


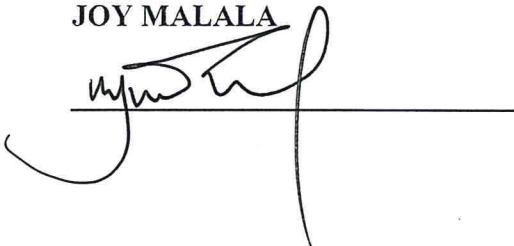
**MOBILE MONEY:**

**Challenges and Regulatory Approaches to Mobile Payment Systems**

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE BACHELOR  
OF LAWS DEGREE OF STRATHMORE UNIVERSITY**

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## **Declaration**

I declare that this report is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Bachelor of Laws in Strathmore University. It has not been submitted before for any degree or examination in any other University.

Charles Omondi Owino

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**Strathmore University**

Law School

## **Dedication**

To my mother, who always has faith in me even when I don't have faith in myself

To the Late Geoffrey Githaiga, who educated me on the power of being constantly underestimated

To Lillian Samawati Maruti, thank you for the music

And to Christina, thank you for the mugs

"No problem can withstand the assault of sustained thinking" - Voltaire



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A special note of thanks to Rodney Muriuki, Douglas Gichuki and Michael Gitau, who have pushed me past the limits of pedestrian thought over the years.

*“Technology is simply a description of something that doesn’t work yet” -  
Douglas Adams*



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## Introduction

Mobile payment systems, as their name suggests, are systems that are used to carry out financial transactions over a mobile telecommunications network. There are two main models of mobile payment systems<sup>1</sup>:

- i. The Additive model – The mobile phone is simply used as a conduit for access to an existing bank account e.g. mobile banking services, which allow bank customers to access their bank accounts from their mobile phones.
- ii. The Transformative model – The financial service is based entirely upon the mobile phone<sup>2</sup> (from the user's perspective). Examples of these include Mpesa and Airtel money, mobile payment services offered by the two leading mobile telecommunications companies – Safaricom and Airtel Kenya.

This paper shall focus on the latter model, as the technical and legal aspects of the two systems are quite dissimilar. As such, any reference to mobile payment systems hereafter, except where an express exception has been made, shall be intended to mean Transformative models of mobile payment systems.

Mobile payment systems are intended to operate on the most basic phones and as such, any phone with the ability to access the Sim Toolkit (STK) menu should be able to access mobile payment services. The customer does not need to have a bank account, but registers with Safaricom for an M-PESA account.<sup>3</sup> To get access to mobile payment services, the prospective user is meant to register with the service provider (the telecommunications service provider, in this case). The generally accepted practice is to present the network's agent with your Identification documents (ID card or passport) and after confirmation of the details, you shall be sent a confirmation message with your default PIN, which you shall be required to change.

Registration of an account entitles one to a mobile wallet, from which all further transactions shall be carried out. To deposit money into the mobile wallet, the user gives an agent of the service

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<sup>1</sup> Porteous D, 'ENABLING ENVIRONMENT FOR CELL PHONE BANKING IN AFRICA', 3

<sup>2</sup> Ghosh I, 'The Agent in a Transformational M-Banking Ecosystem – Interface or Intermediary?' [2013] Proceedings of the Sixth International Conference on Information and Communication Technologies and Development Full Papers - ICTD '13 - volume 1 33

<sup>3</sup> Hughes N and Lonie S, 'M-PESA: Mobile Money for the "Unbanked" Turning Cellphones into 24-Hour Tellers in Kenya' 2(March) Innovations: Technology, Governance, Globalization (2007) 63 63



provider cash. The agent then credits the user's account with mobile money. With the money in the mobile wallet, the user can then choose to transfer money to another user (registered or not) by selecting that action and entering the recipient's phone number and confirming the transaction. Alternatively, one may choose to withdraw money from his/her mobile wallet. To do this, one visits an agent's shop and chooses the option to withdraw money, enters the agent's unique agent number and confirms the transaction. On presentation of identification documents, the agent then hands over the cash amount (and receives the mobile money from the user's mobile wallet). These three actions (deposit, transfer and withdrawal) are the most basic transactions that are provided by all mobile payment systems.

A number of additional services are offered by service providers in order to make their products more convenient to use or more attractive to their customers. For example, to extend the deposit function, one may deposit money from their bank account to their mobile money account, eliminating the need to visit an agent. To extend the withdrawal functions, most service providers allow their customers to withdraw money from supported ATMs. This, again, eliminates the need for an agent. In addition to these two mobile payment service providers allow the customers to use their phones to pay for goods or utility bills in lieu of cash payments.

The basic operation of the mobile payment systems involves the following entities:

- i. The Mobile Network Operator (MNO) – This is the telecommunications service provider who provides the mobile phone infrastructure over which the mobile payment system operates. They are licensed and regulated by the Communications Authority of Kenya (CA)
- ii. The Commercial Bank(s) – The MNO on its own does not have the license to have custody of the cash deposited by the users. The law requires the mobile payment system to deposit the cash deposits in a commercial bank account<sup>4</sup>. The bank account, as per the CBK approved business model, is held by a trust operated by the MNO with all the mobile payment system's users as beneficiaries<sup>5</sup>.
- iii. The Agent - The agent is a person contracted to facilitate certain transactions for the customers. These include carrying out the registration of new customers and conversion of mobile money into cash and vice versa. They also carry out elementary training on how to use mobile money for the benefit of the new users.

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<sup>4</sup> National Payment Systems Regulations 2014 Section 25(3)(f)

<sup>5</sup> National Payment Systems Regulations 2014 Section 25(3)(a)



The growth of the mobile payment systems depends, not only on advancements in mobile technology, but also on customer confidence in the services being offered. To the lay customer, mobile money transfer presents a highly convenient method of transferring money from one person to the other- Faster and cheaper than most of the alternatives. In addition to the speed and cost of transactions, one walks around with money in their mobile wallets and, even when this has been exhausted, there are agents within a reasonable distance of most places. This makes it seem to be the most convenient alternative of the money transfer systems for small amounts of money. The public's confidence in mobile payment systems is as close as it gets to absolute.



## **1 Research Problem and Methodology**

### **1.1 Research Question**

This study shall focus on assessing the need for regulation of mobile money and the extent to which it can be regulated without hampering future development or making the service economically in-viable.

This shall be achieved by considering a basic question question:

#### **How can mobile money be regulated?**

The question is best answered by considering the following questions:

1. Is the regulatory framework around mobile money adequate?
2. What parts of the mobile money ecosystem require additional regulation?
3. Do the benefits of increased regulation outweigh the costs?
4. Has similar regulation been successful in other jurisdictions?

By answering the above questions, we should be able to gauge if and how mobile money is to be regulated. Where regulation is deemed necessary, we are able to gauge from the successes and failures of other jurisdictions and thus produce a regulatory structure that will work in our circumstances.

### **1.2 Research Methodology**

“I never guess. It is a shocking habit — destructive to the logical faculty.”

Sherlock Holmes (Sir Arthur Conan Doyle) — The Sign of Four (1890) <sup>6</sup>

Given the questions above, a proper methodology should be employed to get to the answers. Here I shall explain what methods I choose and why

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<sup>6</sup> Hodgson P, ‘What user researchers can learn from Sherlock Holmes’ (12 April 2015) <[http://www.userfocus.co.uk/articles/learn\\_from\\_Sherlock\\_Holmes.html](http://www.userfocus.co.uk/articles/learn_from_Sherlock_Holmes.html)> accessed 12 August 2015



### 1.2.1 The case for Qualitative Analysis

In attempting to answer the questions posed, I decided to make use of qualitative analysis. Marshall and Rossman aptly likened the process of qualitative analysis to the detective work of Sherlock Holmes or an investigative reporter<sup>7</sup>. On stumbling upon a curious phenomenon, the researcher seeks to describe or explain said phenomenon.

I attempt to find out why mobile money is under-regulated in Kenya and whether this poses any risk. In attempting to answer this, I shall look to evidence from other jurisdictions on the same matter and on closely related issues. Quantitative analysis is highly unlikely to yield any purposeful results other than providing a context to the information being gathered.

### 1.2.2 The case for a Case Study

A case study focuses on a small portion of the cases in order to provide insight into a causal relationship across a larger population<sup>8</sup>. Given the small sample size (four Mobile Network Operators), and the nature of the research questions, I chose to select the most influential mobile money system as a case study with the expectation that it would reflect what goes on in the mobile money sector. In a bid to show the lack of regulation, however, I shall at times consider more than one mobile money operator indicate the lack of a standard that cuts across the sector.

The Case study chosen for the research is M-Pesa, the ubiquitous financial service that Kenyans cannot seem to live without these days. Furthermore, it has been at the forefront of innovation in all matters concerning mobile money...it leads the way.

### 1.2.3 Research Design

I have analyzed the mobile money system in Kenya and done a comparative analysis of the circumstances in Kenya and in other countries with mobile money services in order to get a better understanding of whether the foreign regulations could be employed in Kenya.

A case study requires thorough analysis of secondary data in order to contextualize the primary data<sup>9</sup>. The secondary data available is mostly commentary on the legal regime that exists at the

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<sup>7</sup> Marshall C and Rossman G B, *Designing qualitative research*, 3rd ed. Sage Publications 1999 22

<sup>8</sup> GERRING J, *Case study research: Principles and practices/ John Gerring*, Cambridge University Press 2007 86

<sup>9</sup> Case study research: Design and methods. Newbury Park, CA: Sage and available at [http://www.soberit.hut.fi/~mmantyla/work/Research\\_Methods/Case\\_Study/Case %20Study%20Research.doc](http://www.soberit.hut.fi/~mmantyla/work/Research_Methods/Case_Study/Case%20Study%20Research.doc)



moment. To a lesser degree, financial reports and statistics were also analyzed, albeit at a superficial level. All this was in order to give proper context to the statutory regulations that were being considered during the research.

### **1.3 Challenges and Limitations to the Study**

There were numerous challenges to the study. The biggest of these was the limited amount of literature on the field of mobile money, as it is quite a new field. Most of the commentary was from an economic point of view, with little consideration for the legal aspect of the service.

In addition, it was quite difficult to access some documents as they are paid subscriptions and I could only gain access to a few of them.

Time was also a major constraint as I conducted the study as the time allowed for conduction of the study was taken up by regular schoolwork.

Finally yet importantly, the scope of the study was enormous and, given the time available, it would have been impossible to sufficiently address the research problem.



## **2 The Case for Increased Regulation**

In order to obtain “Pareto Efficient” outcomes, where the players in a market all get the best possible outcome, there must exist certain perfect circumstances. The individuals must be properly informed and the market must be competitive, having certain amenities vital to the flourishing of business such as insurance and credit facilities. Needless to say, the occurrences of the requisite circumstances in the perfect manner is a rarity and as such, government regulation must step in to direct the market<sup>10</sup>.

The National Payment Systems Act 2011 (NPS Act) and the National Payment Systems Regulations 2014 (NPS Regulations) constitute the bulk of the regulation surrounding mobile payment systems. Regulation of mobile payment systems is primarily justified, just as regulation of any other service, by the immense public interest. This presents itself in a number of ways: Consumer Protection, Competition Laws and even Security issues. The adequacy of the current regulation in addressing the major regulatory concerns is questionable (as shall be argued in this paper).

It is evident that Kenyans are getting increasingly more dependent on mobile payment services for carrying out their daily transactions. While it has been argued (quite reasonably) that the situation is far from posing a systemic risk to the economy<sup>11</sup>, a collapse of mobile payment systems is likely to make financial transactions that much more difficult (going to a bank branch vs keying in digits on your phone). This is a reasonable conclusion given the amount of money that passes through mobile payment systems annually. Details provided by Central Bank show that at least 2.5 million money transfer transactions are carried out daily with banks accounting for only 3.2 per cent of the total. In 2014, mobile payments facilitated 911.34 million transactions while banks conducted only 29.68 million.<sup>12</sup>

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<sup>10</sup> Stiglitz J, ‘Regulation and failure’ *New Perspectives on Regulation* [2009] 162 <<http://www.tobinproject.org/books-papers/new-perspectives-regulation>>

<sup>11</sup> Di Castri S, ‘Mobile Money: Enabling regulatory solutions’ [2013] 1

<sup>12</sup> ‘Banks take on M-Pesa in fight for money transfer billions’ <<http://www.nation.co.ke/business/Banks-take-on-M-Pesa-in-fight-for-money-transfer-billions/-/996/2836358/-/6fe3n8/-/index.html>> accessed 14 January 2016



In addition to preventing collapse of the system, it is reasonable to enforce regulation that would make the mobile payment service market open to new entrants. For this to happen, there must be certainty as to the minimum requirements required for new entrants and structures in place to eliminate unfair barriers to entry. A lot has been done to introduce legal certainty with regard to registration of new mobile payment services. The NPS Regulations codified the requirements for registering payment systems (including mobile payment systems). This should make it easier to register a new service and avoid situations such as that which arose during the earlier days of mobile money transfer where the Central Bank was accused of denying or delaying the approval of an MNO's application for a license to offer mobile payments.<sup>13</sup>

In addition to certainty in the application process, regulations on competition should be able to restrict the abuse of market dominance by a player in the mobile payments arena. The NPS Regulations partly addressed this issue by prohibiting exclusivity clauses in the contracts between the agents and the MNOs<sup>14</sup>. Before, agents were unable to represent more than one MNO and given the heavy dependence of the mobile payment systems on a wide agent network, it would be extremely difficult for a new entrant to the market to get proper footing<sup>15</sup>.

Aside from the measures to stem financial risks and deal with competition matters, the law should also address operational risks such as privacy concerns and security issues. There are privacy concerns around the basic operation of mobile money systems. When transacting through an agent, one must present the agent with identification documents and on top of that, sign for the amount received. While this may be important for record keeping purposes, there is a significant risk that arises with no justified benefit.

This paper shall focus on the following areas of regulation:

- i. Regulation of systemic risk
- ii. Regulation on operational risk
- iii. Regulation on competition and anti-trust

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<sup>13</sup> 'Central Bank of Kenya: Mobile Phone Financial Services in Kenya | A Political Kenya in 2014: Latest Politics and Kenya Economy News' (9 November 2015) <<http://kenyapolitical.blogspot.co.ke/2009/01/central-bank-of-kenya-mobile-phone.html>> accessed 14 January 2016

<sup>14</sup> Section 15(2) National Payment System Regulations 2014

<sup>15</sup> Muthiora B, 'Enabling Mobile Money Policies in Kenya' (2015) 19



## 2.1 Regulation of Systemic Risk

Systemic risk refers to the risk or probability of breakdowns in an entire system, as opposed to breakdowns in individual parts or components, and is evidenced by comovements (correlation) among most or all the parts.<sup>16</sup> Due to the dependence of other entities on an entity within the financial system, a collapse of that entity is likely to cause a cascading failure within the system just as a house of cards falls apart once the first is pulled out.

As of 2014, 2.5 million money transfer transactions are carried out daily with banks accounting for only 3.2 per cent of the total. Mobile payments facilitated 911.34 million transactions while banks conducted only 29.68 million.<sup>17</sup> The most accurate measure of the prevalence of the mobile money system would probably be the throughput value, as opposed to throughput volume. In comparison to banks, mobile money transfers a lot less money in terms of value (6.59%)<sup>18</sup>. Banks are known to pose a systemic risk, due to their interconnectedness to the national economy and the sheer amount of money they transact (hence the prudential regulations imposed on them)

With the increase in popularity of mobile money in the country and the diversification of the services offered by the service providers, the footprint of the service on the economy is growing<sup>19</sup>. Whether said footprint is significant enough to pose a risk is another matter altogether, especially considering the amounts of money involved in mobile payments.

On the current state of affairs, there is consensus that the service does not pose a systemic risk<sup>20</sup>. The reason for this is that while there are a lot of movements of money within mobile money systems, the total amount of deposits held in said systems is not significant enough to be a threat to the stability of the system as a whole if the mobile payment systems fail to meet their

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<sup>16</sup> Kaufman G G and Scott K E, 'What Is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?' 7(3) *The Independent Review, A Journal of Political Economy* (2003) 371 375 <[http://www.independent.org/pdf/tir/tir\\_07\\_3\\_scott.pdf](http://www.independent.org/pdf/tir/tir_07_3_scott.pdf)><http://www.independent.org/publications/tir/article.asp?a=88>>

<sup>17</sup> 'Banks take on M-Pesa in fight for money transfer billions' <<http://www.nation.co.ke/business/Banks-take-on-M-Pesa-in-fight-for-money-transfer-billions/-/996/2836358/-/6fe3n8/-/index.html>> accessed 14 January 2016.

<sup>18</sup> Muthiora B, 'New infographic: Mobile money and the digitisation of Kenya's retail payments systems' [2014] <<http://dotafrica.mobi/infographic-mobile-money-digitisation-kenyas-retail-payments-systems/>> accessed 26 January 2016

<sup>19</sup> Hinz M, 'M-PESA: The Best of Both Worlds' <<https://www.bbvaresearch.com/en/publicaciones/m-pesa-the-best-of-both-worlds/>> accessed 15 January 2016

<sup>20</sup> Muthiora, 'Enabling Mobile Money Policies in Kenya' 21



obligations<sup>21</sup>. If the value of the deposits is to increase, however, the associated risk will increase with it.

Whatever the amount of risk, however, it would be wise to implement prudential monitoring on mobile money in order to ensure stability of the small portion of the economy (in monetary value) as it seems to serve a significant portion of the population, regardless of its monetary value.

## 2.2 Regulation of Operational Risk

### 2.2.1 Credit Risk

Clients depositing their money into financial institutions are, as far as the law is concerned, unsecured creditors of the financial<sup>22</sup>. As such, the risk of non-repayment of the money deposited is an issue when the banks fall into insolvency. In Kenya, this risk is mitigated by deposit insurance, which is mandatory for every institution registered by the Central Bank<sup>23</sup>.

It has been argued that the credit risk on mobile money funds, considering the structure of mobile money systems, is non-existent<sup>24,25</sup>. This is because the money transferred to the mobile wallets is fully backed by a cash amount that had been pre deposited by the agent in exchange for the mobile money. The money is then held under a trust, whose beneficiaries are the depositors themselves. As such, the providers are not allowed to interfere with or benefit from the funds<sup>26</sup>. This would eliminate the credit risk, as the amount that has been deposited by the users is the same amount, ideally, that should be withdrawn.

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<sup>21</sup> Di Castri S, 'Mobile Money: Enabling regulatory solutions'

<sup>22</sup> Unsecured Creditors of Failed Banks: It's Not a Wonderful Life' (1991) <http://www.jstor.org/stable/1341671> Accessed on 25th November 2015

<sup>23</sup> Section 24 Kenya Deposit Insurance Act (No. 10 of 2012)

<sup>24</sup> Kasekende L, 'Mobile Money Services – Talking Points' Igarss 2014 [2014] 1 <<http://nyucted.org/wp-content/uploads/2012/11/louis-kasekende-mobile-money-uganda2.pdf>>

<sup>25</sup> Afi, 'Enabling mobile money transfer The Central Bank of Kenya ' s treatment of M-Pesa' Alliance for Financial Inclusion [2010] 16 <<http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/09/enablingmobilemoneytransfer92.pdf>>

<sup>26</sup> 'Ringfencing and Safeguard of Customer Money | Mobile for Development' <<http://www.gsma.com/mobilefordevelopment/programmes/mobile-money/safeguard-of-customer-money>> accessed 26 January 2016



*Deposit Insurance*

Section 24 of the Kenya Deposit Insurance Act (KDI Act) states that any institution licensed by the Central Bank shall be a member of the fund. Mobile money providers, however, fall short of the definition of an “institution” under the Central Bank Act. As such, the money deposited by the users of the various services are not insured individually<sup>27</sup>. The money amount that is held in trust by the Mpesa providers, however, is covered by Deposit insurance due to the fact that the Commercial Bank(s) that the money is deposited into are members of the Kenya Deposit Insurance Fund under Section 24 above.

The KDI Act defines deposits as the unpaid balance of the aggregate of deposits received or held by a member institution from or on behalf of a person in the usual course of the business of deposit taking and shall include<sup>28</sup>:

- (a) A bank draft, certified cheque or other similar instrument or payment instruction, drawn or made against a deposit account for which the member institution shall be primarily liable;
- (b) A cheque entered into a payment system notwithstanding any delay or failure by the member institution in crediting the payee's account; or
- (c) Any other liability or financial instrument as may be specified by the Corporation but excludes:
  - (i) A deposit that is not payable in Kenya;
  - (ii) Bearer negotiable instruments of deposit;
  - (iii) Any sum of money payable under a repurchase agreements;
  - (iv) Interbank transactions; and
  - (v) Any other liability or financial instrument as may be specified by the Corporation;

The Act still fails to define deposits generally (using the word itself in its definition) but defines the deposits that may be insured under the Fund. As such, whether a deposit shall be protected depends solely on whether the insured party is a member of the Fund. Given the criteria for

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<sup>27</sup> Jack W and Suri T, ‘Mobile money: the economics of M-PESA’ (2011) 10

<sup>28</sup> Section 2 Kenya Deposit Insurance Act (No. 10 of 2012)



compulsory membership, it cannot be guaranteed that every mobile money provider shall have their funds insured<sup>29</sup>.

There are two distinct, and seemingly correct, arguments concerning the protection of user funds by the Deposit Insurance Fund. In both cases, the definition of the Mpesa users' funds is central to the argument.

On one hand, the question of whether mobile money schemes qualify for deposit insurance is met with a straight answer: no. The argument goes that since such funds are not in the strict legal sense 'deposits' as defined under the Banking Act, and the beneficial owners of the funds do not have customer/banker relationships with the institutions in which the trust fund has been placed in respect of their entitlement under the mobile money scheme, it follows therefore that each mobile money customer's entitlement cannot be considered a protected deposit.<sup>30</sup>

On the other hand, it has been argued that the Kenya Deposit Insurance Act, having created a structure where each of the beneficiaries in a Trustee or Joint account has their deposits insured separately, the deposits by the customers are, in fact, protected.<sup>31</sup>. This, however, assumes that the Mpesa users' funds can be defined as deposits.

### 2.2.2 Privacy Concerns

During the normal course of use of mobile money, a user is required to divulge private information to a cash merchant who he may or may not know well. The extent to which the web of agents has spread is convenient to the users in that they can get their services from many more agents and profitable to the service providers because more customers will be willing to register if they are able to get more convenient services. It, however, presents a nightmare with regard to supervision of the individual agents and their conduct, especially in the case of misconduct that is as

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<sup>29</sup> Section 24 Kenya Deposit Insurance Act (No. 10 of 2012)

<sup>30</sup> 'Reinventing the Wheel: "Pass Through" Deposit Insurance coverage for Mobile Money in Kenya | Mobile for Development' <<http://www.gsma.com/mobilefordevelopment/reinventing-the-wheel-pass-through-deposit-insurance-coverage-for-mobile-money-in-kenya>> accessed 25 December 2015

<sup>31</sup> Section 29, Kenya Deposit Insurance Act (No. 10 of 2012)



unnoticeable as divulging private information (names, ID numbers and corresponding signatures) to the wrong people.

When transacting through an agent, a customer is required to present the agent with their identification documents (National ID or passport) and sign to confirm the transaction.<sup>32</sup> The fact that there are multiple ways to access one's money without having to sign, let alone present anyone with identification documents means that it is either unnecessary or there is an unclosed loop in the security system. One of the ways to bypass the revelation of personal details is simply to withdraw the amount at an ATM machine or to pay for goods and services using your phone at supported outlets. The two services are both offered by the two largest mobile payment service providers at the moment.

The matter of privacy presents itself more as an academic problem than an actual problem affecting the people at the moment. This, however, has been argued to be mostly due to the laissez faire attitude that most people have to invasion of privacy under such circumstances.

### 2.2.3 Regulation of Security Risk

In response to the terrorist attacks over the past two decades and the increase in movements of cash for illegal purposes e.g. Drug trade and human trafficking, there has been pressure on financial institutions to help in curbing such occurrences at an early stage. This is a reasonable expectation given the fact that most of these activities have been proven to require immense financing beforehand.

Over time, Know Your Customer (KYC) standards have been developed at an international level to ensure that the bank knows whom it's transacting with. This serves many purposes but the two purposes below<sup>33</sup>:

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<sup>32</sup> Deutsche Welle (www.dw.com), 'Privacy concerns in Kenya as users turn to M-Pesa to catch cheating partners | Sci-Tech | DW.COM | 12.07.2013' <<http://www.dw.com/en/privacy-concerns-in-kenya-as-users-turn-to-m-pesa-to-catch-cheating-partners/a-16947446>> accessed 15 January 2016

<sup>33</sup> 'Know your customer: Global anti-money laundering measures: PwC' <<http://www.pwc.com/gx/en/industries/financial-services/publications/anti-money-laundering-know-your-customer-quick-reference-guide.html>> accessed 27 January 2016



1. Identifying the party/parties that are transacting with a given account, and by extension blacklisting relevant people e.g. those on terrorist watch lists
2. Tracking transactions, where need arises, attached to a specific account

### **2.3 Regulations on Competition**

The Competition Authority of Kenya has identified telecommunications as one of several markets being scrutinized by the Competition Authority for possible abuses of dominance.<sup>34</sup> Among others, bundling of services has been considered to be an abuse of dominance in cases where the other services are substandard or overpriced but due to one of the services in the bundle (mobile payments in this case), the customer does not have too choice if he/she intends to use the dominant mobile payments system<sup>35</sup>. While the bundling of the services may seem to be a major issue with regards to competition, the most prevalent issues have to be interoperability and exclusivity of agents.

The argument by Safaricom, the country's most dominant mobile payment service provider, has been that it cannot be punished simply for being a dominant player in the market<sup>36</sup>. This may be (and they argue it to be) a natural result of good business practice<sup>37</sup>. While the truth of the statement is not a target of this research, the actions of Safaricom in response to competitive forces must be noted.

#### 2.3.1 Interoperability

Perhaps the most important regulatory issue relating to competition in mobile money is the *interoperability* of mobile money<sup>38</sup> —the ability of the user of one mobile money service to transact directly with users on another system. There are two types of interoperability that are relevant here – interoperability *between MNO payment systems* (e.g. transfers from Safaricom's

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<sup>34</sup> 'Posts about M-Pesa on African Antitrust & Competition Law' <<http://africanantitrust.com/tag/m-pesa/>> accessed 16 December 2015

<sup>35</sup> Porteous D, 'ENABLING ENVIRONMENT FOR CELL PHONE BANKING IN AFRICA', 33

<sup>36</sup> MUTEGI M and com p n, 'Safaricom gets crucial support in battle with CA' <<http://www.businessdailyafrica.com/Corporate-News/Safaricom-gets-crucial-support-in-battle-with-CA/-/539550/2698158/-/item/0/-/4b9rj5z/-/index.html>> accessed 17 January 2016

<sup>37</sup> Mohammed O, 'Safaricom will not be forced to loosen its dominant hold on Kenya's mobile-money market' <<http://qz.com/472886/safaricom-will-not-have-to-give-up-its-nearly-80-hold-of-kenyas-mobile-money-market/>> accessed 15 January 2016

<sup>38</sup> Jenkins B, 'Developing Mobile Money Ecosystems' 14 CRS Initiative, Harvard Kennedy School (2008) 36



Mpesa to Airtel Money), and interoperability *between MNO payment systems and banks* (e.g. transfers from a Chase Bank account to an Mpesa account).<sup>39</sup> While is quite developed at the moment, interoperability between MNO payment systems is a bit less refined. The transaction involved is similar to transferring money to an unregistered user.

While it is a start, it requires the money received to be withdrawn through an agent of the sender's mobile network and redeposited, if one intends to keep it in their mobile wallet. Furthermore, there is a time limit on withdrawal of the received funds... Past a certain date, the money cannot be withdrawn. The system operating between banks and mobile payment systems allows one to keep the money in whichever account it has been sent to and transact with it through the account, it is not unreasonable to expect the same from inter-MNO transfers.

### 2.3.2 Agent exclusivity

In the past, mobile money providers were allowed to enter into agreements with their agents that restricted them from being agents of other service providers<sup>40</sup>. For example, an agent of Safaricom's Mpesa could not be an agent of Airtel's Airtel Money at the same time. This presented a significant problem with regard to competition

Given the reliance of mobile money transfer on an agent network, the establishment of an agent network in a market with an already established agent network is a significant expense that raised the barriers for entry for mobile money transfer. It is an uphill task to compete against an entity with an established and growing agent network and as such, the new entrants into the mobile money space are deterred from joining.

On the flipside of this issue, it has been argued by the established providers that removing the requirement on agent exclusivity will lead to a stunted growth of the agent network<sup>41</sup> as the

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<sup>39</sup> Argent J, Hanson J A and Gomez M P, 'The Regulation of Mobile Money in Rwanda'(August) (2013)

<sup>40</sup> Muthiora, 'Enabling Mobile Money Policies in Kenya' 19

<sup>41</sup> Argent, Hanson and Gomez, 'The Regulation of Mobile Money in Rwanda'



providers will have no impetus to expand and improve their agent network if the other providers can be allowed to piggyback on their established network<sup>42</sup>.

The Competition Authority of Kenya, in 2014, ruled that Safaricom, the country's most dominant mobile money provider, had to open up its agent network to other providers. Safaricom had preemptively lifted their exclusivity barriers and as such, that barrier to competition has been lifted.

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<sup>42</sup> Leishman P and Davidson N, 'The case for interoperability: Mobile money services would create for customers and operators' GSMA - Mobile Money for the Unbanked [2012] 7 <[http://mmublog.org/wp-content/files\\_mf/mmu\\_interoperability.pdf](http://mmublog.org/wp-content/files_mf/mmu_interoperability.pdf)>



### 3 The Current Legal Framework

At the moment, mobile payment systems are regulated by the following legislation:

- i. Kenya Information & Communications Act: provides the regulatory framework for the licensing & operation of telecoms.
- ii. National Payments System (NPS) Act, 2011: Where MMT has a designation as a Payment Instrument and a designation as a Payment Service Provider.
- iii. Proceeds of Crime & Anti Money laundering Act, 2009: Mobile Money Transfer institutions are 'Reporting Institutions' for purposes of the Act and have a duty to report suspicious activity
- iv. Central Bank of Kenya Act: regulates all financial institutions and entities, including payment systems<sup>43</sup>. The oversight, inspection and enforcement duties of the Central Bank are formally recognized<sup>44</sup>.
- v. Central Bank of Kenya: For the time being, establishes most of the substantive regulation on Mobile Money Transfer systems
- vi. Competition Act, 2011: ensures equal market opportunity by all players
- vii. Banking Act: proscribes certain dealings by non-licensed institutions, e.g. taking deposits from the public, misleading advertising for deposits.

Despite the numerous pieces of legislation applicable to mobile payment systems, the available regulations still have numerous shortcomings. These gaps in the legislation have the potential to lead to some undesirable outcomes and it is this that shall be the focus of this paper.

The current regulations shall be analyzed with reference to the areas of regulations discussed above.

#### 3.1 Regulation of Systemic Risk

The current approach taken to limit systemic risk is simply to impose daily transaction limits on the mobile payment services. This greatly reduces the net amount of money held within the mobile payments system and as such, the risk of a collapse of the economic system due to a collapse of the mobile payment systems is all but eliminated.

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<sup>43</sup> Section 4A, Central Bank of Kenya Act Chapter 491 Laws of Kenya

<sup>44</sup> Muthiora, 'Enabling Mobile Money Policies in Kenya' 18



## **3.2 Regulation of Operational Risk**

### 3.2.1 Credit Risk

#### *Control over Customers' Funds*

Despite the numerous applications of mobile money transfer, the service is essentially a tunnel for money to pass from one person to another. The service providers have absolutely no control over the money in the sense that the money is never actually held by them.

Going back to the structure of the service (and the legal requirement), there is a requirement that the money being transferred be held in a commercial bank. The account holder in this case is a Trust with the customers as the beneficiaries<sup>45</sup>. With this arrangement, the service providers cannot access funds in this account for whatever reasons that could arise. In the case of bankruptcy, the funds remain the property of the M-Pesa customers. In addition to this, mobile money transfer services cannot create new money in the way that banks usually do. As such, the money that goes into the account is, at the very least, the amount that should come out of the account.

One issue with this, however, is the fact that accounts in commercial banks earn interest on the principal. In theory, the customers have a beneficial interest in the money. The amount of money that this translates to per person (given the average amount of time that money is in the customer's M-Pesa account) is negligible and as such, it would be of little use to give it back as interest. Considering, however, the sheer number of people using the service, the interest that accumulates in the trust account is a rather significant amount. Before, the regulations in place required that the interest be spent on charitable activities. This requirement, however, does not exist anymore.

The fact that the funds are ring-fenced from the service providers lends a sigh of relief to individuals who were worried about the fate of their funds if the service provider were to go bankrupt. The concern over the banks' treatment of the funds, however, is not assuaged. The fact that the accounts earn an interest means that the banks holding the money are allowed to intermediate on the funds. What, then, is the fate of the customer funds if the bank itself were to go bankrupt? The funds are certainly not double ring-fenced to prevent this outcome. This problem becomes significant when the aspect of Deposit Insurance is introduced. The money deposited by

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<sup>45</sup> Section 25(3) National Payment Systems Regulations 2014



the users of the various services are not insured individually<sup>46</sup> given the fact that the requirements for compulsory membership of the Deposit Insurance Fund are not met.

*Deposit Insurance*

Section 24 of the Kenya Deposit Insurance Act (KDI Act) states that any institution licensed by the Central Bank shall be a member of the fund. Mobile money providers, however, fall short of the definition of an “institution” under the Central Bank Act. As such, the money deposited by the users of the various services are not insured individually. The money amount that is held in trust by the Mpesa providers, however, is covered by Deposit insurance because the Commercial Bank(s) that the money is deposited into are members of the Kenya Deposit Insurance Fund under Section 24 above. But in the grand scheme of things, the funds can be considered uninsured given the fact that the insurance is limited to Ksh. 100, 000<sup>47</sup> and it’s meant to cover several million accounts for a mobile network operator.

The KDI Act defines deposits as the unpaid balance of the aggregate of deposits received or held by a member institution from or on behalf of a person in the usual course of the business of deposit taking and shall include<sup>48</sup>:

- (a) A bank draft, certified cheque or other similar instrument or payment instruction, drawn or made against a deposit account for which the member institution shall be primarily liable;
- (b) A cheque entered into a payment system notwithstanding any delay or failure by the member institution in crediting the payee's account; or
- (c) Any other liability or financial instrument as may be specified by the Corporation but excludes:
  - (i) A deposit that is not payable in Kenya;
  - (ii) Bearer negotiable instruments of deposit;
  - (iii) Any sum of money payable under a repurchase agreements;

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<sup>46</sup> Jack and Suri, ‘Mobile money: the economics of M-PESA’, 10

<sup>47</sup> Section 28 (1) Kenya Deposit Insurance Act 2012

<sup>48</sup> Section 2 Kenya Deposit Insurance Act 2012



(iv) Interbank transactions; and

(v) Any other liability or financial instrument as may be specified by the Corporation;

The Act still fails to define deposits generally but defines the deposits that may be insured under the Fund. As such, whether a deposit shall be protected depends solely on whether the insured party is a member of the Fund. Given the criteria for compulsory membership under section 24 of the Act, it cannot be guaranteed that every mobile money provider shall have their funds insured.

### 3.2.2 Regulation of Security Risk

The AML Act casts a broad net definition-wise as far as financial institutions are concerned. Mobile money systems are covered under businesses, formal or informal, that transfer money or value by any means<sup>49</sup>. Mobile money systems, by virtue of being financial institutions under this definition, are therefore automatically designated as Reporting Institutions.

Under the AML Act, financial institutions are obliged to:

1. Monitor any unusual transactions and report any suspicious activity<sup>50</sup>
2. Properly identify any person wishing to enter into business with them (KYC)<sup>51</sup>
3. Establish and maintain customer records (keeping the records of the identities and attached transactional history for a minimum of 7 years)<sup>52</sup>
4. Establish and maintain internal reporting procedures
5. Register with the Financial Reporting Centre

In addition, International Anti Money Laundering/ Combating the Financing of Terrorism (AML-CFT) standards set by the Financial Action Task Force require that adequate customer due diligence be undertaken on all new accounts and on single payment cash transactions. This process is part of Know Your Customer (KYC) procedures so that suspicious transactions can be identified. National laws and regulations are required to give effect to these standards, and they typically require:

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<sup>49</sup> Section 2, Proceeds of Crime and Anti-Money Laundering Act (No. 51 of 2012)

<sup>50</sup> Section 44, Proceeds of Crime and Anti-Money Laundering Act (No. 51 of 2012)

<sup>51</sup> Section 45, Proceeds of Crime and Anti-Money Laundering Act (No. 51 of 2012)

<sup>52</sup> Section 46, Proceeds of Crime and Anti-Money Laundering Act (No. 51 of 2012)



- Verification of identity of the client, using a government issued identity document;
- Verification of physical address (for example, by production of a bank statement or utility bill in name of the customer).

If this procedure is not followed, the bank or payment agent may be penalized by the relevant authority; or frozen out of international payment systems by other banks concerned about the risk of being associated with illicit activities.<sup>53</sup>

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<sup>53</sup> Porteous, 'ENABLING ENVIRONMENT FOR CELL PHONE BANKING IN AFRICA', 32



### **3.3 Regulations on Competition**

The Competition Act (the Act, for the rest of this section) is applicable to all persons engaging in trade.<sup>54</sup> Consequently, mobile network operators are regulated by the Act. The Act establishes the Competition Authority of Kenya (CAK) as an independent authority that is tasked with enforcement of the Act.

Concerning dominance in the market, the Act defines a dominant undertaking as one that controls at least half of the services or production in a certain market<sup>55</sup>. While it is not illegal to have a dominant position in the market, a dominant player in the market is subject to increased scrutiny by CAK.

Abuse of a dominant position, according to the Act, includes:

- i. Directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
- ii. Limiting or restricting production, market outlets or market access, investment, distribution, technical development or technological progress through predatory or other practices;
- iii. Applying dissimilar conditions to equivalent transactions with other trading parties;
- iv. Making the conclusion of contracts subject to acceptance by other parties of supplementary conditions which by their nature or according to commercial usage have no connection with the subject-matter of the contracts; and
- v. Abuse of an intellectual property right.

Contravention of these provisions results in fines of up to 10 million shillings.

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<sup>54</sup> Section 5, Competition Act No 12 of 2010

<sup>55</sup> Section 23, Competition Act No 12 of 2010



## 4 Suggestions for Improvements in the Current Regulation

### 4.1 Regulation of Systemic Risk

Despite the increased importance of mobile money in many countries, the overall impact is considered negligible. Even if usage were to expand significantly, however, central banks would still have ways of controlling the balance between electronic money and central bank money and regulate short-term rates. Most central banks, therefore, consider mobile money neutral (or of low importance, at best) with regard to monetary policy<sup>56</sup>.

Mobile payment systems currently pose a far smaller risk to the financial sector than banks and other financial institutions. In fact, “large numbers of clients that frequently transact small amounts pose limited systemic risk because they represent such a small share of overall financial sector assets”.<sup>57</sup> However, this is greatly dependent on the transaction amounts remaining as small as they do are and this is further tied to the transaction limits imposed by the Central Bank.

Every increase in the amount of money transferrable through the mobile payments system is always welcomed by the customers. The maximum amount transferable per transaction is 70,000 shillings, the total amount one may transfer in a day is 140,000 and the maximum amount that may be held in a customer’s account at any time is 100,000 shillings. Keeping these limits low simplifies the regulation of systemic risk significantly<sup>58</sup>, to the extent of being considered a virtually absolute solution.

As a payment system, however, it would be desirable for it to be able to handle more significant transfers. This would necessitate the formulation of new regulations to deal with the systemic risk that would undoubtedly arise when mobile money is responsible for a large number of transactions, including some large volume transactions.

A number of regulations can be introduced to reduce systemic risk:

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<sup>56</sup> Bank for International Settlements (BIS), Committee on Payment and Settlement Systems (CPSS) (2012), “Innovations in Retail Payments,” Report of the Working Group on Innovations in Retail Payments. Available at <http://www.bis.org/publ/cpss102.pdf>

<sup>57</sup> Di Castri, ‘Mobile Money: Enabling regulatory solutions’

<sup>58</sup> Di Castri, ‘Mobile Money: Enabling regulatory solutions’



Require the money held within the system to be held in multiple banks

At the moment, there is no regulation on whether the deposits must be placed in multiple banks. In Afghanistan, the funds must be deposited in several fully prudentially regulated commercial banks.<sup>59</sup> In this way, the risk of significant loss to the system is spread and a collapse of a single bank has a less profound impact on the mobile payment system than it would have if all the funds were held in a single account.

Require the money to be held in banks of a certain standing

In response to concerns raised by banks on the security of the deposits, the country's largest mobile payment service provider replied that it has deposited the M-Pesa money in tier-1 (big, stable) banks that have a much lower risk of collapsing as well in the risk-free government securities.<sup>60</sup> While this is a prudent move by the service provider, it is an isolated case as it is left to each provider to decide where their funds shall be deposited. While it must be appreciated that the service providers must have conducted their due diligence on the banks that they intend to deposit their customers' funds in, the extra certainty goes a long way in bolstering public confidence in the service.

## **4.2 Regulation of Operational Risk**

### **4.2.1 Credit Risk**

#### *Interest*

The mobile payment systems should be maintained as a mere conduit to secure customers' funds. In any case, it is highly unlikely that the MNOs would be willing to go into banking business (by meddling with the customers' funds) as this would put them under extra regulations as financial institutions. That being said, however, security of the customers' funds should receive an extra layer of security given the fact that they are, at the moment, unprotected (individually) by deposit insurance<sup>61</sup>.

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<sup>59</sup> Di Castri, 'Mobile Money: Enabling regulatory solutions'

<sup>60</sup> IRUNGU G and com g n, 'Banks raise alarm over mobile cash deposit insurance' <<http://www.businessdailyafrica.com/mobile-cash-deposit-insurance/-/539552/2157770/-/dgm4ojz/-/index.html>> accessed 25 December 2015

<sup>61</sup> Jack and Suri, 'Mobile money: the economics of M-PESA', 10



It has been implied that there is virtually no credit risk posed by the mobile payment systems given the fact that the service providers do not, at any point, have any legal ownership of the money. However, given the basic operation of a bank, the money does not belong to the clients either, once it has been deposited by the service providers into a bank account<sup>62</sup>. This exposes the clients (through the trust) to a credit risk. As a result, the clients should be protected from the risks on their deposits or at the very least, compensated to justify the risk their money is placed under.

The compensation come in the form of interest paid to the customers on their deposits and the protection comes in the form of deposit insurance (individual) of the customers' deposits.

The current regulations do not allow non-bank m-money issuers to pay interest on the m-money to their customers. Interest here is to be understood to include 'interest equivalents' which are basically any benefits e.g. free airtime given to the customer. As Ehrbeck and Tarazi observed, there is little reason given by regulators for this...The regulators simply state that paying interest is a banking activity. However, Ehrbeck and Tarazi go on to explain that the definition of banking activity focuses especially on the deposit taking and the intermediation of the funds by the institutions, and not the interest alone<sup>63</sup>. Intermediation places the customers' money at risk, which risk is compensated by the interest offered by the institutions carrying out the banking business. The intermediation gives rise to systemic risk, which is what prudential regulations attempt to mitigate. While the m-money issuers, such as mobile payment service providers do take deposits from their customers, the deposits are not held by them...they are held in totality by commercial banks, which then intermediate on the funds (as is their business) and pay interest to the trust account.<sup>64</sup> As such, it is not entirely out of the question to share this interest with the customers, as the service providers are not allowed, under any circumstances, to benefit from this interest.

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<sup>62</sup> Unsecured Creditors of Failed Banks: It's Not a Wonderful Life' (1991) <http://www.jstor.org/stable/1341671>  
Accessed on 25th November 2015

<sup>63</sup> Ehrbeck T and Tarazi M, 'Putting the Banking in Branchless Banking: Regulation and the Case for Interest-Bearing and Insured E-Money Savings Accounts' [2011] 37

<sup>64</sup> Ehrbeck and Tarazi, 'Putting the Banking in Branchless Banking: Regulation and the Case for Interest-Bearing and Insured E-Money Savings Accounts'



*Deposit Insurance*

At the moment, there is regulation that could address the issue of deposit insurance with respect to mobile money. The only barrier to its implementation is a matter of definitions. The Deposit Insurance Act

The previous deposit protection provided under the Deposit Protection Fund Board had inherent weaknesses. For instance, protected payment was restricted to one cover per depositor per institution and no provision was made for the protection of accounts held in a fiduciary capacity.

The new KDI Act allows that where an institution is under a lawful obligation to repay monies to a depositor who is acting as a trustee for another or as joint owner with another, and the trusteeship or joint ownership is disclosed on the records of the institution<sup>65</sup>:

- a. The deposit shall be deemed to be a deposit separate from any deposit of that depositor acting in his own behalf or acting in another trust with the same institution
- b. The deposit held in trust shall be deemed to be a separate deposit for each beneficiary where the depositor is a trustee for multiple beneficiaries
- c. The deposit held in trust shall be deemed to be separate from other deposits with the institution on his own behalf or by another trustee with him as the beneficiary

As matters stand, however, it is still unclear whether mobile payment systems are required by the law to be members of the fund because none of them is. As such, the deposit insurance extends to the bank accounts held in trust as individual bank accounts. In the event of a collapse of the bank, the entire mobile payment system ecosystems would receive a maximum of 100,000 shillings to be shared among the millions of registered users<sup>66</sup>.

The KDI Act defines deposits as the unpaid balance of the aggregate of deposits received or held by a member institution from or on behalf of a person in the usual course of the business of deposit taking and shall include:

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<sup>65</sup> 'Reinventing the Wheel: "Pass Through" Deposit Insurance coverage for Mobile Money in Kenya | Mobile for Development' <<http://www.gsma.com/mobilefordevelopment/reinventing-the-wheel-pass-through-deposit-insurance-coverage-for-mobile-money-in-kenya>> accessed 25 December 2015

<sup>66</sup> Section 28 (1) Kenya Deposit Insurance Act



- (a) A bank draft, certified cheque or other similar instrument or payment instruction, drawn or made against a deposit account for which the member institution shall be primarily liable;
- (b) A cheque entered into a payment system notwithstanding any delay or failure by the member institution in crediting the payee's account; or
- (c) Any other liability or financial instrument as may be specified by the Corporation but excludes:
  - (i) A deposit that is not payable in Kenya;
  - (ii) Bearer negotiable instruments of deposit;
  - (iii) Any sum of money payable under a repurchase agreements;
  - (iv) Interbank transactions; and
  - (v) Any other liability or financial instrument as may be specified by the Corporation;

The Act still fails to define deposits generally but defines the deposits that may be insured under the Fund. As such, whether a deposit shall be protected depends solely on whether the insured party is a member of the Fund. Given the criteria for compulsory membership under section 24 of the Act, it cannot be guaranteed that every mobile money provider shall have their funds insured.

The mobile payment service providers should, at the very least, be required to be members of the Deposit Insurance Fund. The money that is held within the systems is placed at risk, which can hardly be mitigated by insuring the individual trust accounts alone. The law expressly caps the maximum amount that can be repaid by the Fund at 100,000. Considering the number of registered mobile money users and the amount of money held within the mobile payment systems, the compensation by the fund in case of a collapse is so little that it cannot be withdrawn after sharing among the customers.

#### 4.2.2 Privacy Concerns

In line with the minimalistic approach that underpinned the original implementation of mobile payments service in Kenya, unnecessary procedures such as keeping a physical log of transactions when transacting through agents should be eliminated. It is a matter of fact that mobile money



users can make withdrawals through an ATM without providing any information other than their PINs that are attached to their mobile money accounts.

This would go a long way in eliminating the risk of misuse of personal information such as signatures and ID numbers. There has been no satisfactory reason justifying the presentation of identification documents and signing off on each transaction. In fact, some agents do not really enforce the requirement for signing for each transaction one performs. As such, it can simply be eliminated with no serious repercussions in terms of a security leak.



## **5 Conclusion**

It is a widely accepted truism that innovation outpaces regulation. The extent to which this happens is most evident in industries involving digital technology. While this is a fact that cannot be changed, legislatures have to do their best to keep up with the innovations in the market. This, however, should be done in a manner that fosters innovation while keeping to the true function of the law, which is to protect public interest, in this case.

The spread of mobile payment systems within the country has made it so that most people are heavily dependent on it for their daily transactions. The public interest in mobile payment systems, just like any financial services, cannot be overstated. It is fitting, therefore that the mobile payment systems be properly regulated.

The recent regulations passed on mobile payment systems are a step in the right direction. A lot of matters have been canvassed in the National Payment Systems Regulations. More, however, can be done to ensure that the regulations around mobile money meet a satisfactory standard

Firstly, the cost of introducing new regulations must be justifiable from the perspective of the regulator, the service provider, and the consumer. The eventual burden of most of the regulations ends up being shouldered by the consumer because of the service provider increasing their prices in order to meet the cost of conforming to the new regulation. As such, the regulations should only be limited to those whose benefit outweigh the cost of implementation.

Second, the regulator must be able to have the perfect balance of regulation, neither too much nor too little. Overregulation has been considered by many to be the cause of the slow uptake of mobile money in many jurisdictions. While regulations are not the only factor at play here, it has been argued by many to be a key contributor. MPESA, the pioneering mobile payments service in Kenya, launched in 2007 into a regulatory vacuum that allowed it to grow with minimal supervision.<sup>67</sup> With the level of uptake of the service, however, effective regulations have to be

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<sup>67</sup> 'Update on Regulation of Branchless Banking in Kenya January 2010' Consultative Group to Assist the Poor (CGAP) Focus Note [2010]



put in place to ensure some measure of control over the industry if a collapse of the industry is to be avoided.

Finally, the legislature must be willing to enact new legislation to fit new innovations rather than trying to squeeze new products into the traditional definitions in the law. Regulation of mobile money has taken the country such a long time mostly due to the fact that the regulators were trying to regulate a service that the law could not even describe.

While this research does not come close to providing a definitive solution for the regulation of the mobile money environment in Kenya, it highlights some factors to consider when establishing a fitting regulatory system for mobile payment systems.



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