Financial Literacy Pilot Report

Dr. Olga Morawczynski
Ishita Ghosh
Julius Matovu

Executive Summary

This report summarizes findings from AppLab's financial literacy pilot, which ran from March to early December 2010. The work focused on:

(1) Making formal financial services more accessible: bringing the financial service provider (FSP) closer to the village through the mobile money (MM) platform and allowing individuals to choose from a variety of savings accounts.

(2) Making financial information more accessible: providing individuals with the information they need to choose *whether* formal savings mechanisms are appropriate for them and *how* to best use these services to manage their money.

(3) Helping individuals to structure savings: sharing best savings practices with the community and using technology to reinforce good savings behavior.

The pilot tested several incremental innovations in the delivery of mobile financial services:

(1) A new class of **mobile money intermediaries** (agents, footsoldiers, and dedicated sales teams (DSTs)) who acted as savings mobilizers.

(2) A **savings reminder SMS** that helped individuals to structure their savings and meet their pre-determined financial goals.

(3) An **electronic link (e-link)** that facilitated remote deposit transactions

The following lessons emerged from the testing:

(1) DSTs (MTN dedicated sales force) and footsoldiers (local salespeople who were recruited and trained for the pilot) were the most effective savings mobilizers. DSTs opened 38% of the accounts and footsoldiers opened 33% of the accounts.

(2) The majority of customers who signed up for bank accounts were male (78%), had variable income inflows (60%), unbanked (60%), and registered for MM (97%).

(3) Customers preferred transaction to savings accounts across all locations because they could access loans on these accounts. They also preferred the e-link to the branch or van because it was more convenient.

(4) 88% of SMS customers noted that the reminders helped them to structure their savings. 77% also noted that their savings balance had increased a little since they enrolled in the SMS reminder program because they were able to make more frequent deposits.

The report made the following recommendations:

(1) Further develop local intermediaries to increase the banked population in rural locations.

(2) Leverage MM to introduce products that are more appropriate for the lower-income segment. These should provide interest on low balances, limit maintenance fees, eliminate deposit fees for and fit existing savings patterns.

(3) Establish an e-link integrating the MM wallet with a bank account to allow MOs and banks to reap profits from varied transaction volumes and facilitate delivery of additional products, such as insurance and loans.

Table of Contents

List of Tables

List of Graphs

Table 1: Acronyms

AMFIU	Association of Micro Finance Institution of Uganda
ASCAs	Accumulating Savings and Credit Associations
AppLab	Application Laboratory
ARPU	Average Revenue Per User
BoU	Bank of Uganda
ATM	Automatic Teller Machine
DED	Deutscher Entwicklungsdienst (A German Development Services Organisation)[1]
DST	Direct Sales Team
FAO	Food and Agriculture Organisation
FinLit	Financial Literacy
FSP	Financial Service Provider
FEW	Financial Extension Worker
GF	Grameen Foundation
ICT	Information and Communications Technology
ID	Identification
MFI	Micro Finance Institution
MM	Mobile Money
MO	Mobile Operator
MTN	Mobile Telecommunication Network
PDA	Personal Digital Assistant
ROSCA	Rotating Savings and Credit Association
SACCO	Savings and Credit Cooperative
SIM	Subscriber Identity Module
SMS	Short Message Service
Ugx	Uganda Shillings

1 DED has rebranded to GIZ

1. Setting the context

1.1. Project inception and timeline

In November of 2009, Grameen Foundation (GF) received a grant from Western Union Foundation to explore if, and how, mobile phones can be used to improve financial literacy and increase financial inclusion amongst poor Ugandans. Additional funding was also provided by project partners Deutscher Entwicklungsdienst (DED) and MTN Uganda, for the set-up and extension of pilot activities. The project ran for 9 months from March through December of 2010. The schedule of pilot activities is in *appendix 1.*

GF received a grant to examine if and how mobile phones can improve financial literacy amongst the poor.

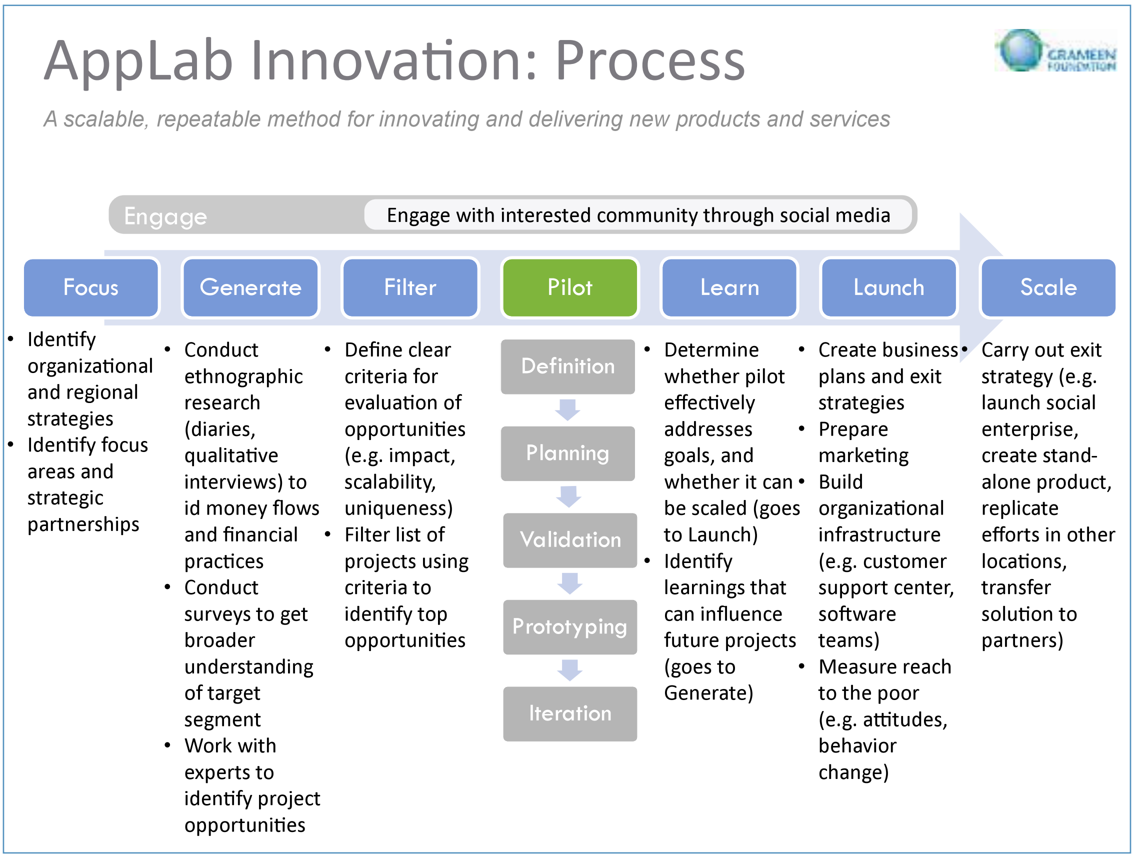
1.2. What is AppLab?

In Uganda, the Grameen Foundation's Technology Center is identifying, developing and piloting data applications and services as part of the Application Laboratory (AppLab). AppLab focuses on how Information and Communications Technology (ICT) in general, and mobile phones in particular, can be developed to serve the information needs and demands of poor people. The focus is on developing applications that:

- add **socio-economic value** either directly or indirectly to poor Ugandans
- are **financially sustainable, scalable** and can be replicated in other countries.

AppLab has cultivated a strategic alliance with MTN, Uganda's largest mobile network operator. The partnership allows AppLab access to a mobile platform on which information and financial services can be tested. This partnership has led to the scale of several successful products including Google SMS, Google Search, Google Trader, and the Community Knowledge Worker (CKW) program.

AppLab has also developed a process for testing new products, from conceptualization to pilot and scale:



1.3. Explaining financial literacy

An individual who is financially literate has the knowledge, skills and confidence to manage their finances well, even in the context of erratic income inflows. They have an understanding of the financial products available in their communities and are able to use these services to build up savings, access loans and protect themselves against unexpected shocks.

1.3.1. The impact of financial literacy interventions

Gray et al. (2009) note that exposure to financial education leads to change in financial behaviour and this is the primary means through which impact is achieved. For example, in 2003, Microfinance Opportunities partnered with Freedom from Hunger to provide financial education to microfinance clients from three microfinance institutions in Bolivia and Sri Lanka. These microfinance clients were given lessons on budgeting, savings and debt management. The results of this study indicate that there was an increase in knowledge regarding product characteristics, and participants were able to better understand loan terms and calculate their debt capacity. There was also an increase in knowledge regarding saving strategies, and participants began to reduce their expenses and save three times the amount of their monthly income for emergencies. The outcome of this was that participants aspired to save and manage debt despite being challenged by food and recurrent financial crises. In the long term, such a change facilitated better decision-making and improved overall financial wellbeing of the participants.

Evidence suggests that financial literacy initiatives lead to changes in spending and budgeting behaviour. In the long term, such changes can improve the overall financial wellbeing of the poor.

1.3.2. The drawback of the current literacy efforts

Financial literacy efforts have mainly been funded by government bodies, such as literacy training in schools or in workplaces, and seen as a public good. FSPs have also had some involvement in this effort, and been focused on disseminating messages that aim to increase the number of transactions on accounts or lower loan default rates amongst existing customers. Within this effort, there is a segment that has received very little attention—the individuals who do not have a relationship with a FSP. The model proposed in this report targets this segment. It also adds an additional element that has not been integrated into other literacy efforts sustainability.

The majority of financial literacy efforts are not sustainable.

1.3.3. Financial literacy is not enough, access is also important

The customer needs assessment revealed that there is no access to formal financial services in the places where financial literacy is needed the most. As a result, the decision was made to focus on both literacy and accessibility throughout the pilot. In regards to accessibility, AppLab utilized MTN's mobile money (MM) network for the pilot. As MM has a large network of cash-in and cash-out agents that could act as a platform for the delivery of financial services and information.

There is no access to formal financial services in places where financial literacy is needed the most.

The unbanked segment in Uganda is made up of low-income individuals. Many do not open up accounts because they do not understand financial products and do not trust financial institutions. They instead save at home where cash can be more easily depleted because it is accessible. As is shown in Muhereza's example below, there are other risks associated with home savings.

Providing appropriate and targeted financial information can address the risks associated with depletion and help poor individuals to increase their savings balances by storing cash remotely. Such balances are vital when unexpected shocks emerge because they decrease the dependence on costly loans. They can further lead to investment in productive assets, which can increase income levels in the future.

Fortune lost to rats

Muhereza Kabaramagi lives in Katooke village, Kyenjojo district in Western Uganda; where she is a second-hand-clothes trader in the weekly mobile markets that take place around Kyenjojo district. She has been doing this work for the last 15 years.

She doesn't have a bank account for two reasons: She lacks familiarity with how a bank operates, and the nearest bank to her village is 30 km away. The cost to travel from Katooke to Kyenjojo, where the bank is located, is 8,000 Ugx (US$4), which is more than she can afford, given that she sometimes earns less than that in a week. So Muhereza decided to save her money in a secret place — a small handbag at home. She has been keeping money like this for the last 15 years.

Two months ago, business was not doing well for Muhereza. It was low season for the farmers who buy most the second-hand clothes that she sells. She decided to dip into her savings, which had accumulated to about 350,000 Ugx (US $150). But after digging out the handbag from a secret place in her bedroom, Muhereza made

a startling discovery — her fortune had been shredded to tiny pieces by rats!

Muhereza was devastated but continued to save cash at home, keeping it in an impenetrable box. This was the best option for her, she explained to us, because the bank was too far from her village and the transport costs would quickly wipe out her small savings.

There is some evidence within the literature that access to formal services leads to livelihood improvements:

- Dupas & Robinson (2009) found that women who were given access to savings accounts in Kenya invested 45% more in their business than women without access. They also had up to 40% higher daily expenditures and were less prone to selling business assets in reaction to unexpected shocks.

- Duflo et al. (2004) also found that commitment savings devices in Kenya allowed women to increase their savings balances, which led to more autonomy to make financial decisions within the household.

- In a study of 1,700 farmers in Malawi, Brune et al. (2010) found that farmers with commitment savings accounts increased their investment into farm inputs by 64%. This increased investment led to 54% increase in farming proceeds and a 31% rise in consumption after harvest.

1.4. Banking the poor—is it profitable?

Savings is an expensive commercial proposition for financial service providers as the poor are often far away from banking services, keep small balances, and make small value transactions.

Many individuals in poor communities have not realized the benefits of formal savings because the number of institutions offering savings products to this segment is limited. Savings is an expensive commercial proposition as the poor are often far away from banking services, keep small balances, and make small value transactions. FSPs also have to cover the high costs associated with signing up new customers, and handling transactions. In many cases, banks have stated that the aggregate cost of serving this segment outweigh the revenues that can be earned.

However, a recent brief has shown that there are some "levers" to make small value savings accounts more viable for financial institutions (Cook, 2010). Growing the average balances on the accounts and moving to cheaper delivery channels such as mobile money (MM) can reduce operational costs and make it easier for FSPs to profit from small value and high volume transactions.

1.5. Mobile money in Uganda

MM is a money transfer service that was launched in March of 2009 by MTN Uganda, the largest mobile operator in the country (holds about half of the market share). The service allows registered customers to access a variety of financial services via their mobile phone—from remittance transfers to airtime top-ups. MTN has mainly advertised MM as a domestic remittance service, with "send money home" as the main value proposition.

However, the needs assessment revealed unintended usages for the application such as savings. Such a usage was also confirmed by MTN who estimates that the aggregate value of mobile money stored in the wallets by customers is around 1 billion Ugx (US$ 432,000[2]) at most times. A significant portion of that value is locked up in the accounts of the customers for several days, and in some cases, months.

Central to the MM service is a network of agents. These individuals usually operate out

2 1.00 UGX = 0.000423728 USD according xe currency converter (http://www.xe.com/ucc/convert.cgi?Amount=1&From=UGX&To=USD) as of January 14th, 2011.

of small retail shops and offer cash-in and cash-out services to customers. For example, a registered user who wants to transfer money to their relative would first load electronic value on their phone by depositing cash with the agent. They could then use their mobile phone to make the transfer to the recipient.

MM has grown substantially over the last year. Over 1.3 million customers have registered with the service and there are over 2300 agents around Uganda. 66% are located outside urban areas.

Key MM stats:

- **Introduced in March 2009**
- **1 million+ users**
- **59% of users are active**
- **2300 agents (66% outside urban areas)**
- **1 billion Ugx in MM float at most times.**

However, the field research revealed that many of the rural agents were not seeing high volumes of transactions and were thus not making money from their service. MTN also notes that only 59% of their MM users are active. The application ideas proposed here may help to address these problems.

It must be noted that MM in Uganda has not yet gone beyond the payments functionality to offer other financial products such as savings. The regulatory environment still remains uncertain and banks are assessing the viability as well as the risks of using MM as a delivery channel.

1.5.1. Going beyond payments — M-Kesho and Iko Pesa in Kenya

In Kenya, the MM platform is more developed and the service offering has gone beyond payments. More specifically, Equity bank has partnered with Safaricom and Orange to introduce two different products:

(1) Iko Pesa
In partnership with Orange, Equity launched Iko Pesa in December of 2010. Iko Pesa is an Equity/Orange bank account with full banking capability. The product works off of mobile banking software that is embedded in Orange SIM cards. It allows for customers to sign-up and transact via their mobile phone and deposit and withdraw cash directly into Iko from Orange agent locations.

(2) M-Kesho
M-Kesho, branded as an Equity/M-PESA account, was introduced into Kenya on March of 2010. The product is fully integrated into the user interface on the mobile phone of the customer and can also be access through Equity's mobile banking service. Customers can make deposits and withdrawals on the account by moving cash in, and out, of their M-PESA accounts. Account holders can also tap into loan and insurance products via M-Kesho.

Because these accounts are still new, it is not yet clear whether they have reached the break-even point. However, it seems that M-Kesho is not yet reaching the poorest segments of the population. The early adopters of M-Kesho are not new to banking; rather, they are existing customers.

1.6. Early findings from the desk research and needs assessment

Before the launch of the pilot, two efforts were undertaken:

> **• 31 interviews carried out with financial literacy stakeholders**
> **• 72 individual and 16 group interviews conducted with potential recipients of financial literacy effort.**

(1) Desk research and literature review: The FinLit team spent the first 2.5 months exploring Uganda's financial sector to better understand the landscape and strategies for financial inclusion and literacy. During this period, 31 one-on-one interviews were carried out with stakeholders. This includes government officials, donor agencies, civil society organizations, and FSPs (*see appendix 2*). Literature from relevant organizations within Uganda was also reviewed.

(2) Customer needs assessment: The team also spent two months engaging in a consumer needs assessment to uncover the financial literacy needs and information gaps amongst poor Ugandans. 72 informants, and 16 group interviews, were conducted during this period with various classes of informants (traders, farmers, MM agents). Areas explored included: financial habits, financial mechanisms used (formal and informal), knowledge of FSPs and their products, structure of income inflows and periods of cash deficits. The following findings emerged from this effort:

1.6.1. Mobile phones and mobile money

- Nearly 7 in 10 Ugandans have access to mobile phones (FinScope, 2010). Access rates are higher in urban areas (80%) than rural (65%) due to better network coverage and higher incomes.

- The needs assessment also found that the majority of informants used their mobile phone for voice calls rather than SMS messaging.

- There are over 2300 mobile money agents in Uganda, nearly six times more than bank branches. As mentioned above, 66% of these agents are located outside urban centres.

- Several informants made clear that they used MM as a savings mechanism. They also explained that they preferred MM to the bank because it was accessible and affordable. They were not charged a monthly fee and understood the service costs, which were displayed in most agent locations.

- The assessment further revealed low levels of awareness in regards to mobile money amongst non-users. Many did not know what mobile money was or how it worked.

- Many MM agents in rural areas expressed that they wanted to increase the number of transactions in their shop to realize higher revenues from their business.

- The MM offering has not yet gone beyond payments, but MTN has plans to partner with banks in the near future to facilitate loan and savings transactions.

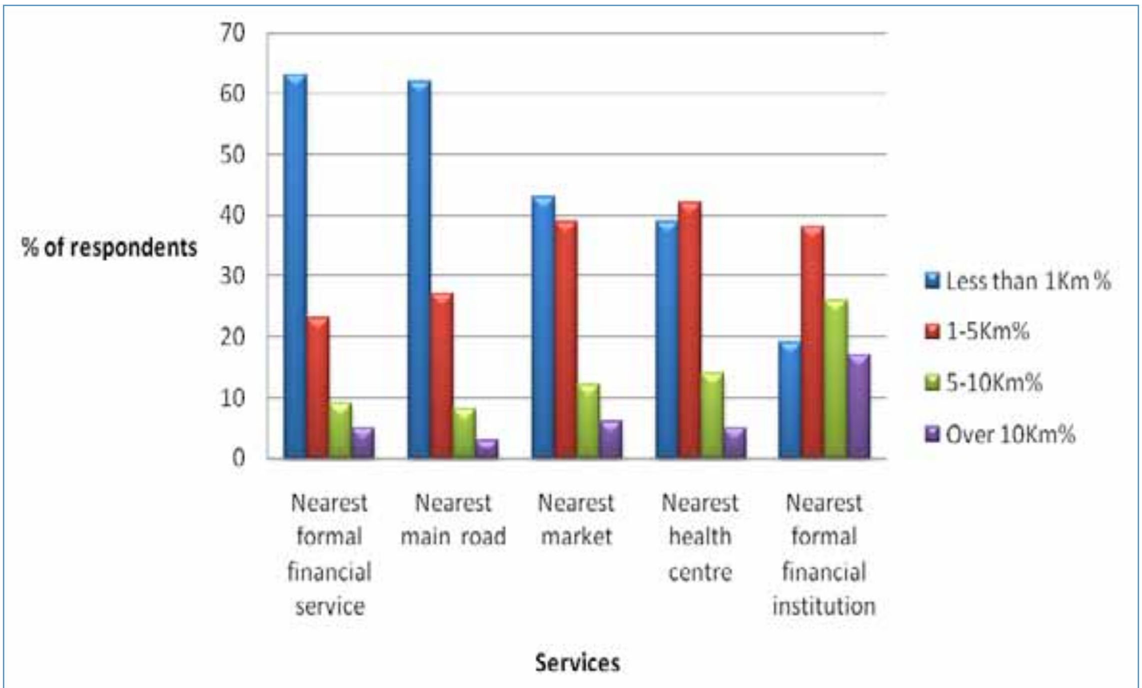
1.6.2. Access to financial services

- There are 22 commercial bank institutions in Uganda and these have a total branch network of 325 branches across the country (Background to the budget, 2009). The majority of these branches are located in urban or peri-urban areas.

- Access to formal services is low in Uganda and only 18% of the population is served by formal financial institutions. The remainder are either un-served (62%), informally served (16%), or semi-formally served (3%) (Finscope, 2010).

- Distance to formal financial services is one such reason for low access rates. Finscope (2010) found that only 19% of Ugandans are within a 1 km radius of a formal financial institution. 63% could access informal services within the same radius.

Graph 1: Distance to financial services



- The needs assessment further revealed that greater distances increased the cost of conducting transactions with a FSP. Informants spent up to 20,000 Ugx (US$ 9) on transport each time they had to transact. Such a high cost impacted the nature and value of each transaction—banked informants would only travel to make larger value transactions. In the interim, they would accumulate cash in informal savings mechanisms.

- The needs assessment also revealed a heavy reliance on informal financial mechanisms—from locked boxes, to storing cash under the mattresses and saving in kind (i.e. cows). Although there was a demand for formal services, informants identified the cost of accessibility (transport), usage (monthly fees, etc) and the lack of formal services in their communities a major barriers to usage.

- Informants made clear that informal services also had their disadvantages. Money kept at home was more prone to theft. It was also harder to track and more easy to spend. Because of this risk of depletion, many informants expressed that they wanted to keep their cash in a safe place that could not be so easily accessed.

- Banks are looking at ways to decrease the cost of extending access to under-served areas via technology. For example, Stanbic has placed over 140 ATMs in whilst PostBank has rolled out point of sale (POS) devices.

1.6.3. Financial Literacy

- Uganda does not currently have a financial literacy strategy in place. The Bank of Uganda (BoU) is working to develop one with two aims in mind— to increase financial inclusion, and enhance consumer protection.

- Very few Ugandans seek financial information from banks (9%) or savings groups (11%). The majority rely on the radio (74%) or personal contacts (55%) for such information (Finscope 2010).

Table 2: Sources of financial information for Ugandans

	Total	Urban	Rural	Female	Male
Weighted base	14,112,506	3,527,284	10,585,222	7,740,603	6,371,903
	%	%	%	%	%
Radio	74	76	73	72	77
Friends and relatives	55	59	53	53	56
Church or Mosque	15	10	17	16	15
Newspapers	13	25	9	11	15
My informal group	11	8	12	12	10
Television	10	27	4	11	9
Don't have access to such information	10	7	11	11	8
My bank	9	14	7	8	10
Colleagues at work	7	8	6	6	8

- The majority of financial literacy initiatives in Uganda do not provide the recipients of information with a place to follow-up on what they learned post- intervention (*See appendix 3* for interventions).

- A Finscope (2010) survey revealed that 22% of Ugandans claimed not to need financial information. The remainder wanted information on acquiring bank loans (24%), opening up a bank account, (11%), calculating interest (11%) and finding groups to save with (11%) (Finscope 2010).

- The needs assessment also revealed that many individuals were not aware of the financial institutions serving their communities or the products that they offered. Many also claimed not to trust banks and other FSPs.

1.6.4. Savings

- There is a latent demand for appropriate savings products in Uganda. One third of FinScope (2010) respondents explained that they would save their cash in a place that was safe, even if the interest rates were low. 16% made clear that they would sacrifice basic neccessities such as decent clothing and food to have the opportunity to save.

- There was also a portion of respondents (24%) who saved for a particular target, such as old age or emergencies. Nearly half tried to save on a regular basis. The needs assessment also revealed that structure and discipline was vital to building up reserves of cash. Many informants joined savings groups because they wanted structure and regularity to their savings. They claimed that having pressure from their peers would help them to meet their savings targets (FinScope 2010).`

- The majority (88%) of individuals who did not save indicated a shortage of cash as the main reason. The needs assessment further revealed that such shortages occurred during particular times of the year. For example, farmers would often experience such shortages before harvest and after Christmas when school fees were due.

2. The pilot focus and hypotheses

The findings from the literature review and user demand assessment led the FinLit team to focus on three main areas for the initiative:

(1) Making formal financial services more accessible: bringing the financial service provider (FSP) closer to the village through the mobile money (MM) platform and allowing individuals to choose from a variety of savings accounts.

(2) Making financial information more accessible: providing individuals with the information they need to choose if formal savings mechanisms are appropriate for them and how to best make use of these services to manage their money.

(3) Helping individuals to structure their savings: sharing best savings practices with the community and using technology to reinforce good savings behaviour (see story of Ugandan millionaire below for an example of good savings behaviour).

The Ugandan millionaire

It remains a popular perception that only the rich can afford to put money aside regularly and watch their wealth grow. Smaller-denomination currency is more often than not discarded as being of too small a value to ever add up to anything significant.

Out in Kyegegwa, about 100 kilometers from Fort Portal in Western Uganda, we met a man who proved us wrong. This man owned a small shop that dealt in food items, imperishable items and hardware, amongst other knick-knacks. When we approached him to open up a PostBank (a socially-concious bank reaching customers in rural areas) account, he jumped at the idea almost immediately. The accessibility that the mobile PostBank van offered him was invaluable, because he spent much time and effort to travel to his bank, which was at least 40 kilometers away.

When he brought us his savings to deposit, it was in a dirty, bulky cement sack that held a number of black polythene packets all neatly tied up. Within the packets were bundles of coins – loose change that his customers had handed over to him. In just over six months, the shopkeeper had managed to save 2.1 million Ugandan shillings (around $950) using this method.

When I went to interview this shopkeeper with the amazing story, I discovered that he had some very sound savings principles. He understood that even small amounts put aside regularly could accumulate over time into significant savings. This is the first tenet of good savings behavior – start putting away some money regularly, even if it is a very small amount. You will be surprised how it adds up over time.

The shopkeeper was also an organized saver. Every black polythene packet had a small piece of paper that mentioned the date and exact amount in that packet – a meticulous method of tracking his savings. But the most amazing part of the story was how the shopkeeper decided to save the notes or coins that came into his hands on a daily basis – to re-invest the larger value notes into his small business and expand it, while putting the coins away as savings.

The decision to save in coins also was a pragmatic one, linked to the shopkeeper's desire to protect his savings. The coins made the sack with his savings very heavy, an instant deterrent for thieves who would try to haul the sack away from his shop – something that a sack full of lighter notes could have never achieved. Moreover, the cumbersome sack would restrain the shopkeeper himself from taking the sack out of his shop and spending his savings, effectively curbing the ease of access to his money. This constitutes another important principle of good savings behavior – getting your money out of your reach, or creating a trivial barrier between you and your savings.

The following hypotheses were tested:

(1) Appropriately executed financial literacy efforts can increase uptake and usage of financial products.

(2) Resource poor individuals will save more if they receive support in structuring their deposits and setting savings targets.

(3) Mobile money agents can act as savings mobilizers and link individuals to formal financial services if given the adequate training and proper incentives.

(4) Individuals will move their cash from MM wallet to formal account if provided with the adequate guidance from MM agents, and appropriate incentives from the financial service provider (FSP).

2.1. Partners

The FinLit team worked with the partners noted below for the duration of the pilot. They were selected based on their localeness, field coverage and outreach, quality of previous work and links with the Bank of Uganda (*see appendix 4* for further details).

Table 3: Financial literacy pilot partners

ORGANIZATION	DESCRIPTION	ROLE IN PROJECT
The Association for Microfinance Institutions Uganda (AMFIU)	An apex organization of Microfinance Institutions (MFIs) in Uganda.	• Provided financial literacy content and operated support line for agents taking part in the pilot. • Sent out SMS reminders
DED	A German development services organization that offers technical support to projects in the field of development.	• Provided technical support to AMFIU to manage the content as well as training on the content. • DED also covered a number of costs that arose in implementing and extending the pilot.
MTN Uganda	The leading mobile telecommunication company in Uganda with nearly 60% of the mobile telephony subscribers. It is also the leading MM service provider in the country with over 1.3 million registered users and over 2300 MM agents across the country.	• Provided access to: (a) the agent network in the selected pilot sites; (b) the platform for linking individuals to financial institutions through MM. •Also provided additional funding for the continuation of the pilot.
PostBank	One of the largest commercial banks in Uganda with a branch network of twenty nine fixed branches and thirteen mobile banking units.	• Extend financial services to people who have received financial education in the selected pilot sites.

2.2 The target population

The pilot targeted those who:

- Reside in rural communities where there is network coverage
- Derive livelihoods from farming or trading activities
- Have erratic incomes and recurrent periods of cash deficits
- Have limited engagement with, and access to, formal financial services and have relied mainly on informal mechanisms for the management of their cash (home savings, savings groups) in the past
- Have access to mobile money agent
- Own, or have access to, a mobile phone
- Can read SMS messages

This segment was chosen because the needs assessment report found that they had a high need for financial literacy. Their dislocation from formal financial services, but proximity to MM agents, also made them an appropriate target for the pilot.

2.3. The pilot locations

Eight sites were chosen for the pilot. These were chosen because they met some, or all, of the following criteria:

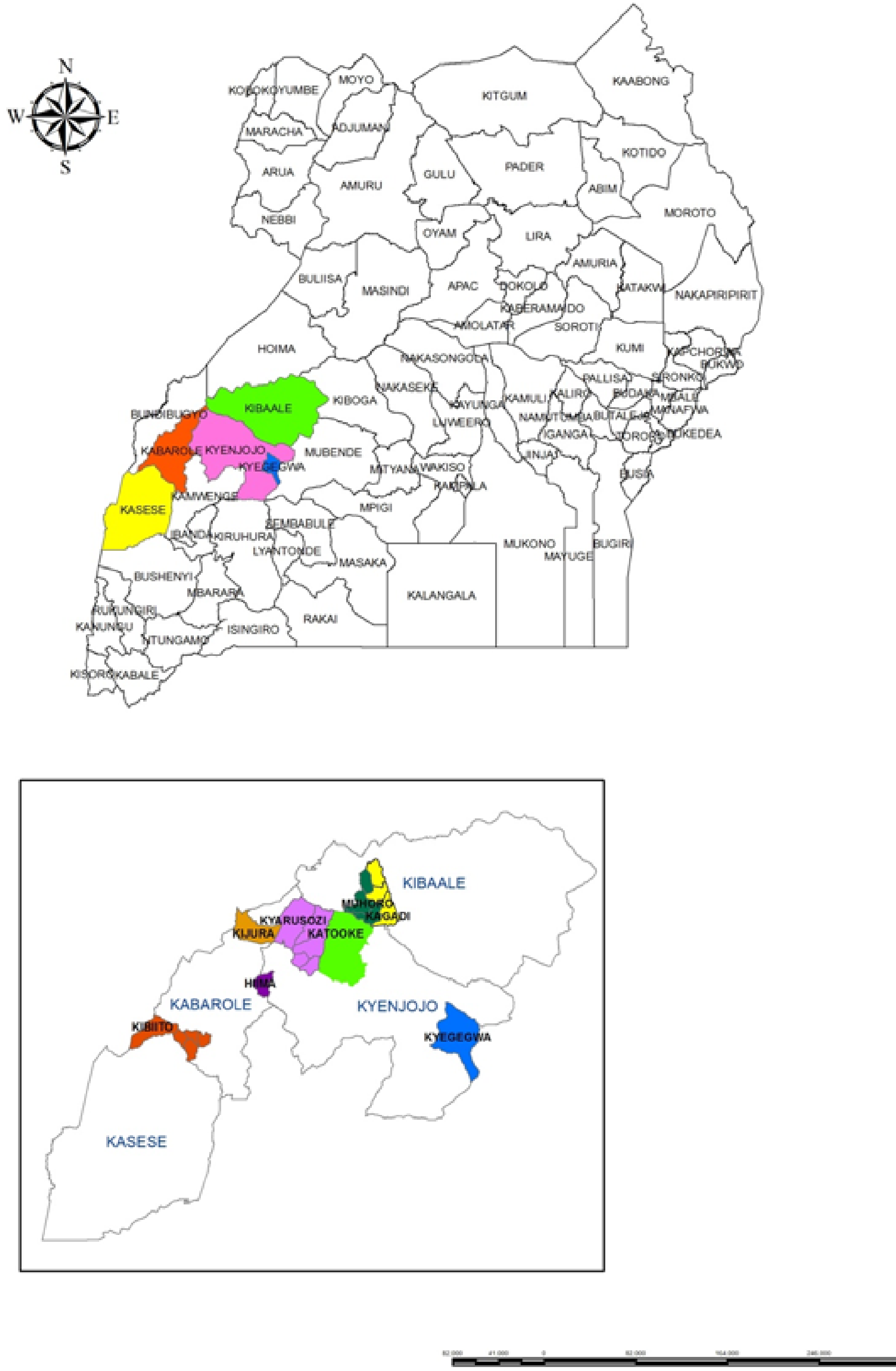
- Located in rural, or peri-urban areas
- Provided access to the target population
- Had low penetration of financial services (formal and semi-formal)
- Had a MM agent within the locality
- Situated along, or close to, the PostBank mobile banking route (to be explained below).

Table 4: Description of pilot sites

SITE	DESCRIPTION	ACCESS TO FINANCIAL SERVICES
Hima	Hima is located in Kasese district, Western Uganda. It has a population of 20,720 people and it is mainly inhabited by migrant cement factory workers and smallholder farmers.	The village has two SACCOs and a Stanbic ATM point; and the nearest bank is 20 km away in Kasese town. There is only one mobile money outlet in this village. This outlet has been open for one year and it does approximately 100 transactions a day.
Kibiito	Kibiito is located in Kabarole district, Western Uganda. The village has a population of 18,000 people; and the main livelihood activity is small hold farming and animal rearing. The main crops grown include: bananas, maize, mangos and avocados.	Kibiito has two SACCOs, and the nearest bank is 30 km away in Fort Portal town (Kabarole district capital). The village has one mobile money outlet and this outlet has been open for one year. The outlet does 20 to 60 transactions a day.
Kijura	Kijura is located in Kabarole district. The village has a population of 8,860 people and is mainly inhabited by migrant tea plantation workers. The main livelihood activity is tea farming where many people are employed in the tea plantations as casual labourers.	The village has one SACCO; and the nearest bank is 25 km away in Fort Portal. The area has one mobile money outlet. This outlet has been open for five months (since June, 2010), and does 20 to 30 transactions a day.
Katooke	Katooke is located in Kyenjojo district, Western Uganda. It has a population of 12,000 people. The village is occupied by smallholder farmers who grow banana and maize. It also a trading place for agricultural produce such as maize grown in the nearby village.	The village has four SACCOs and the nearest bank is 25 km away in Kyenjojo town. The village has one mobile money outlet and it does about 30 to 50 transactions a day.

Muhororo	Muhororo is located in Kibale district, Western Uganda. It has a population of 14,500 people. It is a trading centre for the nearby village. The livelihoods in this town include: boda-boda (motorcycle taxi), metal crafting and maize milling.	The town has two SACCOs and the nearest bank is 50 km away. There is one mobile money outlet and this out let does 30 to 60 transactions a day.
Kagadi	Kagadi is a capital of Kibale district, Western Uganda. It has a population of 16,000 people. Being a district capital, Kagadi is also a big trading centre with a number of activities such as retail shops, boda-boda, metal crafts, and carpentry.	It has seven SACCOs and a Stanbic ATM point. The nearest bank is 30 km away. The area has four mobile money outlets which have opened in the last two years. The Outlet taking part in the FINLIT pilot does 50 transactions a day.
Kyarusozi	Kyarusozi is a tea growing area located in Kyenjojo district, Western Uganda. Most people in this village work as casual labourers in the tea estates. The village has a population of 20,000 people.	There are three SACCOs in this village and the nearest bank is 40 km away. There is one mobile money outlet and has been open for a year. The outlet does 30 to 50 transactions a day.
Kyegegwa	Kyegegwa is the capital of Kyegegwa district, Western Uganda. It has a population of 25,000 people. Kyegegwa has a number of activities including retail shops, trade in agriculture produce, carpentry, metal crafts and boda-boda.	It has one SACCO and the nearest bank is 50 km away. There is only one mobile money outlet which has been open for a year. It does about 100 transactions a day.

MAP OF UGANDA SHOWING FINLIT PILOT SITES



3. The FinLit model

The pilot featured three primary interventions:

(1) A new class of FinLit MM agents: The pilot examined whether mobile money agents could act as financial extension workers and savings mobilizers, instead of just offering cash-in and cash-out services. It also looked at the extent to which the agents could capture the lower end segment of the market.

The agents had several characteristics that made them suitable for this role. First, they were dealing with cash transactions every day and knew the basics of effective money management. Second, they were known to the community members and had already established trust relations. Finally, they could facilitate a two-way flow of information by disseminating information on finances and providing customers with a retail location to follow-up on that information.

Mobile Money Agents

The main function of mobile money agents is to exchange cash for electronic value, or e-money. When a customer deposits cash to an agent, they are trading that cash for e-money, which is then stored on their MM wallet. When they make a withdrawal, they are selling their e-money for cash.

To facilitate the trade of currencies, an agent holds two floats—an e-money and cash float. Throughout the day, the agents have to replenish both floats to serve their customers.

The majority of agents are located in retail shops that often sell mobile handsets and other accessories. Some also provide other services from photocopying to printing.

Responding to the latent demand for information, the agents focused on three relevant activities:

(a) Explaining MM: making clear what MM is what it does, and how it works.

(b) Linking individuals to FSPs: making clear the options provided by the partner institution (PostBank) and referring customers to savings and transactions accounts.

(c) Encouraging savings: helping customers to develop structured savings plans and providing them with a safe place to keep their money.

The pilot team envisioned that the agents would undertake numerous measures to improve financial literacy within their communities and increase the number of savings transactions occurring on both mobile money and PostBank accounts. The following interventions were suggested to the agents:

- Holding financial literacy training sessions within the community.

- Providing individual counselling to customers on financial management within their shops.

- Signing customers up for the savings reminder SMS (see below) and encouraging regular, and structured savings behaviour.

Aside from providing information, the MM agents also linked individuals to formal financial services by handling *referrals* on behalf of PostBank (see section 2.1 for explanation of why PostBank was chosen). More specifically, they engaged in the following activities:

- Informed community members about PostBank products (savings and transaction accounts) and their details (i.e. interest, monthly fees)

- Helped individuals to choose an account that meets their specific needs

- Explained the minimum requirements for the accounts (i.e. photocopy of ID, minimum deposit and a letter of recommendation from the local council)

- Provided customers with account opening forms and ensured that all forms were filled out, and that customers had requirements on hand to complete registration.

The PostBank staff would visit the agent locations once per week. They would collect the forms and complete the account openings. For every account opened, the agent would receive a commission. Such an arrangement was beneficial for PostBank as it increased their presence in locations where they did not have a physical branch. Customers were also able to transact locally after opening up a bank account. Such transactions occurred in two ways:

a) PostBank had a **banking van**, a fully operational bank branch on wheels that stopped in front of the agent shop once per week. Usually, these stops lasted from thirty minutes to several hours (*see appendix 10* for van schedule and description). Customers could make deposits and withdrawals at the van.

b) An **electronic link (e-link)** was introduced one month after the pilot was launched. This allowed the customer to move cash from their MM wallet to their PostBank account. They did this by sending the cash to a dedicated subscriber line that was maintained by an employee at PostBank Fort Portal. The MM transfer fee of 800 Ugx (US$ 0.34) was charged for moving cash from wallet to account. This link allowed customers to make deposits at their convenience instead of waiting for the van to arrive.

(2) The savings reminder SMS

The focus of the pilot was both to enhance access to financial services and encourage the regular use of these services. As a result, the savings reminder SMS was incorporated into the pilot. This would allow individuals to work with their MM agents to map out a structured savings plan. For example, customers could decide to save up 100,000 Ugx (US$ 42) for school fees in December. The agent would make clear that 5,000 Ugx (US$ 2) would need to be deposited every Friday for the period of 20 weeks if this target was to be met.

For the period of the savings program, the saver would receive an SMS each Friday to remind them the deposit was due. The SMS would also make clear how much has been accumulated to date and how much more was needed to meet the savings goal.

An example of the SMS is provided below:

Your savings reminder from MTN and PostBank (August 1)

Your deposit of 5000 Ush for school fees is due today. You have already saved 25,000 Ush and need 75,000 Ush or 15 more deposits, to meet your savings goal.

Customers were encouraged to make the deposits into their MM wallet, and to move their money into a PostBank account after meeting their savings target.

(3) The DSTs and Footsoldiers

The pilot incorporated two other categories of intermediaries to increase the number of accounts opened.

(i) Dedicated Sales Team (DST): The DSTs were employees of MTN who were trained to sell MM accounts. They were paid on a commission basis, and received 1500 Ugx (US$ 0.64) for each new customer they signed up on MM. Most DSTs opened 15-25 accounts per week and thus earned 22,500-37,500 UGX. They were paid their commissions on a daily basis. The DSTs were initially offered 2000 Ugx (US$ 0.90) to refer customers to PostBank. However, they soon made clear this amount was too low as referring customers to PostBank took much more effort than opening up a MM account. As such, utilizing funds from GF Fin-Lit budget, the DST commissions were increased to 5000 Ugx. (US$2)

A team of DSTs (3-5) was hired by the FinLit team for the duration of the pilot. They accompanied the FinLit team on the daily monitoring trips. They spent most of their time working within villages and signing up new customers on bank accounts. The majority of the DSTs were from Fort Portal.

The pilot tested three classes of intermediaries:
1. MM agents—Provided cash-in and cash out services for MM customers.
2. DSTs—MTN MM salesforce.
3. Footsoldiers—local individuals (farmers, boda drivers etc.) who were trained to sell accounts.

(ii) Footsoldiers: The footsoldiers were local individuals who were also hired to refer customers to PostBank. They had no affiliation with MTN and little experience selling financial products. After receiving training from the FinLit team, they worked within their villages to look for customers. Using funds from GF Fin-Lit budget, the footsoldiers were paid a base monthly salary of 40,000 Ugx (US$ 17) plus a commission of 1500 Ugx (US$ 0.64) for every new PostBank customer they brought in. The salary was provided to motivate the footsoldiers to continue their work even if they did not have a high number of accounts opened from the onset. Many of the individuals hired were farmers and had irregular and lumpy cash inflows after harvest. The commissions were meant to provide them with a more regular source of funds.

3.1. Incentive structure for agents

Agents were meant to gain from the pilot activities in three ways:

Table 5 : Agent commissions

ACTIVITY	AMOUNT (UGX)	COMMISSION (UGX)
Register user		1500
Deposit	5000 – 30,000	260
	30,000 – 60,000	260
	60,001 – 125,000	400
	125,001 – 250,000	480
	250,000 – 500,000	800
	500,001 – 1,000,000	2330
Withdrawals	5000 – 30,000	420
	30,000 – 60,000	500
	60,001 – 125,000	600
	125,000 – 250,000	1200
	250,001 – 500,000	2400
	500,001 – 1,000,000	4300

(1) Reducing the costs of cash management: Rural agents mainly handled cash out transactions (withdrawals), which meant that they had to replenish their cash float frequently. They often did this by visiting the nearest bank branch and incurred costs such as transport as part of this activity. The pilot aimed to increase the number of deposit transactions so that the agent's float was more balanced and they could decrease the trips made to the bank.

(2) Increasing the number of savings transactions: Agents received a commission for every cash in and cash out transaction (*see table 5*). The number of deposit and withdrawal transactions would increase if more used MM for savings.

(3) Providing commission on accounts opened: The agents received 1500 UGX for each new MM customer registered.

The pilot provided an additional 2000 UGX *referral* fee. If the agents signed up a new customer for MM and PostBank they would thus receive 3500 UGX commission. This is 13 times higher than the lowest deposit transaction (260 UGX) and eight times higher than the lowest withdrawal (420 UGX) transaction.

The needs assessment found that many of the rural agents are currently making a median of 16 transactions per day, with around 10 being withdrawals. Based on these figures, the majority should be making 5760 [(10x420) + (6x260)] per day on their MM business.

The project team estimated that engaging in the FinLit effort will help the agents to increase the number of transactions going through their shop by at least 30% due to increased customers and a new usage for the application. This will positively affect their revenues. For example, if the agents increase the number of transactions from 16 to 26, with 11 being withdrawals and 15 being deposits, they would make 9040 per day [(11x420) + (15x 260)]. This represents an increase of about 61,000 Ugx per month. If 20 new individuals are signed up for PostBank and MM, the agent can also expect an increase of 70,000 Ugx [(2000+1500) x20] from this activity per month. Together, this amounts to a potential increase of 131,000 Ugx per month on their MM business.

Table 6: Increased revenues for agents (Ugx)

INCREASE IN TRANSACTIONS (DAILY)	INCREASE IN TRANSACTIONS (MONTHLY)	NEW CUSTOMERS SIGNED UP (MONTH)	TOTAL MONTHLY INCREASE
9040	61,000	70,000	131,000

3.2. Marketing the savings process

The marketing campaign focused on making clear the savings process illustrated below. Individuals were encouraged to take money from under the mattress and store it temporarily in their MM account because under the mattress an individual has easy access to the money; and as such, can easily deplete it. After a balance was built up in the MM wallet, they were further encouraged to open a bank account at the agent's shop and to transfer their money to that account so that they could earn interest.

The savings process:

Money under Mattress **Storing in Mobile Money** **Saving in PostBank**

3.3. PostBank Products

The intermediaries were making *referrals* on two types of accounts:

Table 7: PostBank Products

ACCOUNT TYPE	INTEREST RATE	TRANSACTION RESTRICTION	MONTHLY CHARGES
Savings	8% over balances of 100,000 Ugx (US$ 42)	2 free withdrawals annually. Every subsequent withdrawal is charged 5000 Ugx (US$ 2). Deposits are free.	None.
Transaction	5% over balances of 500,000 Ugx (US$ 212)	Every transaction is charged a nominal fee of 600 Ugx (US$ 0.30). For higher amounts, it is 0.2% of the transacted amount.	2000 Ugx (US$ 0.85) is charged as a monthly maintenance fee.

The savings account was designed to encourage people to keep money in their accounts. It thus put a high charge on withdrawals but offered a higher interest rate. The transaction account was designed for those individuals who wanted to push money in and out of the account and charged a lower per transaction fee but also offered a lower interest rate. As part of the financial literacy trainings, the intermediaries were taught about these differences and asked to pass the information on to their potential customers.

3.4. The launch and community training

The FinLit team organized two interventions during the course of the pilot. These were meant to complement the work that was already being done by the intermediaries:

(1) Launch: Every site had an official launch which involved the FinLit team, the researchers, and the DSTs marketing the FinLit services. Popular music was used to attract people, posters and flyers with FinLit's details were handed out, and potential customers were approached to sign up for the service. The researchers also conducted the preliminary surveys at every site. The launch lasted between 4-6 hours at every site. See appendix 5 for launch schedule.

(2) Community Training: Community trainings were conducted at every site. This was led by the FinLit team and supported by local financial extension workers (FEWs) recommended by AMFIU. All of these workers had prior financial literacy training. They worked to mobilize community members to attend the training workshops See appendix 6 for community training schedule.

The content for the training was developed by AMFIU and the FinLit team and focused on the following sub-topics:

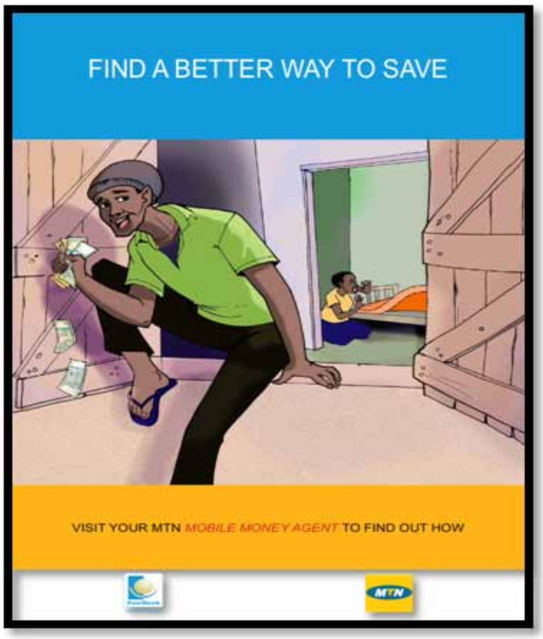
- Savings: *What is it and why must we save?*
- Barriers to savings
- Getting money out of your reach
- Design of Mobile Money
- Design of PostBank accounts
- Difference between loans and savings

The training content was especially focused on explaining the design features of bank accounts, as many in the target segment did not understand the charges associated with the accounts. As a result, some did not trust the banks and chose not to open an account. Others opened the wrong account and incurred high fees as a result.

3.5. Marketing materials

Two types of marketing materials were used. Each was translated into Rutooro, the local language:

(1) Posters: These emphasized the first safe savings value proposition and made clear some of the risks associated with keeping money in the home. They further encouraged the first part of the savings process (mattress to MM) and led individuals back to the agents to gather more information and open a bank and / or MM account. The posters were hung in the shops of the agents. They were also posted around the village center.



(2) Fliers: The majority of the fliers were handed out during the launch. Their main purpose was to make clear the various disadvantages of informal savings mechanisms. The other purpose was to advertise the entire savings process. The fliers also led individuals back to the MM agents to get more information and open an account.

This process was advertised before the e-link was established. As mentioned above, the needs assessment revealed that distance was one of the greatest costs associated with formal banking. As such, the marketing material emphasized that savings and the opening of formal accounts could be done locally by the MM agents.

3.6. Agent, DST and footsoldier selection methods

The agent selection criteria required the individual to be heavily involved in the MM business and have history of keeping sufficient cash float. Agents located within the villages along the PostBank van route were considered for inclusion. Nine agents were selected and trained during the pilot. Only one dropped out after the training whilst the rest continued until the pilot ended. The criteria for agent selection was as follows:

Table 8: Criteria for agent selection

AGENT SELECTION CRITERIA	EXPLANATION
The MM agent should own the shop. Alternatively, the owner should be heavily involved in the business.	If the agent is an employee, they are likely to be paid a wage. As such, the proposed commission scheme may not incentivize them to provide financial information services and link individuals to formal accounts. If the business owner is involved in the business then they can ensure that their agents will make efforts to properly train the clients.

The agent should be a permanent employee if not shop owner.	The needs assessment revealed that trust relations were lower in locations in which there was a high turnover for the agents.
The shop should not be too busy.	If the shop is very busy, the agent may not find the time to provide financial information. Alternatively, the agent can schedule aside time to provide such information when traffic from the core MM business is lower.
The agent must have a history of keeping a sufficient cash float.	If the agent cannot maintain their cash float then customers will not be able to make a withdrawal from their wallets. This could negatively impact the customer experience by stopping customers from making deposits in the future.
The agent must be located in an area that has adequate network coverage.	To participate in the savings reminder SMS pilot, it is vital that the agent can communicate with the AMFIU staff regarding the frequency and value of the deposits.
The agent should be located on the PostBank mobile banking route.	This would make it easier for the agent to link individuals to a formal account.
The agent should have a good reputation in the community.	If the agent is not trusted then adoption rates of MM and PostBank could be lower.

Agents were also asked to identify individuals within their community to work as footsoldiers. In most cases, the agents had worked with the footsoldier in the past or had known them personally.

Several of the top-performing DSTs were also integrated into the project. In this case, performance was measured by the number of referrals made during the launch. These DSTs would go into a community a few hours before the arrival of the van to find and sign-up customers.

3.7. Training of agents, DSTs and footsoldiers

The agents underwent a two-day training session in Fort Portal. *See appendix 7* for the themes around which the training was organised.

The training session consisted of presentations made by the FinLit team. There was also a substantial amount of discussion to clarify the content. Agents also made suggestions on how the value proposition and business model could be changed to better suit their business. Each of the agents was also provided with a training manual for their reference. Some retraining also took place in the agents' shop when new features, such as the savings reminder SMS, was introduced.

The footsoldiers received their initial training from the FinLit team and top performing DST. They were also encouraged to seek additional advice from their local agents. The DSTs underwent a one day training session in Fort Portal. The content used to train the agents was also used for the DSTs.

3.8. Expected outcomes

The pilot team planned for the following outcomes to emerge from the pilot:

(1) At least 300 individual (50 per agent at 6 site locations) will take part in the FinLit awareness training workshops conducted by the agents. 40% of these participants will seek further advice from the agents.

(2) At least 90 individuals (15 per agent at 6 site locations) will be enrolled for the savings reminder SMS. 50% of those enrolled will make regular deposits, complete the program and meet their short term savings goals.

(3) Agents will refer over 150 customers to PostBank. At least 60 PostBank accounts (10 per agent at 6 site locations) will be opened immediately after the financial literacy awareness training workshop. Another 90 PostBank accounts will be opened during the remainder of the pilot (2 per agent per week at 6 site locations over 7-8 weeks).

(4) By the end of pilot, at least 20% of the project participants will respond that their awareness about local financial products and services as well as their ability to exploit these for their personal advantage has been improved (as compared to the values measured from the pre-treatment questionnaire at the beginning of the pilot).

(5) 60% of those involved in the savings reminder SMS will respond that the reminders helped them to structure and organize their savings.

(6) 60% of participants will respond that their access to financial services has been improved as a result of the intervention.

(7) 50% of those using MM for storage will also open a PostBank account.

(8) 70% of those who have a MM wallet and PostBank account will transfer their money from wallet to account at least once during the pilot period.

(9) 30% of participants will answer that they have increased their savings balances because of the ease of access, and FinLit training, received as a result of the intervention.

(10) Agents will note an increase of at least 30% on their transaction volumes as a result of the intervention.

4. Monitoring

Several techniques were used during the monitoring phase:

(1) Focus groups: 19 Focus groups (involving 52 respondents) were conducted across all sites. These respondents were customers who came either to transact with the van, or to open up new accounts (*see appendix 8* for break up by location).

(2) Surveys: 291 surveys were conducted across all 8 sites. These included both potential customers and individuals who opened PostBank accounts. The respondents were mainly found in and around, the agent shop locations (*see appendix 9* for break up by location).

(3) Agent logbook tracking: Each of the agents had a logbook which they used to record their deposit and withdrawal transactions. This logbook was tracked over the pilot period to see if there was a change in transaction patterns.

(4) E-link deposit tracking: At the end of each day, PostBank staff would send through a list of all the deposit transactions that were made by customers on that day.

(5) SMS transaction sheets: The sheets used for monitoring the SMS transactions were also used to gauge customer savings needs and patterns.

(6) PostBank account opening tracking: The basic customer profile details were logged each time a new account was opened. More specifically, the *name, account type*, and *gender* of each new profile was recorded.

(7) PostBank transaction sheets: Whenever a PostBank customer returned to transact with the mobile van, the transaction type (deposit and withdrawal) was also noted.

5. Findings

Several main findings emerged from the pilot. These will be outlined in this section and set the context for the recommendations.

(1) The DSTs and footsoldiers were most successful at referring customers to PostBank.

- **DSTs** referred 114 (38%) accounts across all 8 sites. Because these DSTs were experienced sales people they knew how to approach customers, and explain the benefits of saving formally. The DSTs were also the most aggressive intermediaries within the pilot. They would often approach potential customers several times before finalizing the referral.

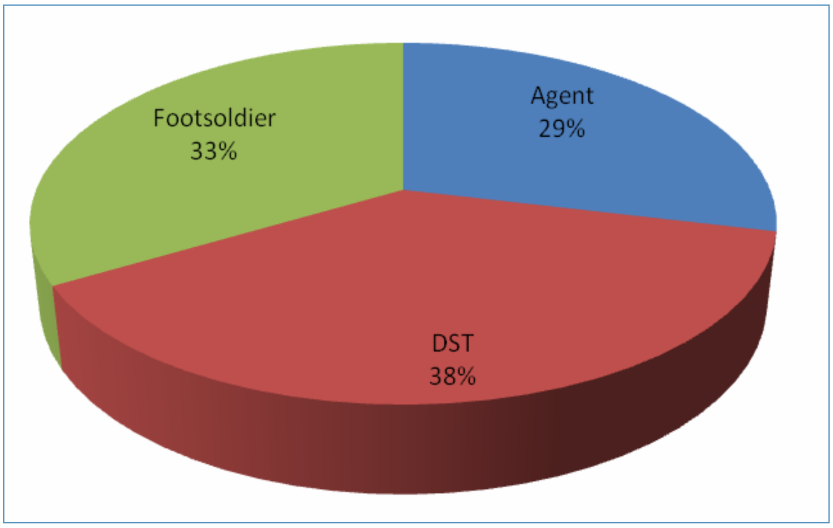
- The **footsoldiers** referred 100 (33%) customers to PostBank. The majority of these referrals were completed in Kijura. The MM agent in this site took the initiative to hire three footsoldiers who went deep into the rural areas to visit the homes, markets, and gardens of potential customers. These footsoldiers also attended community functions such as weddings and church gatherings to promote accounts.

> **The footsoldiers and DSTs were most successful at making the referrals. Agents were often too busy with cash-in and cash-out transactions.**

The footsoldiers in the other locations were less successful at selling the accounts. Most explained that the referral process was too "difficult" and time consuming. They also explained that many of the customers did not have the requirements to open up an account. Footsoldiers also had different salary expectations. 3 dropped out because they found the monthly 40,000 Ugx (US$ 17) base salary too low.

- **MM agents** had the lowest number of referrals with 86 (29%) accounts opened. It was observed that many of the MM agents were too busy to handle the referrals. Cash-in and cash-out transactions were given priority because they took less time. The agents also could not leave their shop to make the referrals, which constrained their ability to reach non-MM customers. The graph below shows accounts opened by intermediaries.

Graph 2 : Accounts opened by intermediaries



(2) The intermediaries (footsoldiers, DSTs and agents) did not always provide the correct financial information to customers.

The aggressive sales strategy of the intermediaries had one significant disadvantage, customers were not always provided with the correct information. Out of the 52 informants who were interviewed, 7 (14%) were not able to properly identify the account they held. Out of these 7:

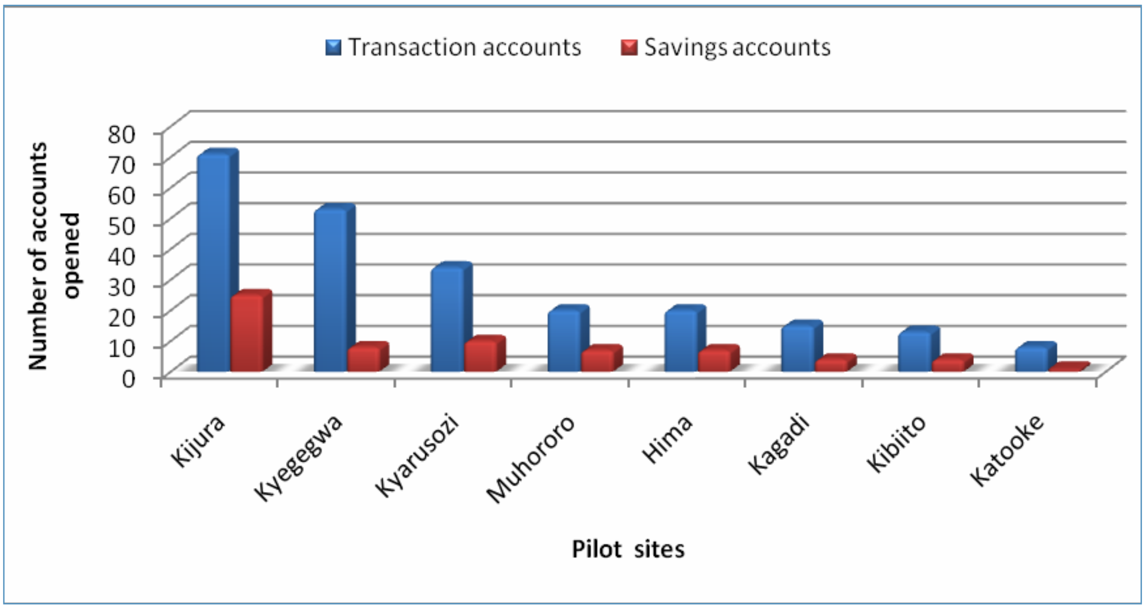
- 4 claimed that they had been given the wrong information
- 2 claimed they knew the features of their accounts but did not know the name of the account type they held
- 1 claimed he had forgotten the type of account he had

Customers also showed low levels of awareness in other areas. Nearly half of the informants who held transaction accounts did not know about the monthly charges. A portion of savings account customers also did not know about the interest rate (28%) on the account and withdrawal restrictions (16%).

(3) Customers preferred transaction to savings accounts.

This pilot was designed to encourage people to save by moving cash temporarily from their mattress to MM, and more permanently from MM to the bank. Even though intermediaries more aggressively marketed the savings accounts, the majority of customers (77%) opened up transactions accounts. The break-up across sites is as follows:

Graph 3: Accounts opened



Such a finding is interesting because customers using the transaction accounts incurred more charges - deposits were charged (600 Ugx or US$ 0.30), and there was a monthly fee (2000 Ugx or US$ 0.90). Interest rates were also lower (5%) and given to customers only on balances greater than 500,000 Ugx (US$ 212).

When asked, 4 (10%) of the informants explained that they opened the savings account because it would be cheaper in the longer term. Informants wanted to make withdrawals without incurring the 5000 Ugx (US$ 2) fee that was put on the savings account (after 2 withdrawals). 9 (30%) informants also noted that they opened a transaction account to access loans, which cannot be accessed on savings accounts.

(4) Many customers did not follow the savings process.

As was mentioned above, the marketing campaign emphasized the savings process—moving cash from mattress to wallet and thereafter transferring the accumulated amount into a bank. However, the FinLit team discovered very early on in the pilot that this process was not followed by many of the informants. Most preferred to use the savings mechanisms in isolation.

During the launch, informal interviews were conducted with individuals who came to inquire about the product:

- 13 out of 16 informants (82%) who were not registered with MM made clear that they were unable to understand why they should use MM as an interim tool in the savings process. They further made clear that they preferred to open up a PostBank account directly and gain interest on their savings.

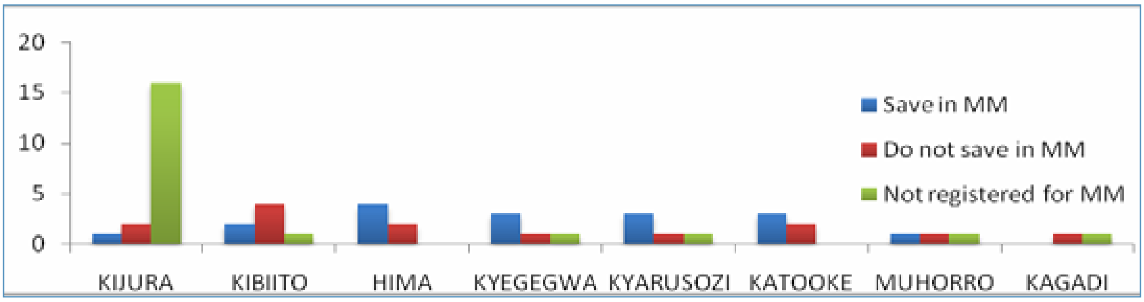
- 11 out of 16 informants (82%) who *were registered* with MM explained that the cost of making the withdrawal was too high to save in MM and then transfer to PostBank. They thus preferred to deposit directly into their bank accounts.

A survey conducted during the latter stages of the pilot with 38 PostBank customers revealed that only 5 (13%) moved their money from their wallet to the bank account. It must be noted that nearly half (47%) of the sample claimed to save in MM. Such a finding makes clear that customers wanted to gain some type of benefit from keeping cash formally—either interest on their cash or access to loans and other banking products in the future.

(5) Customers used their MM wallet to save

52 informants were asked how they used MM in a series of focus group interviews-17 (33%) said they were using MM to "save".

Graph 4: Using mobile money to save



Through numerous informal interviews, the pilot team discovered that the term "savings" meant different things to informants. It also entailed a different series of behaviours. In some cases, informants would "save up" by making frequent deposits. In others, they would "save down" by depleting the balance from their wallet. The following savings scenarios reflect these savings behaviours:

Scenario 1: MM as a transactions account for short-term savings

8 (47%) informants used MM as a short-term savings mechanism. They would deposit cash into their wallet when they had some on hand, and withdraw the cash if and when the need arose. The cash usually stayed on the account from a few weeks to 2 months.

Scenario 2: Saving before sending, or after receiving, MM

6 (35%) informants tied their savings behaviour to transactions that occurred on MM. Transfer recipients would often keep a balance on their account for a period of a few days to three months.

They would make smaller value withdrawals when they needed the cash until the balance was depleted. In this case, the recipients saved by not withdrawing the entire amount after the transfer was made. Senders would also make smaller value deposit before making a transfer.

They would accumulate this cash over a period of a few days to 3 months before sending the accumulated amount. In this scenario, the user would save by depositing cash until they met their transfer target.

Scenario 3: Targeted Savings

3 (18%) of customers would save with a goal mind—from land to cattle and school fees. In some cases, they had cultivated a savings schedule and decided upon the day of the week/month that they would make the deposit and the amount that would be deposited each time. In others, they would put money into MM when they had it on hand. When customers met their goal, they would withdraw the bulk amount from their wallet for the purchase.

Such savings behaviours are important to understand as they can provide the basis for the creation of new products that fit into existing habits.

(6) The customers who signed up with PostBank were satisfied with the weekly frequency of the vans.

As mentioned above, the PostBank van makes a stop in each of the 8 sites once per week. The timing of these stops is between 20 minutes to 4 hours (*see appendix 10* for more details).

Initially, the pilot team predicted that these limited stops would inconvenience the customers. However, an interview with 30 customers who had signed up for PostBank during the pilot revealed that the majority (23 or 77%) of customers were satisfied with the weekly frequency of the van for the reasons given in appendix 10 (23%) said that they would prefer to have access to their bank accounts more frequently than just once every week. The various reasons given for this were:

- **Rigid timings:** 5 informants mentioned that the rigid timings limited their ability to transact with PostBank. This was particularly the case with those who were formally employed and worked during the day. This segment preferred for the van to come daily.

- **More frequent transactions:** 2 informants wanted to transact several times in a week and to not be limited to a particular schedule.

It must be noted that numerous potential customers did not sign up with PostBank because they claimed that they always wanted to access their cash. *"I want to know that I can get to my cash, even if I don't need it"*, one trader explained. Others did not want to save on MM because the cash was too accessible. One shop-keeper who was saving money in a locked box at home to "grow his business" explained that he would not keep cash in his MM wallet because it was too easy to withdraw. He passed the agent daily on his way to work and expressed that he could be "tempted" to make a withdrawal if he had savings in MM.

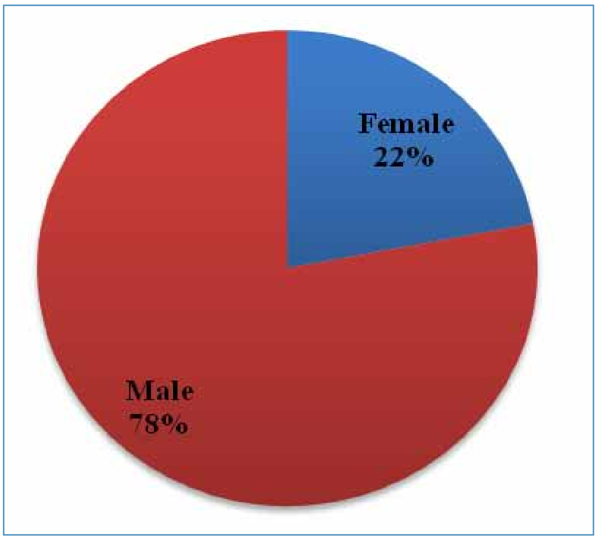
Such findings make clear that a distinction should be made between the availability and accessibility of cash. Although most individuals would want to have their cash within reach (accessible) they may want to put controls on their ability to withdraw the savings (available) to curb their temptation to withdraw and avoid depletion.

(7) The customer profiles were consistent across locations.

The majority of customers who opened up bank accounts during the pilot had the following characteristics:

a. Male
300 new customers had signed up for PostBank accounts, and the graph below shows the number of men and women who signed PostBank accounts.

Graph 5: Accounts opened by gender



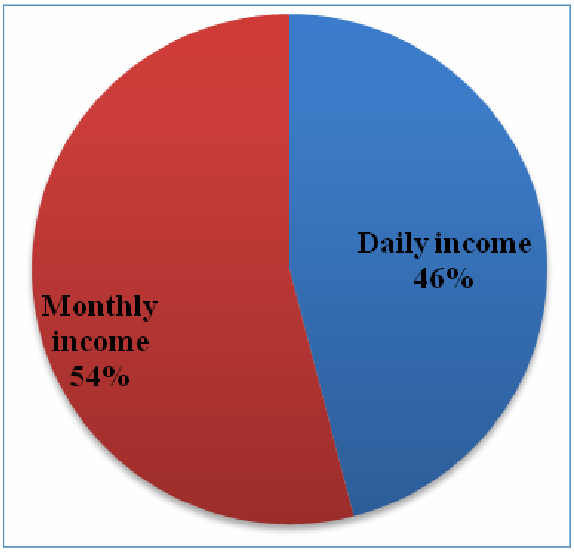
Such a disparity is linked to the control of resources within the household. In most cases, the men control the finances and often have higher income inflows. PostBank staff made clear that the large majority of the women who opened up accounts were not married. The informal interviews further revealed that numerous women were holding cash informally in "secret places". In some cases, this was used as an emergency fund. In others, they were saving for something specific such as school fees.

Another explanation to the disparity in account opening is linked to the fact that most of the agents (6 out of 8) and intermediaries (10 out of 16) for the FinLit pilot were males. It was observed that male intermediaries were more likely to approach male potential clients. Integrating more female intermediaries could thus raise the number of women that sign up for banking products.

b. Had daily or monthly income inflows that were variable

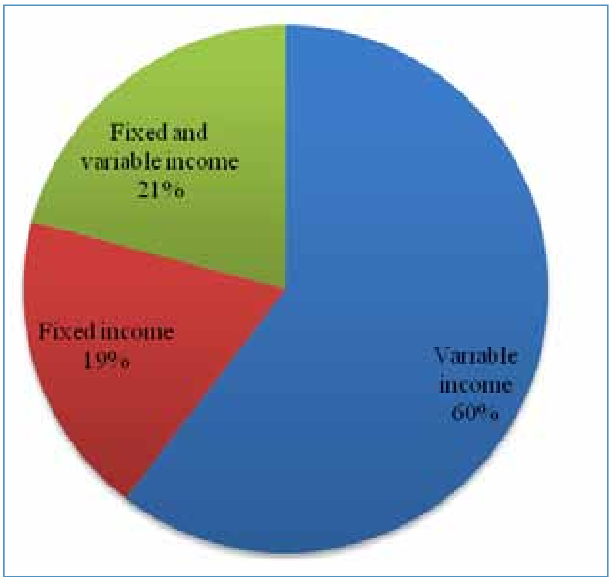
92 respondents were surveyed on the flow of their incomes and the graph below shows that most had daily or monthly income inflows.

Graph 6 : Income inflows of customers



The surveyed customers were also asked if their incomes were variable, fixed or a combination of both and the graph below shows that the majority had variable incomes.

Graph 7: Nature of incomes

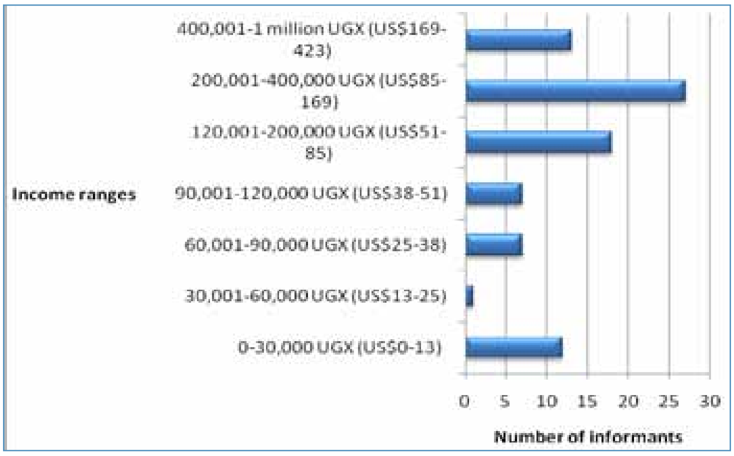


The informal interviews also revealed that those earning a variable income did not want to open a bank account because they could not always maintain the minimum balance. They also explained that they did not want to bank fees to "eat" their money when their balance was low. Many also did not understand the banking fees and accused banks of stealing the money of the poor through hidden charges.

c. In the higher income range.

Of the 92 customers surveyed, 90 respondents self-reported their cumulative income inflows for each month. The graph below shows the breakup.

Graph 8: Monthly income ranges for customers who signed for PostBank accounts

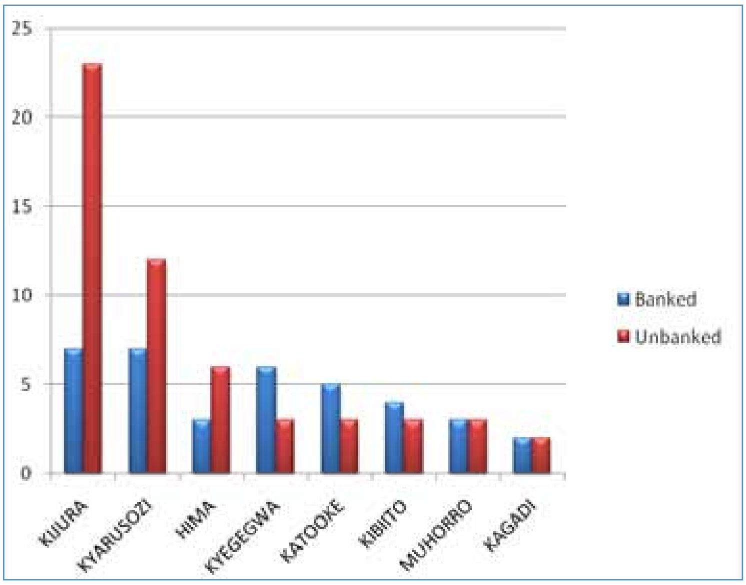


The higher income range customers were typically businessmen, traders or employed in services. The lower income range customers were typically small shop-owners or farmers. It must be noted that only 32% of customers earned less than 120,000 Ugx per month, or under $2/day.

d. Unbanked.

55 (60%) out of the 92 new customers possessed no bank account prior to the FinLit pilot.

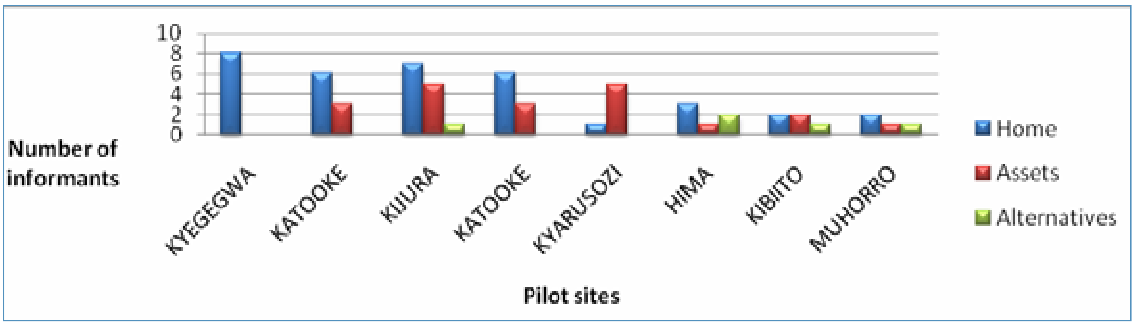
Graph 9: Possession of bank account prior to the FinLit pilot



There was also some variation in terms of banked individuals across sites due to the representation of services. For example, Kijura had a high proportion of unbanked individuals because there was only one SACCO within the village center. The closest bank was 25 km away in Fort Portal.

The sample also showed a reliance on informal savings devices. Half of the sample kept money at home (29 or 32%) or in assets (17 or 19%). This finding makes clear that there are substantial reserves of cash within these rural areas that can be funneled into formal financial services.

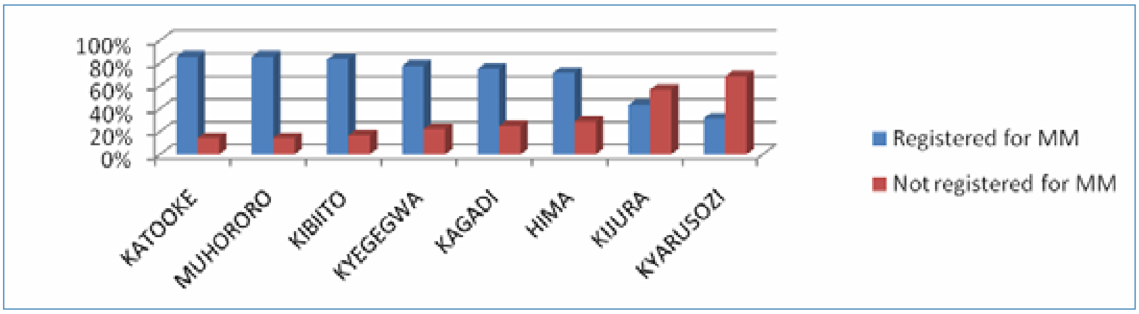
Graph 10: Informal savings devices



e. **Registered for mobile money**

51 (57%) respondents who opened up PostBank accounts self-reported that they were registered for Mobile Money. In sites like Muhororo, Kibiito, Kyegegwa and Katooke, this number was significantly higher.

Graph 11 : Mobile money registrations



The above findings make clear that there continues to be a significant segment of the market that remains untapped (women, lowest earners).

(8) Most individuals who attended the financial literacy training did not open a bank account but a significant portion claimed that they changed their savings behaviour.

Over 600 individuals participated in the financial training workshop. There was an effort to incorporate low-income earners, or those under $2/day. A sample of 17 individuals who attended the training were surveyed.

All responded that the training was useful and 15 (88%) noted that they made some type of change to their savings behaviour. From this 15:

- 8 (47%) started to make regular deposits
- 2 (12%) opened up accounts at SACCOs
- 2 (12%) started buying assets as a means of storage
- 1 (6%) opened an account in another bank
- 1 (6%) started saving at home
- 1 (6%) started planning their savings so that they did not run out of cash

It must be noted that none of the respondents opened a bank account. When asked why, 8 (47%) noted that the account was too expensive, whilst 5 (29%) said they did not know how the account works and 1 (6%) said the van did not come often enough for them to transact.

Many poor customers found PostBank accounts too expensive.

The agents also suggested that the information given on banking products was not sufficient to drive people to sign up. They suggested that DSTs and footsoldiers should have gone into the sites several times after the training to answer questions and sign up customers for PostBank. The agents further explained that the customers trainers were not always trusted because they were not from the community. They made clear that the footsoldiers could have driven the referral numbers if they did the training themselves.

(9) Most customers preferred the electronic link to a physical branch or the PostBank van.

24 electronic link users were also surveyed to find out why they had chosen to use this method for transacting. 88% (21) of these customers had used the van before moving to the electronic link whilst the remainder used a branch. 92% (22) responded that they chose to transact with the link because it was more convenient. The remainder made clear that they saved time (13%) and money (4%) when using the e-link. Numerous informants also made clear that they were not afraid of losing their money because the e-link was associated with "big brands" like MTN and PostBank.

(10) The majority of electronic link customers noted that the transaction charge for making the deposit was too high and that the minimum and maximum deposit amounts should be changed.

The majority (14 or 58%) of customers surveyed noted that the 800 Ugx fee charged by MTN for the deposit was too high. The average amount deposited by customers was 18,000 Ugx, which means that the fee represented about 4% of the average deposit amount. Nearly one fifth of the deposit transactions were 5,000 Ugx, which was the minimum that could be deposited. In this case, the charge was 16% of the deposit amount.[3]

3 It must be noted that these smaller deposit amounts do not always reflect the amount that a customer actually has to deposit. In some cases, customers were just "trying out" the system to determine whether their cash would reach PostBank safely before making a larger value deposit.

54% of customers further noted that the minimum deposit amount should also be lowered. When asked to choose a range for the deposit, 38% (9) said 1001-3000. The remainder suggested 501-1000 (8%), or 3001-5000 (8%) as the range.

67% (16) also noted that the 100,000 Ugx limit on the deposit should be increased. When asked to choose a range, the majority (33%) responded 500,000-1 million Ugx. The remainder chose deposit amounts between 100,000-500,000 Ugx (17%) or 1-5 million Ugx (13%).

(11) The majority of e-link customers also noted that the frequency and value of deposits had increased since adopting the link.

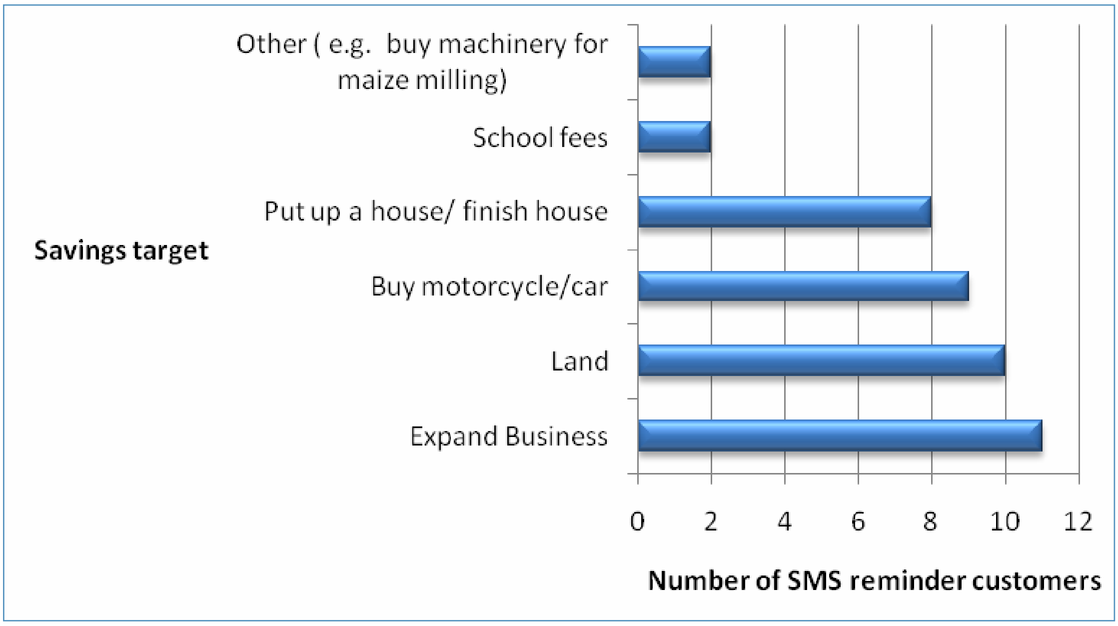
96% (23) of respondents noted that the frequency of their deposits had increased after adopting the link whilst 92% (22) responded that their average deposit amount had gone up. Such an increase was not entirely reflected in the transaction data of the customers. Only 38% (9) customers made more than one deposit. For 7 out of 9 of these customers, the deposit amounts increased over time or remained the same.

It must be noted that a majority of the PostBank customers using the e-link did not have a bank account before the pilot began. They were thus not making any deposits into formal savings mechanisms. This could also represent their response of increased frequency of deposits.

(12) SMS customers noted that the SMS reminders helped them to structure their savings.

SMS customers had various savings targets. The majority wanted to expand their business (26%) or purchase land (23%). The value of the savings targets was also different and ranged from 100,000 to 3 million.

Graph 12: Savings targets



17 customers who used the SMS reminder system were interviewed. From this sample, 15 (88%) said that they found the reminder useful to organizing their savings. However, only 41% noted that the SMS reminder came at the properly scheduled time. A significant portion of informants (9 out 51 who signed up) also noted that they did not get their SMS reminders at all. The reminder was sent by an individual based in our partner organization (AMFIU Kampala) and was largely prone to human error.

The customers noted that the SMS reminders did have some benefits. 77% (13) of the respondents noted that it helped them to regularize their savings. They deposited cash always (10 or 59%) or most of the time (3 or 18%) after the reminder was sent. 77% (13) of respondents noted that their savings increased a little as a result of the SMS reminder. The remainder noted that there was no change. All of the respondents made clear that they would like to use the reminder tool in the future.

(13) The agents noted that their revenues had increased as a result of the pilot.

All of the agents were surveyed at the end of the pilot. 7 out of 8 noted that their revenues had increased as a result of the intervention.

- 3 said that this increased occurred because customers were making more deposits and withdrawals
- 2 noted that the referral commissions increased their revenues
- 2 mentioned that customers were making more deposits
- 1 mentioned that customers were making additional withdrawals

Transaction volumes were also monitored via the agent logbooks. Such monitoring revealed an increase of transactions in nearly all of the sites:

- Muhororo and Katooke saw a 30% increase of deposits after community training
- In Kyegegwa, deposits show a sharp increase of 176% both after launch and after community training. Whereas for Kijura deposits decreased after launch, but sharply went up by 72% after community training.
- In Katooke, records show that there was an increase in deposits after the launch intervention, but after community training, deposits decreased by 3%.
- Kyarusozi also saw an increase in deposits, 22% after launch and 15% after the community training.

Such increases also show that the community training did lead some customers to adopt MM as a savings device.

Agents also saw other benefits as a result of the intervention. For example, the Kijura agent made clear that his photo shop and photocopy business had increased. This is because customers needed passport photos and a photocopy of their ID to sign up with PostBank. The Kyarusozi agent also made clear that he sold more airtime because community members were coming to inquire about PostBank and sign up for an account. The increase in foot traffic also led to an increase of sales of other goods within the shop.

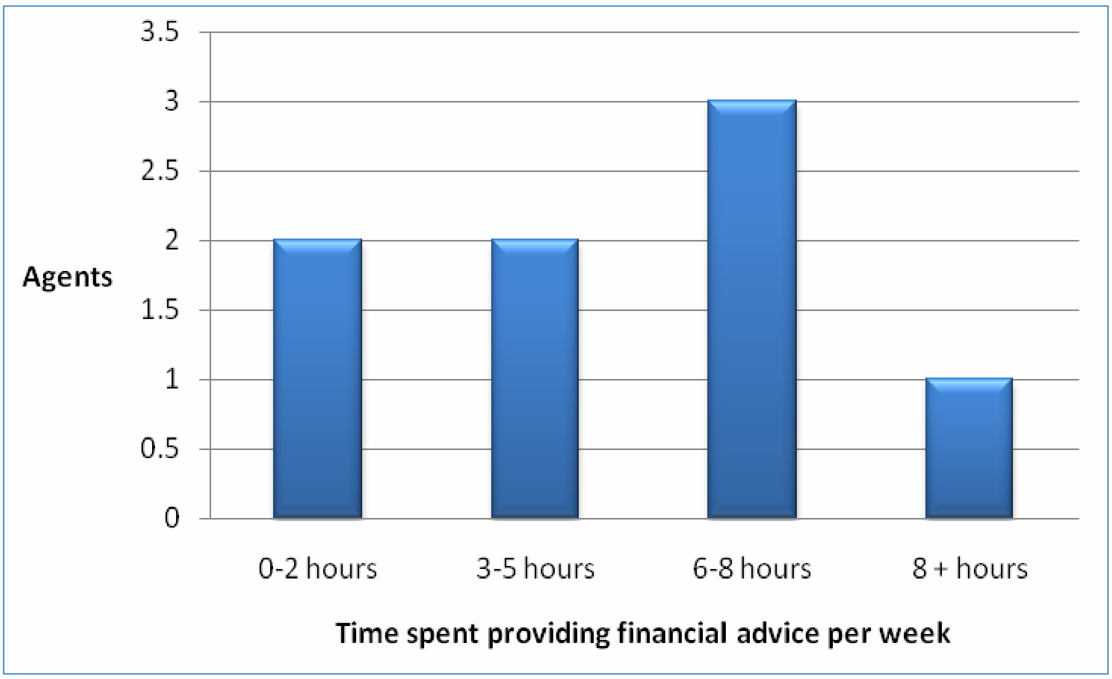
(14) The agents were imparting financial information to customers.

22 individuals who were coming into the agent shops were surveyed. 77% (17) responded that they aware that the MM agent could provide them with financial information. Most (55% or 12) found out from their agent, and a portion (23% or 5) were also informed by friends and family.

Awareness often resulted into action. 68% (15) of the respondents made clear that they asked the agent for financial advice. More specifically, the respondents noted that they had made enquiries regarding: saving in PostBank (55% or 12), storing cash in MM (41% or 9), managing their money better (18% or 4), and moving cash from their MM wallet to PostBank (18% or 4). 77% (17) of the respondents further made clear that the agent had time to answer their questions and that they were satisfied with the financial advice that they received.

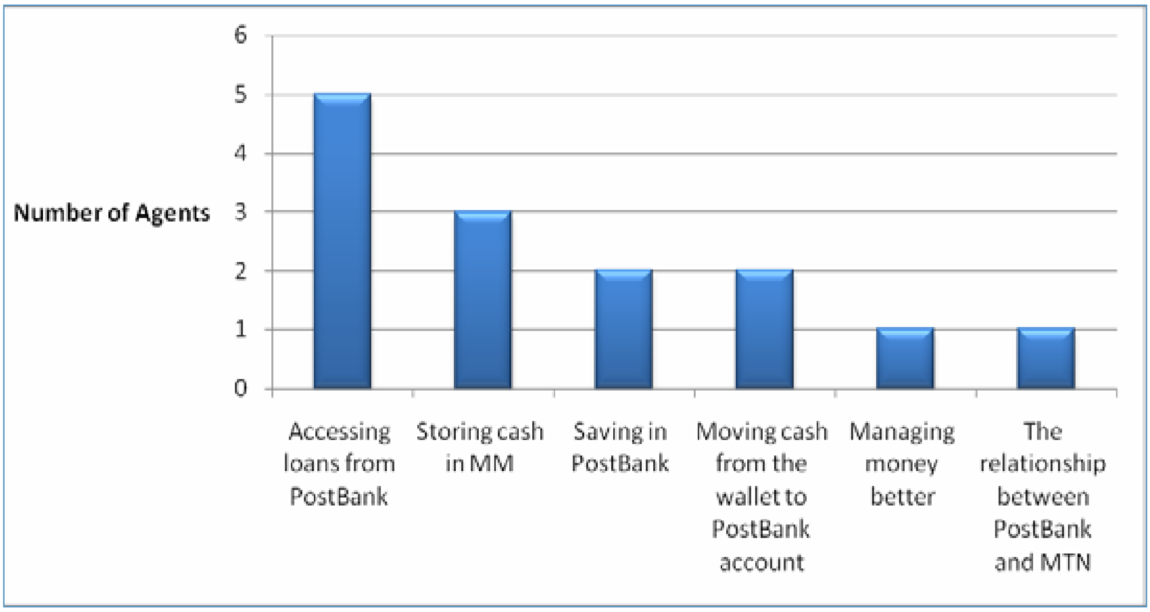
The agent surveys also revealed that customers were coming in for financial advice. Out of the 8 agents surveyed, the following responses were given in regards to how much time was spent providing advice on financial services per week:

Graph 13: Time spent by agents providing financial advice



When asked to identify the advice that was usually given to customers, and the shows the responses.

Graph 14: Advice given by agents



5.1 Expected and actual outcomes

The table below maps expected against actual pilot outcomes.

Table 9: Outcomes

EXPECTED OUTCOME	ACTUAL OUTCOME
At least 300 individuals (50 per agent at 6 site locations) will take part in the FinLit awareness training workshops conducted by the agents.	*Met.* A total of 629 individual (75 per agent at the 8 sites) took part in the FinLit awareness workshops. This outcome was met because the financial extension workers as well as the footsoldiers worked to mobilise community members to attend workshops.
At least 90 individuals (15 per agent at 6 site locations) will be enrolled for the savings reminder SMS. 50% of those enrolled will make regular deposits, complete the program and meet their short term savings goals.	*Not met.* 51 individuals (5 per agent at 8 sites) enrolled for savings reminder SMS. 31 of out 51 actually received the reminders, and 17 out 31 made regular deposits. None completed their savings program because the programs were long term, but all people who signed up were making regular deposits. The number of people who signed for savings SMS reminders was below the expected because agents were often busy with other business in their shops.

Agents will refer over 150 customers to PostBank. At least 60 PostBank accounts (10 per agent at 6 site locations) will be opened immediately after the financial literacy awareness training workshop. Another 90 PostBank accounts will be opened during the remainder of the pilot (2 per agent per week at 6 site locations over 7-8 weeks).	*Met.* 300 accounts opened by agents. Agents opened 140 in the first 4 weeks after the financial literacy training and another 160 accounts were opened in the remaining time (average of 5 accounts opened per agent per week). The different interventions such as the agent launch, community training and recruitment of intermediaries undertaken during the pilot helped to achieve this outcome.
60% of those involved in the savings reminder SMS will respond that the reminders helped them to structure and organize their savings.	*Met.* 17 SMS reminder customer were interviewed and 15 (88%) noted that it was useful to structure their savings because they were able to put money away regularly and this was a good step towards achieving their savings targets.
60% of participants will respond that their access to banking services has been improved as a result of the intervention.	*Not met.* Only 41% of respondents noted that the intervention improved their access to banking services. The time was too short to correctly assess this outcome as improvement in access to financial services may take a long time to be realized.
50% of those using MM for storage will also open a PostBank account.	*Not Met.* Only 1 out of 14 people interviewed who used MM for storage opened a PostBank account. This is because people found MM more affordable than the bank. In addition some people were using MM to store money for emergencies such as sickness or death; and they explained that keeping money in the bank would make it difficult for them to access it if they needed it urgently.
70% of those who have a MM wallet and PostBank account will transfer their money from wallet to account at least once during the pilot period.	*Not met.* The value proposition was not understood by customers. 51 PostBank and MM customers were interviewed and only 23 (41%) transferred money from MM wallet to account at least once during the pilot period.
30% of participants will answer that they have increase their savings balances because of the ease of access, and FinLit training, received as a result of the intervention.	*Difficult to measure.* 77% of customers noted that their savings had increased a little, that is, put away money more than once as a result of the savings reminder SMS.
Agents will note an increase of at least 30% on their transaction volumes as a result of the intervention.	*Met.* 7 out of 8 agents interviewed indicated that their revenues have gone up during the pilot. MM deposits increased (as potential customers started to store their money in the MM wallet).

6. Recommendations

The pilot learnings presented have led the FinLit team to recommend the following:

(1) A portion of the under-served market in Uganda can be tapped if individuals are provided with financial services that are appropriate (fit into their existing savings habits and meet their needs and interests), affordable (suitable for erratic income inflows) and accessible (available locally).

(2) Financial service providers (FSPs) can capture a large segment of the under-served market by partnering with, and thinking like, mobile operators. More specifically: using technology and local intermediaries to increase scale, making their products more suitable to the erratic income inflows of low-income individuals, offering customers a range of products that are suitable to their cash flows, and focusing on high transaction volumes and low transaction costs. Such an arrangement would require several changes from both the FSP and MO's end.

Based on these conclusions, the following recommendations are being made:

(1) Introduce a new class of local intermediaries to make the referrals

FSPs and mobile operators hoping to tap the lower end, and rural, segment of the market should consider using local intermediaries to make sign up new customers. As was shown in the pilot, such intermediaries exploited their local networks to sign up customers.

Local women should be recruited and trained as intermediaries to raise the proportion of females making use of formal financial services.

The agents would have a role in selecting the intermediaries to ensure that a trusted community member was put into this role. The number of female intermediaries could also be increased to raise the number of women who sign up for financial products. There would have to be a clear demarcation of territory for such an arrangement to be successful. The agent would be responsible for all referrals that occur in the shop. The intermediary would serve the wider community. Such an arrangement would allow both to gain commissions from the referrals.

Intermediaries would have to undergo an intensive training program to ensure that they are communicating the right information to customers. As mentioned above, a portion of customers opened up the wrong account whilst others were not aware of the charges associated with the account they held.

The commission structure also has to be designed to motivate the intermediaries to sign up new customers. In this case, a structure that provided a higher commission for each customer signed up seemed to work best. Such a cost should be split between the mobile operator and FSP as they both benefit from getting customers onto the system — the FSP by increasing their deposit base and the mobile operator by raising the number of transactions that pass through their system.

(2) Making use of technology and branding to facilitate other banking processes at the agent's shop

The FinLit model still required PostBank agents to visit the sites with the van to finalize the opening up of accounts. However, additional testing should examine how all of these processes could be conducted with little or no presence of banking personnel. More specifically, technologies can be used to facilitate the following:

- The agent could input all information needed to open an account into a smart phone. That information would then be sent to the bank for verification and storage. This would eliminate the paper form altogether and would make it easier for banks to penetrate areas in which they have little or no presence without too much extra cost.

- A photograph of the customer and their ID could also be taken via the phone and sent to the bank branch. As mentioned above, it was difficult and sometimes expensive for customers to get passport photos and copy their ID within their village. Many chose to avoid these processes and not open an account.

Banks should cover the cost of these smart phones, and all the testing needed to develop this model. Although this would require some initial investment, it could radically facilitate expansion to the lower-end segment of the market. It could also radically cut costs and thus lead to higher profit margins on small value accounts.

If the agent is to facilitate remote banking processes then the relationship between the bank and mobile operator must be made clear. The agent shops should thus have bank branding clearly displayed. This could increase trust relations especially with those customers who noted that they wanted to see the presence of a physical branch before transacting.

(3) Introducing products that are more appropriate for the low-income segment

The pilot made clear that it is not just about *accessibility* but also *appropriateness*. The poor need products that they understand and that meet their specific needs. As such, the following should be considered:

- **Pricing:** FSPs should consider modelling their pricing scheme after MM. More specifically, customers should not be charged ledger and maintenance fees. Instead, they should be charged only per transaction made. Deposits should also be

Products have to be more appropriate for poor customers.

free to encourage customers to put cash into the system. The monthly fees should be eradicated so that they do not eat up the smaller balances of the low-income segment. Most importantly, as is done with MM, FSP charges have to be clearly displayed within the agent shop so that the customer knows where their money is going.

- **Interest:** If FSPs want to beat out the mattress and other informal methods of savings as the most appropriate solution for value storage, interest should be offered on low balances. This would provide a clear incentive for poor customers to move cash into formal savings mechanisms. As the empirical findings showed, there is lots of cash currently stored in informal methods. Such mobilization would increase the average balances of customers, and increase the margin on the bank's float. This is vitally important for the bank to remain profitable as the costs of serving poor customers are often high.

Products should be designed to fit into existing savings practices.

- **Existing savings habits:** Monitoring existing savings habits, and designing products that fit into these habits, would also increase the uptake and usage of banking products amongst poor customers. The findings revealed two types of savings behavior. In some cases, customers "saved up" by depositing cash into MM and building a balance. In others, they "saved down" by keeping money on the account after a transfer was made and making withdrawals until the amount was depleted.

Savings products that are appropriate for those customers who "save down" should be considered. More specifically, a small portion of cash could be funnelled into a formal account every time that it hits the wallet. Such a transfer would be made without the customer making any additional transactions. The customer could opt in to this type of program using their mobile phone. They could also set limits on how much would be transferred. It takes much less time and effort for customers to save down.

By designing a product that fits into this usage, the mobile operator can increase the number of transactions going through their system whilst the bank can increase their deposit base.

- **Reminders:** Allowing customers to opt into a reminders program via their mobile phone can also increase activity on the account. This would suit those customers who are saving up towards a particular target. Cash could also be automatically funnelled to a formal account after a certain balance is reached.

- **Promotional SMS:** The MO's database can also be mined, keeping privacy concerns and policies in mind, to identify which customers are keeping higher balances on their wallets. These customers can then be sent an SMS that explains the benefits of formal savings. The SMS would also encourage the customer to visit their MM agent to open up a bank account, and thereafter shift their cash from wallet to account.

- **Setting voluntary limits on the availability of cash:** The findings made clear that customers wanted a financial service that was within reach (accessible).

Some also wanted to put controls on their ability to withdraw the savings (available) to avoid depletion. Allowing customers to opt into a program that makes it more difficult for them to access their cash—either by setting limits on the days or the amounts that can be withdrawn—should also be considered.

- **Access to other products:** As was mentioned previously, numerous customers preferred the transaction to savings accounts because it provided the possibility of accessing loans in the future. Banks should consider using all of their accounts as a gateway to other products—from loans to insurance. They should also allow for customers to apply for these loans via SMS, as is done with M-Kesho and Iko Pesa and consider bundling services.

- **Building a credit history through MM:** Many of the customers who signed up for PostBank had little, or no, engagement with formal financial services in the past. MOs should consider using the MM transaction history to create credit scores for customers. Such information could then be sold to FSPs who are looking for new ways to assess the default risk of potential clients or for customers who may not have collateral for their loans. Such a product may be especially suitable for women who have steady income inflows but do not own any assets to back the loans.

- **Products for women:** MTN should consider designing a "virtual account" to increase the number of female account holders. This would allow an individual to register with MM even if they do not have their own SIM.

Instead, they would be provided with a number, which they could use to "turn on" or "turn off" their account using a handset at the MM agent. Such an arrangement would make the account invisible. The women who accumulate a higher amount of cash could also transfer their savings to PostBank to gain interest after accumulating a higher amount.

(4) Integrating the e-link

The pilot saw rapid uptake of the electronic link, with nearly 10% of new customers using this method for depositing in the month that it was running. Such adoption happened with only word of mouth advertising of the service. A more aggressive marketing campaign, that makes clear the relationship between PostBank and MTN, would increase the transactions going through the system. The integration of the withdrawal functionality would do the same.

Banks and MOs have several options for making this link. The existing "pay bill" functionality could be used to facilitate push and pull transactions between the wallet and bank. Although one of the cheapest alternatives, this is also tedious for the customer who has to enter a long series of numbers (billing code) to make the transaction. The other option is to link the two accounts automatically, as is done with M-Kesho and Iko Pesa. This allows the bank menu to be automatically loaded on the phone and each FSP has automatic dropdowns of menu options for the customer. Although this option requires more negotiation between the mobile operator and banks, and is also costlier, it facilitates the delivery of a much broader range of financial services (insurance etc.).

MTN should consider the following changes before introducing the e-link:

- **Lowering minimum deposit amount:** Many e-link users expressed that they wanted to lower the minimum fee that could be deposited into the account. Having a deposit amount as low as 1000 Ugx (US$ 0.42) could increase the frequency of these deposits.

- **Lowering the transaction fee for deposits:** Many customers noted that the 800 Ugx (US$ 0.34) transaction fee for depositing cash into the bank was too high. If such a fee was cut in half, customers could increase the number of transactions going through the system. The bank could also subsidize the send money to bank fee, either partially or fully, to increase their savings reserves.

  MTN could also tier the pricing structure for money sent to the bank. Customers were charged 800 Ugx (US$ 0.34) for transferring deposits ranging from 5,000 Ugx (US$ 2) - 1,000,000 Ugx (US$ 424). Such a range should be lowered for deposits less than 50,000 Ugx (US$ 21). More specifically, a tiered pricing structure could be introduced that sets the transaction cost low enough to encourage high frequency transactions but at a rate that will make such transactions profitable for both the agent and MTN in the future.

- **Integrating numerous banks on the platform:** For MTN to profit from a high volume of low value transactions, the number of banking partners needs to be increased. Intermediaries would also benefit from such an arrangement as their number of referrals would go up. However, they would need to constantly undergo retraining. The referral commissions would also be kept the same as to not encourage the sale of one FSP account over another.

MTN needs to increase the number of banking partners to benefit from high volume and low value transactions.

Such an arrangement would be good for low-income customers. FSPs in Uganda would have to become more competitive if they were offering their services from one central hub. This may lead to the introduction of products that are more appropriate for this segment. A word of caution—regulators would have be made aware of the testing and potential roll-out. As mentioned, MM is not yet regulated in Uganda.

(5) Finding ways to reward the dissemination of financial information

The DSTs and agents received training on a wide range of financial literacy topics, from managing of finances to opening up a bank account. However, they spent more time disseminating the information that would lead to the opening of an account to receive a commission. This means that a large portion of their knowledge was not imparted to the customers.

For financial literacy strategies to be sustainable, the dissemination of financial information must be rewarded.

Finding ways to reward the dissemination of the other literacy content is thus vitally important. For example, intermediaries could receive an airtime reward each time that a customer completes the savings reminder SMS program. This would ensure that they were making clear the benefits of structured savings to community members.

A more targeted financial literacy strategy should also be considered. As was mentioned previously, the majority of accounts opened were by men. Cultivating messages that resonate well with women and leading them to loan and savings products that are appropriate for their financial lives (virtual wallets, MM credit history) is thus vitally important.

(6) Ensure sustainability by designing a model that benefits all stakeholders

All key stakeholders involved must see some type of value-add in the FinLit model if it is to be scaled and to remain sustainable. The table below provides a short summary of benefits by stakeholder class:

Table 10: Benefits to all players

STAKEHOLDER	VALUE-ADD
User	• Cost of information gathering (about banking products) lowered. • Cost to access banking services decreased (i.e. travel and time). • Ability to access other banking products, from a variety of institutions, in the future (loans, insurance).
Regulator	• Increased presence of financial institutions, especially in rural areas. • Ability to capture and measure cash flows of constituents.
FSP	• Decrease in per transaction and customer acquisition costs. • Ability to use wide agent network to deliver products and product information. • Increased float levels by pulling small value deposits from large customer base.

Mobile operator	• Increase in transaction volumes, and thus revenues, as more savers added on to the system. • Increase in transaction revenues as existing user base funnels portion of 1 billion Ugx float into bank account. • Growth in agent network as MM becomes more attractive business due to higher transaction volumes. • Increase in banking partners and banking products on the MM system. • Increase in ARPU.
Local intermediary (footsoldier, agent)	• Increased revenues due to higher transaction volumes and referral commissions. • Decreased costs of cash/e-float reconciliation due to increased number of deposits.

It is vital that the mobile operator recognize these benefits as they will have to mobilize partners onto the platform, and introduce a new class of agents. MTN has the opportunity to capture up to 18% of the banked population who are already transacting with formal institutions. But the real opportunity is in the unbanked segment, where billions of shillings are held underneath mattresses and in locked boxes. Mobilizing even a portion of this amount could radically increase MM's transaction volumes as customers move cash between the wallet and bank account. For example, if MTN manages to capture 50,000 new savings customers in the first year, and 70% (35,000) of these customers make at least two transfer from wallet to bank (at current 800 Ugx transaction fee) then they will add 56 million Ugx (app. $24,000) to MTN's revenues.

Because of regulatory stipulations, MTN cannot earn interest on the 1 billion Ugx float they hold. If customers have the option of pushing cash into formal savings, instead of holding it on the wallet, the aggregate amount of float will decrease whilst the transaction volumes go up. MTN will make revenues off the decreasing float as cash will be moved through the system instead of sitting in the account.

7. Conclusion

Access to financial services in Uganda can be enhanced if the right partnerships are formed and if local intermediaries are used to reduce outreach costs for FSPs and to bring financial products closer to poor customers. But any accessibility strategy must also consider the information needs of poor customers, many of whom have had little interaction with formal services in the past. Strategies must also ensure that the poor are reached with products that they view as affordable and appropriate. Only when all of these elements are in place can the bank begin to beat out the mattress as a savings mechanism.

References

AMFIU Report (2010), From Consumer Education to Transparency in Microfinance:The Ugandan experience.

Brune, L., Gine, X., and Yong, D., (2010), Committement to Save: Fieldwork in Malawi

Cheng, J., Wong, S.H.Y., Yang, H., and Lu, S., (2007), SmartSiren: virus detection and alert for smartphones. Published in MobiSys '07 Proceedings of the 5th international conference on Mobile systems, applications and services.

Cook, T. (2010), The Challenging Economics of Small-Balance Accounts: The Financial Service Providers Perspective. Global savings Forum Report.

Collins, D., Morduch, J., Rutherfold, S., and Ruthven, O., (2009), Portfolios of the Poor (Princeton: Princeton University Press).

Duflo, E., Kremer, M., and Robinson, J., (2004), Understanding Technology Adoption: Fertilizer in Western Kenya Preliminary Results from Field Experiments," MIT, Harvard University, and Princeton University.

Dupas, J., and Robinson, J., (2009), Savings Constraints and Micro-enterprise Development: Evidence from a Field Experiment in Kenya". NBER Working Paper No. W14693.

FinScope Uganda, (2010), National Survey on Access to Financial Services in Uganda (Produced by Synovate Uganda).

Gray, B., Sebstrad, J., Cohen, M., and Stack, K., (2009), Can Financial Education Change Behavior? Lessons from Bolivia and SriLanka. Global Financial Education Program's Financial Education Outcome Assessment.

Ministry of Finance and Economic Planning and Development, (2009), Uganda Background to the Budget Report.

Sebstrad, J., and Cohen, M., (2003), Financial Education for the Poor. Microfinance Opportunities.

Appendices

Appendix 1: Schedule for pilot activities

DATE	ACTIVITY	DESCRIPTION	OUTPUTS
March15-June 1st	Desk research and literature review	-Literature on financial literacy and financial inclusion in Uganda reviewed -Interviews conducted with 31 stakeholders who have been involved in the financial literacy efforts in Uganda	-Background report -Weekly updates
June 1-July 15	Customer needs assessment	-Informal interviews with 72 informants and 16 focus groups conducted	- Needs assessment report - Weekly updates
July 15-September 6	Preparation for pilot	- Site for pilot identified - All activities related to pilot set-up conducted - Pilot plan written up	-Pilot Brief - Weekly updates -Stakeholder's workshop
September 6-November 26	Pilot	- Pilot launched in 8 sites - Pilot activities and findings monitored - Pilot model altered in accordance to customer feedback - Pilot wrap-up	- Bi-weekly updates
November 26-December 15	Dissemination of findings	- Pilot report written up - Findings shared with stakeholders and partners	- Final pilot report

Appendix 2: Stakeholder's interviewed during the exploration of Ugandan Financial Sector

1	Association Of Microfinance Finance Institutions Of Uganda (AMFIU)
2	Bank of Uganda
3	Barclays Bank Uganda
4	DED
5	Finca Uganda
6	Financial Literacy Foundation
7	Innovation for Poverty Action
8	Investor's Club
9	Mediae
10	Micro Finance Support Centre Limited
11	Ministry of Finance, Economic Planning and Development
12	MTN Mobile Money Uganda
13	Pride Microfinance Limited
14	Private Education Development Network (PEDN)
15	Post bank Uganda
16	Stanbic Bank
17	Uganda Cooperative Savings Credit Union (UCSCU)
18	Uganda Cooperative Alliance
19	Uganda Institute of Bankers
20	Uganda Insurers Commission

Appendix 3: Financial literacy initatives undertaken

ORGANIZATION	NAME OF INITIATIVE UNDERTAKEN	DESCRIPTION OF INITIATIVE UNDERTAKEN
AMFIU	Consumer education programme	This initiative focuses on giving consumers necessary knowledge about their rights, obligations and choices so that they can negotiate with financial institutions for appropriate services for their needs in an atmosphere of trust.
IPA , FINCA AND STRAIGHT TALK FOUNDATION	Youth Savings Programme	For this initiative, youths (10- 19years) are given basic financial literacy training and encouraged to take up particular savings products with the hope of producing "life-time savers." The curriculum is provided by GFEP.

FINCA, POPULATION COUNCIL AND PEDN	Star girl	This initiative is targeting out of school and teenage girls to open up special product of savings accounts for themselves and use them. The project is being piloted in selected Finca operation areas across the country.
FINCA AND IPA	Super savers	The objective of this project is to help develop a culture of savings amongst school children.
FINANCIAL LITERACY FOUNDATION AND INVESTORS CLUB	Financial Literacy Week Financial literacy clinics	This is an annual event that was started in 2009. It takes place around July –August, and during this week, different financial service providers get opportunity to showcase and educate the public about their products. The channels used to deliver information during this event include: seminars/ workshops, radio talk shows, drama shows, and commercial banks / MFI exhibiting their products at this event.

Appendix 4: Criteria for Evaluation and selection of FinLit Partners

Localness: (main points to consider are: Period of being in existence, Links with other local organizations, out-reach environment, that is, branch net work coverage for the case of FSPs)

- **High** = *Locally registered organization / financial institution and having strong links with other relevant local organizations / financial institutions; Organization has been in existence for a long (10 years above)*
- **Medium** = *locally registered organization / financial institution but has strong influence from donors or foreign organizations (not autonomous); organization is less than 5 years in existence (in Uganda)*
- **Low** = *Organization has just set up (in the last 2 yrs)*
Could be a branch of a foreign organization; it has no strong links with other relevant organizations.

Field coverage / Out Reach :(main points to consider are: Area of operation, possession of out-reach stations/branch net work, trained financial extension workers)

- **High** = *Should be operating in 10 districts and above*
Have stations or branches of their own they operate in the rural areas. Cover a number of rural areas (10 and above districts)

Have a person to person model, that is, financial extension workers to deliver financial information to the public.

- **Medium** = *have no stations / branches of their own but have partnerships with other organizations who have stations/branches. Also do outreach using other modes like radio.*
- **Low** = *Have no stations / branches, don't do out-reach by radio, but may be producing and generating content for other organizations.*

Quality Assurance: (main point: presence of health experts on the team, community outreach model, strong links with other relevant organizations)

- **High** = *presence of experts on the team to produce and support content; and trained personnel to use as a platform for the pilot. Has strong links with other relevant organization.*
- **Medium** = *have no experts on the team, but have partnership with someone who has the expertise and has suitable platform for a pilot.*
- **Low** = *have no expertise on the team. Has no strong links with other relevant organizations*

Experience and Reputation: (main points: Time period of existence in Uganda, evidence of success stories, affiliation/collaboration with international and national organizations, links with the ministry of finance or Bank of Uganda)

- **High** = *Must have been in existence for 10 years and above, Show evidence of 2 success stories of projects handled in the last 5 years, Strong links international and national reputable organization, Have strong links with Ministry of Finance or Bank of Uganda.*
- **Medium** = *Must have been in existence for not less than 5 years, Show evidence of one success story of project handled in the last 5 years, Strong links international and national reputable organization, Have strong links with Ministry of Finance or Bank of Uganda.*
- **Low** = *organization in existence, no strong success story, no solid links/affiliation with reputable international and national organization.*

Overall:

- *Consideration for the highest number of a particular kind of vote obtained e.g. So many Hs, so many Ms or Ls.*

	LOCALNESS OF ORGANISATION	FIELD COVERAGE/ OUT-REACH	QUALITY ASSURANCE	EXPERIENCE AND REPUTATION	OVER ALL	RANKING OF WINNERS
AMFIU	High	Medium	High	High	High	R3
DED	Medium	Medium	High	High	Medium/ High	R4
MTN Uganda	High	High	High	High	HIGH	R1
PostBank	High	High	High	High	HIGH	R2

Appendix 5: FinLit launch schedule at MM participating outlets

SITE	DATE FOR THE LAUNCH
Hima	September 6th, 2010
Kyegegwa	September 7th, 2010
Muhororo	September 8th, 2010
Kibiito	September 9th, 2010
Kagadi	September 15th, 2010
Katooke	September 17th, 2010
Kijura	September 18th, 2010
Kyarusozi	October 1st, 2010

Appendix 6: Community training schedule

LOCATION	DATE(S) OF COMMUNITY TRAINING	NUMBER OF TRAININGS
HIMA	2nd October 2010	4
KAGADI	10th October 2010	2
KIBIITO	1st October 2010 and 5th October 2010	5
MUHORRO	20th October 2010	2
KYEGEGWA	6th October 2010	1
KATOOKE	15th October 2010	1
KYARUSOZI	12th October	3
KIJURA	9th October 2010	5

Appendix 7: Agent training content

MODULE	DESCRIPTION
Introduction to FinLit	An introduction to the project and partners.
How does FinLit work?	Description of the savings process and commission structure for agents and handlers. Referral also clearly defined.
Introduction to Savings	Description of importance of savings and best practices.
Introduction to PostBank Products & Services	Lessons on PostBank products, account selling techniques and PostBank van schedule.
Introduction to Savings Plan & SMS Savings Reminder	How to make a savings plan with the customer and how savings SMS application works.
Introduction to Other Agent Operations	Overview of marketing strategy, customer care, and how business operations may change as a result of the pilot.

Appendix 8: Focus group meetings conducted during monitoring

LOCATION	NUMBER OF FOCUS GROUPS	NUMBER OF RESPONDENTS
KAGADI	1	2
KIBIITO	2	8
KIJURA	8	16
KYARUSOZI	1	4
KATOOKE	2	8
HIMA	2	6
MUHORRO	1	3
KYEGEGWA	2	5
TOTAL	19	52

Appendix 9: Surveys conducted during monitoring

LOCATION	POTENTIAL CUSTOMERS	CUSTOMERS WHO OPENED POSTBANK ACCOUNT
MUHORRO	12	7
HIMA	34	8
KAGADI	19	4
KIBIITO	24	7
KYEGEGWA	30	9
KIJURA	24	31
KATOOKE	24	7
KYARUSOZI	32	19
TOTAL	199	92

Appendix 10: PostBank mobile bank van

Post bank mobile van is a bank on wheels that moves to rural areas in Western Uganda to extend financial services to rural dwellers. This mobile bank van makes scheduled stops once every week at each of the FinLit pilot sites. When this van is in the village, people are able to perform balance checks, account transactions, payments and credit applications.

The mobile bank van has been operational in areas around Fort Portal for 8 years. In the areas where it operates, it has helped to grow the bank's customer base, and got many rural banked. Averagely, the van signs up 150 new accounts every month.

Below is the weekly schedule for this van in the pilot sites.

TIME	LOCATION
Monday 10 -11 am	Kibiito
Monday 1-5pm	Hima
Tuesday 1-5pm	Kyegegwa
Wednesday 10-11	Katooke
Wednesday 12-1pm	Muhororo
Wednesday 2-5pm	Kagadi
Thursday 1-5pm	Kijura
Friday 1-5pm	Kyarusozi

Appendix 11: Reason why customers were satisfied with weekly frequency of the van

- **Weekly savings behavior:** 8 informants structured their savings around the van schedule. They would accumulate money during the week and deposit the lump sum when the van came to the village. 1 respondent said (paraphrased) – *I can save small amounts every day. At the end of a week I will have enough to make a savings deposit at the van.*

- **Diversified financial portfolio:** 6 Respondents explained that they rarely keep all their money in once place. Therefore, in the event of an emergency wherein they would require money but the van is not due for a few days, they could still access these other resources and have some money on hand. Some even mentioned taking a short-term loan from family or friends in such an event, which they would return when the van came.

- **Temptation to withdraw:** 3 Respondents mentioned that they prefer the weekly service of the van because it made it more difficult to access the cash and thus lessened their temptation to withdraw. 1 respondent even recommended that the van come only once in a month. He said (paraphrased) – *I would be ok with the van coming even monthly. It would further reduce my temptation to withdraw.*

- **Distance:** 2 informants said that distance to the agent's shop was a reason for their preference of the weekly frequency. Although the informants lived only 1-7 km away from the shop, most explained that they were satisfied with the weekly visits as they would most likely not visit the agent shop more frequently.

- **Rigid timings:** 2 respondents mentioned that the rigid timings on a weekly basis helped them stick to schedule. If the van were to make a stop daily, the respondents said that they would be less disciplined in making deposits. They also explained that missing the van meant that they would have to wait an entire week before transacting. This made them more disciplined to transact regularly.