"(1) Every person who owns or intends to use detachable SIM card or built-in SIM card mobile telephone shall be obliged to register SIM card or built in SIM card mobile telephone". The Act implies that any person prior to connection to any mobile phone, one has to register, a special form that contains required information has to be filled in by the customer. Once the SIM card had been registered, customer will be

[82] Section 6.1(i.) of TCRA Act 2003
[83] Section 41 of TCRA Act 2003
[84] Section 42(1)(2)(3)(4) of TCRA Act 2003

able to connect with other users and thereafter he/she can join in mobile banking services by registering a mobile account. To register SIMcard, user has "to provide identity card number or any other document which proves identity of the potential subscriber; and (iii) residential and business or registered physical address, whichever is applicable." [85]

Of course, this legislation was passed in 2010, at the time when customers had already started using mobile connections, grace period of almost one year was given for the existing customers to registration and the response has been positive. The Act stipulates that failure to register will lead to disconnection and imposition of fines or 3 months imprisonment; [86]At the same time, if one provides false information at the time of registration, then will be liable to fine or one year imprisonment.[87]

4.8 Research Findings Analysis and Presentatation

This chapter specifically seeks to analyse the findings collected from the field of study by testing the assumption that was set prior by the researcher. Also it tries to answer the hypothesis using findings and answers from the field data. Then, it intends to have in- depth observations on the findings examining the extent to which the emergence of mobile banking in Tanzania has brought legal and regulatory challenges in the current legal and regulatory frameworks and how the same need to be addressed.

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[85] Section 93(2) of The Electronic and Postal Communications Act 2010
[86] Section 131 of The Electronic and Postal Communications Act 2010
[87] Section 130 of The Electronic and Postal Communications Act 2010

4.8.1 General Observations and Hypothesis Testing

The research was conducted under the auspices of one hypothesis which need to be proved as it stated that: ‘The emergence of mobile banking in Tanzania has brought a number of legal and regulatory challenges in the current legal and regulatory frameworks that need to be addressed in the right manner’.

4.8.2 Analysis of Findings

Findings have been analysed by way of testing hypothesis to the data gathered from the field and documentary sources. Data were obtained from public documents, books (hard copies and online books) conducting interviews, internet (websites and links) as well as going through some academic papers:

4.8.3 From Municipal Laws

Mobile banking in Tanzania has developed without a ‘National Payment Systems Act’, though, BOT Act 2006 has provided on the role of BOT in the regulation of payment systems[88], the Act has not adequately addressed defined roles of BOT as a payments systems regulator. It is well understood, the good intention of the BOT to allow operations of mobile banking because of its potential to bring financial services to the poor and unbanked as well as outreach the remotest parts of Tanzania, absence of clear and comprehensive guidelines on the mobile banking has left most of the key elements of the innovation not addressed.

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[88] Section 6.1.(2) of BOT Act 2006

The existing Electronic Payment Schemes have given general definition of 'electronic payment schemes' to include mobile banking, however there has not been at all definitions on matters relating to mobile banking and mobile banking itself. The absence of such definitions has rendered the operations of mobile banking to run without adequate legal framework and protection.

The present practice whereby MNOs which operate or intend to operate mobile banking services to have 'Trust account' with commercial banks equivalent to the deposit in mobile money is a very crucial thing, nevertheless, the same has not been addressed in the guidelines; because of its sensitivity it should have been addressed in 'black and white' in the guidelines. AML Act 2006 and its subsequent amendment in 2012 which has provided on issues of identification and role of reporting persons in the process of identification; of reporting persons which included banks and other entities, MNOs and their network of agents have not been any where included and defined in the Act of 2006 and the subsequent amendment.

In the country like Tanzania where both models of mobile banking co-exist, the recipients of mobile money can obtain funds initiated through MNOs or from the Banks and the agents are the parties who disburse the funds; non inclusion of either MNOs or agents as cash dealers has left a lot of unanswered questions in the midst of technology which is fast growing and could be potentially exposed to the money laundering and terrorist financing.

The success of mobile banking relies on the active part to be played by the agents; and MNOs have to enter into agreements with agents for the provision of services of mobile money services. However, a number of MNOs disclaim their liabilities for the acts of the agents in the course of their dealings. Under M-Pesa terms and conditions, Vodacom is not responsible for the acts of the agents; this is misleading to the general public as far as the agents are concerned they handle the transactions for M-Pesa run by Vodacom. The practice is contrary to the clear definition of Agent as per Law of Contact Act applicable in the country. [89] Moreover, there are no clear guidelines on the regulation of the agents, whether they fall under BOT regulatory regime or TCRA.

TCRA Act 2003, in its section 40 has provided on dispute resolution processes and procedures which to the greater extent relate to the telecommunication services; mobile banking services are partly offered by banks and MNOs which have no clear procedures on handling of complaints, whether TCRA (telecoms regulator) is the right forum to handle complaints arising on mobile banking or it is BOT –mobile banking financial regulator is unclear.

4.8.4 From International Jurisdictions

It is worth noting, the role of Philippines as pioneer jurisdiction in the mobile banking, prior to the active launch of mobile banking had at least Electronic Commerce Act which did recognise on the validity of electronic contracts, electronic signatures and provided for the prosecution of e-commerce crimes. Common approach deployed in the regulation of mobile banking by the Central Bank of Philippines is 'Test and Learn' approach and involvement by issuance of circulars-

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[89] Section 134 of the Law of Contract Act (RE) 2002

for instance circular 649 which provided guidelines on mobile banking that allowed both banks and non-banks to issue e-money. The Central Bank-BSP is responsible for issuance of licences to mobile agents, though the telecommunications companies will remain responsible for their agents.

In other jurisdictions, though they are yet to have concrete 'mobile banking' laws but clear framework is in place. National Payments Acts have been enacted giving clear direction to the regulator on how to regulate the mobile banking. [90] It has also been found that data protection laws have been given due weight in some countries; in case of India, the country has laws which aim at protection and preservation of sensitive personal and private data in the area of electronic transactions. [91]

In the mobile banking, telecommunications companies have been somehow engaged in dual roles-as telecommunications services providers and as mobile financial services provider, this a very complex functional arrangement; despite that, somehow India has provided for the recognition of intermediaries (in particular, telecommunications companies when transmitting financial messages) and their roles, obligations, liabilities and exemptions have been clearly defined in the Act. [92]Furthermore, need to have consumer protections as far as mobile banking is concerned have been clearly addressed in some jurisdictions; USA's FFIEC has been issuing guidelines requiring banks to provide proper safeguards including encryption, use of the PINs, and handling of mobile devices.

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[90] Section 22 of Kenya National Payment Systems A

[91] Section 43A of Information Technology(Amendment) Act, 2008

[92] Section 2,79 of Information Technology(Amendment) Act, 2008

The telecommunications regulators in some jurisdictions perform functions of overseeing smooth working of electronic transactions, same time ensure its sustenance, growth and promotion in the better interests of the country; however that does not affect the powers of Central bank as financial regulators.[93] It has been observed that AML and counter terrorist financing have been addressed in the regulations in those jurisdictions that have been reviewed and mobile banking is an area that has been covered as well. For instance, in Philippines, it is mandatory for the agents to attend training as a part of process to obtain licences for the mobile banking. Where ‘non bank based model’ predominantly operates, it has been observed that MNOs need to work and maintain trust account with the bank, as float for mobile money and also to avoid being deposit taking institutions. This practice is prominent in Kenya and Philippines.

4.8.5 From Banks

Interviews with some members of the bank staff established initial response of the banks to mobile banking was negative and none of the banks had shown interest. However, as mobile banking (by then predominantly operated by MNOs) gained upper hands, banks felt threatened by the MNOs, that likely they may go even further to erode their customer base. It was also found out some banks have been communicating with BOT complaining on lax rules and regulations on KYC, such as simple ID (Employer’s ID or village resident ID or Voters’ ID) could be used to open Mobile account with MNOs’ agents whereas banks were subject to strict

[93] Section 83c of Kenya Communications(Amendment)Act 2008

KYC/AML rules that included obtaining proof of one's physical address, reference letter, photographs which are not applicable to the mobile money account.

On the other hand, entry of mobile banking was positively taken by some banks which found the innovation as advantage in winning more customers and delivering services efficiently to the customers. They find it constructive to partner with the MNOs so that they all benefit with the innovation. Bankers have acknowledged the challenges they face with the working of the mobile banking services, in particular in the absence of clear regulations on mobile banking. There is clear no position of the duties of the banks and liabilities; duties of the customers and their liabilities and those of the mobile network operator-where one's duty and liability starts and where the same ends.

In the absence of clear policies and laws, banks feel that in case of any dispute that will lead to litigation, there could be failure to have the matter resolved and that may affect the innovation. Bankers are optimistic that regulator is keenly working on the current legal challenges and will in future come up with concrete regulations and laws that will address the challenges holistically.

4.1.6 From Bank Customers

A number of bank customers were interviewed; those with banks having 'mobile banking wing' expressed appreciation for the services and had some concerns as well. Those bank customers with no mobile banking services stated that they wish their banks could adopt the technology soon because of its inherent benefits and flexibility. Bank customers expressed some concerns on 'missed payments', where and who is liable for that; when they approach their banks they are told to wait for advice from MNOs, they wonder who is then liable for fines and delay fees-is it the bank or MNO. They wished to have clear policy and laws that will address issues of liability in case of missed payments and fraudulent acts as well as threats of hackers and virus which are likely to be common.

4.1.7 From MNOs

Some officials of mobile network operators interviewed informed that flexibility and simplicity of the rules applicable in the mobile banking services offered by MNOs has taken the innovation to the level of success that it is presently proud of. However, they admitted that the legal and regulatory framework is not very clear, on one hand, they fall under TCRA powers and on the other hand BOT, they noted that it is in the best interests of mobile banking, if all could be under one umbrella. MNOs officials also acknowledged lack of clear legal framework of mobile banking, presence of outdated laws which lag behind technological innovations may hamper further innovations in the market. On the other hand, they suggested any proposed mobile banking legal framework should be flexible and scalable to sustain, maintain and enhance smooth working of mobile banking and other mobile innovations.

4.1.8 From Mobile Money Account Holders

A few users of mobile banking tied to MNOs who were interviewed, were very much in support of the mobile banking services offered by MNOs and even those of the banks especially when they receive funds from bank account holders. Moreover, they appreciated how mobile banking introduced them to the formal financial practices, because they can now do some savings in their mobile account and transfer funds to cater for their household items without need to move around with physical cash. Furthermore, they supported current procedures in opening mobile account as simpler and faster as against opening of the bank accounts at the banks. However, they stated that in case of problem with mobile money account, there is no clear way of getting prompt response. One of the users narrated of a case when trying to cash out and instead of putting the current Agent code number he had put another Agent code number, it took him more than one month to have the refund, and that involved movement from one agent to another.

4.1.9 From Mobile Agents

Even the mobile agents interviewed raised some concerns; one of the issue raised is that they fail to register some of the mobile customers because they do not have IDs or mobile phone, so they use mobile agent for withdrawing funds directly as received from party who sent the transfer, this may expose agents to the risks of being used by fraudsters and money launders. Agents interviewed expressed lack of proper training on the procedures and regulations -KYC and AML; mere signing of agreement with MNOs and activation of the agent code is good enough to start working as mobile agent!

4.1.10 From Regulators

In the course of interviews with officials of BOT and TCRA, both regulators admitted lack of proper legal framework on the mobile banking; however they defended that current legal and regulatory mechanism has managed to serve the innovation despite the fact that the laws do not fully support mobile financial services. The regulators admit being almost outstretched in terms of learning curve to keep abreast with the fast growing technology. The current approach of the regulator-BOT, ‘the Test and Monitor’ has allowed BOT to test mobile banking and based on its socio economic benefits approved it to run despite the lack of detailed regulatory framework and laws.

During the last 5 years, the regulators have somehow managed to learn more on the innovation and have been all along collecting experiences of other countries in the hope that such lessons will help to develop better regulations and laws on mobile banking. The regulators have already proposed new regulations on mobile banking and they are just waiting for the government to pass them.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

This chapter presents a conclusion to the study as well as recommendations on how the legal challenges can be addressed in the best interests of the mobile banking

5.1 Conclusion

No doubt, mobile banking is inescapable innovation which developing economies cannot afford not to do with despite both legal and regulatory challenges it faces in the economies and around the globe. In Tanzania, mobile banking has had greater positive impact by facilitating inclusion of the unbanked and the under-banked to the formal financial services; this has been made possible due to the deployment of mobile banking through both banks and non-banks. Moreover, the flexibility of the regulatory approach has helped in spurring growth and innovation of mobile banking in the country.

Despite the challenges it faces, the adoption and expansion pace of the innovation has been extremely massive, it is the access point for majority of population in Tanzania. During the last five years of its existence in the country it has helped to bridge financial exclusion gap, [94] which stood at 56% in 2009 and the goal of the BOT is to reduce it to below 50% before 2015. Mobile banking innovation is still in its immature stage and the general perception that developing countries tend to learn from other countries (developed) is very unique in this innovation; the current trend is that other countries both developing and developed are looking at East Africa as

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[94] Section 2,79 of Information Technology(Amendment) Act, 2008

the peculiar model for mobile banking and likely they may have a lot to learn from this part of the world where Tanzania is geographically located.

Because of its immaturity, some legal, regulatory and policy issues are still being explored, it may take a long way but the basic legal and regulatory framework has to be in place. It is understood that a lot of work is going not only in Tanzania but Kenya, Philippines, India and South Africa trying to address the legal challenges of mobile banking. The future of growth and development in our financial sector belongs to 'mobile banking'; it is the direction where the financial sector and country as whole has to go because of its convenience and mobility factor, but at the same time, the challenges facing mobile banking have to be addressed.

5.2 Recommendations

To address legal and regulatory challenges of mobile banking, this study proposes the following recommendations:

5.2.1 Regulators and the Government

The regulators have to make deliberate efforts to address the legal and regulatory issues challenging mobile banking, the current framework is not robust to further sustain, promote mobile banking. New laws have to be proposed addressing the issues which impact mobile banking; the key areas of focus should be:

i. Electronic and Mobile Commerce laws which have to address both electronic commerce and mobile commerce in all possible dimensions (from Electronic signatures, E-Money, Electronic contracts). The laws should clearly addressed the roles, duties, liabilities and exemptions of each party involved; incorporating contemporary developments from other jurisdictions-like the issue of intermediaries which EU and India have passed directive and legislations in a detailed manner.

ii. Introduction of data protection laws which are non-existent in the country, it has to be noted that the growth and promotion of both E-Commerce and Mobile Commerce could somehow be hampered in the absence of proper laws on data protection laws. The data protection laws should be aim at the protection and prevention of abuse of privacy but at the same time should be balanced not to harm new innovations, incorporating best practices in the data protection laws.

iii. AML/KYC Laws though already in place should be amended to incorporate risk based approach that will spur further expansion and growth of mobile banking.

iv. Cybercrime and Mobile crime laws need to be passed to address the challenges which come or develop once new innovations come into the market and mobile banking being one of such innovations.

v. The Law of Evidence, despite its amendments in 2007 incorporating electronic evidence but its range is too narrow, it has to be reviewed to include electronic and mobile evidence in the wider angle; this should cover both civil and criminal domains.

vi. National payment Systems law need to be passed and the law should address the key elements clearly and broadly not like the current guidelines which have even failed to define mobile banking.

vii. Consumers protection laws should amended, if not re-enacted to incorporate new electronic and mobile innovations (mobile banking and other such other innovations); the laws should clearly address the roles, duties, liabilities and exemptions of each party –from consumers, service providers, mobile operators, banks and all those involved in the chain of service delivery.

viii. There need to be major task of aligning the legal and regulatory framework to cope with the fast happening technological innovations in the mobile banking. The current regulatory set up should be reviewed and BOT should have all powers in the regulation of mobile banking, MNOs should be advised to run separate or subsidiary companies which will be handling its mobile banking services and let MNOs concentrate on telecommunications networks and services.

ix. Mobile banking transactions involve small values, in case of disputes; it is not cost effective and economically effective to adjudicate the disputes before the tribunal or courts, alternative methods have to be introduced that will facilitate smooth resolution of the disputes faster and less costly.

x. Adoption of technology neutrality approach; the proposed laws should avoid to be technology based; instead the laws should adopt ‘technology neutrality’ approach to allow easy adaptation to the new innovations.

xi. Proper rules and regulations on ‘Agents’ should be framed so that their roles and responsibilities can be known. They should also be licenced by BOT prior to start of agency operations and BOT should be regulatory body for the agents as the case of Philippines where Central Bank regulates the agents.

xii. The process of passing new laws should be flexible and faster and not like present situation. It is said that ‘mobile banking regulations’ have been on hold for some time now waiting for the blessings of the government!

5.2.2 Banks and MNOs

Banks and MNOs in particular have played key role in the growth and promotion of mobile banking and potentially will continue to do so. Banks and MNOs have to work closely with the regulators and government to spur promotion of mobile banking. Furthermore, it is in the best interests of mobile banking growth, for the banks and telecoms company to disclose to their customers the risks involved in the process and advise them what could be sound practices in minimising risks associated with hacking-such as switching off bluetooths.

Banks and MNOs should advise their customers to keep their PIN codes secure, avoid giving their phones to unknown persons and avoid using their phones in fraudulent acts. On the other hand, the banks and telecoms companies may consider apportioning some liability due to hacking activity. Banks and MNOs should not avoid responsibility in case of ‘missed payments’ which could happen due to the failure of their networks and systems. Furthermore, it is recommended that banks and telecommunications companies offering mobile banking to have proper system of confirming payments.

Bank and MNOs should undertake proper selection of agents to avoid risks associated with non-compliance with AML/CTF and where the acts of the agents could have direct impact on the consumers, they (MNOs) should take responsibility.

5.2.3 Consumers and members of the General Public

Consumers and the general public are the movers of the innovation, without their appetite, any innovation is bound to fail and collapse. Customers should avoid using their mobile phones in fraudulent acts and money laundering acts; and they should securely keep their PIN codes separate from where they keep their mobile phones. Customers should be careful when effecting transactions to avoid unnecessary delays and inconveniences. They should be very careful when effecting transfer of funds at times or in areas where there is ‘zero signal’ or no network coverage because the transfer will not be transmitted and processed.

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