Research & Analysis Journals

International journal of management and economics invention
||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220
www.rajournals.in

Mobile money regulations and protection of users of Mobile Money in Uganda

***Mellan Basemera*[1], *Donatus Mugisha Rulangaranga*[2], *Eva Mpaata*[3], *Joshua Muwema*[4]**
[1]Assistant Lecturer, Department of business administration of Makerere University Business School
[2]Senior Lecturer, Department of management science of Makerere University Business School
[3]Lecturer, Department of finance of Makerere University Business School
[4]Procurement manager, East African Breweries Limited - Uganda

Abstract:* Mobile money service has been growing in Uganda since its inception in 2009. Many Ugandans, rich and poor, embraced the service which is considered to be the key to help ease payments and receipts as well as assist those who do not have bank accounts to keep some savings through their mobile money accounts. Though considered to be good, many users are reported not to be comfortable with the way they sometimes lose money through the transactions they undergo through the mobile money platforms. The need to establish possibility to close this gap formed the gist of this research. Existence, awareness and implementation of mobile money regulations were considered to be possible explanations to the feeling of insecurity amongst the over 10 million mobile money customers (users) in Uganda. This was tested by surveying a maximum of 385 users of mobile money services as well as the entities that are at the center of enhancing the operations of mobile money services in Uganda. These institutions are Bank of Uganda (BoU), Uganda Communications Commission (UCC) and the companies housing the mobile money services. These are commonly referred to as the Mobile Network Operators (MNOs) such as MTN, AIRTEL, AFRICELL and even Uganda Telecom. Interviews were conducted and questionnaires were issued out in the process of data collection. Descriptive, thematic, correlation and regression analyses were used to arrive at the relevant conclusion to this research. Findings indicated that it is possible to reverse the insecurity in customers and users of mobile money services if the implementation of regulations governing mobile money services is carried out effectively and successfully.

***Key words:* Mobile Money services, Mobile Money, Mobile Money regulations, Protection of users of mobile money services, protection of users**

INTRODUCTION

In Uganda today, it is common to hear of a complaint related to mobile money service with nowhere to address it (Mwesigye and Nakabugo 2013). Even where one thinks they would get help, such as the Mobile Network Operators (MTN, AIRTEL and UTL offices), the help is limited. Most of the customers are left to handle their own problems. Despite these trends of challenges on the side of the customer, there is over-reliance on mobile money services in most parts of Uganda. The percentage of people using bank services as well as other financial services is still low making many people resort to use of mobile money services (Uganda FinScope III Report 2013). Convenience and hence over-reliance on mobile money services is considered to have been the major driving force in the growth of mobile money services in the country (Ssonko 2010).

Since their introduction, mobile money services have been on the rise in Uganda (Duncombe 2009). Almost everyone in the country considers the use of mobile money services regardless of the location of that person. This is evidenced by a mobile penetration level of 44% of the population and with 97% of the population covered by one or more Mobile Network Operator (MNOs) networks. Reports further indicated that by December 2012, there were 8.9 million registered mobile money customers holding a combined virtual money account of Ugshs.11.7 trillion (Bank of Uganda 2012). This means that people from both rural and urban areas have a chance to access mobile money services making the services one of the best innovations that Uganda has ever had in quite a long time. The same trend is reported to be experienced elsewhere in East Africa and Africa in general. Though the consumers are happy with the service, there are reports that these people basically know the existence of the service without knowing exactly what it takes to have a secure mobile transaction. Regardless of this fact, the service is still considered to be one of the best since even people without banks can use it (Rwothungeyo 2012).Presence of mobile phones to almost everyone in the country is considered to be one of the reasons for the widespread use of mobile money services. (Duncombe 2009).

Looking at a wider perspective, the advent of mobile telephone technology is a phenomenon that has been particularly remarkable in Uganda, East Africa and the whole of Africa (Michael 2013). According to a recent report about Africa, the mobile phone usage has greatly grown hitting the 80% mark. More of this growth is expected to be in 2014 with the reduction in the prices of smart phones in the African Market (Koetsier 2013). This rapid development in Africa’s ICT sector, particularly mobile telephone is sending a strong message about the

Research & Analysis Journals

International journal of management and economics invention

||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220

www.rajournals.in

continent's potential to innovate (Ondiege 2010). Key among the most recent innovations is mobile money. The revolution of Mobile Money in the financial services market has grown rapidly and is widely viewed as a success story to be emulated across the developing world (Jack and Suri 2010).

Mobile money is a powerful way of delivering financial services to Africa's 600 million people who have a cell phone but no bank account (Duncombe 2009). It has a number of advantages over traditional banking methods because it breaks down geographical constraints and offers other advantages such as immediacy, security and efficiency (Ondiege 2010). It is promoting financial inclusion by allowing people excluded from the banking system either because they live far from bank branches or do not meet minimum deposit requirements for a bank account to access payment and store of valued services (Kasekende 2011).

Focusing on Uganda, according to a survey on Demand, Use and Access of financial services that was conducted in Uganda in 2006, access to financial services, both formal and informal was estimated at 57% but only 18% were using formal financial institutions such as banks. In 2009 the same survey indicated that 70% of Ugandans were financially included and 30% were not included. Of the 70% that were financially included about 7% were using Mobile Money Services (MMS). A similar survey conducted in 2013 revealed that financial inclusion increased to 85% between 2009 and 2013. The 85% was further divided into 20% who were using formal financial intermediation services, 34% were using only the non-bank formal services but not the formal banks and the remaining 31% were reported to be using formal institutions but not the formal financial products and services. Further analysis revealed that the non-bank formal service that rose to 34% in 2013 was mainly driven by the high increase in use of mobile money services. In comparison to 2009, this component of financial inclusion was at 7% (Uganda FinScope III Report 2013).

The dramatic increase in the use and penetration of mobile money services portrays the level of acceptability of this service in Uganda (Diniz, Albuquerque and Cernev 2011). This increase in acceptability however comes with challenges related to how such services are managed as well as how the different customers are protected in the process of carrying out the transactions. One of the vivid issues related to customer services is that of customers losing money while operating the mobile money service. This mainly occurs through the loss of network while transacting or accidentally sending to a wrong person without having means of confirming the recipient before sending. In the process, the sender, receiver or mobile money attendant ends up losing money. For instance, in 2013, it was reported that customers as well as operators lost millions of Ugandan shillings in different network related and fraudulent transactions of mobile money (Mwesigye and Nakabugo 2013)

Borrowing from the Uganda FinScope III Report (2013), it could be possible for Bank of Uganda to control the transactions carried out through mobile money though this is not clearly spelt out. The legal regime governing provision of financial services may not favor the offering of secure mobile money services. In Uganda, banks are required to partner with mobile network operators before they offer any mobile money services (MTN 2009). Mobile money initiatives are led by mobile network operators that are traditionally outside the scope of financial regulation, and with whom the financial regulator has traditionally had little or no contact.

Considering having contact between the financial sector and mobile sector won't be a bad idea, but currently the situation seems not to be ready for that. The telecom sector is transforming at a very fast rate bringing as many people as possible on board while the regulation setting and implementation in relation to the financial transactions is not progressing at equally the same speed (Nakabugo, 2014). This however does not mean that there are no regulations that can help protect online transactions such as those carried out through mobile money in Uganda. Bank of Uganda for instance, has information in relation to how the mobile money transactions should be operated (Bank of Uganda 2012) though the relevance of this information to the daily mobile money transactions carried out is still questionable.

The aspect of being questionable is further coupled with that of awareness (Bank of Uganda 2010). Many people in Uganda operating mobile money services are not well educated and do not know the existence of the different regulations that can be of use to the effective operation of mobile money. Most people consider lodging their complaints with the telecom companies housing particular mobile money service brands. This could be lodging a complaint with Airtel when the problem is with Airtel money or MTN when the problem is with MTN Mobile money. However in real sense, the problems could go beyond what these companies can handle and at times, the complaints are ignored with customers left to suffer. This makes the whole good business a problem to the customers as well as the users (Interrmedia 2012). It is on this basis that this study was proposed to establish whether the consumers can at one time be able to address their challenges in mobile money transactions effectively and hence achieve the much needed consumer protection.

THEORETICAL REVIEW

Mobile money is money that can be accessed and used via a mobile phone (Mirzoyants 2012). The definition of mobile money varies according to its wide scope of overlapping applications. These applications however, describe mobile money as the service that allows electronic money transactions over a mobile phone (Ernst & Young 2009). Bank of Uganda (2010) refers to it as an electronic wallet service that enables a client to send and receive money using

Research & Analysis Journals

International journal of management and economics invention
||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220
www.rajournals.in

their mobile phone. USAID (2010) on the other hand defines mobile money as using a cell phone where value can be stored on an "e-wallet" before and after the transaction to make (or receive) payments to (from) others . Despite these restrictive definitions, Mobile Money users are generally able to: Send money to any mobile phone user registered or not regardless of the Mobile Network Organization (MNO); Withdraw cash at any authorized Mobile Money agent; Pay bills such as DStv and utilities such as water anywhere conveniently with immediate results.

Initially, mobile money in East Africa was intended to promote financial inclusion to the marginalized as an ICT solution to microfinance. The United Kingdom's Department for International Development funded the first mobile money pilot project implemented by Safaricom, a Vodafone affiliate (Leach 2014). Safaricom popularized mobile money across East Africa and beyond under the brand name of M-PESA since 2007. M-Pesa is a mobile payments solution that enables customers to keep money in a virtual 'stored value' account maintained in a server by the telecoms provider and operated by users through their mobile phone (Khattab, Balola and Eldai 2012).

The mobile money services in Uganda are a reflection of similar technology being existent in other parts of the world. Mobile money was also developed with an aim of helping people in war zone areas in Burundi to access money. This idea was later extended to business related practices as indicated in Zimbabwe. In fact, Zimbabwe is currently considered as that one country in Africa that is heading towards paper-less money. The idea here is to ensure that there is good control in the financial transactions between two people so as to achieve more effective transactions compared to when there is use of paper money (Leach 2014).

Though it is good to have paper less economy and business activities, there is need to have good regulations as well to monitor the way these online transactions are carried out. Most of the online business transactions are characterized with people who are not in the banking community though those in the banking community have also shown some good level of acceptance of the service (USAID 2010).

In East Africa for instance, there is high level of acceptance of mobile money services mainly sighting issues of effectiveness, efficiency and economy in their operations. This is however highlighted by the majority of people who have not faced any challenge in the service. Majority of the business people as well as customers are reported to have faced losses in one way or the other from these mobile money transactions without knowing where to address their problems (Mirzoyants 2012).

THEORETICAL UNDERPINNING

From the theoretical point of view, two key theories are considered for this study; institutional theory and the contract management theory. Though not greatly considered in this study, the explanations from the supplier management theory shall also be considered.

Institutional theory dwells on the fact that there are institutions in place which are mostly not well developed. These institutions need to be developed and be made formal so that the desired results from them can be achieved. This therefore means that there is need for people in these institutions to come up with ideas on how to develop good systems for better functioning of these institutions (Khan and Dyball 2013).

The institutions theory postulates that the environment is one of the major determinants in the process of coming up with a good system. Different institutions slowly define the path to this desired system of operation. Mostly, these are considered to be market leaders defining how the market should be operated as a system. This idea worked well in Uganda as far as the development of mobile money business operations is concerned. The different ethical measurements in relation to the evolution of mobile money services in Uganda are considered to have taken this kind of trend. In a similar manner therefore, the theory suggests that the organic evolution of the mobile money service should start taking into consideration the importance of a customer. This is considered to be useful in ensuring that the customers get good quality services (Van Slyke M. 2006).

In relation to the institutions theory, further information can be drawn from the contract management theory. This theory highlights that there is need to ensure that the different parties of a contract relate well in a contractual agreement (Engellandta and Riphahn 2005). Likening this to the mobile money services, there is need for there to be a good relationship between the MNOs and the different people operating mobile money outlets. Though not evidently recorded, in case this relationship is implemented without considering the possibility of one side winning by force, then there will be a chance of reaching an amicable solution between customers and mobile money operators (Rulangaranga, Ntayi and Muhwezi 2013).

The supplier management theory helps to substantiate the arguments raised through the contract management theory. According to the supplier management theory, a customer needs to be viewed as a partner and not a mere a person who buys and enables the sellers to make ends meet as far as their business is concerned. In the same way, the suppliers need to be considered and actually get treated as partners. This therefore means that both the suppliers and customers need to perceive each other as partners and hence a need to help each other to realize their different goals. Eventually, some form of synergy is expected to emanate from such an arrangement (Brennan, et al. 2010).

A combination of arguments from the supplier management theory and contract management theory suggest that it is not possible for customers to exist without suppliers. Likewise, there is need to ensure that the relationships that exists between MNOs (suppliers) and users or consumers of mobile money services (customers) are also improved in the situation of Uganda. This way, there is expected hope that the customers of mobile money services will be more protected from any form of losses that may occur when transacting online through mobile money. Though this is a suggestion based on theories, there is need for a study to be conducted to establish this fact (Khan and Dyball 2013).

The risks that customers are likely to face when using Mobile Money services

The introduction of mobile money services into a society that previously lacked these services has both good and bad effects (Field, 2011). The fees and commissions charged for mobile money operations give rise to consumer protection issues particularly because the charges might not be transparent (Kasekende, 2011). Concerns of spam, theft of personal financial information and fraud are all risks that come along with the emergence of remittance of money via mobile phones.

There is a risk of outright loss to customers' virtual money because MNOs hold the equivalent of all the virtual money issued in a settlement account at its partner commercial bank. Mobile money customers incur losses of their virtual money should the bank holding the settlement account fail to keep the money on behalf of the customers. This however has an advantage that even if the MNOs were to cease trading and become bankrupt, mobile money customers would still be able to recover their virtual money from the settlement account only if the bank keeps its end of the bargain (Mugabe, 2015).

Operational risk is probably the largest potential risk facing mobile money and arises primarily from failures linked to the IT systems used to operate mobile money, for example, attack by viruses. A breakdown of the IT system could leave customers being unable to access their virtual money and effect transactions. The IT system might be vulnerable to errors being made in effecting transactions and debiting and credit customers' virtual accounts. The security of the IT system is critical, to prevent frauds being committed on virtual accounts. Bank of Uganda (BOU) is not well placed to regulate against the operational risk of mobile money because this emanates mainly from the IT systems which are operated by the MNOs rather than banks (Bank of Uganda, 2014).

The risk of mobile money being used for money laundering also exists despite the fact that the amounts which can be stored and transferred are capped at relatively low levels and that there is a permanent electronic record of all transactions. Field (2011) asserts the increased speed of the electronic environment may make it more difficult to timely catch fraud and will create new opportunities as well as dimensions for mischief. Nevertheless, basic safeguards against money laundering, such as ensuring that customers provide proof of identity, are desirable (Lake, 2013).

Liquidity risk in mobile money mainly involves the agents, who may not have sufficient cash on hand to effect transactions with customers, such as meeting a demand for a withdrawal of cash from a virtual account. The risk, however, is idiosyncratic to the individual agent, not the mobile money system; therefore customers who cannot access cash from one agent could do so from another if available (Lake, 2013; U.S Department of State, 2014).

Uganda's mobile money regulatory framework

Mobile money regulation in Uganda is still ambiguous. MNOs who are the custodians of mobile money are not licensed financial institutions subject to regulation by Bank of Uganda. Instead they are regulated by Uganda Communications Commission whose mandate is to prevent abuse of market power, rather than financial regulation (BOU, 2012; UCC, 2012). Consequently, there is need for amendments in Uganda's financial regulations and legislation because MNOs are not by law allowed to assume the role of financial institutions.

Regulation of mobile money requires a partnership with very clear mandates between BOU and UCC covering their respective responsibilities. Field (2011) stipulates that the legal and policy consideration in the use of mobile money services be categorized into system oversight; user issues; crime and national security. He also suggests that the strengths of traditional and well developed bank based payment systems need to be reproduced or adopted in mobile money. These strengths include "know your customer" requirements, traceability, and a restitution structure that is consistent and understandable.

In this regard BOU (2012) developed Consumer Protection Guidelines which are part of the regulations for all financial institutions. BOU has however promised appropriate amendments to the legislation in the financial sector to cater for changes in alternative banking channels such as mobile money. This further indicates the need to review the law on money laundering in Uganda to provide a legal basis to address fraud and other forms of banking indiscipline that may be carried out through the use of mobile money platforms (U.S Department of State, 2014). The priority of mobile money regulation should however be to protect the interests of mobile money customers and the integrity of the payments' system rather than complicating entry into the market.

Field (2011) asserts that the first concern for consideration in mobile money regulation should be system oversight aimed at ensuring the safety and soundness of the entire payment system, consumer protection and other social policies. Consumer protection concerns pertaining to the relative obligations of the counterparties, banks, and MNOs then follow. Notable among these obligations are loss

Research & Analysis Journals

International journal of management and economics invention

||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220

www.rajournals.in

allocation, as well as the establishment and maintenance of other appropriate protections against fraud, user error and system error or loss. Crime and national security considerations especially money laundering which presents a critical set of issues in any payment system (U.S Department of State, 2014) comes last. This raises a variety of issues relating to personal privacy in mobile money services like confidentiality, data protection, as well as anonymity (Lake, 2013).

The Financial Action Task Force (FATF) categorizes issues on crime and national security in regard to mobile money into four categories: Mobile financial information services, for viewing accounts only without the ability to conduct transactions; Mobile banking and securities account services, tied to existing accounts and therefore likely to be regulated and supervised; Mobile payment services, allowing payments to be made by non-account holders, under widely varying controls and supervision of non-traditional financial institution payment service providers; And mobile money services which offer the ability to store value on mobile telephones in the form of phone credits, airtime or other measures that are likely to be unregulated and unsupervised (Financial Action Task Force, 2011). This therefore means that mobile money also has a chance of encouraging money laundering which is dangerous to the users of the mobile money services (U.S Department of State, 2014). This further increases their (users) vulnerability considering that the users are not well educated in financial matters.

GENERAL OBSERVATION

The theoretical review clearly indicates that mobile money services are a growing trend in Uganda as is in other parts of the world. The dream of having paper-less economy and paper-less money is slowly becoming a reality. The regulation and protection of the users of these services are however not well understood by a common Uganda as well as rarely being implemented. It is however not clear whether the implementation of such regulations is likely to guarantee the much needed protection amongst the users of the mobile money services in Uganda.

METHODOLOGY

This study was undertaken using both qualitative and quantitative methods. These were accompanied with a cross sectional design since the time span considered (*the time scope*) was not more than one year. This design was preferred because it ably provided statistical figures against which decisions can be based as well as in-depth insights on the factors that influence use of mobile money services

The study population comprised of two categories of respondents; the primary target and the secondary target. The primary target was composed of the users of mobile money services. Only respondents that were 18years of age and above were considered in this study. They comprised of ordinary consumers who send money to friends and family or use mobile money services to pay their bills. The people who use the mobile money services to transact business were also considered as potential respondents since they too use the mobile money services. The people who transact are mainly identified by their company names they register with the MNOs which are commonly placed in the category of SMEs. Considering the nature of these respondents, it was not possible to establish the exact number of respondents to be considered as the sampling frame. Because of this, this category of respondents was considered to be too large in statistical terms.

Secondary target respondents were comprised of the key informants who deal with regulatory systems for money and telecommunications. Three institutions were considered to arrive at the population of the respondents in this category. These were Bank of Uganda (BoU), Uganda Communications Commission (UCC) and Mobile Network Operators (MNOs). These three facilitated the existence of mobile money services and hence were considered to be in better position to inform this research of the developments in relation to regulations of mobile money services and how they were useful to protect users of mobile money services in Uganda. In this regard, the institutions formed the sampling frame as well as the sampling unit basing on which the responses were gathered.

The primary category of the respondents was sampled using a multi-stage sampling design. This was found appropriate in this research because there were two important levels of sampling that were supposed to be considered. The first was getting representation from each division and the second level was to get representation from each group of users of mobile money services; - the users who are mainly clients and the users who transact the services (the agents). The secondary category of the respondents were sampled using census approach since they were basically three groups of institutions. The sample size for the primary group was considered to 385 respondents. This was based on the Krejcie and Morgan (1970) sampling table which can also be accessed through www.raosoft.com/samplesize.html.

Data collection targeted the use of primary data collection approaches. This is because the information targeted was from the users of the services and regulators at a given point in time. Little information documented in Uganda in relation to mobile money usage and regulations attached to the service also makes it necessary to focus on primary data rather than both primary and secondary data. Interview and questionnaire approaches were used to get the necessary data for the research. Questionnaires were used for the primary category of respondents whereas the interview approach was used for the secondary category of respondents.

The data collected was analysed using Statistical Package for Social Scientists (SPSS). Descriptive analysis using means, standard deviation and percentages was used to provide detailed information in relation to existence of regulations, implementation of regulations as well as level of protection of mobile money user in Uganda. This information was further supplemented using thematic approach of descriptive analysis. This approach helped to consider responses from interviews conducted. Important excerpts were also extracted and included in this report. Correlation and regression analyses were also used in this study. These were mainly employed to investigate the relationships in the research.

DATA ANALYSIS AND RESULTS

The analyses conducted and the findings obtained thereof are presented in this section in a specific order of inquiry. This is presented in form of sub-headings that form sub-sections of the section of data analysis and results. These are presented in the sub-sections that follow.

Existence of regulations relating to use of mobile money in Uganda

The first inquiry that was investigated in this research was in relation to the existence of regulations relating to mobile money usage in Uganda. Though this could have been documented, there was need to establish from the users of mobile money services whether they were aware that the regulations governing use of mobile money services in Uganda existed. The aspect of accessibility of these regulations was also considered in this research. Findings in relation to this inquiry are presented in Table 1.

Table 1: Existence of mobile money regulations-accessibility

	Min	Max	Mean	SD	%age
Every Mobile money customer in Uganda has access to rules and regulations governing mobile money services	1.00	5.00	2.58	1.047	43.00
Most mobile money customers in Uganda have access to the rules and regulations governing mobile money services	1.00	5.00	2.72	1.032	45.37
Rules and regulations governing mobile money services are available on request from Bank of Uganda	1.00	5.00	2.91	.902	48.44
Rules and regulations governing mobile money services are available on request from telecom companies in Uganda	1.00	5.00	3.45	.880	57.53
Rules and regulations governing mobile money services are easy to understand to a lay person	1.00	5.00	2.71	1.050	45.14

Source: Primary data

Findings in relation to existence and accessibility of mobile money regulations indicated that every mobile money customer in Uganda does not have access to rules and regulations governing mobile money services (mean = 2.5802). The findings further indicated that most mobile money customers in Uganda do not have access to the rules and regulations governing mobile money services (mean = 2.7219). It is also reported to be difficult for them (customers) to access the rules and regulations from Bank of Uganda (mean = 2.9064). However, these rules and regulations governing mobile money services are available on request from telecom companies in Uganda (mean = 3.4519) though they are not easy to understand to a lay person in Uganda today (mean = 2.7086).

These findings indicate that the rules and regulations governing mobile money services and transactions in Uganda do exist in Uganda and are accessible for those who want to know them. There is however a challenge of a lay person understanding them. Additionally, the fact that there is need to request for the regulations so that they can be provided to a customer by the mobile money service operator, it is not easy for the regulations to be known by a majority of Ugandans since the majority expect the rules to be provided to them as users and not to be requested for from telecom companies or elsewhere.

In relation to the availability of the regulations and rules, further information search was conducted by use of interview questions with officers from the telecom companies, Bank of Uganda and the Uganda Communications Commission. According to these officials, the rules and regulations are provided and are actually available. The only challenge currently present is the

International journal of management and economics invention
||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220
www.rajournals.in

awareness campaign that is not yet stepped up by all the major organs that are expected to make this happen. A few excerpts were obtained from the different officials that were interviewed as indicated below;

"Upon expressing interest to offer mobile money services, Bank of Uganda issues a no objection to a licensed institution (LI) to partner with a Mobile Network Operator (MNO) to offer mobile money services. The no objection is granted to the LI and not the MNO. The LI holds an escrow account with e-value on behalf of the MNO. Bank of Uganda is mainly concerned with regulation of the mobile financial services in general (mobile money & mobile banking). Mobile money service by MNOs forms the financial wing of the telecom companies. In essence, the financial wing of these telecom companies operates as a bank and hence a need to be regulated as a bank. This makes it necessary for the bank of Uganda to ensure that the deposits of the public in mobile money accounts are safe. Additionally, the transactions of mobile money services are regulated by Bank of Uganda in the same way as a normal bank transaction and bank transfer is. This regulation is however imposed onto the telecom companies so that the public dealing with these telecom companies can be protected…." (Bank of Uganda official).

For the purpose of performing a follow-up of the response from the official of Bank of Uganda, another interview was arranged from an official of a telecom company. MTN was considered in this interview because it is the pioneer of mobile money services in Uganda and has higher experience in dealing with financial matters of mobile money.

According to the officer of MTN, Bank of Uganda indeed regulates the financial transactions of mobile money to ensure that the telecom companies do offer a good service to the public. Bank of Uganda however, does not have direct contact with the public to ensure that the regulations set are followed and the public trading in mobile money transactions are safe. This is a big challenge. This information is further extracted and presented below as an excerpt.

"Bank of Uganda has a mandate to ensure that we as a telecom company do the right thing in relation to transacting with the public as ethically as possible. This is still a challenge since the rules and regulations are available but most people in the public are not yet aware of the existence of these regulations though they always operate as people who know what to do when transacting"……."Uganda Communications Commission [UCC] on the other hand regulates the network to ensure that it is up and running to facilitate communication between people. It is through this same network that the mobile money transactions are carried out" (Officer from MTN).

The words of the officer of MTN confirm the earlier findings obtained from Bank of Uganda in relation to the supervision roles of Bank of Uganda and Uganda Communications Commission [UCC]. These findings are however about the existence of regulations without knowing the details of whether these regulations are actually implemented or not. This actually led to getting findings in relation implementation of mobile money regulations in Uganda.

Implementation of regulations relating to use of mobile money in Uganda

The second line of inquiry was in relation with establishing the implementation of mobile money regulations in Uganda. There was need to establish whether the regulations of mobile money services existing in Uganda are either implemented or just stop at being existent. Findings in relation to this aspect are displayed in Table 2 below.

Table 2: Implementation of mobile money regulations

Extent of implementation of Mobile Money regulation					
	Min	**Max**	**Mean**	**SD**	**%age**
Regulations governing mobile money services are used by mobile money retail operators in their daily transactions	1.00	5.00	3.69	.819	61.50
In handling customer complaints, telecom companies in Uganda use regulations governing mobile money services	1.00	5.00	3.70	.747	61.72
I as a customer of mobile money services use the existing regulations of Mobile Money operations to seek refuge in case I face a mobile money challenge	1.00	5.00	3.29	.986	54.81

Research & Analysis Journals

International journal of management and economics invention

||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220

www.rajournals.in

Quality of implementation					
	Min	**Max**	**Mean**	**SD**	**%age**
Regulations of mobile money have ever helped me to solve a mobile money dispute I had	1.00	5.00	2.84	1.204	47.28
There are instances of police involvement in assisting customers and or operators to recover money lost through mobile money operations	1.00	5.00	3.17	1.136	52.90
I have ever recovered my lost money in mobile money transactions from a telephone company (MTN, AIRTEL etc) using the rules and regulations of mobile money.	1.00	5.00	2.61	1.269	43.54

Source: Primary data

According to findings in Table 2, regulations governing mobile money services are used by mobile money retail operators in their daily transactions (mean = 3.6898). Findings further indicate that in handling customer complaints, telecom companies in Uganda use regulations governing mobile money services (mean = 3.7032). Though not strongly supported by majority of the respondents contacted, the findings indicate that customers of mobile money services use the existing regulations of Mobile Money operations to seek refuge in case they face a mobile money challenge (mean = 3.2888). These findings indicate that the customers indeed know about the existence of the mobile money regulations and are in position to use them to ensure that they do not lose their money in the process of using mobile money services.

Though the use of regulations is already in place, findings reveal that majority of the customers have not been lucky using these regulations. According to them (*customers*), use of regulations of mobile money have not been helpful in solving mobile money disputes they have encountered so far (mean = 2.8369). This therefore means that the use of mobile money regulations could be more of a formality with little reality that the regulations could indeed be useful to the customers.

Findings however indicate that there were instances of police involvement in assisting customers and or operators to recover money lost through mobile money operations (mean = 3.1738). Though not supported by majority of the respondents, the fact that the police accepted to be involved is an indication that to some extent, the regulations could be useful. However, it is also possible to get police involvement and still fail to get the desired results.

In relation with getting the desired results, the findings indicate that majority of the respondents state that they have not been able to recover their money (lost money) in mobile money transactions from a telephone company using the existing rules and regulations (mean = 2.6123). This finding indicates that the use of mobile money services could be risky with little chances of recovering money lost in a transaction. Though this is not good news on the side of the customers, the telecom companies feel that they are doing the right thing.

LEVEL OF PROTECTION OF USERS OF MOBILE MONEY IN UGANDA

In relation to implementation of mobile money regulations, there was a need to check whether the implementation actually had any impact onto the protection of consumers in Uganda. This became the center of focus in the third inquiry of this study. Consumer protection levels look into how well consumer rights are protected including but not limited to protection against fraud or loss in the process of transacting mobile money. Findings in relation to this aspect are provided in Table 3 below.

Research & Analysis Journals

International journal of management and economics invention
||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220
www.rajournals.in

Table 3: Consumer protection levels in mobile money transactions

Consumer complaints					
	Min	**Max**	**Mean**	**SD**	**%age**
I as a customer of mobile money know where to go to report my grievances in relation to mobile money	1.00	5.00	3.61	.896	60.12
I as a customers of mobile money have always managed to file my complaints to the relevant authorities	1.00	5.00	2.98	1.145	49.78
All complaints in relation to mobile money services that I report are attended to by the relevant authorities	1.00	5.00	2.62	1.130	43.63
Mobile money retail service operators are compensated in case they raise a genuine complain in relation to mobile money services they deal in	1.00	5.00	2.94	.987	48.98
As a customer of mobile money services I get compensated in case I raise a genuine complaint in relation to mobile money services	1.00	5.00	2.90	1.079	48.40
In general, customers of mobile money services get compensated in case they raise a genuine complaint in relation to mobile money services	1.00	5.00	2.89	1.012	48.08
Views of consumers					
	Min	**Max**	**Mean**	**Std. Dev**	**%age**
I feel more secure using mobile money services than using traditional banking services	1.00	5.00	3.40	1.124	56.64
Telecoms operating in Uganda have always assisted customers in recovering their lost money	1.00	5.00	3.35	1.006	55.84
I prefer using my mobile money account to save my money for future use	1.00	5.00	3.20	1.199	53.39
Even if I make a mistake when transacting using my mobile money account, the telephone company I subscribe to will help me recover my money	1.00	5.00	3.00	1.150	50.04

Source: Primary data

Research & Analysis Journals

International journal of management and economics invention

||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220

www.rajournals.in

The findings indicate that customers of mobile money know where to go to report their grievances in relation to mobile money (mean = 3.6070). However, the challenge is filing the complaints to the relevant authorities successfully. This has not been easy (mean = 2.9866). It means that even when the customers know where to go to file their complaints, filing them successfully is not easy. Findings further reveal that not all complaints in relation to mobile money services that are reported by a customer are attended to by the relevant authorities (mean = 2.6176). Majority of the respondents contacted for this study also indicate that mobile money retail service operators are not compensated in case they raise a genuine complaint in relation to mobile money services they deal in (mean = 2.9385). This is not good for them as retail operators. The same trend is also reported to be existent on the side of customers. The customers are reported not to be getting the assistance they need from the authorities they seek assistance from (mean = 2.9037). In general, customers of mobile money services do not get compensated in case they raise a genuine complaint in relation to mobile money services (mean = 2.8850).

Despite the challenges that the customers face with mobile money services, the findings reveal that they (the customers) feel more secure using mobile money services than using traditional banking services (mean = 3.3984). This can mainly be judged from the fact that majority of the mobile money users are likely not to have bank accounts and use the mobile money account as a bank account. This sounds fine though it does not mean that the mobile money service customers are happy with the un-mitigated risks registered in the transactions they carry out from time to time.

A different view is obtained from the telecom companies. According to the official from MTN, the customers mainly use the regulations provided without knowing what the regulations entail. The losses realized by the customers are mainly as a result of fraud which cannot be easily covered by a telecom company and neither can it be covered by Bank of Uganda. An excerpt of the response from this official is provided below;

"Majority of these customers engage in transactions which are not protected and are actually outside the jurisdiction of the provisions provided in the law. Like a bank, once a customer is transacting through a bank account and provides a fake note at the counter, it is the duty of the account teller to recognize the note as fake and reject it. Otherwise, if the note is accepted, it is a flaw in the system of a bank and not a problem in Bank of Uganda. Likewise, if a customer receives a fake note from a bank (though it is rare), then the customer has a duty to establish whether the note is fake or not. Likewise, it is upon the customer to confirm whether the money given by the teller is the amount actually withdrawn and hence the need to confirm the amount before leaving the counter. These are procedures which need to be controlled internally as the main sources of fraud……" (Official from MTN).

The view presented by the official from MTN is also echoed by the BoU official indicating that these mobile money outlets operate as banks and hence they should be treated as such. The Bank of Uganda official however added that there are instances when errors are made in a transaction process and money is deposited in a wrong account or a network problem occurs and the money does not reach where it is intended to go. Such instances are technical in nature and it is the duty of the telecom company to ensure that the customer is assisted.

Further in relation to protection of customers in mobile money transactions, an interview conducted with an official from AIRTEL revealed that the marketing division is in charge of ensuring that the different changes that customers are expected to know are taken into consideration and communicated to them. This is reported to be conducted from time to time through the use of short message services (SMS), alerting the customers of what they are expected to do. This is one way of creating awareness which, according to the telecom officials, is very effective since the instructions are sent directly to the phone of the users. Through this awareness action, more vigilance is expected from the customers to be in good position to transact mobile money effectively. The comment from the official of airtel indicates the level of commitment that these telecom companies have put in place to ensure that they reduce cases of customers losing money through mobile money. Though this is good, its effectiveness is still considered to be on a long term basis.

Findings further reveal that it is partly because of the issue of mobile money that the phone number registration became mandatory. This was expected to be used as an account name attached to a phone number which in essence is an account number. Like in a bank scenario, it is very hard to send money to a wrong account number since the account name will always alert this and the sender will realize the mistake about to be committed. This view was provided by officials from BoU, UCC and MTN in the interview conducted with them.

Correlation and regression – existence of regulation, implementation levels and protection of users of mobile money in Uganda

Correlation and regression tests were conducted with an aim of establishing the extent to which the consumer protection level is associated with the mobile money regulations in Uganda. This formed the essence of this study and hence the need to establish it. This sub-section is further divided into other smaller parts. The first part has details of correlation analysis and the second part has details of regression analysis.

Correlation analysis results and discussion

Correlation analysis was carried out with specific interest of establishing the existence of association between the

||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220
www.rajournals.in

independent and dependent variables of this study. The independent variables of study are the existence and implementation of mobile money regulations whereas the dependent variable is the consumer protection. The consumer in this sense is the person who uses mobile money services in Uganda. This could be daily or even once a month.

Findings from correlation analysis are displayed in Table 4.

TABLE 4: CORRELATIONS RESULTS

	1	2	3
Existence of mobile money regulation (1)	1		
Implementation of MM regulations (2)	.248**	1	
Consumer protection (3)	.283**	.544**	1

***. Correlation is significant at the 0.01 level (2-tailed).*

Source: Primary data

Table 4 reveals that existence of mobile money (MM) regulations has a strong, positive and significant association with consumer protection in Uganda ($r = 0.283$; $p \leq 0.01$). The same is portrayed to be the case of the association between implementation of mobile money (MM) regulations and consumer protection ($r = 0.544$; $p \leq 0.01$). Judging from the correlation coefficients (r), the association between implementation of MM regulation and consumer protection is stronger than the association between existence of MM regulations and consumer protection. This means that the protection of a consumer is more attached to the way mobile money regulations are implemented rather than their mere existence. However, the existence of MM regulations cannot be ignored since it is from the existence that the implementation can take place.

Regression analysis results and discussion

Basing on the results of correlation analysis and the associations reported, there was an indication that there could be some level of influence of the independent onto dependent variables. This therefore prompted the carrying out of the regression analysis to check the existence of this influence and the amount of the influence that can be found. Results from the regression analysis are displayed in Tables 5 below.

TABLE 5: REGRESSION RESULTS

	Beta	**t**	**Sig.**
(Constant)		5.911	0.000
Existence of mobile money regulation	0.158	3.569	0.000
Implementation of MM regulations	0.505	11.426	0.000
Dependent variable:	Consumer protection levels		
R:	0.565		
R square:	0.320		
Adjusted R square:	0.316		
F statistics:	87.139		
Sig:	0.000		

Source: Primary data

Basing on the results in Table 5, both existence and implementation of mobile money regulations are significant predictors of consumer protection in the mobile money industry. This is judged by looking at the significance levels associated with the influence from these variables onto consumer protection level of mobile money users in Uganda. The significant levels displayed are 0.000 for implementation of regulations and 0.000 for existence of mobile money regulations.

The results further indicate that the Beta values are 0.158 and 0.505 for existence and implementation of mobile money regulations respectively. These results confirm the findings from the correlation analysis by displaying that implementation of mobile money regulations has a higher influence onto consumer protection levels of users of mobile money in Uganda as compared to existence of the regulations. The combined effect of existence of mobile money regulations and their implementation influences up to 31.6% of the changes in consumer protection levels of users of mobile money services in Uganda. This is an indication that there are other factors that could influence the protection level of consumers of mobile money services in Uganda which were not considered in this research. However, for those considered in this research, they influence up to 31.6% of the changes in consumer protection levels of users of mobile money services in Uganda.

CONCLUSION AND RECOMMENDATIONS

Deriving from the findings obtained, mobile money services in Uganda have been in existence though the regulatory environment has not been the best. The regulations expected

||Volume||2||Issue||10||Pages-1052-1064||Oct-2016|| ISSN (e): 2395-7220
www.rajournals.in

to govern mobile money services in Uganda have not been significantly useful in improving the protection of users of mobile money services though there is still hope that the level of protection is likely to improve in the near future. This is mainly by considering the regression results which indicate a statistically significant influence of existence and implementation of mobile money regulations onto realization of protection of users of mobile money services. Basing on this therefore, it is recommended that the users of mobile money services in Uganda keep advocating for the effective implementation of regulations governing mobile money services in Uganda. Though below 50%, the reported influence is statistically significant which is likely to transform the mobile money service provision to being that which benefits all users in terms of both; the services provided and the possibility of getting an effective redress in case one gets a problem while transacting using mobile money services.

REFERENCES

[1] Bank of Uganda, 2010. *Annual supervision report,* Uganda: BoU Press.

[2] Bank of Uganda, 2012. *Annual Supervision Report,* Uganda: BoU Press.

[3] Bank of Uganda, 2014. *Annual supervision report,* Kampala: Bank of Uganda Press.

[4] Brennan, R. J., Rogers, D., Sarcar, S. & Vergeer, P., 2010. *Identifying Indicators for Performance-Based Contracting (PBC) is Key: The Case of Liberia,* s.l.: World Bank Press.

[5] Diniz, H. E., Albuquerque, J. P. & Cernev, K. A., 2011. *Mobile Money and Payment: A literature review based on academic and practitioner-oriented publications (2001-2011).* Shanghai, China, GlobDev.

[6] Duncombe, R., 2009. Assessing the potential for Mobile Payments in Africa: Approaches and Evidence from Uganda. *Development Informatics Working Paper Series Paper No. 41.*

[7] Engellandta, A. & Riphahn, R. T., 2005. Temporary contracts and employee effort. *Labour Economics,* 12(3), pp. 281-299.

[8] Ernst & Young, 2009. *Mobile money: An overview for global telecommunications operators.,* s.l.: s.n.

[9] Field, R. L., 2011. *Development Implications of Mobile Money,* s.l.: United Nations Commission on International Trade Law Colloquium on Electronic Commerce..

[10] Financial Action Task Force, 2011. *Anti-money laundering and terrorist financing measures and Financial Inclusion,* s.l.: FATF.

[11] Interrmedia, 2012. *Mobile Money in Uganda Use, Barriers and Opportunities.,* s.l.: The Financial Inclusion Tracker Surveys Project.

[12] Jack, W. & Suri, T., 2010. *Mobile Money: The Economics of M-PESA,* Nairobi: s.n.

[13] Kasekende, L., 2011. *Mobile Money Services.* Kampala, Uganda, s.n.

[14] Khan, H. Z. & Dyball, M. C., 2013. *Institutional influences on multi-dimensional performance measures of banks,* Macquarie: Macquarie University NSW 2109 Australia.

[15] Khattab, I., Balola, Y. & Eldai, T., 2012. *Factors influencing branchless banking for microfinance in Sudan: Theoretical perspectives and future directions.* Munich, Germany, s.n.

[16] Koetsier, J., 2013. *African mobile penetration hits 80% (and is growing faster than anywhere else).* [Online] Available at: http://venturebeat.com/2013/12/03/african-mobile-penetration-hits-80-and-is-growing-faster-than-anywhere-else/ [Accessed 20 June 2016].

[17] Krejcie & Morgan, 1970. *Sampling table for determination of sample size basing on pre-determined population size,* s.l.: s.n.

[18] Lake, A. J., 2013. *Risk management in Mobile Money: Observed Risks and Proposed Mitigants for Mobile Money Operators,* s.l.: International Finance Corporation.

[19] Leach, A., 2014. *Zimbabwe's Econet Wireless and the making of Africa's first cashless society.* [Online] Available at: http://www.theguardian.com/global-development-professionals-network/blog/2014/aug/18/econet-wireless-zimbabwe-cashless-society?INTCMP=mic_233716 [Accessed 02 Sept 2016].

[20] Michael, H., 2013. *Mobile penetration in Africa is now at 80% and growing fast.* [Online] Available at: http://www.phonearena.com/news/Mobile-penetration-in-Africa-is-now-at-80-and-growing-fast_id50014 [Accessed 18 June 2016].

[21] Mirzoyants, M., 2012. *MobileMoney in Uganda and Tanzania:Use, Barriers and Opportunities,* s.l.: Iintermedia.

[22] MTN, 2009. *MTN Uganda Mobile Money,* Kampala, Uganda: s.n.

[23] Mugabe, D., 2015. *Registered mobile money customers have increased from 17.6 million to 19.5 million between June 2014 and June 2015, the central bank has disclosed.* [Online] Available at: http://www.newvision.co.ug/new_vision/news/1408793/mobile-money-customers-shoot-195m [Accessed 16 Aug 2016].

[24] Mwesigye, S. & Nakabugo, Z., 2013. *How billions are lost in mobile money fraud.* [Online] Available at: http://observer.ug/index.php?option=com_content&view=article&id=27442:how-billions-are-lost-in-mobile-money-fraud [Accessed 23 Aug 2016].

[25] Nakabugo, Z., 2014. *BOU urges mobile money customers on PINs.* [Online] Available at: http://observer.ug/index.php?option=com_content&view=article&id=33558:-bou-urges-mobile-money-customers-on-pins&catid=38:business&Itemid=68 [Accessed 05 Sept 2016].

[26] Ondiege, P., 2010. Mobile Banking in Africa: Taking the Bank to the People. *Africa development Bank Economic Brief paper.*

[27] Rulangaranga, D. M., Ntayi, J. & Muhwezi, M., 2013. Competence and ethical behavior of people appointed to contract management post in local governments in Uganda. *European Journal of Business and Management.*

[28] Rwothungeyo, B., 2012. *Mobile money business is big business. The new mobile phone based money transfer system is enabling financial access faster than commercial banks have done in the past 100 years..* [Online] Available at: http://www.newvision.co.ug/mobile/Detail.aspx?NewsID=643118&CatID=406 [Accessed 14 June 2016].

[29] Ssonko, G., 2010. The role of mobile money services in enhancing financial inclusion in. *Bank of Uganda Working Paper.*

[30] U.S Department of State, 2014. *2014 International Narcotics Control Strategy Report (INCSR).* [Online] Available at: http://www.state.gov/j/inl/rls/nrcrpt/2014/supplemental/227883.htm [Accessed 25 July 2016].

[31] Uganda Communications Commision, 2012. *Annual Report,* Kampala, Uganda: UCC Press.

[32] Uganda FinScope III Report, 2013. *Survey Report Findings: Unlocking Barriers to Financial Inclusion,* Kampala, Uganda: BoU Press.

[33] USAID, 2010. *Uganda mobile money assessment and case study examining cash payment streams and their electronic alternatives amongst USAID implementing partners,* s.l.: s.n.

[34] Van Slyke M., 2006. Agents or Stewards: Using Theory to Understand the Government Nonprofit Social Service Contracting Relationship. *Journal of Public Administration Research and Theory,* pp. 157-187.