# A LEGAL ANALYSIS OF THE LAW REGULATING MOBILE MONEY IN KENYA: A CASE STUDY OF NAIROBI

 $\mathbb{B}\mathcal{Y}$ 

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# A RESEARCH REPORT SUBMITTED TO SCHOOL OF LAW IN PARTIAL FULFILMENT FOR THE AWARD OF THE BACHELOR'S DEGREE OF LAWS AT KAMPALA INTERNATIONAL UNIVERSITY

**MARCH 2017** 

#### DECLARATION

I **OWUOR .O. REEN** do hereby declare that this dissertation is my original research work both in substance and in style and that to the best of my knowledge it has never been submitted in any academic institution for any academic award.

I further declare that all materials cited in this dissertation which are not my own have been fully acknowledged.

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#### APPROVAL

I clarify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality, for the partial fulfillment for the award of Bachelor's Degree of Laws of Kampala International University.

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#### DEDICATION

I dedicate this dissertation to my parents, Michael Jack Owuor and Susan Yobera, and my brother, Victor Onyango Owuor for their unwavering support in my life and especially in my studies.

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Any errors, weaknesses or shortcomings found in this work are entirely mine for which I assume all responsibilities.

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- 2. THE CENTRAL BANK OF KENYA OF 2015.
- 3. THE KENYA INFORMATION AND COMMUNICATION ACT CAP. 411A: REVISED EDITION 2012[1998].
- 4. THE PENAL CODE CHAPTER 63 LAWS OF KENYA.
- 5. THE PROCEEDS OF CRIME AND ANTI-MONEY LAUNDERING ACT OF (THE AML ACT) NO.9 OF 2009.

## REGULATIONS

- 1. THE KENYA COMMUNICATIONS (ELECTRONIC TRANSACTIONS) REGULATIONS 2016.
- 2. THE KENYA INFORMATION AND COMMUNICATIONS (DISPUTE RESOLUTION) REGULATION 2010.
- 3. THE KENYA INFORMATION AND COMMUNICATIONS (TARIFFS) REGULATION 2010.
- 4. THE NATIONAL PAYMENT SYSTEM (NPS) REGULATIONS OF 2014.

#### TABLE OF CASES.

- 1. JOACHIM SON VS. SWISS BANK [1921]3 KB @110.
- 2. JUDD VS. CITIBANK 107 MISC.2D 526 (1980).
- 3. PETER KIMANI NGURE VS. REPUBLIC (2015) EKLR.
- 4. THE NATIONAL BANK OF COMMERCE VS. SAID ALLY YAKUT (1989) TLR 119.
- 5. JOHNSON ZUMO OBONGO V. REPUBLIC C.A No. 107 of 2010.

## ACRONYMS

АТМ	Automatic Teller Machine
B2B	Business-to-Business
СВК	Central Bank of Kenya
ССК	Communications Commission of Kenya
CPSS	Committee on Payment and Settlement Systems
E-BANKING	Electronic Banking
<b>E-PAYMENTS</b>	Electronic Payments
ICT	Information and Communications Technology
КҮС	Know Your Customer
M-BANKING	Mobile Banking
М-КОРА	Mobile Kopa
M-MONEY	Mobile Money
MNO	Mobile Network Operator
<b>M-PAYMENTS</b>	Mobile Payments
NPS	National Payment System
P2B	Person-2-Business
P2P	Person-2-Person
SIM	Subscriber Information Module
SMS	Short Message System
STK	SIM Toolkit
TELCO	Telecommunication
USSD	Unstructured Supplementary Service Data
VAS	Value Added System
www	World Wide Web

#### ABSTRACT

This study focused on the Mobile Money transfer services in Nairobi. What is majorly the point of concentration, is the legal implications mobile money came along with , and whether there was need to amend the existing legal regime in order to take care of the challenges and risks that faced thereof. Hence, it is at this point that the study introduced the research topic. It discussed vividly the background of the study, objectives of the study, scope and methodology. The objective of the study was mainly to assess the effectiveness of the existing legal framework and regulatory challenges of mobile money services in Nairobi. For this reason this study did a literature review of various work written by a number of authors to fill in the gap left. Equally, this study analyzed the various concepts and models of mobile money services that are available in Nairobi, in order to bring out a clear understanding of what Mobile Money is and its importance. It also delved into identifying the specific risks and challenges encountered by consumers and service providers due to lack of effective laws and policies in place. This was done after critically analyzing the legal regime influencing Mobile Money in Nairobi.

Finally, the study proposed recommendations and concluding remarks on how the challenges and risks faced may be addressed. This was to enable the regulators get a view of what Mobile Money Services had faced due to inappropriate legal framework and where to incorporate amendments or come up with new enactments to regulate the services and ensure its positive contribution towards the economy in Nairobi.

# CHAPTER ONE GENERAL INTRODUCTION

#### **1.0 Introduction.**

Generally this study examines the legal framework of Mobile Money services in Kenya particularly Nairobi county. Specifically this chapter presented the background, problem statement, objectives of the study, scope, significance, methodology and literature review.

#### 1.1 Background of the study.

For many of the Kenya's poor, a number of obstacles limit access to finance and financial networks. Physical barriers, like large distances to banks or ATMs, make participation costly, especially for rural populations. Lack of documentation and high associated costs are other commonly cited barriers that may contribute to high unbanked populations in Kenya especially Nairobi. Digital banking and mobile phone financial applications are increasingly being proposed by regulators as a potential approach to overcome such barriers and increase financial inclusion. Nearly 45 percent of the developing world's population now has access to mobile phone accounts, presenting an opportunity to reach the unbanked<sup>1</sup>. **Radcliffe and Voorhies<sup>2</sup>** argue that connectivity is the first step on the pathway to financial inclusion. They contend that connectivity is a prerequisite to services that leverage mobile phone platforms to offer digital remote payments, and eventually a full range of financial services like savings, credit, and insurance. In Kenya the process of moving from basic connectivity to digital payments is already underway: at the end of 2014, mobile money services were operational in most parts of the country.

Mobile Money therefore refers to any "mobile-based transactional service that can be ransferred electronically using mobile networks"<sup>3</sup>. Mobile Money being considered a global

Scharwatt, Katakam, Frydrych, et al. (2015). 2014 State of the Industry Mobile Financial Services for the Unbanked. GSMA. Retrieved from <u>http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTTR\_2014.pdf</u>

<sup>&</sup>lt;sup>'</sup> Radcliffe, D., & Voorhies, R. (2012). A digital pathway to financial inclusion. Retrieved from <u>http://ssrn.com/abstract=2186926; accessed on 10<sup>th</sup>October 2016.</u>

Alliance For Financial inclusion,2012 page 3: Mobile Financial Services; Basia. Terminology, Retrieved from <http://www.afilobal-org/sites/default/files/publicating/MFSWG%20Guideline%20Note%20Terminology.pdf> ;Accesed on 12<sup>th</sup> March 2016.

success story, the money is stored using the SIM (Subscriber Identity Module) in a mobile phone as an identifier as opposed to an account number in conventional banking. Notational equivalent is in value issued by an entity (an MNO in this case) and is kept in a value account on the SIM within the mobile phone that is also used to transmit transfer or payment instructions, while corresponding cash value is safely in a bank. The balance on the value account can be accessed via the mobile phone, which is also used to transmit instant transfer or payment instructions.

In its definition of banking business, the **Banking Act**<sup>4</sup> only refers to the cash and cheque payment systems. The Act provides no definition and makes no reference to Mobile Money. Banking has undergone a revolution on the inception of technology into the industry. Though the relationship of the bank and its customers remains contractual, the terms of these contracts have taken 360 degrees turn around.

A good illustration will be the Judgment of *Lord Atkins* in the celebrated case of *Joachim son vs. Swiss Bank<sup>5</sup>* He describes the relationship between the bank and its customers as one and the same contract involving obligations on both sides and includes the following conditions:

The bank undertakes to receive money and to collect cheques for its customer's account; The proceeds so received are not to be held in trust for the customer, but the bank borrows the proceeds and undertakes to repay them; The Promise to repay is to repay at the branch of the pank where the account is kept; It includes a promise to repay any part of the amount due against the written order of the customer addressed to the bank at the branch; Such written orders may be outstanding in the ordinary course of business for two or three days; The bank will not cease to do business with the customer except upon reasonable notice; The customer indertakes to exercise reasonable care in executing her written orders so as not to mislead he bank or facilitate forgery, and; The bank is not liable to pay the customer the full amount intil he demands payment from the bank at the branch at which the current account is kept.<sup>6</sup>

<sup>2015</sup> Law of Kenya. (1921)3 KB @ 110.

Eighty-five years after the pronouncement of this Judgment, Mobile Money provides consumers with among others the following benefits. Twenty-four-hour access to their accounts; Payments need not be made upon written orders; Widespread use of digital signatures; Payments may be made through public access terminals, for instance Agents, Automated Teller Machines; Electronic pay roll systems; Direct transfers and so on.<sup>7</sup>

Historically in Africa, the most common form of mobile money service delivery is in form of money transfer services.<sup>8</sup> An example is the Kenyan M-PESA mobile money service. The instant case of Peter Kimani Ngure vs. Republic<sup>9</sup>, defines "M-Pesa" as a mobile phone based money transfer run by Safaricom and which has received global acclaim as a way of giving millions of people access to the formal financial system in an otherwise largely cash based society. M-Pesa was first launched by the Kenyan mobile network operator Safaricom, where Vodafone is technically a minority shareholder (40%), in March 2007. M-Pesa quickly captured a significant market share for cash transfers, and grew to 17 million subscribers by December 2011 in Kenya alone.<sup>10</sup>

The growth of the service forced formal banking institutions to take note of the new venture. In December 2008, a group of banks reportedly lobbied the Kenyan finance minister to audit M-Pesa, in an effort to at least slow the growth of the service. This plot failed, as the audit <sup>5</sup>ound that the service was robust.<sup>11</sup> At this time The Banking Act did not provide basis to regulate products offered by non-banks, of which M-Pesa was one such very successful product. As at November 2014, M-Pesa transactions for the 11 months of 2014 were valued at (ES. 2.1 trillion, a 28% increase from 2013, and almost half the value of the country's GDP.

Nobile money has served both as a complement to traditional banking services and in other ases served as the only form of non-traditional banking services. One commonly cited factor nfluencing the emergence and uptake of digital financial services is regulation. Flexible, open

Ibid n5.

Hughes N., & Lonie, S. (2007). M-PESA: Mobile Money for the "Unbanked" Turning Cellphones into 24-Hour Tellers in Kenya. nnovations, 2(1-2), P.34.

<sup>(2015)</sup> EKLR. Retrieved from kenyalaw.org/caselaw/cases/view. Accessed on 20th November 2016

<sup>&</sup>quot;CCK releases 2nd guarter ICT sector statistics for 2011/2012". Communications Commission of Kenya. 17 Apr 2012. P.66. "Mobile Cash Transfers Pose Threat to Banks". Philanthropy Action.com. 26 February 2009, P.3.

financial regulatory frameworks can enable innovation and allow multiple business models to operate in the provision of mobile financial services. Conversations around "flexible" regulations for mobile money schemes typically center on whether a country's regulations allow non-banks to provide mobile financial services, meaning that entities such as mobile network operators (MNO) can "lead" schemes.<sup>12</sup>

However, these alternative delivery channels should be looked into keenly and adopted only after carefully balancing the risks and rewards. It is at this point that the legal regulatory issues of such new technologies arise. It should be noted that the regulators role is not to try to eliminate these new channels but to balance them appropriately with their usage benefits and to create enabling environment where the adopted technologies are put to use on the efficient frontiers of the risk-return trade off.

As a consequence, this study will predominantly center on Nairobi since members of many Kenyan families live and work here, while the rest remain in the village. Tapping into this need, Safaricom's first advertising campaign to promote M-Pesa centered around the simple slogan "*Send money home.*" Also the fact that in 2008 during Post-election violence, M-Pesa was helpful to people trapped in Nairobi's slums and some Kenyans came to regard M-Pesa as a safer place to store their money than banks.<sup>13</sup>

This study presents an overview of mobile money services, an analysis of the legal or regulatory framework. It focuses on Mobile Money in Nairobi-Kenya, to assess the effectiveness of the existing legal framework and regulatory challenges in the transformation rom traditional banking practices to mobile money. Also to find out the risks that mobile noney users are exposed to as a result of unregulated mobile payment system. For instance ack of privacy in their transactions, no efficient security and swindlers/con-men such as the vrisoners at Kamiti Prison who deceive M-Pesa users to send them money.

<sup>&</sup>lt;sup>?</sup> Financial Access Initiative. (2012). Big Questions in Payments. Retrieved from

ttp://www.usfinancialdiaries.net/sites/default/files/publications/Big%20Questions%20in%20Payments.pdf.Accessed on 15<sup>th</sup> farch 2016.

<sup>&</sup>lt;sup>1</sup> <u>www.economist.com/blogs/economist-explains/2013/05/economist-explains-18</u>. Accessed on 22<sup>nd</sup> April 2016

Branchless banking represents a new distribution channel that allows financial institutions and other commercial actors to offer financial services outside traditional bank premises. A wide spectrum of branchless banking models is evolving differing primarily on the question of who will establish the relationship (account opening, deposit taking, lending etc.) to the end customer, the Bank or the Non-Bank/Telecommunication Company (Telco).<sup>14</sup>

This broad definition can be further delineated as follows:

- Mobile banking (m-banking)<sup>15</sup> is the use of a mobile device primarily as a channel to conduct transactions from one or more bank accounts. These transactions may include payments from one bank account to other bank accounts. For example you have an account with Equity Bank then you connect it with your M-Pesa account, such that you can send money to your bank via mobile phone and vice versa. Mobile banking services typically offer a range of informational functions as well, such as balance enquiries, simplified statements, transaction notifications, or account alerts. Mobile banking is a subset of electronic banking (e-banking), which includes Internet banking and the use of non-mobile channels such as ATMs and Point of Sale devices.<sup>16</sup>
- Mobile payments (m-payment)<sup>17</sup> is the use of a mobile device to make a payment. M-payment may involve creating a new instrument, such as e-money, to serve as the source from which and to which value is transferred. However, m-payment may be made using an existing instrument or store of value such as a bank account, although the term is sometimes used to describe only those payments that are not from a bank account. There are a variety of types of mobile payments, including:
  - i. **Person-to-person (P2P):** also known as a mobile money transfer or mobile remittances between persons.

 <sup>&</sup>lt;sup>4</sup> Wambari Andrew Peter Mwaura, a Report on MOBILE BANKING IN DEVELOPING COUNTRIES. (A CASE STUDY ON KENYA), ?.13.
 <sup>5</sup> Barnabas Andiva, a report on Mobile money-Kenya. (2010), P.5.

<sup>&</sup>lt;sup>5</sup> Barnabas Andiva, a report on Mobile money-Kenya. (2010), P.S.
<sup>5</sup> Ibid n15.

<sup>&</sup>lt;sup>2</sup> CPSS (2004) Survey of e-money and internet and mobile payments, BIS, available via <u>www.bis.org</u>. Accessed on 15<sup>th</sup> April 016.

- **ii. Person-to-business (P2B**): the payment of bills, goods, and services, and purchase of airtime. The reverse, Business-to-person (B2P) occurs when businesses pay people (for example, in wages or for goods delivered) and is broadly referred to as m-commerce.
- **iii. Business-to-Business (B2B):** entails transactions between businesses, such as between a manufacturer and a wholesaler, or between a wholesaler and a retailer conducted on a mobile platform.

#### 1.2 Statement of the problem.

Mobile Money provides more efficient modes of delivery of banking services to clients, however it does present legal challenges to the legal regime governing banking business in Kenya. A review of the said legal regime indicates that the law is lacking the regulation of Mobile Money. None of these laws have a definition of the concept, the parameters of its operation in the country and who is authorized to provide the said services to the public.

Thus since the inception of M-Pesa in 2007, no comprehensive legislation or regulations were n place. Mobile Money services being a fast changing services due to technological advancement, there is a danger of the legislative framework not evolving as fast which brings the questions of whether the regulators have the technical capacity and competence to regulate effectively?

Consequently, there is a need to have a better legal framework to govern and regulate it for the safety and benefit of both the banks and customers and thus the need to review the said egal regime on banking in Kenya, in order to bring it up to date with the current trends specially in regard to Mobile Money services.

#### 1.3 Objectives of the study.

The study purports to assess the effectiveness of the existing legal framework and regulatory hallenges in the transformation from traditional banking practices to mobile money services in Cenya particularly Nairobi.

#### 1.3.1 Specific objectives.

- 1. To examine on the concepts and the various models of Mobile Money in Nairobi.
- 2. To examine the legal regime of mobile money and the various risks encountered by consumers and service providers due to lack of effective laws in place.
- 3. To come up with recommendations for the modifications of the legal regime on banking in Nairobi, so as to fully govern the services offered under Mobile Money.
- 4. To give research findings and concluding remarks that can be a resource to Nairobi in order to effectively modify the laws regulating Mobile Money.

## 1.4 Research questions

- 1. What are the various models of mobile money in Nairobi?
- 2. How the legal regime is and what are the various risks encountered by consumers and service providers due to lack of effective laws in place?
- 3. What are the recommendations for the modifications of the legal regime on banking in Kenya, so as to fully govern the services offered under mobile money?
- 4. What are the research findings and concluding remarks that can be a source to Nairobi in order to effectively modify the laws regulating Mobile Money?

# 1.5 Scope of the study.

The study was be carried out in Nairobi, the capital city of Kenya. The area has an estimated population of 46 661 552 people.<sup>18</sup>

This study was focusing on the current banking laws in Kenya and consider the extent to which there is a vacuum/lacuna in regards to Mobile Money.

Thus it centered on the challenges of incorporating Mobile Money as a legally accepted form of anking with regard to payment system in Nairobi hence changing the traditional perception of anking.

# L6 Significance of the study.

hus purpose of this study is to assess the legal challenges posed by mobile money in Nairobi ind propose solutions to the said challenges.

<sup>&</sup>lt;sup>3</sup> Countrymeters.info/en/Kenya(2014) Accesed on 20<sup>th</sup> April 2016.

The study also seeks to investigate the risks that consumers of Mobile Money in Nairobi undergoes due to lack of effective laws or policies regulating them.

Henceforth the research is going to be significant, in the sense that it intends to come up with recommendations on the way out of the current regulatory challenges facing mobile money services.

#### 1.6.1 Hypothesis.

- 1. Kenya does not have a sound legal regime on Mobile Money.
- 2. The legal regime on Mobile Money in Kenya needs a comprehensive review.

#### 1.7 Methodology.

Due to geographical limitations and financial resources, the field research was not possible therefore, the research was qualitative and dependent on published documents, secondary data, newspapers, textbooks and reports from the internet and libraries' materials that are relevant in regards to the emergence of Mobile Money generally and particularly in Kenya. As well as the various legislations on the said subject matter in Kenya and other jurisdictions.

#### **1.8 Literature Review.**

There is a wide range of literature review and research on mobile money especially on the World Wide Web, however there is very little material on Mobile Money in Kenya, this is because it is still in its infancy stages but developing rapidly.

The field of mobile money services is not only new and fast evolving but also sits at the overlap of several regulatory domains-those of banking, Telco and payment system supervisors, and anti-money laundering agencies. The overlap substantially raises the risk of coordination failure, where legislation or regulatory approaches are inconsistent or contradictory. In such environments, it is likely that mobile money may simply be an added channel for already banked customers. A comprehensive vision for market development

between policy makers, regulators and industry players can help to define obstacles and calibrate proportionate responses to risk at appropriate times.<sup>19</sup>

The **UN ICT Task Force** <sup>20</sup>has defined m-banking as "investment, innovation and entrepreneurship" which will build the private sector. However policy makers and regulators in the financial sector will usually seek an enabling environment with certain key outcomes such as financial stability, economic efficiency, access to financial services, financial integrity and consumer protection.<sup>21</sup>

The premise of this research is that the explosive growth of mobile communications can be a powerful tool for addressing some of the most critical challenges of the 21<sup>st</sup> Century, such as promoting vibrant democracies, fostering the establishment of new regulatory policies and laws on Mobile money, and reducing the huge risk posed to consumers due to lack of effective laws.

According to the most recent **Committee on Payment and Settlement Systems (CPSS) survey, (2004)<sup>22</sup>,** a regular *survey of e-money and internet and mobile banking,* which scans developments in this sector, it was reported that payments using the internet and mobile phones have advanced rapidly in recent years, compared to the usage of e-money which has agged, at least in e-purse form.<sup>23</sup>

In as much as the committee focused on the rapid development of mobile phone payments, it eft out the challenges faced in Nairobi due to lack of effective laws in place. In this regard, his study brought out the various challenges faced by mobile money services and the way forward to establish appropriate laws and policies.

<sup>&</sup>lt;sup>9</sup> Ojijo P ; 26 Legal Issues in Mobile Money Transactions. <u>http://www.wikipedia.legal-issues-in-mobile-money-pdf</u>. Accessed vn 26<sup>th</sup> April 2016.

<sup>&</sup>lt;sup>9</sup> UN ICT Task Force replaced by a Global Alliance for ICT Policy and Development in 2010, P.32.

<sup>&</sup>lt;sup>1</sup> Ibid n 20. ? cocc (20

<sup>&</sup>lt;sup>2</sup> CPSS (2004) available via <u>http://www.bis.org</u> accessed on 6<sup>th</sup> October 2016. <sup>3</sup> Ibid a22

<sup>&</sup>lt;sup>3</sup> Ibid n22.

**Sealy and Hooley:**<sup>24</sup> define "*Payment*" as gift or loan of money or an act offered accepted in performance of a money obligation payment by physical delivery of the money. Sealy further argues that the payment by physical delivery can be both risky and expensive and these difficulties have led to the developments of various forms of payment systems e.g. electronic banking, the likes of mobile banking and mobile money services.<sup>25</sup>

They dispute that, however, certain regulatory and policy issues emerge from such new technologies due to lack of solid precedents, in regards to mobile money services, each issue is complex in its own right, and is often associated with a different regulatory domain for instance bank supervisor, payment regulator, Telco regulator, competition regulator, antimoney laundering authority may be involved in crafting policy and regulations which affect this sector. The complex overlap of issues creates the very real risk of coordination failure across regulators. This failure may be one of the biggest impediments to the growth of m-money services, at least of transformational sort. Still, even without the additional complexity introduced by mobile money, many of these issues require coordinated attention anyway in order to expand access. It is possible; however, that mobile money may be useful because the prospect of leapfrogging may help to galvanize the energy required among policy makers for the necessary coordination to happen.<sup>26</sup>

Therefore, this article is relevant to this study such that, it stresses that a well-balanced enabling environment must be established if it is intended that mobile money services be taken to the next level. The authors gave a foundation to my study whereby I was able to come up with the various recommendations and conclusions as stated in chapter four and five.

<sup>&</sup>lt;sup>4</sup> Sealy and Hooley Commercial law texts, cases and materials, 15th September 2008. 4<sup>th</sup> Edition P.43. Ibid n24.

<sup>&</sup>lt;sup>6</sup> Simone di Castri (2012), "GSMA position on the taxation of mobile money transactions in Kenya", GSMA, available at <a href="http://www.gsma.com/mobilefordevelopment/gsma-position-on-the-taxation-of-mobile-money-transactions-in-Kenya">http://www.gsma.com/mobilefordevelopment/gsma-position-on-the-taxation-of-mobile-money-transactions-in-Kenya</a>. Accessed on 12<sup>th</sup> May 2016.

<sup>7</sup> Njaramba Gichuki (2013), Law of Financial Institutions in Kenya, 2nd edition, LawAfrica Publishing (K) Ltd, Nairobi,P 234

**Njaramba Gichuki:**<sup>27</sup> notes that there are a number of unregulated issues that affect Mobile Money service provision. He explores various laws touching on mobile phone business including communication laws, banking laws, technology laws, and evidence law.<sup>28</sup>

In his examination of various communication laws he notes that the legal position in Kenya is that there are no laws specifically regulating Mobile money services and mobile payment systems, despite attempts to amend some of the existing laws to that effect. He writes that mobile phone business is regulated by the **Communications Commission of Kenya**, but that mobile money payment services and mobile payment services need more expertise than that of the communication sector because of the banking aspects and information and technology aspects involved that CCK lacks, which make it unqualified to regulate these services.<sup>29</sup>

Njaramba mentions the convenience that comes with mobile money services and suggests that perhaps this convenience could have led to the financial sector regulator to overlook the legal and risk issues involved.<sup>30</sup>

In the various communication laws he examines, he brings out how each one of them is deficient in mentioning mobile money transfer services as one of the issues regulated therein.<sup>31</sup>

He points out the deficiencies in the various statutes in terms of provisions therein and how they do not relate directly to mobile money and how the provisions could be amended to envisage mobile money services within the particular statutes.<sup>32</sup>

In his examination of the banking laws which are specifically the **Banking Act chapter 488** (now the Banking Act of 2015) <sup>33</sup>and the Central Bank of Kenya Act 2015<sup>34</sup>, he brings out clearly how these laws do not cover mobile money transfer. He does this by stating how

<sup>2</sup> Ibid n31.

<sup>&</sup>lt;sup>8</sup> Ibid n27

<sup>&</sup>lt;sup>9</sup> Njaramba Gichuki (2013) supra, P 236.

<sup>&</sup>lt;sup>o</sup> Ibid n29.

<sup>&</sup>lt;sup>1</sup> Njaramba Gichuki (2013) supra, p 247.

<sup>&</sup>lt;sup>3</sup>Banking Act chapter 488 (now the Banking Act of 2015) Laws of Kenya.

<sup>&</sup>lt;sup>4</sup> Central Bank of Kenya Act 2015 Laws of Kenya.

mobile money services does not qualify to be classified as banking services therefore not falling within the ambit of the Act. It follows then that the Banking Act as bit is does not qualify to regulate mobile money services.<sup>35</sup>

However, his work only majors in what is provided for under the existing laws, but does not address other issues unrelated to the scope of the relevant statute examined which perhaps would warrant new legislation in light of mobile money service provision, for instance, tackling money laundering brought about by existence of mobile money transfer and which is not handled under the **Proceeds of Crime and Anti-Money Laundering Act of 2009**<sup>36</sup>, and many others as shall be brought about by this study. In this respect his book fails to mention other vices that could be outside the scope of the existing legal regime on mobile money in Nairobi.

Another area I will seek to fill by this study is that he point out clearly some of the areas of deficiency but fails to make any recommendations on how these defects could be cured. I aim to make recommendations.

Under The Alliance for Financial Inclusion Policy<sup>37</sup>, Gerald Nyaoma states that the Banking Act did not provide the basis to regulate products offered by non-banks, although the Central Bank of Kenya Act<sup>38</sup> did give the CBK the general authority in *Section 4(a)*<sup>39</sup> to formulate and implement such "policies as best to promote establishment, regulation and supervision of efficient and effective payment, clearing and settlement systems." The CBK nence drafted a National Payment System Bill in 2008 which was enacted in 2011, now The National Payment Systems (NPS) Regulation Act.<sup>40</sup> This Act of Parliament to make provision for the regulation and supervision of payment systems and payment service providers, and for connected purposes.<sup>41</sup>

<sup>&</sup>lt;sup>•</sup> Njaramba Gichuki (2013) supra, p 248.

<sup>&</sup>lt;sup>7</sup> Proceeds of Crime and Anti-Money Laundering Act of 2009.

<sup>&#</sup>x27; Gerald Nyaoma's report of 2010, "Enabling Mobile Money Transfer". The Central Bank of Kenya's treatment of m-pesa at age 4.

Central Bank Of Kenya Act 2015 laws of Kenya.

Central Bank Of Kenya Act 2015 laws of Kenya

National Payment System (NPS) Regulation of 2014.

Supra.

Nevertheless, **Gerald Nyaoma** in his work<sup>42</sup> only focused on payment, clearing and settlement systems. He did not mention the mobile money services alongside the recommendation as to how the lawmakers should adopt the laws regulating mobile money.

It is at this point that this study emphasized the lawmakers to ensure various amendments are done to the existing legislations to accommodate mobile money services and all payment providers should be brought under the ambit of the Central Bank of Kenya before rendering their services to the public

Thus **Porteous**, in his book<sup>43</sup> argues that without certainty and clear regulatory frameworks, reputable providers are likely to be unwilling to commit the resources to launch and sustain deployments. At the same time, clients might find offers from new entrants unreliable and therefore unattractive. Enablement must also provide adequate safeguards for consumers' interests, without which large scale adoption is unlikely anyway **(Lyman et al 2008)**<sup>44</sup>.

The weakness of this book is that the author didn't bring out the risks that the consumers of mobile money undergoes in regard to uncertainty and unclear regulatory framework. My study clearly expounded on the various risks that the consumers and service operators are exposed to. Equally, it recommends on the adaption and establishment of clear regulatory frameworks to sustain mobile money services and protect its consumers against the risks.

In addition to, **Tony Omwansa**,<sup>45</sup> in this article, is of the view that, regulation that limits nnovation normally takes the form of tough rules, high fees and huge taxes on the new services that make the service costly to set up and expensive to run. Thus when adopting the new laws for Mobile Money, the regulators should be vigilant on the merits and demerits of such laws.<sup>46</sup>

<sup>&</sup>lt;sup>2</sup> Gerald Nyaoma's report of 2010, "Enabling Mobile Money Transfer". The Central Bank of Kenya's treatment of m-pesa supra <sup>2</sup> 8.

<sup>&</sup>lt;sup>3</sup> DFID by Porteous, D. ; "The Enabling Environment for Mobile Banking in Africa", (2006). P,55.

<sup>&</sup>lt;sup>4</sup> Lyman T., Porteous D, and Pickens M; "Regulating Transformational Branchless Banking: Mobile Phones and Other Technology to increase Access to Finance." (2008). P.83.

<sup>&</sup>lt;sup>5</sup> Tonny Omwansa (2009), "Progress and Prospects: Innovations Case Discussion," P. 109-110.
<sup>6</sup> Ibid n45

He affirmed that, the country still lacked a clear framework for electronic transactions, which it needed to participate effectively in the new internet economy. It needed an appropriate and comprehensive information bill to address the specific details of electronic transactions including the critical laws for this sector. According to him, many interested parties including mobile operators, banks, entrepreneurs and consumers want to see the accurate and inclusive Information Communication Technology enacted soon, to enhance trust in.

This article is relevant to this study such that it elaborates on the effects of lack of appropriate laws to regulate mobile money transactions. However, the author majorly concentrated on the effects and challenges of lack of appropriate laws but did not address on the way possible to enable the establishment of appropriate regulatory laws. Hence it is at this point that this study proposes recommendations on the effective legal framework of mobile money in Nairobi.

**Barnabas Andiva**<sup>47</sup>: This is a comprehensive article that critically addresses the legal challenges posed by Mobile Money in Kenya and provides various recommendations to what needs to be done in order to address the said challenges. This particular article was a mind opener in the research of this study. The author predominantly advocates for the 'extension' so to say of the current legal regime on banking to cater for the said challenges and then creation of legal certainty through guidance or new legislation that regulate mobile money ssuance.<sup>48</sup>

Barnabas Andiva's report of 2ND March 2010 on Mobile money-Kenya. P.23

#### 1.9 Chapterisation.

This paper will be divided into five chapters as follows;

- **Chapter One** introduces the study. It succinctly states the problem to be researched, the objectives, scope, significance of the study, methodology as well as the literature review of the study and the questions that the study hopes to answer as it concludes.
- **Chapter Two** discusses the concepts, and principles which are at the heart of the report. Including the various models of branchless banking.
- Chapter Three involves an overview of the legal regime status and the risks encountered by the providers of mobile money services and the consumers due to the lack of effective laws in place.
- Chapter Four proposes a high level framework for enabling the development of appropriate regulatory laws and policies of Mobile money
- **Chapter Five** will give findings and concluding remarks that can be a resource to Nairobi in order to effectively modify the laws regulating Mobile Money

In **conclusion**, this chapter introduced the study on Mobile Money Services in Nairobi. It presented its background in line with the definitions of main terms in mobile money. The chapter similarly stated the problem of the study, the objectives of the study, scope, significance of carrying out the study and methodology. In this chapter, literature review of some of the written work done by various authors related to the research topic were consulted as stated above.

#### **CHAPTER TWO**

# THE CONCEPTS AND THE VARIOUS MODELS OF MOBILE MONEY IN NAIROBI 2.0 Introduction.

In the first instance, it is important to understand the background of the study. This chapter will concern itself with the general understanding of what Mobile Money is, why Mobile Money and its categorization and the concepts. This will provide a strong foundation to the rest of the study.

#### 2.1 Mobile Money.

Mobile Money services is commonly used as an umbrella to describe any financial service that is provided using a mobile device.<sup>49</sup>

Recent advances in technology have created a surge in "technology-based self-service". Such developments are changing the way that service firms and consumers interact. Mobile money service is becoming progressively more important not only in determining the success or failure of banking but also providing consumers in Nairobi with a superior experience with respect to the interactive flow of information. Mobile banking services (also referred to as SMS banking)<sup>50</sup> offered through mobile phones upon the platform of mobile money transfer services, which is the moving of money from one place to another using the mobile phone technology, example in Kenya the main service is **M-Pesa**, which is a mobile money transfer service offered by Safaricom<sup>51</sup>. The said Safaricom operates in conjunction with some banks such as KCB, Co-operative Bank, Equity among others, whereby the consumer can directly ransfer his/her money from his/her bank account to his mobile phone account and vice versa.

While mobile banking technology is still in a developmental stage, that is most certainly true or the legal and regulatory framework that governs these services. However financial nstitutions can't afford to sit out the mobile banking while waiting for a number of technical, egal and regulatory issues to be sorted out. One of the distinct areas of tension between

<sup>&</sup>lt;sup>9</sup> Brian Muthiora; a report on Enabling Mobile Money Policies in Kenya. January 2015. P.12.

<sup>&</sup>lt;sup>9</sup> Richard Nyangosi & Dr.J.S.Aurora, Emergence of information Technology in the Kenyan banking sector: An empirical study 2010) P.9.
<sup>1</sup> Gerald Nyaoma: Alliance For Financial Inclusion: Case study Enabling Mehile Menoy transfers. The Control Back of Kenyan in Control Research and the Control Research and the

<sup>&</sup>lt;sup>1</sup> Gerald Nyaoma: Alliance For Financial Inclusion; Case study Enabling Mobile Money transfer; The Central Bank of Kenya's Treatment of M-Pesa(2010) P.15.

financial institutions and mobile services providers with respect to mobile banking and mobile finance has to do with risk allocation and liability. In a variety of different ways, financial institutions are responsible for ensuring that banking transactions are properly initiated and closed.<sup>52</sup>

There are various pertinent legal questions that have to be addressed in regard to m-banking in Kenya: - Does the law distinguish adequately between payments and deposits? The **Banking Act**<sup>53</sup> defines deposits implicitly in the definition of banking and further while explaining *section 16(5)*. Under existing law, it is the purpose (for investment or borrowing) and not the mode of payment (cash or electronic) that defines deposit. Secondly, does the law provide for mobile money issuance and by which entities? There is no specific legislation in Kenya which defines the above concept or address its issuance. Finally, is there a provision for agencies for cash withdrawal and deposits under the existing law?

#### 2.2 Why Mobile Money.

The future of banking lies in clicks and mortar<sup>54</sup>. Paper based systems are slow, labor intensive and correspondingly expensive to maintain hence the growth of Mobile banking systems. This has been precipitated by among other factors; the rapid growth/development in the technological world, rapidly changing customers' needs and preferences like the need to deposit, withdraw money anytime, make payments, transact business etc.

The enhancement of customer relationship management that is banks wanting to keep their customers happy have also influenced the growth in mobile money services and also as above noted the pressure to reduce transactional and operation costs and pass the benefits to customers. Some even see electronic banking (bearing in mind mobile banking) as an opportunity for countries with underdeveloped financial systems to leapfrog developmental stages<sup>55</sup>.

<sup>&</sup>lt;sup>2</sup> Mbiti, I., & Weil, D. N. (2011). MOBILE BANKING: THE IMPACT OF M-PESA IN KENYA. NATIONAL BUREAU OF ECONOMIC XESEARCH, Working Paper 17129. P.22.

Banking Act, Section 16(2) 2015 Laws of Kenya.

<sup>&</sup>lt;sup>4</sup> Cronin , Mary J, Banking and Finance on the Internet (1997 John Wiley & sons) P. 41

<sup>&</sup>lt;sup>5</sup> Saleh M.Nasouli & Andrea Schaechter, "challenges of E-banking Revolution", Finance & Development Volume ?9(September 2002) P.56.

With Mobile money services, convenience can be achieved 24hrs a day. This is because a user has access to his mobile phone all day, at all times. So, to effectively achieve a truly convenient banking mode, a truly mobile mode of money transfer has to be explored, hence the need for m-money services. <sup>56</sup>

#### 2.3 Categorization and Concepts.

Models of branchless banking can be classified into four broad categories: - Bank Focused, Bank-Led, Nonbank-led and Hybrid model.<sup>57</sup>

#### 2.3.1 Bank-Focused Model.

This emerges when a traditional bank uses non-traditional low-cost delivery channels to provide banking services to its existing customers. Examples range from use of **Automatic Teller Machines (ATMs)** to internet banking or mobile phone banking to provide certain limited banking services to bank's customers. This model is additive in nature and can be seen as modest extension of conventional branch-based banking.<sup>58</sup>

#### 2.3.2 Bank-Led Model.

This is whereby a bank or any other licensed financial services institution such as microfinance institution (MFI), is the main institution licensed to provide mobile financial services under the **Banking Act**.<sup>59</sup> This model is distinguished by the fact that clients, or recipients of the mobile financial service, are required by the **Central Bank of Kenya Act** to have a bank account.<sup>60</sup>

The mobile financial services provided are mobile banking services such as payments, account balance inquiry, and monetary transfers between accounts. These services are accessed hrough the Internet or through a mobile phone based system where the mobile phone company provides menu based communications services in partnership with a bank. However,

<sup>6</sup> Ibid n55.

<sup>&</sup>lt;sup>7</sup> Policy Paper on Regulatory Framework for Mobile Banking in Pakistan via <u>www.bankablefrontier.com</u> accessed on 20<sup>th</sup> October 2016.

<sup>&</sup>lt;sup>8</sup> Supra

<sup>&</sup>lt;sup>9</sup> 2015 Laws of Kenya.

<sup>&</sup>lt;sup>0</sup>Central Bank of Kenya Act, 2015 Laws of Kenya.

neither the mobile network operator nor the cell phone company, is involved in any underlying financial transactions, all of which pass through the client's bank account and for systems will make it significantly easier to exercise fiduciary oversight over the payment process.<sup>61</sup>

#### 2.3.3 Nonbank-Led Model/ Mobile Network Operator Model (MNO).

Under this model, a mobile service provider transforms its wireless network messaging functionality into a Subscriber Identification Module (SIM) based platform for providing mobile financial services as Value Added Services (VAS) under its telecommunications license. Here the bank does not come in the picture except possible as a safe keeper of surplus funds and the Non-bank or Telco performs all the functions.<sup>62</sup> This is an example of M-Pesa in Kenya whereby its operator is Safaricom Network. The SIM based service enables its subscribers to transfer funds and make payments in the form of electronic money to each other, which transactions are settled through the operator's established agent network.

In contrast to mobile banking services, the payment transactions occur entirely within the MNO's network, and do not require the subscriber to have a bank account. The funds in transit - paid in by the remitter but not yet withdrawn by the recipient, are in principle on deposit in a separate trust account with one or more banks and are therefore not deposits in the context of banking business. <sup>63</sup>

Mobile Network Operators make use of the banking facilities, in the form of trust accounts. This requirement is part of the authorization and licensing conditions spelt out by the Central Bank of Kenya. The Mobile Network Operator (MNO) only executes client payment nstructions and does not perform the credit assessment and a bank's risk management role.

The Mobile network operator model of mobile money transfer services is different from the nobile banking model in three significant aspects:-<sup>64</sup>

<sup>&</sup>lt;sup>1</sup> Okonjo, J.O (2013), "Convergence between Mobile telecommunications and financial services: nplications for regulation of mobile telecommunications in Kenya" P. 34.

<sup>&</sup>lt;sup>?</sup> Ibid n61.

<sup>&</sup>lt;sup>3</sup> Barnabas Andiva; A report on mobile Money Kenya.(2015) P.6.

<sup>&</sup>lt;sup>1</sup> Mazer, R and Rowan P, (2014), "Competition in Mobile Financial Services in Kenya, Draft Brief Prepared by CGAP for competition Authority of Kenya" P.21.

Firstly, cash exchanged for electronic value are not repaid and remains in control of the customer at all times. To offer M-PESA services the agent must deposit a float of cash upfront in an M-PESA account, held by a local bank. As such there is no credit risk to either the customer or the mobile network operator.<sup>65</sup>

Secondly, customer funds are not on-lent in the pursuit of other business or interest income. All funds are to be maintained in a pooled trust account at a reputable bank, and cannot be accessed by the mobile network operator to fund its business. Hence, there is no intermediation, which is a key part of the deposit taking definition. <sup>66</sup>

Thirdly, no interest is paid on customer deposits, or received by the mobile network operator on the float. This is a further factor which indicates that the e-value created is not in fact a deposit.<sup>67</sup>

Therefore, these services arguably do not constitute banking business as defined under **Section 2** of the **Banking Act<sup>68</sup>**. Therefore, they do not require the extent of regulatory oversight required for deposits that are used in banking. The depository bank has no involvement in or responsibility for payments through the MNO system. Mobile banking has relatively high costs of a bank account opening (minimum balance, service charges, full Know-Your-Customer (KYC) requirements, and travel time to a branch), compared to the easy, low cost and increasingly universal access to cell phone services.<sup>69</sup>

The MNO model is therefore highly effective in bringing informal cash transactions into a form of formal financial system, thereby expanding access to financial services.

#### 2.2.4 Hybrid Model.

Since the inception of mobile money services by Mobile Network Operator MNOs, there has been increased competition between the banks and MNOs in the provision of mobile banking

<sup>&</sup>lt;sup>5</sup> Ibid n64.

<sup>&</sup>lt;sup>6</sup> Ibid n64.

<sup>&</sup>lt;sup>7</sup> Ibid n64.

<sup>&</sup>lt;sup>8</sup> 2015 Laws of Kenya. Section 2 defines 'banking business' as: "the accepting from members of the public of money on leposit repayable on demand or at the expiry of a fixed period or after notice; the accepting from members of the public of noney on current account and payment on and acceptance of cheques; and

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. <sup>9</sup> Ibid n68.

and mobile money transfer services respectively. In addition, there has also been competition within the banking industry, and also between the mobile network operators on the other hand. This has resulted in innovative integration of mobile banking and mobile money transfer and payment services, so as to add value to the services offered by banks to their banking customers, and MNOs to their subscribers. Hence the so called Hybrid type of mobile money services. In this model, banks, MNOs and/or other third parties partner offer mobile financial services that combine mobile banking services and mobile money transfer services. Such hybrid models are mobile network operator based money transfer services that handle payments internally with cash in/out through the MNO's agent network, yet link to formal banking services including savings and loans such as Safaricom's M-KOPA and M-Shwari, and insurance.<sup>70</sup> For instance, in 2010, a mobile savings, credit and insurance product, M-KESHO, was launched in partnership with Equity Bank. M-KESHO would allow Equity Bank customers to pair their bank account with their M-PESA account, making it convenient to move money between accounts. Unfortunately the M-KESHO collapsed later of due to disagreements with Safaricom. The Kenya Commercial Bank (KCB), Chase Bank, Family Bank, Standard Charted bank, Post Bank and the Cooperative Bank among others has also integrated with M-Pesa to provide mobile banking services.<sup>71</sup>

Mobile money services in Kenya currently falls in both the **Nonbank Led Model and the Hybrid Model** which is the focal point in this research paper. M-Pesa therefore works by allowing registered individuals to withdraw cash, store money, make payments and send money P-2-P, purchase mobile phone airtime, pay bills, buying goods and services and acquiring loans using the e-money value in their M-Pesa accounts via mobile phones. In Vairobi currently, a large number of residents use Mobile money services to pay for Water bills<sup>72</sup>, paying for goods in the supermarkets among others. One of the Economists in Kenya, contends that "paying for a taxi ride using your mobile phone is easier in Nairobi than it is in

<sup>&</sup>lt;sup>9</sup> Mazer, R and Rowan P, (2014), "Competition in Mobile Financial Services in Kenya, Draft Brief Prepared by CGAP for Competition Authority of Kenya" P.25.

<sup>&</sup>lt;sup>1</sup> <u>www.economist.com/blogs/economist-explains/2013/05/economist-explains-18</u>

<sup>&</sup>lt;sup>2</sup> The water bills pay points are the Cooperative bank, Equity, Barclays bank, Postal corporation of Kenya and in some upermarkets in Nairobi; Retrieved from <u>www.mpesacharges.com/nairobi-water-company-pay-bill-number/</u> accessed on 17<sup>th</sup> pril 2016.

*New York.* <sup>*n*23</sup> Nowadays some of the schools and education institutions allows payment of school fees via Mobile money. For instance, tuition at the Bridge International Schools in Nairobi, can be paid only through M-Pesa.<sup>74</sup> Customers equally use network of Safaricom's airtime sellers (agents), shops and petrol stations to access the services some agents are also situated inside banks and supermarkets. Their National identity card (ID) or passport is the means used to verify their identity. Low fees are charged and all monies (e-float) are held in a single bank account at the Commercial Bank of Kenya (CBK).<sup>75</sup>

**Conclusively**, in Kenya, mobile financial services including **M-PESA**, **Airtel Money**, and **Orange Money**, offered by mobile telecommunications companies were originally under the pure Mobile Network Operator (MNO) model. However, increased integration of some of these mobile money services with mobile banking services has created **hybrid models** as discussed above.

<sup>3</sup> Ibid n72.

<sup>&</sup>lt;sup>4</sup> econ.worldbank.org/external/default/main?theSitePK=469382&contentMDK :Accessed on 13<sup>th</sup>Nov 2016.
<sup>5</sup> Ibid n74.

#### CHAPTER THREE

# THE LEGAL REGIME OF MOBILE MONEY AND THE RISKS ENCOUNTERED BY CONSUMERS AND SERVICE PROVIDERS.

#### 3.0 Introduction.

Mobile Money Services being a fast changing services due to technological advancement, there is a danger of the legislative framework not evolving as fast as required. Henceforth, this Chapter will concern itself with examining the legal regime, legal challenges and the risks encountered by both the providers of mobile money services and the consumers due to the lack of effective laws in place.

#### 3.1 The Legal Regime.

Mobile Money services as aforementioned herein is an extension of traditional banking, because it is a delivery of various banking services or conducting banking business electronically without necessarily visiting banking hall.<sup>76</sup>

There are no specific laws governing the mobile money services or electronic payments in Kenya. The applicable banking laws are antiquated, however, the banking sector pays no heed to this legislative vacuum. There is no doubt that information technology is both a strategic and a turnaround activity for the banking sector. Banks that were slow on their feet n embracing this technology have found a large chunk of their market niche grabbed from under their feet by banks that revamped their information systems and information technology capabilities and are offering fast and better services coupled with a wide variety of banking products. The banking sector can only shrug at the lack of law governing electronic banking mobile money) in Kenya. It is not their place to enact laws or weep at the lack of any regulations. All the grey areas in the relationship between bank and customer in respect to nobile money transfer are governed by clausal terms and conditions that will exempt the bank rom liability from any fraud, error or malfunctions in the electronic payment systems.<sup>77</sup>

<sup>&</sup>lt;sup>5</sup> Gerald Nyaoma, Director, Banking Department, Central Bank of Kenya, speaking at the first AFI Global Policy Forum in lairobi, Kenya, 2010, available at <u>http://www.youtube.com/watch?v=5npOSOJO8KA</u>. Accessed on 17<sup>th</sup> April 2016. P.7.
<sup>7</sup> Kethi D.kilonzo ; An Analysis of the Legal Challenges posed by Electronic Banking.(2007). P.340.

Henceforth, due to amalgamation of the banking sector with the technological one to provide mobile money transfer services some of the legislations governing information and Communication Technology have a bearing on mobile money services as will be discussed herein.<sup>78</sup>

# **3.2 Pertinent legislations influencing the operation of Mobile Money services in Kenya.**

#### 3.2.1 The Bank.

In the mobile payment context, banks offer banking services via the mobile device. They hold the e-float on behalf of the Mobile Network Operators (MNOs) and handle cross-border transactions while managing foreign exchange risk. In Nairobi, retail payments are dominated by banks whose primary function is to gather deposits for deployment in loans and other permissible investments.<sup>79</sup> Banks are best positioned to employ risk management programs that ensure regulatory compliance. The banks' role in the mobile payment value chain is important as the mobile payment system in exchange for e-float is deposited in bank accounts held by the mobile network operator. In efforts to diversify their risk,Mobile Network Operators (MNOs) hold such deposits in different banks.<sup>80</sup>

These accounts are regular current accounts where Mobile Network Operators (MNOs) have no restrictions of access. In turn, the banks face no special reserve requirements with regard to the MNO's' deposits. Similarly, there are no explicit requirements for the Mobile Network Operators (MNO) to give notice of their intention to withdraw "large" quantities of cash at a given point in time, which shows that these trusts are treated as any other current account deposit in terms of regulatory policy by the Central Bank. This then shows the vulnerability hat exists within the framework which mobile money services is currently operating.<sup>81</sup>

<sup>8</sup> Ibid n77.

<sup>&</sup>lt;sup>9</sup> Ojijo P ; 26 Legal Issues of Mobile Money in Kenya. <u>http://www.wikipedia.legal-issues-in-mobile-money-pdf</u>. Accessed on <sup>9</sup> O<sup>th</sup> April 2016.

<sup>&</sup>lt;sup>9</sup> Joy Malala; Consumer Protection for Mobile Payments In Kenya: An Examination Of The Fragmented Legislation and The Complexities It Presents For Mobile Payments. P.34. <sup>1</sup> Ibid n80.

In Kenya the main banking legislation is the **Banking Act**<sup>82</sup>which comprehensively covers traditional Banking. **Section 2(1)** of the said Act defines *banking business* as the accepting from members of the public of money on deposit repayable on demand or after notice, this is borrowed from the common law definition of banking, a deposit is defined<sup>83</sup>as a sum of money paid on terms under which it will be repaid, with or without interest or a premium and either on demand or at a time or in circumstances agreed by or on behalf of the person making the payment and the person receiving it.

Further ahead **section 3(1)**<sup>84</sup> provides that no person should transact any banking business unless it is an institution or duly approved agency conducting banking business on behalf of an institution which holds a valid license. This has provided a lot of heated debates in the country especially in relation with mobile money transfer services, banks in collaboration with telecommunication companies are using the said money transfer services, to offer mobile banking (SMS banking) in the country where clients can deposit and withdraw money from their bank accounts using their mobile phones. In furtherance of this, the said banks have set up mobile branches in collaboration with the said telecommunication companies where bank clients can open accounts deposit and withdraw money and even make payments to others or <sup>7</sup>or utilities.<sup>85</sup>

The said Mobile Network Operators (MNOs) with banks have been accused of carrying on banking business in contravention of the aforesaid provision of the law because they are not authorized or licensed to carry on banking business. This argument has also been compounded by **section 16(1)** which prohibits the acceptance of deposits in the course of carrying on a deposit taking business without a valid license<sup>86</sup>.

levertheless, the above said Act under **section 16(5)**<sup>87</sup> which states that business is a leposit taking business if in the course of the business money received by way of deposit is ent to others in form of loans or otherwise. In regards to the Mobile Money Transfer services,

<sup>&</sup>lt;sup>?</sup> Banking Act of 2015 Laws of Kenya.

<sup>&</sup>lt;sup>3</sup> Banking Act, section 16(2).2015 Laws of Kenya.

<sup>&#</sup>x27; Ibid n82.

<sup>&</sup>lt;sup>†</sup> Popularly regarded to as M-Kesho or "Bank Kwa Jirani"(Bank in The Neighbourhood).

Banking Act,2015 Laws of Kenya.

<sup>&#</sup>x27; Ibid n86.

the Banking Act is of very little application, if any and seems to have been overtaken by events.

The other banking legislation in Kenya is the **Central Bank of Kenya Act (as amended)**<sup>88</sup> and just as the foregoing Act, it is mainly concerned with the traditional banking. **Section 7** of the said Act empowers the Central Bank with powers to license and supervise all financial institutions in Kenya<sup>89</sup>. Under **section 27**, the said Bank is the custodian of the General Reserve Fund which is a fund contributed by all the banks in Kenya meant for emergency purposes, for instance when a bank is unable to pay back its customers' deposits due to financial difficulties. Generally the said Act empowers the Central bank with regulatory and supervisory powers over all other banks in regards to traditional modes of banking<sup>90</sup>.

## 3.2.2 Information and Communications Technology.

In Kenya ICT business is regulated by the Communication Commission of Kenya (CCK), there is no specific legislation geared towards the regulation of mobile money transfer services, however the **Kenya Communication Act**<sup>91</sup> has been amended by the **Kenya Communication (amendment) Act**<sup>92</sup> to include part IV.<sup>93</sup>

Jnder **section 83 C** of the said Act the functions of the CCK includes; to facilitate electronic ransactions (mobile money services), by ensuring the use of reliable electronic records and ransactions, to develop a sound framework to minimize the incidences of forged electronic records and fraud in electronic commerce among other functions.<sup>94</sup>

This clearly put the said commission at the forefront in ensuring that mobile money services levelop to the maximum in the country, however, the commission has no regulatory or upervisory powers over financial institutions. **Section 83 G**<sup>95</sup> of the said Act provides legal ecognition of e-records, thus transactions recorded by mobile devices are acceptable in courts of law. **Section 83 J** is to the effect that, electronic (mobile phone) contracts are validated

<sup>&</sup>lt;sup>1</sup> Central Bank of Kenya Act (as ammended) 2015 Laws of Kenya.

<sup>&#</sup>x27; Ibid n88.

<sup>&#</sup>x27; Ibid n88.

Kenya Information and Communication Act of 1998 Laws of Kenya.

Kenya Information and Communication Act CAP. 411A: Revised Edition 2012[1998].

Kenya Information and Communication Act CAP. 411A: Revised Edition 2012[1998]. Kenya Information and Communication Act CAP. 411A: Revised Edition 2012[1998]. Ibid n92.

and are considered as contracts concluded in the traditional way, such contracts include mobile money transfers and other related mobile payment services like payment of utility bills through mobile money services.<sup>96</sup>

In addition to, there are a number of regulations that have been made by the minister<sup>97</sup> in consultation with the CCK under the authority of the aforementioned Act. One such regulation is the **Kenya Information and Communications (Tariffs) Regulation<sup>98</sup>**. In consumer protection, **regulation 4** provides that mobile network operators shall set tariffs that are just and reasonable, sufficiently clear and enable the end user to determine the description of the service, the detailing to the nature of service and charges payable for the services and that are non-discriminatory and shall guarantee equality of treatment<sup>99</sup>.

The **Kenya Communications (Electronic Transactions) Regulations**<sup>100</sup>, are also important in providing financial protection to consumers of mobile money services. **Regulation 5** provides that service providers for instance Safaricom, must be companies registered in Kenya, they must have taken out adequate insurance in accordance with guidelines published by the commission against liability for loss claims arising out of any error or omission on the part of the applicant<sup>101</sup>.

Further ahead, **regulation 7** provides that service providers must keep relevant records of transactions for a period of 7 years, in case of any disputes or claims that may arise in the future in relation to the said transactions<sup>102</sup>.

Another regulation is the **Kenya Information and Communications (Dispute Resolution) Regulation**<sup>103</sup>. **Regulation 3** vests the commission with the power to adjudicate over disputes between a consumer and a service provider, this is meant to ease the burden that would be caused by court litigation due to the said disputes. Under **regulation 8** of the aforesaid Regulations any party that is dissatisfied with the decision of the commission

<sup>&</sup>lt;sup>\$</sup> Ibid n92.

<sup>&</sup>lt;sup>7</sup> For Information and Communication.

<sup>&</sup>lt;sup>°</sup> 2010 Laws of Kenya. <sup>°</sup> Ibid.n99

<sup>&</sup>lt;sup>10</sup> 2016 Laws of Kenva.

<sup>&</sup>lt;sup>11</sup> Ibid n100.

<sup>&</sup>lt;sup>12</sup> Ibid n100.

<sup>&</sup>lt;sup>13</sup> 2010 Laws of Kenya.

may appeal to the Appeals Tribunal established under **regulation 102** within 15 days of the decision. The procedure for instituting a complaint with the commission is very similar to that in civil proceeding though the commission has powers to disregard technicalities<sup>104</sup>.

#### 3.3 The New Regulatory Framework.

"A regulator must realise that better regulation is more beneficial than more regulation. This is because we must ensure that innovations are not stifled by heavy regulatory regimes."<sup>105</sup>

#### 3.3.1 The National Payment System (NPS) Regulations of 2014.

On 15 August 2014, the Cabinet Secretary for the National Treasury issued a Legal Notice officially giving life to the **NPS Regulations of 2014**.<sup>106</sup>

Publication of the Legal Notice capped off a long wait for a formal legal framework for mobile money. The NPS Regulations have codified into law the regulatory practices that have evolved since mobile money was introduced in 2007, beginning with the prudential and market conduct requirements enshrined in the no objection letters, and have given more legitimacy to existing business models. For operators, the NPS Regulations provided much-needed certainty in the market and direction for investors seeking to enter it. For instance, In Nairobi where there are over 2 million registered mobile money accounts and 59% of the adult population actively uses mobile money, it is customers who will benefit most from comprehensive mechanisms for consumer redress, disclosure of terms of service, maintenance of privacy, and confidentiality of customer data.<sup>107</sup>

The CBK has adopted a functional rather than institutional approach to regulation, which permits both banks and non-banks, including mobile operators, to provide mobile money

<sup>&</sup>lt;sup>74</sup> G.Njaramba, Law of Financial Institutions in Kenya,(Law Africa Publishing (K) Ltd 2010). P.233.

<sup>&</sup>lt;sup>15</sup> Prof. Njuguna Ndungu', former Governor, Central Bank Of Kenya. Effective financial markets require regulations that bring ertainty, foster competition, sustain innovation, and promote ethical and responsible business conduct that upholds the rights f customers. P.55.

<sup>&</sup>lt;sup>16</sup> Central Bank of Kenya (2014), "The National Payment System Regulations, 2014. Arrangement Of Regulations" at <u>ttps://www.centralbank.go.ke/images/docs/legislation/NPSRegulations2014.pdf</u> accesed on 23rd June 2016.
<sup>17</sup> Brian Muthiora; Enabling Mobile Money Policies in Kenya. January 2015. P.11.

services. Under the NPS Regulations, mobile money providers may be designated as either payment service providers<sup>108</sup> or e-money issuers.<sup>109</sup>

Customer funds must be held in trust with a 'strong' rated prudentially regulated bank, and lending or investment of these funds is not permitted. The funds are isolated from the service provider's funds and protected from the claims of its creditors. Service providers can appoint agents and are responsible for the actions of agents. The CBK's oversight, inspection, and enforcement duties are formally recognised.<sup>110</sup>

The Regulations validate existing mobile money business models and reinforce the AML/CFT compliance regimes practiced by mobile money providers. Beyond validating the regulatory and business practices that have evolved since the launch of M-PESA, the NPS Regulations also address a range of 'second-generation' issues that have emerged as the mobile money market has matured. These issues are detailed below.

#### Governance and business models.

While the NPS Regulations do not require mobile money business to be conducted under a separate legal entity, the framework validates the existing business model that allows mobile operators to operate under distinct corporate business units or divisions.<sup>111</sup>

The CBK was keen to ensure there would be no disruption of business for existing mobile noney providers. Mobile operators therefore do not need to change their structures, and may continue to offer their mobile money service along with their core voice and data services, provided roles and management are clearly separated. Given that the CBK has taken a unctional approach to regulation, nothing restricts the formation of wholly or partly-owned

<sup>&</sup>lt;sup>18</sup> A payment service provider is defined under the NPS Act as (i) a person, company or organisation acting as provider in elation to the sending, receiving, storing or processing of payments or the provision of other services in relation to payment ervices through an electronic system; (ii) a person, company or organisation which owns, processes, operates, manages or ontrols a public switched network for the provision of payment services; or (iii) any other person, company or organisation hat processes or stores data on behalf of such payment service providers or users of such payment services.
<sup>19</sup> An e-money issuer is defined under the NPS Regulations as a payment service provider that is authorised to issue e-

An e-money issuer is defined under the NPS Regulations as a payment service provider that is authorised to issue eioney.

<sup>&</sup>lt;sup>0</sup> Underhill and Hayton; Law of Trusts and Trustees. 2012. P.44.

<sup>&</sup>lt;sup>1</sup> Central Bank of Kenya Act 2015 .S. 25 (2) (d).

subsidiaries of mobile operators to conduct mobile money business, which is common in other markets.<sup>112</sup>

The NPS Regulations require a payment service provider engaged in electronic retail transfers and other commercial activities to establish adequate governance arrangements, which must be effective and transparent to ensure the integrity of its service.<sup>113</sup>

The NPS Regulations prohibit a payment service provider from transferring any funds to itself or co-mingling trust funds with other funds. Therefore, considerable emphasis has been placed on the management and governance of the trusts set up to hold customer funds.

### Interoperability.

**Barnabas Andiva** in his report defines "Interoperability" as the interconnection of mobile money services either between providers or with external parties.<sup>114</sup>

Similarly, the **NPS Regulations** define interoperability as "commercial interconnectivity between providers of different payment systems or payment instruments including the capability of electronic systems to exchange messages and 'interoperable' shall be construed accordingly".<sup>115</sup>

Interoperability has not been mandated under the NPS Regulations. Rather, payment service providers are permitted "to enter into interoperable arrangements".<sup>116</sup>

Jnder this definition, "commercial" implies the CBK will leave it to the market to determine now players should interoperate.

<sup>&</sup>lt;sup>12</sup>In many markets, non-banks, including mobile operators, are typically required to set up separate legal entities authorised *y* the financial regulator to provide mobile money services. <sup>13</sup> The requirements include: a) establishment of a Board of Trustees of persons of caliber, credibility, and integrity who fulfil

<sup>&</sup>lt;sup>13</sup> The requirements include: a) establishment of a Board of Trustees of persons of caliber, credibility, and integrity who fulfil he fit and proper criteria prescribed in the draft regulations; b) clearly documented ownership and management structure; c) regregation of duties and internal audit functions to minimise risk of fraud; and d) conducting payment services in a separate and distinct business unit from other business units, including maintaining a separate management structure and keeping eparate books of account for the payment services division.

<sup>&</sup>lt;sup>14</sup>A report on Mobile Money Kenya. <Barnabas-Andiva-Mobile-Money-Kenya.pdf>(2014) P.9.

<sup>&</sup>lt;sup>15</sup> National Payment System Regulations of 2014. S. 2.

<sup>&</sup>lt;sup>16</sup> National Payment System Regulations of 2014, S. 21.(2).

The NPS Regulations permit the Central Bank to recognize a Payment Service Provider Management Body (PSPMB), whose intent is to facilitate interoperability amongst payment service providers<sup>117</sup>.

#### • Consumer protection.

The NPS Regulations include very detailed provisions for consumer protection. Service providers are required to have disclosure mechanisms, open channels for consumer redress, and clear terms and conditions for the service in place, and must maintain the privacy and confidentiality of customer data. In **Judd Vs. Citibank 107 Misc.2d 526 (1980)** a decided case in the USA, the court held that in an action involving a consumer's liability for an electronic funds transfer, the burden of showing that the transfer was "unauthorized" is on the consumer. The consumer must first plead transfer and put forward evidence supporting this.

*Disclosure*:<sup>118</sup>Providers are required to disclose to customers and the CBK any material changes in the rates, terms, conditions, and charges for the service at least seven days before the changes take effect. Providers are also required to provide the following payment-related information: a payment reference; name of the payer/name of the payee; amount of the transfer; date of the transaction; and statements on request.<sup>119</sup>

Providers are prohibited from: charging customers to fulfil its disclosure and information obligations under the NPS regulations; or issuing misleading advertising on its products or services.

<sup>&</sup>lt;sup>17</sup> Ibid. Section 22 (1) further provides: "A payment service provider may, for the purposes of facilitating interoperability, varticipate in a payment service provider management body." The PSPMB would be established to manage and regulate, in elation to its members, all matters affecting payment instructions, acting as a channel for communication by its members with the Government and the Central Bank; and deal with and promote any other matter of interest to its members and foster o-operation among them. As a collective membership body, a PSPMB is required to self-regulate. To this end, the NPS 'egulations provide that the rules of a PSPMB shall empower it to admit new members and regulate, control, and terminate nembership (with the approval of the Central Bank); and constitute, establish, or dissolve any committee, forum, or body onsisting of its members provided that such committee, forum, or body has an impact on, interacts with, has access to, or nakes use of any payment, clearing or settlement systems, or operations. The CBK retains some residual powers over the ffairs of a PSPMB; thus, the body cannot terminate the membership of any of its members except with the approval of the 'entral Eank.

<sup>&</sup>lt;sup>8</sup> National Payment System Regulations of 201 S. 35

<sup>&</sup>lt;sup>9</sup> National Payment System Regulations of 2014, S. 35 (7).

*Customer redress*<sup>120</sup> Service providers are required, within six months of commencing operations, to establish a customer redress and complaints-handling mechanism, and to inform customers of the procedures for lodging complaints, including how to escalate the complaint if the customer is not satisfied with the initial response. Complaints must be filed within 15 days of the event, and service providers must respond to all complaints. The service provider is required to inform the customer of the expected outcomes and timeline for the resolution of the complaint within 60 days. The provider cannot charge customers for lodging complaints. However, it may levy a reasonable charge when records more than three months old must be retrieved, or when retrieval results in incremental expense or inconvenience to the service provider.<sup>121</sup>

*Privacy and confidentiality*:<sup>122</sup> Disclosure of confidential customer<sup>123</sup> information is prohibited except under the following circumstances: to the customer concerned; to the Central Bank; when authorized in writing by the customer concerned; or as required by law.

A significant fine of KES 1 million (USD 11,600) may be imposed on service providers (including agents or cash merchants) that fail to comply with these disclosure requirements.

#### 3.3.2 Proceeds of Crime and Anti-Money Act No. 9 of 2009.

When M-PESA was launched in 2007, no comprehensive AML/CFT legislation or regulations were in place. Banks were subject to the Prudential Guidelines on Anti-Money Laundering ssued by the CBK under the powers conferred upon it by the **Banking Act**. Since mobile operators were not subject to the Banking Act, the CBK could not extend the application of the Prudential Guidelines to mobile money providers. In the absence of a substantive law on AML/CFT, mobile operators, notably Safaricom, implemented a voluntary AML/CFT programme consisting of staff and agent training, identity verification, know your customer (KYC) procedures, and transaction controls.<sup>124</sup>

<sup>&</sup>lt;sup>20</sup> National Payment System Regulations of 2014 S.38.

<sup>&</sup>lt;sup>?1</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> National Payment System Regulations of 2014. S.42.

<sup>&</sup>lt;sup>23</sup> Includes agents and cash merchants.

<sup>&</sup>lt;sup>14</sup> Mercy W. Buku and Michael W. Meredith, "Safaricom and M-PESA in Kenya: Financial Inclusion and Financial Integrity", 8 VASH. J.L. TECH & ARTS 375 (2013) at 398 et seq. available at

In 2009, Kenya enacted the *Proceeds of Crime and Anti-Money Laundering Act (the AML Act)*,<sup>125</sup> The AML Act defines (and criminalizes) money laundering and related offences, provides enforcement measures for Kenya's government (such as tracing and seizure of assets), and imposes penalties on offenders. The Act also imposes obligations on 'reporting institutions'. These obligations include the obligation to verify customer identity,<sup>126</sup> maintain customer records, and establish AML suspicious activity reporting mechanisms. All reporting institutions are required to register with the Financial Reporting Centre (FRC) and file any suspicious activity reports with the FRC. The proceeds of Crime and Anti-Money Laundering Regulations 2013.<sup>127</sup>

(AML Regulations) flesh out the AML Act and require reporting institutions adopting new technologies or new business practices, including new delivery mechanisms, to undertake a risk assessment before introducing a new product, business practice, or technology.

While the AML Act and AML Regulations do not explicitly provide for a risk-based or tiered approach to KYC, it can be inferred that since mobile money providers are permitted to accept additional KYC information incrementally, such as a utility bill, employment or occupational details, or a tax Personal Identification Number, a risk-based approach can be implemented. The AML Act does not discriminate between different classes of reporting institutions, but regulatory authorities may prescribe the extent to which and the circumstances under which ncremental KYC documents may be requested.<sup>128</sup>

#### 3.4 Challenges.

## 3.4.1 Legal Challenges.

The first challenge Safaricom and the CBK had to overcome was ensuring product design was compatible with the existing legal framework. The CBK had to be satisfied that Safaricom

ttp://digital.law.washington.edu/dspace-law/bitstream/handle/1773.1/1204/ 8WJLTA375.pdf?sequence=5. Accessed on 24<sup>th</sup> ugust 2016.

<sup>&</sup>lt;sup>15</sup> Act number 9 of 2009. In 2012, the Prevention of Terrorism Act (Act number 30 of 2012) was passed and adopts the same efinition for 'reporting institution' as the AML Act, The Prevention of Terrorism Act imposes similar obligations on reporting istitutions.

<sup>&</sup>lt;sup>'6</sup> Acceptable forms of identification allowed under Section 45 (1) (a) are: birth certificate, national identity card, passport, iver's licence, or any other official document as may be prescribed.

<sup>&</sup>lt;sup>7</sup> Legal Notice No. 59 of 2013.

<sup>&</sup>lt;sup>8</sup> Ibid n127.

would not be intermediating M-PESA customer funds, which the Banking Act restricted to licensed banks. From the foregoing discussion it is clear that the most source of law in Kenya governing mobile money transfer services are the law of contract, agency, customs and usage of banking that have mostly not been tested in courts of law and it is not clear how the courts deal with them due to lack of clear legal legislation in regards to the said Mobile Money. Conveniences of e-banking are apparent but so are the risks and subsequent loss to a bank and its customers, for example in instances where a fraudulent person deceives a customer to send them money or where a customer's M-Pesa pin number is hacked, in Kenya there is no clear legislation governing such a situation and in most of the times the customer is made liable and his/her account is debited.<sup>129</sup>

In addition apart from the aforementioned **Kenya Information and Communications Act**<sup>130</sup> and the various regulations under, mobile money transfer services which are the backbone of m banking are not under the ambit of any other law in Kenya, perhaps their own convince has made the finance sector regulator to overlook the legal and risks involved.

The aforementioned **Kenya Information and Communications (revised) Act**<sup>131</sup> provides that no operator will operate communication systems or provide communication services without license from the CCK, this implies that the banks need the CCK licenses to conduct Mobile Money Services, however, banks are not under the jurisdiction. In relation to the foregoing and in regards to dispute resolution, banks that are in collaboration with the MNO's n offering M-banking cannot bring a dispute to the said commission for determination and hey would have resort to courts thus incurring a lot of costs in time and expenses.<sup>132</sup>

Security is another issue which ranks highest among concerns for customers and vendors. Because mobile payment apps store credit card and other financial details to make payments asy and seamless for buyers, many consumers are still afraid of someone intercepting their ayment information or other data<sup>133</sup>

<sup>&</sup>lt;sup>9</sup> Brian Muthiora; Enabling Mobile Money in Kenya. January 2015. P.8.

<sup>&</sup>lt;sup>10</sup> Revised in 2012.

<sup>&</sup>lt;sup>1</sup> Ibid n130.

<sup>&</sup>lt;sup>2</sup> Ibid n130.

<sup>&</sup>lt;sup>3</sup> <u>www.directpay.online/blog/four-main-challanges-in-mobile-payments/</u> accessed on 19-11-2016.

The issue is where to apply the law of the area where the transaction has finally taken place. Allied to this is the question where the income has been generated and who should tax such income. There are still no definite answers to these issues, either in Kenya or in other jurisdiction. In research carried out in the year 2010 lack of clear legal regulations in Kenya was noted as being a challenge of significant importance by 90% of the respondents in the development of mobile money. <sup>134</sup>

#### 3.5 Risks.

A major driving force behind the rapid spread of mobile money services all over the world is the acceptance as an extremely cost effective deliver channel of banking services as compared to the existing channels. However, mobile money is not unmixed blessing to the sector. Along with reduction in costs of transactions, it has also brought about a new orientation to risks and even new forms of risks to which banks conducting Mobile banking expose themselves. Regulators and supervisors, all over the world are concerned that while banks should remain efficient and cost effective, they must be conscious of different types of risks this form of banking entails and have systems in place to manage the same.<sup>135</sup>

An important and distinctive feature is that technology plays a significant part both as source and tool of control of risks. Because of rapid change in information technology, there is no inality either in the types of risks or their control measures. Both evolve continuously. The rust of regulatory action in risk control has been to identify risks in broad terms and to ensure hat banks have minimum systems in place to address the same and that such systems are evived on a continuous basis in keeping with changes in technology<sup>136</sup>.

#### 5.1 Operational risk

perational risk also referred to as transactional risk is the most common form of risk ssociated with Mobile money services. It takes the form of inaccurate processing of ansactions, compromises in data integrity, data privacy and confidentiality, unauthorized

<sup>&</sup>lt;sup>4</sup> J.W Gikandi, C Bloor: Electronic Commerce Research and Applications(2010) P.9.

<sup>&</sup>lt;sup>7</sup> Brian Muthlora; Enabling Mobile Money Policies in Kenya 2015. P.23 <sup>3</sup> Ibid n135.

<sup>1010 11135,</sup> 

access/ intrusion to banks systems and transactions etc. such risks can arise out of weakness in design, implementation and monitoring of mobile money information system . Besides inadequacies in technology, human factors like intelligence by customers and employees, fraudulent activity of employees and crackers/hackers etc. can become potential source of operational risk.<sup>137</sup> For instance in the case of **Johnson Zumo Obongo v. Republic<sup>138</sup>** where the accused who worked as an employee of an M pesa Agent made away with KSH.173,000 meant to be deposited in an M pesa account. He was charged of stealing by servant contrary to **section 281** of the **Penal Code<sup>139</sup>** 

#### 3.5.2 Security risk.

From security perspective, if data sent via either USSD or SMS are not encrypted, a transaction is vulnerable to interception. Given that USSD is session based and the server helps manage the steps, once a USSD session terminates, no data is left on the phone. Conversely, with STK (SIM Toolkit), the SIM helps to manage the steps and creates an SMS sent to the server. SMS is transaction-based and SMS data are stored on the phone, creating vulnerability if the SMS is not deleted, and the phone ends up in the wrong hands. All systems rely on the use of a Personal Identification Number (PIN) for transaction authentication. Currently, there is no specific protection in the event that a user's mobile phone is stolen and used by fraudsters able to figure out the user PIN. Just like with ATM cards and Banks, a user's best bet is to report a stolen mobile phone or SIM as soon as possible so that all mobile money transactions are blocked.<sup>140</sup>

When using mobile money services, all transaction are tied to the SIM (and thereby the mobile phone number). Some MNOs supports the use of nicknames in the place of mobile number so hat customers are able to pay you by sending money to a nickname instead of a number.

<sup>&</sup>lt;sup>17</sup> General Nyaoma ;AFI Case Study/ Enabling mobile money transfer.2013 P.15.

<sup>&</sup>lt;sup>18</sup> Criminal Appeal No 107 of 2010

<sup>&</sup>lt;sup>19</sup> The Penal code, Cap 63 Laws of Kenya

<sup>&</sup>lt;sup>10</sup> Ojijo P; 26 Legal Issues in Mobile Money Transactions. Retrieved from

<sup>&</sup>lt;u>ttps://www.linkedin.com/pulse/26-legal-issues-mobile-money-ojijo-p</u> accessed on13th November 2016.

Besides privacy and security, nicknames can be similar to a business name, making them more memorable for customers, especially if they have to pay remotely.<sup>141</sup>

### 3.5.3 Reputational Risk.

Reputational risk <sup>142</sup> may result in critical loss of funding or customers. The more a bank relies on the Mobile Money, the greater the potential for reputational risk. The risks arise from actions which cause loss of public confidence in the banks' ability to perform critical function or impair the bank customer relationship. It may be due to the banks own action or due to third party actions. It may also stem from the customer misuse of security precautions or ignorance about the need for such precautions.<sup>143</sup>

The main reasons for this risk may be system or product not working to the expectations of the customers, significance deficiencies, significant security breach (both due to internal or external attack), inadequate information to customers about product use and problem resolution procedures, significant problems with communication network that impair customers access to their funds or account information especially if there are no alternative means of account access.<sup>144</sup>

Mobile Money payment service has failed to pick as expected, with consumers and business still preferring cash over m-payment. Among things staling the adaption and spread of Mobile Money among Kenya's 26.9 million subscribers are frequent technical hitches and high charges. It costs around \$ 0.25 and \$1.2 to use Mobile Money service in Nairobi and to pay utility bills one pays an extra \$0.30 this is definitely costly for many people.<sup>145</sup>

Also according to some analysts, customers still value personal and responsive from their vankers, this is especially true of technology skeptic customers. In relation to the foregoing here is still ignorance among members of the public especially those in rural areas in relation

<sup>&</sup>lt;sup>11</sup> Ibid n140.

<sup>&</sup>lt;sup>12</sup> The risk of getting significant negative public opinion.

<sup>&</sup>lt;sup>13</sup> Gerald Nyaoma, a report on Enabling Mobile Money Transfer. 2013, P.23.

<sup>&</sup>lt;sup>4</sup> Ibid n143.

<sup>&</sup>lt;sup>15</sup> Biddah Mengo; 'High Cost Hitches Fail E money Uptake' Outlook The East African Newspaper (Nairobi March 5-11 2012) p31.

to mobile money services, some customers do not even know that their banks are offering e banking services.<sup>146</sup>

In **conclusion**, this chapter clearly presented an overview of the legal regime in regards to mobile money services in Nairobi, and stated some of the legislations in relation to the services. Similarly, challenges and risks that customers and operators were exposed to as a result of lack of appropriate laws in place are as discussed above.

<sup>&</sup>lt;sup>6</sup> Claire Alexandre; 10 Things You Thought You Knew about M-Pesa. Retrived from www.cgap.org/blog/1o-things-youought-you -knew-about-m-pesa. Accesed on14th July 2016.

#### CHAPTER FOUR

# THE RECOMMENDATIONS FOR THE MODIFICATIONS OF THE LEGAL REGIME ON BANKING IN NAIROBI.

### 4.0 Introduction.

A review of the said legal regime vividly indicates that the law is lacking regulation of Mobile Money, henceforth posing the various challenges and risks as discussed above. It is because of these challenges that this research in this chapter proposes recommendations for the modifications of the legal regime on banking in Kenya so as to fully govern the services offered under the mobile money.

### 4.1 Recommendation.

## 4.1.1 Legal Recommendation.

Kenya has made great strides in mobile money services and has emerged as one of the leading country among the developing countries in the said sphere, however this has been achieved with very little or no specific legal backing in form of an elaborate legislation(s) regulating the various elements of Mobile Money. So it is evidently clear that there is a need <sup>†</sup>or a legislation that will comprehensively cater for the afore-discussed categories of Mobile Money.

However, before this is done, various amendments could be done to the existing legislations to accommodate the emerging issues, for example mobile money transfer services and payment providers should be brought under the ambit of the central bank under **section 7** of the above mentioned **Central Bank of Kenya Act**, thus empowering the central bank to license and supervise the said entities in relation to banking matters.<sup>147</sup>

**Section 27** provides for the general reserve fund for banks intended for emergency purposes. The said section should be made applicable to the said service providers, enabling them to

<sup>&</sup>lt;sup>7</sup> Central Bank of Kenya Act 2015.

deposit a certain amount of money into the said fund and this will ensure that the consumer deposits in the mobile phone accounts are more secure.<sup>148</sup>

Part II of the **Banking Act of Kenya** should also be made applicable to the above service providers dealing in banking transactions in terms of licensing and this would make them more careful as there would be another body<sup>149</sup> other than the CCK regulating them. In addition the agent used by the mobile service providers are not regulated by any law there should be a law to register and regulate this agency in case of a mistake it is not clear who bears the burden of liability, there should be rules establishing the situation under which the agents will be liable and the situation under which the service providers will be liable.

It is suggested that the CBK may constitute a multi-disciplinary high level standing committee to review the legal and technological requirements of e banking on a continual basis and recommend appropriate measures as and when necessary.

It is commendable that the **United Nations** and its members make provisions for Mobile Money contracts in an endeavor to keep up with the changes in the nature of contracting. Countries have different legislations and the law of contract varies between countries. A solution to the problem at the moment of contract and jurisdiction can be removed by all countries adopting the same regulation relating to the online contracting and thereby creating 1 'common law' that will apply in all instances, this could be initially a regional ievel, for example East African Community level. Such a move will promote much more certainty in 40bile money Contracts as all parties<sup>150</sup> will know exactly what their entitlements and esponsibilities are in such contracts.

tegulators need to be adaptable so as to grapple with issues beyond their expertise. Also the need for standardized laws which will establish an enabling environment for new innovations nd promote the growth of the industry.<sup>151</sup>

<sup>&</sup>lt;sup>8</sup> Ibid n147.

<sup>&</sup>lt;sup>9</sup> The Central Bank of Kenya.

<sup>&</sup>lt;sup>0</sup> The service providers, Agents, Banks and Consumers.

<sup>&</sup>lt;sup>1</sup> Wanjau .E. : M-PESA: Regulatory Framework. 2011, P.10.

Regulators should come up with instrumental laws which balance policy objectives for financial inclusion, and a secure payment system.<sup>152</sup>

The other approach that can be employed by the regulators is the **Dispute resolution mechanism** (DRM) (CGAP, 2015). In markets where commercial agreements are not forthcoming, a coordinated DRM, whereby the telecommunication, financial regulator and the competition regulator jointly intervene, could be used to resolve access, price, and/or quality issues. This approach would allow the regulator(s) to understand the considerations of all stakeholders. This could give operators the opportunity to explain arguments for withholding access, including the potential impact that the provision of USSD at scale could have on Mobile Network Operator (MNO's) core telecommunications business. It could also give all parties a chance to communicate and detail their positions regarding USSD quality, pricing, and cost.<sup>153</sup>

Legislations around the world has lagged behind the Mobile Money revolution. This problem is more acute in Kenya, because most of our legislations is over outdated. To take advantage of global trade it is necessary for Kenya to provide the users of mobile money services in Nairobi with legal infrastructure to become operationally and commercially viable.<sup>154</sup>

#### 1.2 Other Recommendations.

-inancial and other relevant organizations should make explicit security plans and document hem. There should be a separate security officer/ group dealing exclusively in information system security.

#### 1.2.1 Backup and recovery.

The Mobile Network Operators/M-Pesa should have a proper infrastructure and schedule for acking up data. The backed up data should be periodically tested to ensure recovery without ss of transaction in a time frame as given out in the banks security policy. Business

² Ibid n138.

<sup>&</sup>lt;sup>3</sup> Mazer, R and Rowan P, (2014), "Competition in Mobile Financial Services in Kenya, Draft Brief

epared by CGAP for Competition Authority of Kenya" P.23.

<sup>&</sup>lt;sup>†</sup> Ojijo P; 26 Legal Issues of Mobile Money in Kenya. <u>http://www.wikipedia.legal-issues-in-mobile-money-pdf</u>. Accessed on <sup>sh</sup> April 2016.

continuity should be insured by having disaster recovery sites, where backed data is stored. This facility should also be tested periodically.<sup>155</sup>

### 4.2.2 Monitoring against threats.

The Mobile Network Operators and banks should acquire tools for monitoring systems and the networks against intrusion and attacks. This tools should be used regularly to avoid security breaches.<sup>156</sup>

### 4.2.3 Education and review.

The Mobile Network Operators Mobile Network Operators should review their security infrastructure and security policies regularly and optimize them in the light of their own experiences and technologies. They should educate on a continuous basis their security policies and also the end users (consumers).<sup>157</sup> Customers should understand that any deviations from this established communication channel cannot be trusted. This will reduce the 'isks of customers falling victim to attacks such as phishing. Customers should also have an established way to communicate relative to suspected fraud and understand how their Mobile Vetwork Operator will communicate to them.

## 1.2.4 Approval for Mobile Money Services.

All telecommunications having operations in Kenya and intending to offer Mobile Money ervices to the public must obtain an approval for the same from the CBK. The application for he approval should clearly cover the systems and products that the MNOs plans to use as well s their security plans and infrastructure. It should include sufficient details for the CBK to valuate security, reliability, availability, recoverliability, orderbility and other important aspects f the services. The CBK may provide modern documents for security policy, security rchitecture and operation manual.<sup>158</sup>

<sup>&</sup>lt;sup>5</sup> Lyman T, Porteous D, and Pickens M, (2008) "Regulating Transformational Branchless Banking: obile Phones and Other Technology to Increase Access to Finance." Focus Note

<sup>3.</sup> Washington, D.C.: CGAP, P.23.

<sup>&</sup>lt;sup>5</sup> Ibid n.155.

<sup>&#</sup>x27; Ibid n156.

<sup>&#</sup>x27; Ibid n156.

#### 4.2.5 Harmonization.

Regional and international harmonization of mobile banking regulation must be a top priority. This means intensifying cross border cooperation between supervisors and coordinating laws and regulatory practices regionally and internationally. The above mentioned problem of jurisdiction arises from "borderless" transactions is very much in limbo. The task of regional and international harmonization and cooperation can be viewed as the most daunting in addressing the challenges of mobile money not only for Kenya but for other countries as well.<sup>159</sup>

**Conclusively**, in regards to the lack of vivid legal regime, both legal and other recommendations for the modification of the existing laws in order to fully govern Mobile Money Services in Nairobi, were as discussed above.

<sup>&</sup>lt;sup>9</sup> Aidan Evakuze, "One network and 'just like home' – regional integration by mobile phone," in the State of East Africa sport 2007: Searching for the Soul of East Africa. The publication is available '<http://www.sidint.org/files/SoEA\_2007\_Mini.pdf>, accessed on 19th November 2016.

#### **CHAPTER FIVE**

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### THE RESEARCH FINDINGS AND CONCLUDING REMARKS.

#### 5.0 Introduction.

1

Having critically examined the problem of the study, this chapter will give concluding remarks to the entire research paper.

## 5.1 Conclusion.

This study sets out the law, practice and legal challenges of Mobile Money in Kenya, particularly Nairobi through the various study of available materials. It has emerged that Mobile Money services are in the rise in Kenya albeit with some challenges as discussed herein, top among them being the legal challenges. Players in the banking sector remain aware of the said legal challenges. However, the exigencies of mobile money, efficiency, effectiveness and economics, by far outweigh to the banks the risk of falling foul of the current legal structure of the Mobile Money.

Mobile money has also improved the image of the bank; besides profit making the banks have engaged themselves for the good of the effective business, process management which has caused great market share and more profits to the bank.in addition banks that were slow in embracing this technology have found a large chunk of their market niche grabbed by competitors that have revamped their information system and information technology capabilities and are offering first and better services coupled with a wide variety of banking products.<sup>160</sup>

It is only appropriate that the more efficient and cheaper methods of providing this mobile noney products, to value traditional bank clients. The increased convenience and lowered cost arising from innovations in mobile money services should also benefit the poor and low income clients.<sup>161</sup>

<sup>&</sup>lt;sup>60</sup> Kethi D. Kilonzo; An Analysis of the Legal Challenges posed by Electronic Banking. 2007, P.431.

<sup>&</sup>lt;sup>61</sup> Jack, W., & Suri, T. (2010). The Economics of M-PESA. Washington: Global Savings & Social Protection

nitiative.from<u>http://assp.newamerica.net/sites/assp.newamerica.net/files/articles/The%20Economics%20of%20M-PESA.pdf</u>. Accessed on 19<sup>th</sup> November 2016.

It is clear that the future of baking lies in clicks and mortar, paper based systems are slow, labor intensive and correspondingly expensive to maintain, it also provides enormous benefits to consumers in terms of the ease and cost of transactions. World over and also in Kenya Mobile Money is making rapid strides due to evolving communication technology.<sup>162</sup>

These developments offer banks and their clientele a lot of benefits as discussed herein, however the stiff competition in this area exposes the banks to substantial risks and they exacerbate traditional banking risks. There is need for transparency and disclosure by mobile money community while the existing regulations and legislations applicable to traditional banking in Kenya are being extended to govern and regulate Mobile Money services, it is recognized that the security, customer authentication and other issues such as technology outsourcing pose unique risks to the banks and clients as well. Such should be addressed with focused attention.<sup>163</sup>

Special legislations and regulations should be framed as discussed herein for proper management of the different types of risks posed by these services. Consumer protection and data privacy are areas which assume great significance when M-Pesa transaction are carried over a medium as insecure as the SMS.

Even though considerable work has been done in Kenya in adapting banking and mobile noney supervision regulations, continuous vigilance and revisions will be essential as the scope of mobile money increases. In addition to the above reforms regulators in Kenya should ook at special consumer protection/ data privacy legislation for the general e commerce environment. It is also clear that the law in most circumstances has always lagged behind other developments especially science and technology is part of science, this may be justified with the maxim that "*the law cannot exist in a vacuum*," thus the necessary developments lave to occur before the law as mobile money has.<sup>164</sup> Thus the banking sector and its clientele n Kenya can only shrug at the sufficiency of the law governing mobile money in Kenya. It is

<sup>&</sup>lt;sup>52</sup> Ibid n161.

<sup>&</sup>lt;sup>33</sup> Kariuki J. N (2012), "Mobile Banking Services in the East African Community (EAC): Challenges to the existing legislative nd Regulatory frameworks" P. 14.

<sup>&</sup>lt;sup>14</sup> Okonjo, J.O (2013), "Convergence between Mobile telecommunications and financial services: implications for regulation f mobile telecommunications in Kenya" P. 9.

not their place to enact laws or weep at the lack of any regulations. To their credit banks in Kenya have formalized policy on e-commerce and international business process management<sup>165</sup> that assist in the regulation of the various issues arising from the use of e banking service. However the relevant authorities discussed herein should see to it that the said insufficiency is addressed.

**Conclusively,** the above findings and conclusions shall be of great importance in guiding the law makers on the best way to amend or enact legislations governing Mobile Money sector in order to fill in the existing lacuna, and equally address the different types of risks posed by these services as it has been clearly discussed herein.

<sup>&</sup>lt;sup>65</sup> Peterson Obara Magutu, Richard Nyaanga Ongeri and Mwangi; Modeling the effects of E commerce Adoption on Business Process Management: case study of Commercial Banks in Kenya (2009) Vol. 8

## BIBLIOGRAPHY Text Books

Cronin, Mary J, Banking and Finance on the Internet (1997 John Wiley & sons) pg. 41.

Hughes N., & Lonie, S. (2007). M-PESA: Mobile Money for the "Unbanked" Turning Cellphones into 24-Hour Tellers in Kenya. Innovations, 2(1-2).

Kariuki J. N (2012), "Mobile Banking Services in the East African Community (EAC)": Challenges to the existing legislative and Regulatory frameworks.

Lyman T, Porteous D, and Pickens M, (2008) "Regulating Transformational Branchless Banking: Mobile Phones and Other Technology to Increase Access to Finance." Focus Note 43.Washington, D.C.: CGAP.

Magutu, P, Ongeri, R, R and Mwangi; Modeling the effects of E commerce Adoption on Business Process Management: case study of Commercial Banks in Kenya (2009) Vol. 8.

Nasouli,S, S & Schaechter A, "challenges of E-banking Revolution", Finance & Development Volume 39(September 2002).

Njaramba, G. Law of Financial Institutions in Kenya (Law Africa Publishing 2015).

Omwansa. T (2009); M-Pesa: Progress and Prospects: innovations case discussions.

Porteous, D. (2006). "The Enabling Environment for Mobile Banking in Africa", DFID.

Sealy, Hooley Commercial law texts, cases and materials of 15th September 2008. 4th Edition.

Jnderhill and Hayton; "Law of Trusts and Trustees" 19<sup>TH</sup> Edition 2010.

## JOURNALS, NEWSPAPERS AND REPORTS

## Journals

Jack, W., & Suri, T. (August 2010). The Economics of M-PESA. Washington: Global Savings & Social Protection Initiative. Pp2.

J.W Gikandi, C Bloor Electronic Commerce Research and Applications (2010) Pp9

Mazer, R and Rowan P, (2014), "Competition in Mobile Financial Services in Kenya, Draft Brief Prepared by CGAP for Competition Authority of Kenya"

Mercy W. Buku and Michael W. Meredith, "Safaricom and M-PESA in Kenya: Financial Inclusion and Financial Integrity", 8 WASH. J.L. TECH & ARTS 375 (2013) at 398 et seq.

"Mobile Cash Transfers Pose Threat to Banks". Philanthropy Action.com. 26 February 2009

Ojijo P; 26 Legal Issues of Mobile Money in Kenya. <u>http://www.wikipedia.legal-issues-in-mobile-money-pdf</u>. Accessed on 26<sup>th</sup> April 2016.

Radcliffe, D., & Voorhies, R. (2012). A digital pathway to financial inclusion. Retrieved from http://ssrn.com/abstract=2186926

Simone di Castri (2012), "GSMA position on the taxation of mobile money transactions in Kenya", GSMA, available at <u>http://www.gsma.com/mobilefordevelopment/gsma-position-on-the-taxation-of-mobile-money-transactions-in-kenya</u>

## Newspapers

3iddah Mengo; 'High Cost Hitches Fail E money Uptake' Outlook The East African Newspaper (Nairobi March 5-11 2012) P.31.

### Reports

Aidan. E, "One network and 'just like home' – regional integration by mobile phone," in the State of East Africa Report 2007: Searching for the Soul of East Africa.

Andiva.B; A report on Mobile money-Kenya 2010 June 23<sup>rd</sup>.

Brian Muthiora; a report on Enabling Mobile Money Policies in Kenya January 2015.

"CCK releases 2nd quarter ICT sector statistics for 2011/2012". Communications Commission of Kenya. 17 Apr 2012.

Claire Alexandre; 10 Things You Thought You Knew about M-Pesa. Retrived from www.cgap.org/blog/10-things-you-thought-you -knew-about-m-pesa. Accessed on 14<sup>th</sup> August 2016.

CPSS (2004) Survey of e-money and internet and mobile payments, BIS, available via <u>www.bis.org</u> accessed on 6<sup>th</sup> October 2015.

G .Nyaoma, Director, Banking Department, Central Bank of Kenya, speaking at the first AFI Global Policy Forum in Nairobi, Kenya, 2010, available at <a href="http://www.youtube.com/watch?v=5npOSOJO8KA">http://www.youtube.com/watch?v=5npOSOJO8KA</a>. Accessed on 4<sup>th</sup> August 2016.

Kethi D.kilonzo; An Analysis of the Legal Challenges posed by Electronic Banking 2007.

Malala, J;(2008) Consumer Protection for Mobile Payments In Kenya: An Examination Of The Fragmented Legislation and The Complexities It Presents For Mobile Payments.

Mbiti, I., & Weil, D. N. (2011). MOBILE BANKING: THE IMPACT OF M-PESA IN KENYA. NATIONAL BUREAU OF ECONOMIC RESEARCH, Working Paper 17129.

<u>Dkonjo, J.O (2013), "Convergence between Mobile telecommunications and financial services:</u> mplications for regulation of mobile telecommunications in Kenya.

<u>Policy Paper on Regulatory Framework for Mobile Banking in Pakistan via</u> <u>www.bankablefrontier.com accessed on 20th October 2016.</u> Richard Nyangosi & Dr.J.S.Aurora, Emergence of information Technology in the Kenyan banking sector: An empirical study (2010).

Scharwatt, Katakam, Frydrych, et al. (2015). 2014 State of the Industry Mobile Financial Services for the Unbanked. GSMA.

Wambari. A, (2009), a Report on Mobile Banking In Developing Countries. (A Case Study of Kenya).