



Original Research Article

Reaching beyond the banked: The impact of mobile phone money transfer on market development in Uganda

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The convergence of mobile telephony and financial services has the potential to significantly expand access to financial services to individuals at the base of the pyramid. In Uganda, roughly 80 percent of the population has no access to banking services, and mobile phone money, a financial service and transaction made on a mobile phone could address this financial gap. The focus of this phenomenological study was to explore the impact of mobile phone money on market development in Uganda, in particular, from the experiences of 4 Mobile Network Operators, 8 agents, and 19 users. The main question for this research was: What is the influence of mobile phone money on market development in Uganda? The conceptual framework for this study was based on Kim and Mauborgue's concept of Blue Ocean Strategy. Key findings revealed that mobile phone money had significant impact on the users and on market development. The most used mobile phone money service was transfer of money to relatives and friends. Over 2 million adults who were previously unbanked are accessing financial services using their mobile phones. The main conclusion from this study is that mobile phone money has provided a more efficient channel for financial transaction and inclusion in Uganda. Further research should focus on: the extent to which Mobile Phone Money is used to transfer funds from rural areas to urban centres.

Key words: Base of the pyramid, market development, mobile phone money transfer, phenomenological study, Uganda

INTRODUCTION

When mobile telephony and financial services converge, they have the potential to significantly expand access to financial services for individuals at the base of the pyramid. According to the World Bank, 75 percent of the 3 billion poor people in the world do not have a bank account. Roughly 67 percent of the poor who do not have a bank account cite poverty as the obstacle to financial access. While about 33 percent blame the cost of opening and maintaining an account or the banks being too far away (World Bank, 2012). Mobile Phone Money Transfer

(MMT), a financial service and transaction made on a mobile phone, could significantly fill this financial gap among the unbanked, especially in Africa (Must and Ludewig, 2010 United Nations, 2012).

In Kenya, where Safaricom Mobile Phone Company is believed to have been one of the first to start Mobile Phone Money, popularly known as "M-PESA," the relatively more stable socio-economic environment as well as the positive regulatory stance of the Central Bank of Kenya (CBK) has been instrumental in fostering faster Mobile Phone Money

market development (IFC, 2011). Since its launch in March 2007, Safaricom M-PESA is used by roughly 15 million people, which is about 36 percent of total Kenyan population. Reports from recent studies indicated that 84 percent of Kenyans say they would be worse off if M-PESA did not exist (Suri and Jack, 2011).

According to Global Mobile Statistics (2012), eight branchless banking providers, namely; Safaricom M-PESA in Kenya, Banco Postal in Brazil, FINO in India, Globe GCash and Smart Money in Philippines, Vodacom M-PESA in Tanzania, WING in Cambodia, and WIZZIT in South Korea, had 3.73 million active registered users, of which 1.39 million (or 37 percent) were previously unbanked. M-PESA in Kenya, the biggest success story in the world of mobile banking, demonstrates that branchless banking can reach low-income and unbanked people on a grand scale and offer them access to valuable financial services. The economics of M-PESA reveals that between 2007 and 2009, the percent of M-PESA users who were unbanked doubled from 25 to 50 percent and the number living in rural areas also increased from 29 to 40 percent (Suri and Jack, 2011; Muwanguzi and Musambira, 2012). M-PESA users are not just using the service to send money, 81 percent of the customers now use M-PESA for savings, for example. Most importantly, 91 percent of the Kenyans said their lives would be impacted negatively if they no longer had access to M-PESA (Global Mobile Statistics, 2012). In terms of national revenue stream, Safaricom's M-PESA contributed 15.8 percent (or US\$ 1.44 billion) to the Kenya's annual revenue for the financial year 2011/12 (Safaricom Annual Report, 2012). This was twice what SMS would earn, making Mobile Phone Money a big potential revenue earner for a country. All these are achieved without needing a bank account, bank card or a smartphone, because M-PESA works on all handsets.

In Uganda, Mobile Phone Money transfer is a new phenomenon brought about by advancements in computer and telecommunication technologies. This has resulted in marked expansion in Mobile Phone Money over the last four years in a country where about 80 percent of the population lacks access to financial services (Ndiwalana, Olga and Popv, 2010). Recent data show there are 30 banks in Uganda with a penetration of only 10 percent of the population (Bank of Uganda Annual Report, 2010/2011). Further, the communications infrastructure in Uganda in regards to Bank Automated Teller Machines (ATMs) is unreliable. Many clients using ATMs have often been robbed of their funds through stealing of ATM Personal Identification Number (Bank of Uganda Annual Report, 2011/12). Thus, ATMs are being perceived to be unreliable.

In March 2009, the Central Bank gave Mobile Telephone Network (MTN), a mobile phone company in Uganda, a license to operate Mobile Phone Money. This was a positive

step, given that Uganda has close to 80 percent of the population without access to financial services. Thus, there is a huge untapped potential for Mobile Phone Money. Currently, there are four Mobile Phone Money operators in Uganda, with MTN being the largest. Of the over 6 million Mobile Phone Money users, MTN has a market share of about 4 million with 7,336 MTN mobile money agents, Uganda Telecom (UTL) has 520,000 users with 3,500 M-Sente mobile money agents, Airtel has 120,000 users with 120 Zap mobile money agents, and Warid Telecom has 2 million users with 44 Pesa mobile money agents (Ministry of ICT status reports, 2012). According to Ministry of ICT status reports for 2012, overall daily Mobile Phone Money transfer in Uganda hit Ushs50 billion (or US\$20 million) by June 2012 up from Ushs30 billion (US\$12 million) in early 2011, signifying the important place Mobile Phone Money has in the financial market deepening in Uganda. This research will attempt to provide evidence in support of the impact of Mobile Phone Money on market development in Uganda.

In Uganda, there is no study that investigated the impact of Mobile Phone Money transfer on market development. Studies that have been conducted tended to concentrate on actual usage of Mobile Phone Money rather than on its impact on market development (Kyeyune et al., 2012). While the impact of Mobile Phone Money in Uganda could be substantial, there is no consolidated literature around this new world (Ndiwalana et al., 2010). Lack of available data and research efforts on the impact of Mobile Phone Money on market development are some of the main challenges facing policy makers and researchers in Uganda. Even from studies on Mobile Phone Money transfers in the developing world, only a few tended to base their analyses on the actual impact of Mobile Phone Money transfer on market development (Must and Ludewig, 2010). A few that did so mainly looked at Mobile Phone Money in a more broad sense; models used in mobile money transfer, different MNOs involved in mobile money transactions, and usage. So far, such studies in the developing world have been done in Sri Lanka, Brazil, Thailand, Nigeria and Kenya (IFC, 2011). While the results of these studies will help to guide this research, the current research will go further to address additional areas not covered in the previous studies. These areas include; the contribution of Mobile Phone Money transfer to the bi-directional remittance flow and youth employment.

This research is a strategic move to make Mobile Phone Money transfer more compelling to policy makers as mobile phone services including Mobile Phone Money transfer accounted for 63 percent of the telecommunications revenue, contributed Ushs 215 billion (US\$ 120 million) in tax revenue, making it the number one source of revenue for Uganda in 2011 (Uganda Communications Commission Market Review Report,

2012). Because Value Added Tax (VAT) is embedded in the cost of sending Mobile Phone Money, roughly 80 percent of the Uganda's unbanked population will be contributing to revenue generation and financial market development through using Mobile Phone Money services. It will also shape the policy environment that has propelled rapid growth in the Mobile Phone Money sector elsewhere in the world (Yabs, 2010; IFC, 2011), and help Uganda's leaders to move from strategy to effective implementation of Mobile Phone Money. Thus, a qualitative phenomenological research study that explores how Mobile Phone Money transfer impacts market development in Uganda could address the problem. The general purpose of this research is to generate a phenomenological study. Specifically, the purpose of this research is; to bring into light the impact of Mobile Phone Money transfer on mobile commerce for a developing country; and to contribute to a body of knowledge of mobile commerce that serves as a basis for reference by researchers and policy makers. The main question this research intends to answer is: What is the influence of Mobile Phone Money on market development in Uganda? Specifically, this research intends to answer the following sub-question: What are the impacts of Mobile Phone Money on market development in Uganda?

This study is guided by Kim and Mauborgne's concept of Blue Ocean Strategy (Kim and Mauborgne, 2005) with focus on untapped market space, demand creation, and opportunity for highly profitable growth. Guided by this concept, this study will provide only practical analytics for the impact of Mobile Phone Money transfer and its capture of the untapped financial market in Uganda. This research does not provide a historical account of Mobile Phone Money development, nor does it provide a detailed account of Mobile Phone Money transfer services. Instead it focuses more narrowly on the impact of Mobile Phone Money transfer on market development in Uganda, and particularly on the lived experiences of users with Mobile Phone Money.

Research Questions

The main question this research intends to answer is: What is the influence of Mobile Phone Money on market development in Uganda? Specifically, this research intends to answer the following sub-question: What are the impacts of Mobile Phone Money on market development in Uganda?

METHODS

Research Design

A qualitative phenomenological research design was adopted for this study. A research applying

phenomenology is concerned with the lived experiences of the people involved with the issue that is being researched (Caelli, 2001; Casey, 2000; Ehrich, 2005; Groenewald, 2004; Mason, 2010; Nitta, Holley and Wrobel, 2010; Rinyka, 2012; Robson, 2002). The purpose of a phenomenological approach is to illuminate the specific, to identify phenomena through how they are perceived by the actors. Using this design, multiple data collection techniques can be used, including; interviews, conversations, participant observation, document research, analysis of text (Groenewald, 2004), and presentation of multiple realities with the researcher as the instrument of data collection, with a focus on participants' views. Adding an interpretive dimension to this research through the phenomenological approach enables results to be used as a basis for practical theory, allowing it to inform, support or challenge policy and action.

Study Location

The study was conducted in Kampala district in central Uganda (see Figure 1).

Kampala district was chosen as the study location not only because it has the largest number of Mobile Phone Money agents and users, but also diverse socio-economic characteristics and distributions of Mobile Phone Money operators, agents and users in the country, making it a best choice for this study. All the four Mobile Phone Money operators have their head offices in Kampala. According to the Uganda Bureau of Statistics (UBOS, 2009), Kampala has a population of 1,705,900 people, roughly 37 percent of the about 4.6 million people living in urban centres in Uganda. The population of the males and females are 820,300 males and 902,900 females, respectively. Micro enterprises make up the largest share (92.4%) of the total number of businesses in Kampala, followed by small enterprises at 5.3 percent, and least being large enterprises at 0.2 percent (UBOS, 2009). This indicates that a greater population of Kampala district is largely of low income earners. The large proportion of low income earners presents a huge opportunity for Mobile Phone Money operators to extend this relatively cheap financial service to this group through Mobile Phone Money.

Selection of Participants

The participants for this phenomenological study consisted of Mobile Phone Money operators, Mobile Phone Money agents, and Mobile Phone Money users, selected using criterion sampling (Creswell, 2007). According to Creswell, criterion sampling works well for phenomenological studies because it is essential for all participants selected to have experienced the phenomenon that is under



Figure 1: Map of Kampala District
Source: Map data. Copy right 2009 Europa Technologies

investigation. In this study, experiences with Mobile Phone Money dictated the method, including even the type of participants.

Sampling and sample size

A purposive sampling was used, described by Groenewald (2004) as the most important kind of non-probability sampling to identify the primary participants for a phenomenological study. Based on this argument, Mertens and McLaughlin (2004) suggested that the appropriate number of participants for a phenomenological research is six. Creswell (2007) suggested 10 participants as adequate for a phenomenological research. While, Morse (2000) and Salkind (2005) on the other hand suggested 30 participants. In this study, the sample size went up to 31 participants because the researcher wanted to capture the significant experiences of the participants with the four Mobile Phone Money platforms. Thus, it was important to draw experiences in involvement of participants with all the four Mobile Phone Money platforms, viz; Mobile Telephone Network (MTN) Uganda, Airtel, Uganda Telecom (UTL), and Warid Telecom. That explains the slightly higher number (i.e. 31) of participants for this study than that suggested by Mertens and McLaughlin (2004) and Creswell (2007). Four MNOs, 8 Mobile Phone Money agents and 19 Mobile Phone Money users were therefore selected to participate in this study.

The study sample for this study was selected based on the researcher’s judgment and the purpose of the research, looking for those who have experiences with Mobile Phone Money phenomenon to be researched. Use was made of Internet searches and physical inquiry to the MNOs’ offices to identify Mobile Phone Money shop locations and the right people to interview about Mobile Phone Money. Interviews were arranged with these people. These interviews are the primary units of analysis (Groenewald, 2004), with ‘informed consent’.

In order to trace additional participants, particularly Mobile Phone Money agents and users, sign posts were used, as on the streets of Kampala City one would not walk past the next street without seeing a post: “Mobile Money Services Available here.” At the Mobile Phone Money agent’s shops, opportunity was used to select users for interviews. The criterion used for selecting participants for this study were as follows: (a) Mobile Network Operators (MNO) which were currently offering platforms for Mobile Phone Money transfer in Uganda, (b) Mobile Phone Money agents who were currently offering Mobile Phone Money services, and (c) Users who were currently using Mobile Phone Money services. To meet this criterion, the MNO must be licensed to provide Mobile Phone Money services; the Mobile Phone Money agents must have an agreement with MNO (i.e. registered, has a premise, and trained in Mobile Phone Money offerings and procedures). MNOs, Mobile Phone Money agents and Mobile Phone Money users who met this criterion were selected to participate in

this study.

Research Instruments

For phenomenological studies, the researcher is often the sole person responsible for data collection and for the design of the instruments that will be used to collect data. In this study, the research instrument used for data collection were interview and observation guides. Data was collected from individual mobile money users. According to Colin Robson (2002), individual interviews are generally the principal source of data collection for phenomenological studies. By using interviews, a deeper understanding of the lived experiences of the participants with Mobile Phone Money emerged.

Data Collection Procedures

The interview questions were directed to the participants' experiences, feelings, beliefs and convictions about Mobile Phone Money. According to Caelli (2001), Davidson (2000) and Groenewald (2004), this technique is called bracketing when the research is performed from the perspective of the research participant. Bracketing in this study entailed asking MNOs, Mobile Phone Money agents and users to share their lived experiences with Mobile Phone Money based on the open-ended interview guides. Open-ended interviews were also conducted to obtain data about how Mobile Phone Money agents and users think and feel in the most direct ways about Mobile Phone Money. The data collection was focused on what goes on within Mobile Phone Money agents and users about Mobile Phone Money and got them to describe the lived experience with Mobile Phone Money.

Informal interviews were used to find out more information about the setting of the Mobile Phone Money agents and users. In this study, both the researcher and the Mobile Phone Money agents and users were engaged in the dialogue that generated information on their feelings about Mobile Phone Money. The number of informal questions varied from one participant to another because it was like an interchange of views between two persons conversing on a common theme.

In addition, memoing was used in data gathering in this study. Using this technique, field notes recording were taken of what the researcher heard, observed, experienced, and thought in the course of collecting data and reflecting in the process. This was very important as the researcher sometime got absorbed in data collection process and could have lost track of certain events if these notes were not written. And because there were multiple realities, the research questions kept on being modified in the process (Robson, 2002). Data collection interviews continued until the topic was exhausted or saturated that is when

interviewees introduced no new perspectives on Mobile Phone Money. This was also a form of data validation.

Data Storage

Field notes are a secondary data storage method and crucial in qualitative research to retain data gathered. Field notes were written in the evening of the same day that field interviews were conducted to avoid memory loss. The method of field note taking followed the model described by Groenewald (2004) as: Observation notes (ON) – 'what happened notes' deemed important enough to the researcher to make. This emphasizes the use of all the senses in making observations in a Mobile Phone setting. Theoretical notes (TN) - 'attempts to derive meaning' as the researcher thinks or reflects on experiences of the research participants. Methodological notes (MN) – 'reminds, instructions or critique' to oneself on the process of data gathering. Analytical memos (AM) – end of a field day summary or progress reviews.

Data Analysis

From a phenomenological research perspective, it is important to recognise that field notes written during field interviews and observations are already a step toward data analysis. Groenewald (2004, p.16) comments that since field notes involve interpretation, they are properly speaking, "part of the analysis rather than data collection." There is usually no need to analyse them further. According to Groenewald (2004), the term 'analysis' usually means breaking into parts, and therefore often means a loss of the whole phenomenon, and should be used carefully in phenomenological studies. Besides, there is no one software package that will do the analysis in itself (p. 17). Accordingly, the data analysis method used in this phenomenological research followed that described by Groenewald (2004, p. 17), which included; bracketing and phenomenological reduction, that is not allowing the researcher's meanings and interpretations or theoretical concepts to enter the unique views of the research participants. delineating units of meaning from those statements from the research participants or documents that were seen to illuminate the researched phenomena were extracted or isolated; clustering of units of meaning to form themes; summarizing each interview, validating it and where necessary modifying it; extracting general and unique themes from all the interviews and making a composite summary. When all the processes had been done for all the individual interviews, the researcher looked for the themes common to most or all of the interviews as well as the individual variations. The themes were the basis for data description, analysis, and interpretation based on the main research question and sub-research questions posed

Table 1. Selected socio-economic data for Uganda

Total GDP (US\$ billion) (2011)	16.81
GDP per capita (US\$) (2011)	477
Average annual Economic Growth Rate (2009-2011)	5.6%
Land Size (km ²) (2011)	236,040
Total population (2011)	33 million
Population/km ² (2011)	137.1
Exclusion from financial services (2009)	80%
Value of domestic money transfer (2009)	Ushs132.5 billion
Phone subscription market share (fixed & mobile) (2009)	31%
Owned mobile phone prior to launch of mobile money (2009)	9,336,630
Registered Mobile Money users (2009)	552,047
Mobile Money Agents Network (2009)	600

Sources: Bank of Uganda Annual Report 2010/11. UBOS Population Projections 2009.

for this phenomenological study.

RESULTS AND DISCUSSIONS

Although a number of Mobile Phone Money payments have emerged in Uganda, few have reached a significant scale. Overall, Mobile Phone Money uptake is still limited when contrasted with its apparent promises of reaching the unbanked and underserved, of servicing existing banking clients, and of being a means for redeeming a cashless society. The study examined the following in more detail: The impact of Mobile Phone Money on market development in Uganda. The main research question guiding this study. Is; What is the influence of Mobile Phone Money transfer on market development in Uganda? The specific research question is: What are the impacts of Mobile Phone on Money market development in Uganda?

Socio-economic context

Uganda is described by the World Bank as one of the poorest nations in the world, with about 12.4 million people (or 38 percent) living on less than US\$1.25 a day¹. About 14 percent of Ugandans live in urban centres; in other East African countries, Kenya and Tanzania, about 41percent and 30 percent of the population, respectively, lives in urban centres (Mas and Olga, 2008). About 4 million (or 33 percent) of Uganda's adult population have a bank account. About 80 percent of Uganda's population that live in rural areas are excluded

from financial services (see Table 1), and about 80 percent of the labour force works in agriculture.

Demographic statistics

The profile of the Mobile Phone Money respondents is shown in Figure 2. The Mobile Phone Money user respondents can be summarised as follows: slightly more than 50 percent are females; 96 percent are between 18-30 years of age. This is the age range for people regarded as youth in Uganda. None of the respondents was younger than 18 years. In Uganda, a person below 18 years is regarded as a child, and employing such a person amounts to child labour (UBOS, 2009). About 44 percent have a university degree, and slightly more than 40 percent are still students. More than 30 percent are employees of private businesses; and family business make up slightly more than 40 percent of the occupation of Mobile Phone Money users.

This study was not intended to be a statistically significant sample of Mobile Phone Money users in Uganda. Its purpose was to provide an in-depth qualitative analysis of the access of users to Mobile Phone Money, their perception of use, impact of the Mobile Phone Money on individuals, organisations and government. The study involved face-to-face interviews with 27 Mobile Phone Money agents and users in Kampala City and its suburbs, and the 4 major Mobile Phone Money Operators (MMOs) in Kampala (i.e. MTN Uganda, Airtel, Warid Telecom, and UTL). Respondents were interviewed in 6 locations in and around Kampala City (i.e. Nakasero, Kampala Road, Ntinda, Nakawa, Kirekka and Kyaliwajjala). Nakasero, Ntinda, Kampala Road, and Nakawa represented the urban setting, while Kirekka and Kyaliwajjala represented the semi-urban setting. This ensured a good representation of the socio-economic background of the respondents. Areas where

¹ Population earning below US\$ 1.25 a day is the percentage of the population living on less than US\$1.25 a day at 2005 international prices. *World Economic Outlook, April 2012.*

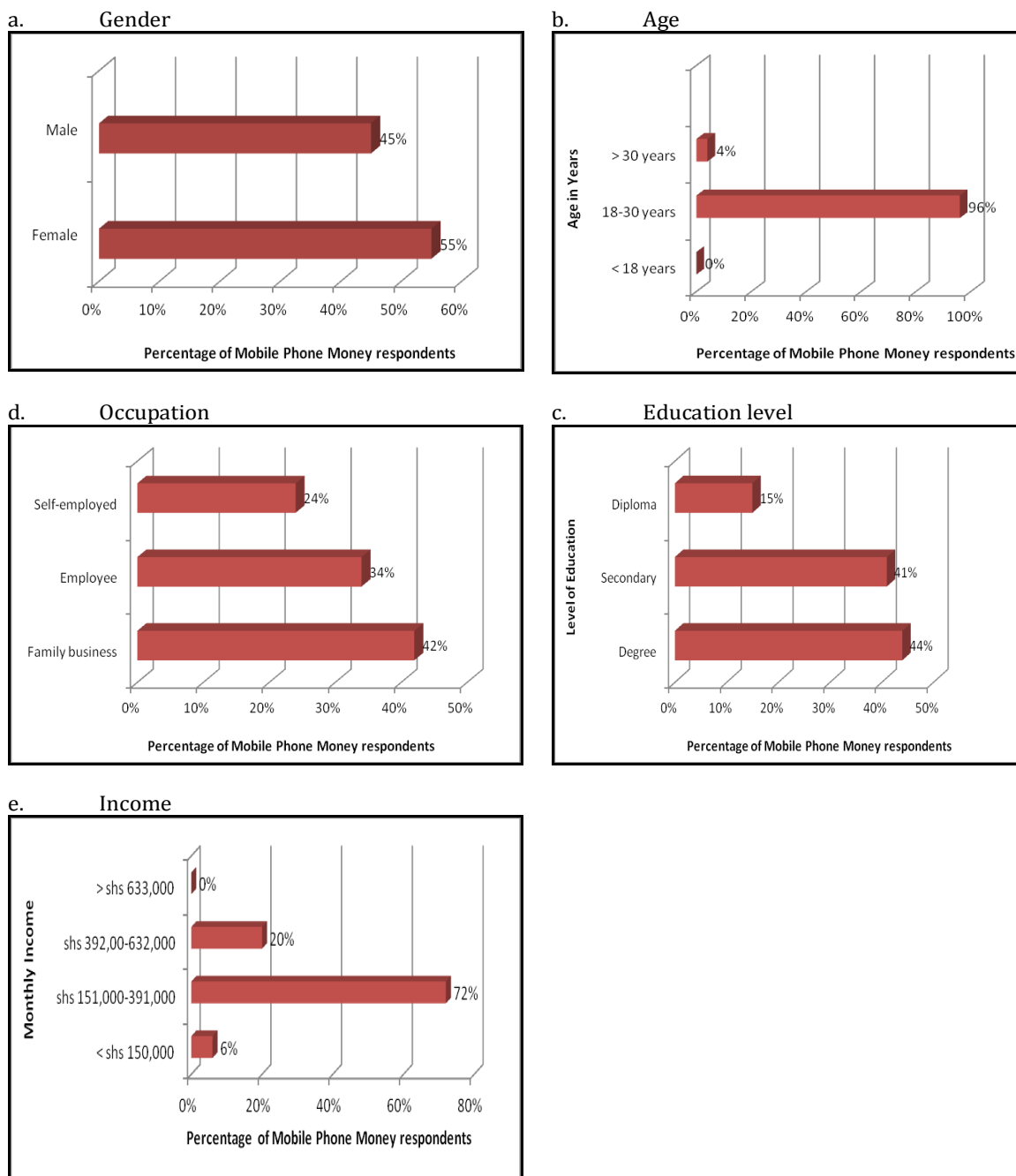


Figure 2: Demographic Characteristics of Mobile Phone Money Users
Source: Mobile Phone Money Transfer Study 2012

interviews were conducted included; market areas, business areas, trading centres, petrol stations, as well as those areas close to supermarkets, and banks.

Results show that in Uganda, the main use of Mobile Phone Money is for remittances to relatives or families, provided by Mobile Phone Money and additional access

channel for people with existing bank accounts. Non-bank account holders use Mobile Phone Money mainly for Person-to-Person (P2P) transfer. The proportion of the unbanked (28 percent) is slightly smaller (Figure 3) given that the semi-urban centres where this study was conducted have been influenced into use of banking

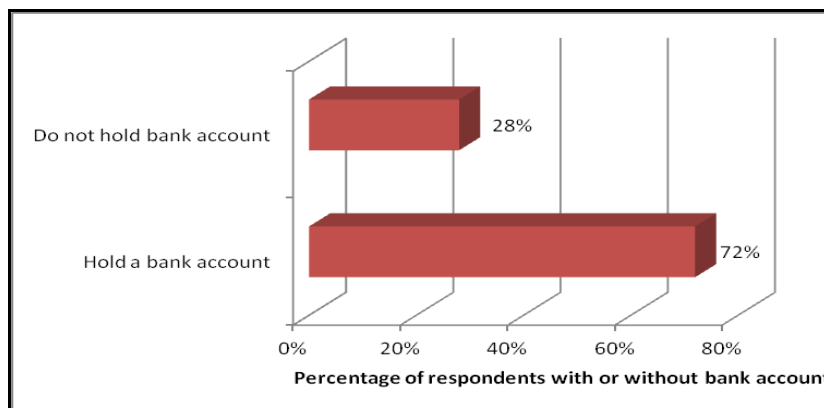


Figure 3: Ownership of Bank Accounts among users of Mobile Phone Money
Source: Mobile Phone Money Study 2012

Table 2. Key Mobile Phone Money Financial Access Data

Financial data	Period			
	2009	2010	2011	2012**
Registered Mobile Phone Money Agents/Outlets	600	4,340	7,664	11,000*
Registered Mobile Phone Money Users	552,047	1,683,713	2,879,968	6,000,000*
Adults transferring money using Mobile Phone Money	4%	14%	43%	46%*
Mobile Phone Money Transfer (Ushs billion)	123.5	962.7	3,752.9	1, 000,000*

Source: Bank of Uganda Annual Report 2010/2011 & 2011/2012. * Conservative estimates from MNOs Websites and Brochures. ** Data presented up to August 2012.

services by being near Kampala City.

Impact of Mobile Phone Money on market development

Greater access to financial services

Data derived from field interviews and observations, and desk research indicated that Mobile Phone Money is the most popular financial platform for money transfer in Uganda with 46 percent of all adult Ugandans using the service by mid 2012 (Table 2). By mid 2012, there were about 6 million registered users of Mobile Phone Money shared between the 4 Telco’s (MTN, Airtel, Warid, and UTL) (Table 2). The branchless Mobile Phone Money service delivered through mobile phones has undoubtedly had impact on the lifestyles of users, particularly in addressing the unmet financial need of the population, as evident by the statement from interviews with MTN Corporate Affairs Manager in Uganda: *“The most important aspect to note here is the positive impact of Mobile Phone Money on the population. We have empowered Ugandans to transact with ease at their preferred locations at all times.”* By mid 2012, about 46 percent of Ugandans that made domestic remittances used Mobile Phone Money services (see Table

2). The proportion of adults sending domestic remittances through Mobile Phone Money showed a marked increase; from 4 percent in 2009 to 14 percent in 2010 and 43 percent in 2011 to 46 percent by August 2012 (Table 2). Data from Bank of Uganda also showed a dramatic increase in domestic remittances using Mobile Phone Money transfer; from Ushs123.5billion in 2009 to Ushs962.7billion in 2010 and, reaching Ushs 3,752billion by December 2011, to an estimated Ushs 1 trillion by August 2012 (Table 2).

Trends on money transactions using ATMs and Mobile Phone Money showed that the volume and value of Mobile Phone Money transactions grew faster than the volume and value of ATM transactions in a period of 12 months (Figures 4 and 5).

From the above results, Mobile Phone Money has become the most popular financial platform for money transfer in Uganda. Just four years after its launch, Uganda is second to Kenya in the number of people that use Mobile Phone Money transactions compared to other money transfer modes in sub-Saharan Africa (United Nations, 2012). This study showed that in 2012 alone, about 46 percent of Ugandans that made domestic remittances used Mobile Phone Money services. In Kenya, 66 percent of the people used the service in the same year (United Nations, 2012).

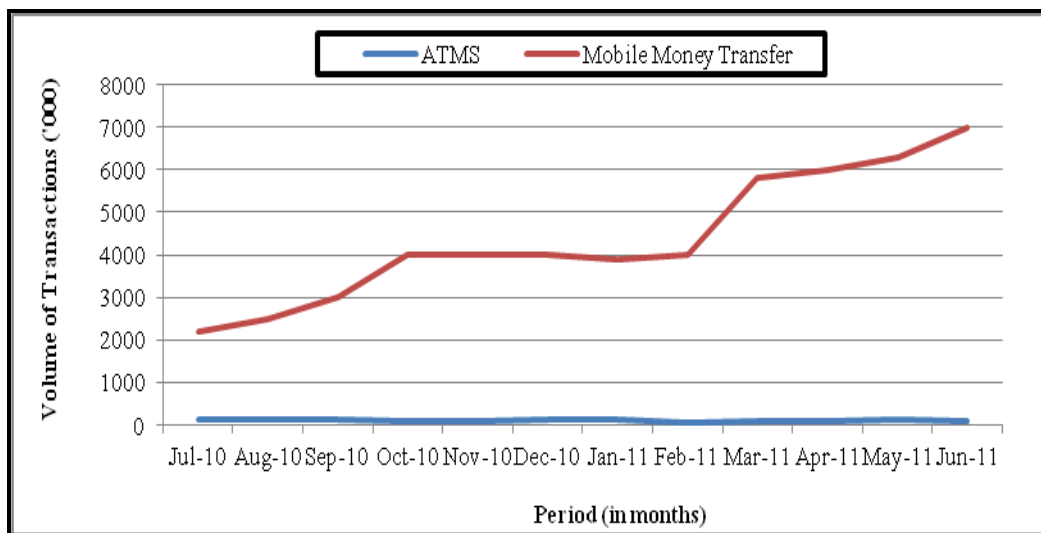


Figure 4: Volume of ATMs Deposits and Mobile Phone Money Transfer in Uganda 2010-2011
Source: Data for graph derived from Bank of Uganda Annual Report 2010/11.

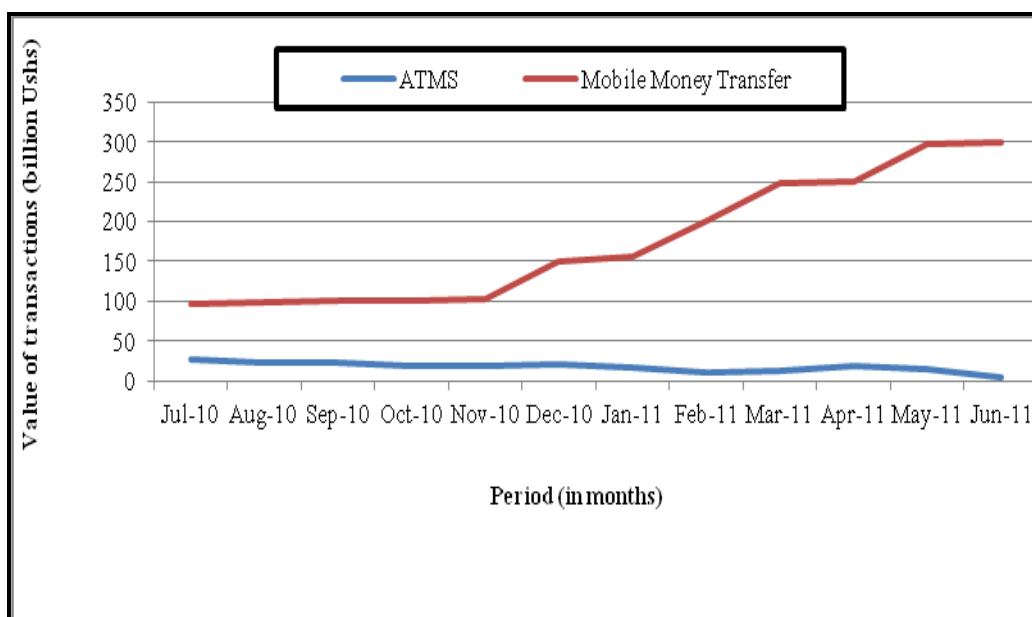


Figure 5: Value of ATM and Mobile Phone Money Transfer in Uganda 2010-2011
Source: Data for graph derived from Bank of Uganda Annual Report 2010/11.

While it is only in Kenya where there is a financial survey available before and after the M-PESA launch (Camner, Pulver and Sojoblom, 2011), in Uganda such a survey has not been conducted and it was only possible to show trends rather than use a benchmark comparison.

In reshaping the financial business architecture, mobile commerce has emerged as an infrastructural enabler of business. Even with banking entering Uganda way before

independence², they did not have the same impact on the financial market that Mobile Phone Money is creating. Early banks like Standard Chartered and Bank of Baroda are older than Uganda as a state (Mwanguzi and Musambira, 2009). While the banking institutions have in the past few decades been joined by another 20 banks,

² Uganda got independence from the British rule on October 9, 1962.

Table 3.Key Financial Sector Access Indicators

Financial data	Period			
	2008	2009	2010	2011
Number of Bank branches	301	363	393	455
Number of Bank ATMS	-	480	598	637
Money Remitters	-	91	149	173
Number of Micro Finance Deposit Institutions (MDI)	-	76	83	98

Source: Data derived from Bank of Uganda Annual Report 2010/11 and 2011/12.

making 30 banks with 455 branches and 637 ATMs country-wide (Table 3), there has been very little impact on financial deepening.

Data from Bank of Uganda showed that just about 33 percent or 4 million adult Ugandans have a bank account (Bank of Uganda Annual Report, 2011/12). Even with the 455 bank branches country wide, about 80 percent of the population still lacks an avenue through which to carry out transactions like sending, receiving and depositing money.

Compared, banks have been in Uganda for over five decades and have reached 33 percent of

the 12 million adult Uganda population to-date; this study showed that Mobile Phone Money has been in operation in Uganda for just four years and has reached almost 50 percent (6 million people) of the 12 million adult population. The simplicity in Mobile Phone Money use addresses the real financial needs of the poor and the unbanked, and subsequently it has had the fastest influence on rural financial deepening in Uganda.

Expanded national revenue base

Mobile Phone Money has undoubtedly expanded the Uganda's revenue base. Data from this study showed that by June 2012, monthly transactions on the Mobile Phone Money services were close to Ushs 1trillion (Table 2), which was one-tenth of the Uganda's national budget for the financial year 2012/13 (MoFPED Background to the Budget Report, 2012/13). The tax paying platform through the mobile phone initiated by MNOs also now makes it easier for the Uganda Revenue Authority's (URA) push to e-tax, which, according to observers, is going a long way in formalizing the large informal Mobile Phone Money sector, but also growing the Uganda tax base. By the end of 2011, URA collected about Ushs90 billion from e-taxes through Mobile Phone Money (MoFPED Background to the Budget Report, 2012/13). It is likely that this will see an upward trend in the subsequent years.

Employment market development

Uganda is a youthful country, with about 21 percent of the

population between 18-30 years of age (UBOS, 2009). From the demographic data presented earlier (see Figure 2), the age range of 18-30 years make up about 96 percent (or 10,560 youth) of the 11,000 Mobile Phone Money agents in Uganda (Table 2). Statistics show that an average of 256,700 youth who graduate from college every year do not find a job (UBOS, 2012). Mobile Phone Money is therefore helping to create employment for about 4 percent of the 256,700 youth who would not have been employed. Thus, Mobile Phone Money is a potential contributor to employment in Uganda.

Bi-directional remittance flow

In Uganda, the agricultural sector represents the third largest contribution to GDP with 18.9 percent after the services sector (52.4 percent), and industrial sector (25.4 percent) in 2011/12 (MoFPED Background to the Budget Report, 2012/13). The rapid growth in the agricultural sector in recent years (14.9 percent of the GDP in 2008/9 to 18.9 percent of the GDP in 2011/12) has created a significant amount of wealth in rural areas (MoFPED Background to the Budget, 2009/10 & 2012/13). With the increasing need to pay fees for children schooling in urban centres, the rural based persons who largely live on agriculture and related agricultural trade are now using Mobile Phone Money to remit cash to their children who attend school in urban centres. While there are no reliable statistics to show how many of the rural Mobile Phone Money users are involved in Mobile Phone Money transfer to urban centres, this study estimates that about 26 percent of the 6 million Mobile Phone Money users (or 1.6 million) are rural-based, and could be remitting money to town centres to meet financial needs of either their relatives or to buy goods. Thus, Mobile Phone Money is not only addressing the previously endemic inefficiency in the financial services in rural areas in Uganda, but now flowing bi-directionally from urban centres to rural areas as well as from rural areas to urban centres.

Shift in mobile phone market leadership

Based on this study, Mobile Phone Money has opened a new

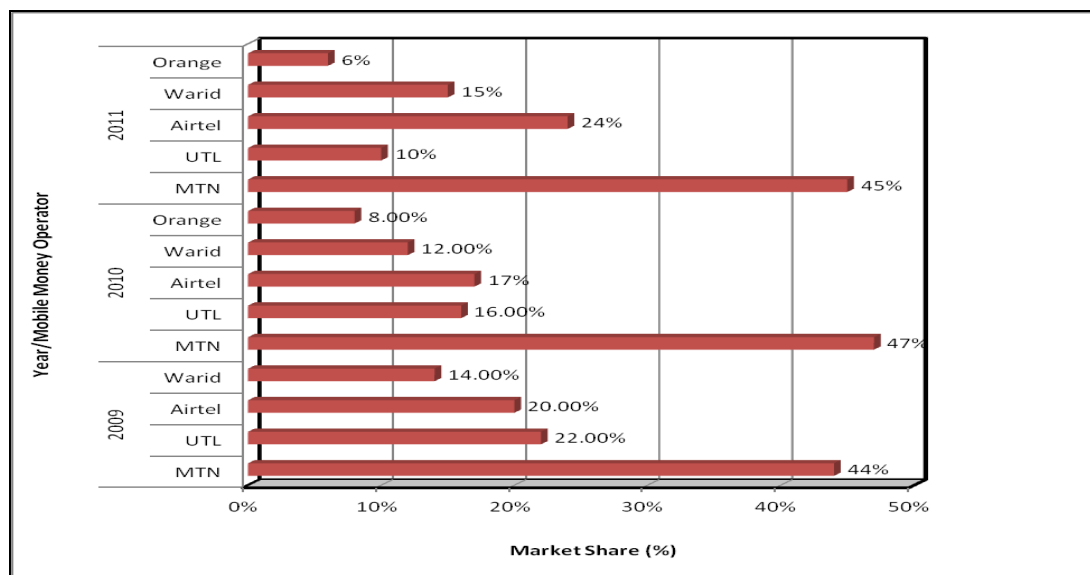


Figure 6: Growth in Mobile Phone Money Market Share in Uganda 2009-2011
Source: MNO Websites

wave of competition among telcos in Uganda. With liberalisation, trade barriers have been dismantled and information on mobile products and prices are becoming instantly and locally available to competitors (MoFPED Background to the Budget, 2009/10 & 2012/13). MTN joined the mobile phone business in 1995, two years after Celtel, now Airtel. It launched MTN Mobile Money in 2009, and by 2011 it has surpassed Airtel which was a giant in the industry 5 years ago (Figure 6).

While it is struggling to recapture the mobile phone market, Airtel has failed to come back as a mobile phone market leader in Uganda. MTN developed a clear-cut and compelling tagline: “*MTN Everywhere You Go.*” Even the most proficient ad from a particular Telco would have difficulty reducing the conventional offering MTN delivers. Since its launch in March 2009, MTN Mobile Money use has been adopted by over 4 million of the 6 million users with speed.

In conclusions, as outlined above, mobile phone money transfer services is reaching beyond the existing traditional banking demands. It has provided a more efficient channel for financial transaction and inclusion in Uganda. This study also reveals that Mobile Phone Money transfers are becoming increasingly popular in Uganda, which confirms the impact of this branchless banking. As this study reveals, Mobile Phone Money also reaches the poor, as over 2 million Ugandans who were previously not banked are accessing informal financial service using their mobile phones. In a bid to support increased financial inclusion that Mobile Phone Money brings to the economy,

regulators, policy makers, and other stakeholders with interest in this trade should work together and share information about the service development and consider addressing potential gaps in regulations.

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