

INTERNATIONAL FINANCE CORPORATION

# Mobile Financial Services in Microfinance Institutions: Musoni in Kenya

Vanessa Vizcarra, John Irungu Ngahu, and Minakshi Ramji



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Eidgenössisches Departement für  
Wirtschaft, Bildung und Forschung WBF  
**Staatssekretariat für Wirtschaft SECO**





# Table of Contents

<b>Acknowledgements .....</b>	<b>v</b>
<b>Chapter 1: Introduction .....</b>	<b>1</b>
Financial infrastructure .....	1
<b>Chapter 2: Musoni BV .....</b>	<b>5</b>
Musoni Overview .....	5
Overview of MFI & MFS operations.....	5
Partnership management.....	8
Marketing and promotion.....	10
Risk management.....	12
IT platform .....	13
<i>How the system works.....</i>	<i>13</i>
<i>Staff training.....</i>	<i>14</i>
MFI operations and M-Money.....	14
<i>Loan application process.....</i>	<i>15</i>
<i>Group meetings .....</i>	<i>16</i>
<i>Operational details.....</i>	<i>18</i>
Financial and performance analysis .....	18
<i>Cost and development roadmap.....</i>	<i>18</i>
Benefits of the Musoni model.....	20
Lessons learned.....	22
<i>Technology-related.....</i>	<i>22</i>
<i>Client-related.....</i>	<i>22</i>
<i>Product-related.....</i>	<i>22</i>
<i>Partnership-related.....</i>	<i>22</i>
<i>Regulation-related.....</i>	<i>22</i>
<b>ANNEXE: Musoni Product Information.....</b>	<b>23</b>

## List of Tables

Table 1: Musoni Parameters Over Time .....	6
Table 2: M-PESA Tariffs.....	10
Table 3: Comparison between Musoni Groups and Traditional Groups .....	17

## List of Figures

Figure 1: Financial Access Strands by Year.....	2
Figure 2: Money Transfer Before and After M-PESA.....	2
Figure 3: Client Survey via Tablets.....	7
Figure 4: M-PESA Kiosk .....	7
Figure 5: Number of Transactions by Type .....	9
Figure 6: Value of Transactions by Type.....	9
Figure 7: Musoni Marketing Material.....	10
Figure 8: Musoni Wealth Creation Officers.....	12
Figure 9: Musoni tablet application for WCOs .....	14
Figure 10: Number of Borrowers Per WCO (Avg) Per Branch.....	15
Figure 11: Musoni Group Meeting.....	16
Figure 12: MFS Expenses as a part of Operating Costs.....	18
Figure 13: Relative Costs of M-PESA Network, and Physical Branches.....	19
Figure 14: Operational Expenses for Cashless branches and M-PESA Network .....	19
Figure 15: Musoni branches and M-PESA Agents .....	20
Figure 16: Number and Value of Musoni Transactions.....	20
Figure 17: Musoni Client Feedback.....	21
Figure 18: Musoni Client.....	21

# Acknowledgements

The authors acknowledge the contribution and input of the following staff of Musoni who provided relevant data and support required to conduct this study:

	<b>Name</b>	<b>Position</b>
1	James Onyutta	CEO
2	Cameron Goldie-Scot	CEO of Musoni Services
3	Stanley Munyao	Former Chief Operating Officer
4	James Owino	Chief financial Officer
5	Helene Osore	Business Development Officer
6	Charles Mutinda	IT Officer
7	Judy Ndungu	Chief HR Officer
8	Molcolm Odwa	Branch Manager Kitengela branch
9	Ernest Mbidha	Acting Chief Operating Officer



# Introduction

The technology is now available for microfinance institutions to leverage mobile phone coverage into a mobile financial service channel able to deliver services beyond the reach of traditional branches. Some MFIs have already tried to develop this opportunity, launching pilot projects and small-scale experiments across Asia, Africa, and Latin America. But though these initiatives exist, there is as yet no clear indication of whether MFIs can realize a robust and sustainable business model in providing services through the electronic/ mobile channel. What follows is a case study of one such MFI, Musoni in Kenya. It is part of a series of four aiming to shed light on specifically how MFIs can implement MFS channels to deliver sustainable profits and growth.

Musoni was selected for this study because it is the first microfinance institution (MFI) in the world with operations, including transactions that are entirely mobile-based. As mobile networks become more common globally, other MFIs may find it easier to emulate Musoni's example of starting as an all-mobile operation rather than going through the often disruptive and difficult process of moving from manual to mobile methodology. Musoni is based in Kenya and uses the M-PESA deposit and withdrawal services to disburse loans and collect customer repayments<sup>1</sup>.

## FINANCIAL INFRASTRUCTURE

The Central Bank of Kenya recognizes the role that financial inclusion plays in fighting poverty, and desires to promote the savings investment cycles that lead to economic development. Thus the regulator has undertaken several initiatives and reforms to boost financial inclusion through developing the appropriate financial infrastructure. This includes the licensing of deposit-taking microfinance institutions (DTMs) and credit reference bureaus (CRBs); promoting take up of mobile phone financial services and the agency banking model. Already these initiatives and reforms have led to notable improvements in the levels, reach and depth of access to financial services, especially among the lower echelons of the population. In fact the

### Kenya by numbers

Population: 42 million

Income level: Low income

Unbanked population; ~ 40%

Mobile banking penetration: 67%

---

<sup>1</sup> Musoni's website: <http://www.musoni.eu/>, accessed on September 10, 2013 and Sadana et al (2011). "Analysis of Financial Institutions Riding the M-PESA Rails" MicroSave Research

results, gauged by the numbers, are astounding: deposit accounts have grown tremendously.

Over the last two years, the central bank has issued regular anti-money laundering and counter-terrorist financing guidelines to financial institutions to further support and enhance implementation of the Proceeds of Crime and Anti-Money Laundering Act, 2009 (POCAMLA). On the microfinance front, the Microfinance Regulations and the Agency Guidelines require deposit-taking microfinance institutions and their agents to implement AML/CFT measures. In November 2011, parliament enacted the National Payments System Act. This legislation empowers CBK to oversee the national payments system. The goal is

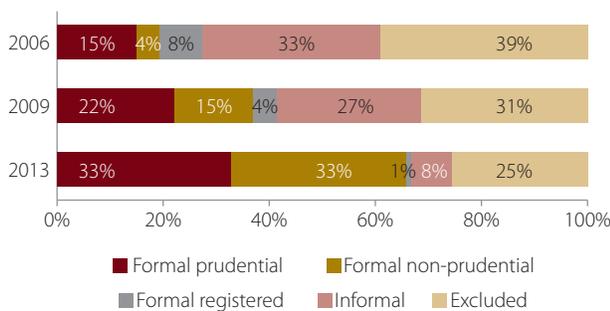
to bring all payment service providers, including mobile phone service providers offering money transfer services, within one regulatory framework. Going forward, the inclusion of these mobile phone service providers within the supervisory and regulatory scope of CBK will no doubt enhance the country's AML/CFT measures.

Kenya has a relatively well developed financial sector which comprises 43 commercial banks, one mortgage finance company, seven deposit-taking microfinance companies, 3,500 active savings and credit cooperatives (SACCOs), one postal savings bank (Kenya Post Office Savings Bank), 125 foreign exchange bureaus, a host of unlicensed lenders, and an association of microfinance institutions with 56 members. Despite the abundance of financial institutions, however, Kenya's financial sector is highly concentrated. Four financial institutions, Equity Bank, Cooperative Bank, Kenya Post Office Savings Bank and Kenya Commercial Bank, account for two-thirds of all bank accounts. These totaled 14 million by mid-2012. In the traditional microfinance sector, more than 70 percent of the market is made up of Kenya Women Finance, Faulu Kenya and Jamii Bora. There is also a high concentration of SACCOs, with 96 registered so far<sup>2</sup>. Deposit (savings) and credit (individual and group loan), insurance, money transfers, technical assistance and training make up the core set of products offered by MFIs. Some non-core products include insurance, pension, and bill payments. This latter function has become increasingly common with the advent of mobile money.

It is estimated that up to 67 percent of Kenyans now have access to formal financial services<sup>3</sup>. This has increased from 41 percent in 2009. Commercial bank penetration stood at 5.17 per 100,000 adults in 2011<sup>4</sup>.

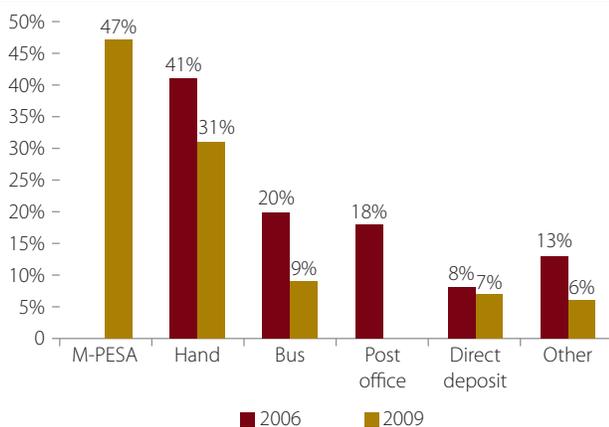
M-Pesa, the pioneering money transfer service, has had a significant role to play in this changing financial

**FIGURE 1: Financial Access Strands by Year**



Source: Financial Sector Deepening (Kenya, 2006, 2009, & 2013)

**FIGURE 2: Money Transfer Before and After M-PESA**



Source: Financial Sector Deepening (Kenya, 2006 & 2009)

<sup>2</sup> See, <http://saccoskenya.blogspot.com/2012/03/saccos-in-kenya.html>, accessed on June 19, 2014

<sup>3</sup> Financial Sector Deepening, Kenya (2013), accessed on June 19, 2014

<sup>4</sup> See <http://datatopics.worldbank.org/g20fidata/topic/branch-penetration>

services landscape. The FinAccess data shows the extent to which M-PESA transformed the way person to person (P2P) transfers take place in the country. Prior to M-Pesa informal transfer mechanisms, such as sending money through someone or through informal bus and matatu (taxi) companies, were the most popular methods. M-PESA's ubiquitous agent network and its promise of security led to a large scale take-up of the service to the point that today, "M-PESA me" is a commonly used phrase to

indicate P2P money transfers. Importantly, M-PESA agents far outnumber the number of bank branches, post office branches, and ATMs in Kenya<sup>5</sup>.

---

<sup>5</sup> Graphs are adapted from Mas, Ignacio and Daniel Radcliffe (2011), "Mobile Payments Go Viral: M-Pesa in Kenya", accessed on September 10, 2013



# Musoni BV

## MUSONI OVERVIEW

Musoni was founded in September 2009. By May 2010, Musoni Kenya had disbursed its first loan. It has four shareholders: Musoni Netherlands (the technology service provider), Grameen Foundation, KFW Bank, and MicroVest Capital Funds. Musoni defines itself as Hi-tech and Hi-Touch, and provides enhanced efficiency with an emphasis on customer satisfaction. The firm's bold aim is to take microfinance to the next generation.

Musoni's name is derived from "m-usoni". The "m" stands for mobile while "usoni" is the Swahili word for future. The organization uses the M-PESA deposit and withdrawal networks to make loan disbursements and to collect repayments from customers<sup>6</sup>. Typically, MFIs begin operations manually and over time, try to incorporate the mobile channel into their delivery methodology. What distinguishes, Musoni is that it commenced operations wholly built around the use of a mobile channel.

The idea grew out of a desire to improve the quality of financial services available to low-income households in Kenya. It was informed by the experience gained by members of the team working in mobile banking and microfinance in East Africa. Musoni's promoters found that many MFIs were spending over 8 hours per month per loan officer in order to collect loan repayments. Additionally, there was a lack of transparency in the information provided about loans, high real interest rates, plus extra repayment costs.

M-PESA, meanwhile, had made significant inroads in Kenya and was the obvious partner of choice for Musoni due its ubiquitous presence and market up-take. Moreover, Musoni's use of M-PESA may have contributed to their marketing growth. Initially, Musoni had been looking to sign a partnership agreement with another well-known MFI in Kenya. But the deal was dissolved when the MFI decided that the idea was disruptive for its business model. In Musoni's case, the team saw the opportunity to leverage new technologies available in the market in order to offer accessible financial services to more people more rapidly.

## OVERVIEW OF MFI & MFS OPERATIONS

Musoni operates in and around Nairobi through nine branches: Zimmerman, Gikomba, Thika, Naivasha, Muranga, Kariobangi, Kawangware, Kiambu, and Kitengela. The bank also has service points called satellite offices or mini-branches (called 'mashinani') in Nakuru, Donholm and Rongai. These mini-branches support expansion into rural areas while supporting the loan officer or wealth creation officers' (WCOs) work in allowing them to have a customer service point and connectivity when necessary. This also helps justify, Musoni's decision-making as to whether to

---

<sup>6</sup> Sadana et al (2011). "Analysis of Financial Institutions Riding the M-PESA Rails" MicroSave Research

**TABLE 1: Musoni Parameters Over Time**

Parameter	2010	2011	2012	Dec 2013
<b>Number of Branches</b>	2	3	5	5
<b>Loan Officers</b>	20	49	44	67
<b>Number of Loans</b>	4,117	3,985	7,883	11,056
<b>Total Amount of Loans</b>	KES 78,711,266	KES 87,213,433	KES 179,602,617	KES 240,064,887
	US\$ 899,044	US\$ 996,156	US\$ 2,051,429	US\$ 2,781,426
<b>Average Loan Size</b>	KES 19,119	KES 21,885	KES 22,784	KES 22,789
	US\$ 218	US\$ 250	US\$ 260	US\$ 264
<b>Number of Groups</b>	823	1189	1229	1,582
<b>Number of Active Clients</b>	4,068	3,979	7,880	10,534
<b>Number of Clients</b>	8,159	12,033	12,455	14,519

Source: Musoni Internal Data.

open a branch in those locations or not. The average cost of opening a branch is approximately three million KES (\$43,000). Branches are set up as a main point of contact for clients and Musoni's field personnel, but they do not conduct any cash activity. All Musoni branches are already paperless.

Musoni has 16,229 registered clients of whom 12,059 (as of July 2014) are active. The majority (62 percent) of the total number of active clients are women. Beyond this, the bank has a base of inactive clients (35 percent). The reasons for this inactivity can be attributed to a few different factors:

- The limits for disbursements using the M-PESA platform as approved by the central bank are 140,000 Kenyan shillings / \$1,647)
- The limited number of loan products offered and the frequency of group meetings (weekly);
- A number of new clients are still in a countdown period<sup>7</sup>. If after three months a client does not pass to the next level (converting into a Musoni client), they are qualified as a dormant client. Of a total of 4,004 inactive clients, 82 percent (3,283) are dormant. The balance is in the countdown period.

Musoni targets entrepreneurs between the ages of 18 and 35 needing finance for their small businesses. In the beginning the MFI targeted urban and semi-urban

clients, because doing so would allow it to expand quickly and reach a break-even point as soon as possible. More recently, however, Musoni has moved on plans to expand into semi-rural/ underserved areas, where clients can access the benefits of Musoni's much-needed financial products using mobile payment technology. Musoni primarily serves the commercial service sectors in urban centres (>80 percent of its clientele).

Musoni plans included adding two more branches by year end 2013. All Musoni clients have a mobile phone and subscribe to the M-PESA service, which is a prerequisite for obtaining a loan. In 2013, Musoni's business grew to 240 million KES (around \$2.8 million), while its portfolio at risk stood at 3.0 percent<sup>8</sup>.

For regulatory reasons, as an MFI Musoni is only able to offer credit products. From the beginning, the bank has offered three loan products to their clients, with a fourth launched in the second quarter of 2013. These are:

- **Nawiri Loan:** The Nawiri loan is an entry level business loan for small entrepreneurs. It is intended solely for business purposes. All Musoni clients start with this loan and graduate to bigger loans over time based on

<sup>7</sup> Countdown period: four weeks after client registration during which clients cannot obtain a loan

<sup>8</sup> Musoni quarterly report 2013 available at <http://www.musoni.eu/index.php/24-april-2013-musoni-quarterly-report-1stquarter>

their repayment history. With each succeeding year, the Nawiri customer gets a one percent interest rate reduction. Ninety-seven percent of loans in Musoni's portfolio are Nawiri loans.

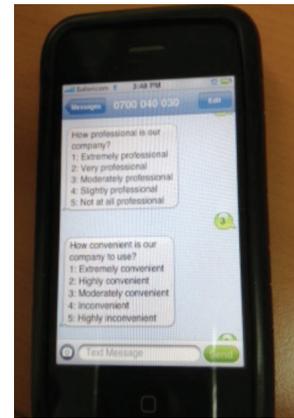
- **Stawi Loan:** This loan is on offer to those clients who have successfully completed a few loan cycles with Nawiri. Stawi customers get bigger loans at a slightly decreased interest rate.
- **School fees loan:** This loan was introduced in early 2013 to mitigate the risk that business loans would be diverted towards school fees. It can be structured in different ways to provide flexibility around when the fees need to be paid, whether once a term or annually.
- **Wepesi loan:** Wepesi makes provision for the emergency needs of customers, which can be business-related or otherwise. Although discussed at the time the bank was launched, it was put on hold while Musoni consolidated a high quality portfolio and its customers built up a credit history. This type of loan can be approved on the same day as the application for it is made.

Detailed information about Musoni's products can be found in Annex 1.

Musoni's product design is based on continuous market research. Specifically, the principles underlying product design, services, and branch locations were derived from conversations with potential clients—urban and semi-urban micro-entrepreneurs. So far, this research has been qualitative and quantitative in nature, and is detailed. For example, Musoni notes that research participants were asked to rank product attributes, such as a quick and simple loan application process, pre-loan training, a low interest rate, a grace period, and other attributes, according to their preferences.

The feedback mechanism included revealed strong demand for non-business related loans, for purposes such as payment of school fees, covering emergencies and other items. Ultimately, Musoni decided to launch these products because it was found that productive loans were being diverted towards non-productive uses; and that this proved beyond the organization's control.

**FIGURE 3: Client Survey via Tablets**



Going forward, Musoni plans to launch several new products to meet more varied client needs. As for credit products, Musoni is working to expand the number of these in introducing agricultural and individual loans.

Three typical messages have emerged from the market research Musoni has conducted thus far. Firstly, clients value convenience and flexibility of access. In other words, they wish to access the product easily so that it fits with their work schedules and locations. They also understandably want price transparency and reliability. Finally, they have expressed the desire to acquire greater financial literacy in order to manage their money better.

**FIGURE 4: M-PESA Kiosk**



This extant market research is directly complemented through the use of market research tools. Much emphasis is placed on integrating WCOs in product design, testing and launches. Due to their extensive interactions with customers, they are best placed to define customer needs for new products and recommend enhancements to those presently on offer. The firm's WCOs have begun sharing this information with customers, both to seek their input and to prepare them to take advantage of new services when they are launched.

In addition to conducting market research, Musoni also conducts regular client satisfaction surveys to understand the reasons underlying retention rates, and client likes and dislikes. The bank proactively solicits this feedback from clients on a regular basis. Moreover, in sync with the Musoni mobile concept, this feedback is obtained through questionnaires sent via SMS. This survey method shows how mobile technologies can be leveraged to continuously engage clients on product design, enhancements and evaluations. This is not only affordable. It also ensures that they feel valued by their financial institution. The research data demonstrates the bank's ability to reach a large number of clients for low cost research: Musoni's expenditure for its client satisfaction inquiries was \$635 per survey, with an overall response of 700 client answers (from 1,000 clients solicited) with an average number of five questions per survey.

Musoni is also in the process of developing a credit scoring tool which will help wealth creation officers (also known as loan officers) assess the repayment capacity of potential clients. The goal is to ensure a high quality portfolio, but likewise prevent clients taking on too heavy a debt burden. To help this effort, Musoni plans to partner with the Association for Microfinance Institutions, the sector-wide body through which MFIs can exchange information on clients. The plan is to develop a credit scoring system.

Results from regular social performance management audits are also vital inputs for Musoni's decision-making process. Specifically the organization aims to develop and implement a 'Progress Out of Poverty' Index (PPI) tool to verify client poverty levels. Questionnaires to verify PPI scores are administered on tablets. Musoni's goal is to collect and analyze data to get a better understanding of the

nature of clients' financial lives as well as to gather other developmental data which will enable Musoni to better respond to their needs. It will also make it possible to assess the developmental impact Musoni products and services are having on these people's lives.

When new products are launched, WCOs take responsibility for educating existing and new customers alike of the features and prices. This happens during group meetings and at specially organized workshops in the different zones. Such training involves reviewing product features, as well as studying a step by step guide on service operations. And pamphlets are provided as refreshers. The (formal) learning process is continuous and takes place in the context of group meetings. Importantly, since most of Musoni's customers exist in groups, there's a lot of peer-to-peer support and learning that continues long after the scheduled meetings; so users can also rely on fellow group members for assistance and if all else fails, they have direct access to their WCOs.

Musoni has shown strong growth over time. They have successfully developed five branches and their client roster is increasing steadily. From the first to second quarters of this year, average growth in this area has been around 9.5 percent. The average loan size has also increased slightly, indicating that Musoni has repeat clients who are able to avail of bigger loans. Critically, at an operational level, they have been able to keep the time interval between loan application and loan disbursement to a maximum of 72 hours, which is much appreciated by their clients.

## PARTNERSHIP MANAGEMENT

Musoni partners with M-PESA in providing cashless operations to its clients, via M-PESA's Pay Bill feature<sup>9</sup>. From the beginning, this partnership has shaped up as a success story on both sides resulting from a shared vision of the future. According to Musoni, at the time the agreement was originally struck, back in 2008, M-PESA was still early on in

<sup>9</sup> Pay Bill feature allows merchants (such as Musoni) to accept payments from customers through M-PESA.

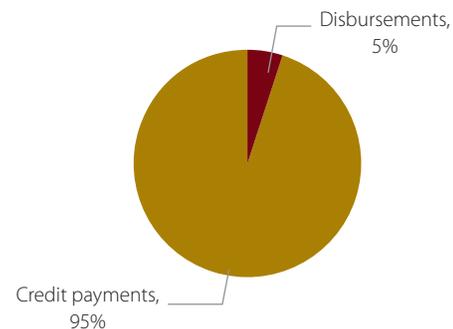
its growth process (with 2,329 agents); its team was young and eager to take new partners on board as a means to increase its revenue stream. Besides, the M-PESA service had been founded with the idea of working cooperatively with microfinance institutions. As a result, Musoni was able to negotiate a deal with M-PESA which included the use of their network for payments-per-transaction. In other words, the advantage Musoni gained from M-PESA optimized the product proposition for all concerned, clients included.

Over the years, M-PESA has proved to be one of the more enduring examples of a sustainable mobile payment service in the world. As of 2013, M-PESA serves about 63 percent of all Kenyan adults. It does this through its vast network of close to 80,000 agents<sup>10</sup>. These services enable customers to conduct an array of transactions including: deposits, withdrawals, bill payments, mobile airtime purchases, and money transfers<sup>11</sup>. With this ubiquitous presence—and its popularity with customers—other institutions have seen the advantage of partnering with M-PESA in offering their service menus. These partnering institutions are diverse, including banks, schools, petrol stations, utility companies, charities, and government agencies. What they have in common is using M-PESA.

For Musoni specifically, using the M-PESA platform enables them to offer timely loan disbursements and repayments, enhanced to include collateral payments as of July 2013. Overall transaction distribution (based on 2012 data) is as follows:

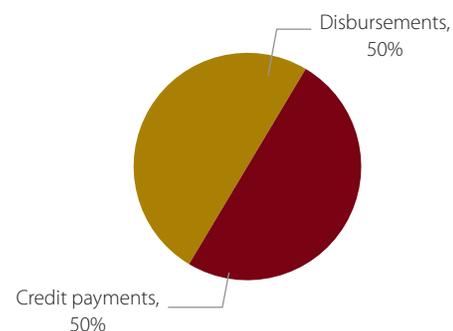
M-PESA charges Musoni based on transaction volumes. However, due to the low value of repayments that borrowers have to make, the cost of sending the money using M-PESA can be expensive. For example, if a borrower wishes to make a payment of 120 KES (\$1.4), they would pay a transaction fee of 27 KES or 30 cents, which is about 23% of the payments. Musoni is presently evaluating these cost implications, particularly for the borrowers, and has held discussions with M-PESA on providing cheaper (bulk) SMS prices. The risk of being perceived by the market as a very expensive solution for loan repayments makes it difficult for them to market themselves as a low cost bank for the poor. Rates offered to Musoni and its clients are as follows:

**FIGURE 5: Number of Transactions by Type**



Source: Musoni Internal Data.

**FIGURE 6: Value of Transactions by Type**



Source: Musoni Internal Data.

At the beginning of 2013, M-PESA increased its rates by 35 percent. As a consequence, transactions in the lower bands (equivalent to Musoni loan repayments amounts) became significantly more expensive. When visiting client groups, an expressed concern about Musoni's business model was related to transaction costs. An internal analysis in February 2013 found about 88 percent of their clientele is between the second and third tier (meaning making repayments between \$1.18–11.75 and \$11.76–29.40). Thus the price impact on clients could be as much as 20 percent of the total amount of loan payment. Of note, clients in the

<sup>10</sup> <http://www.safaricom.co.ke/blog/2014/01/27/whats-given-safaricom-m-pesa-the-midas-touch/>, accessed on August 15, 2014

<sup>11</sup> Safaricom Ltd FY 2013 results presentation, accessed on July 7, 2013

**TABLE 2: M-PESA Tariffs**

	Tx Volume (U\$)		Cost of Tx (U\$)		Tx Increase
	Min	Max	Client	Musoni	Client
<b>Charge Band</b>	0.59	1.16	0.12		
	1.18	11.75	0.24		0.32
	11.76	29.40	0.24	0.12	
	29.41	58.81	0.24	0.35	
	58.82	117.64	0.24	0.65	
	117.65	235.28	0.35	0.82	35% tx increase for client
	235.29	411.75	0.35	1.41	
	411.76	588.22	0.47	1.65	
	588.24	823.53	0.59	1.76	

Source: Musoni.

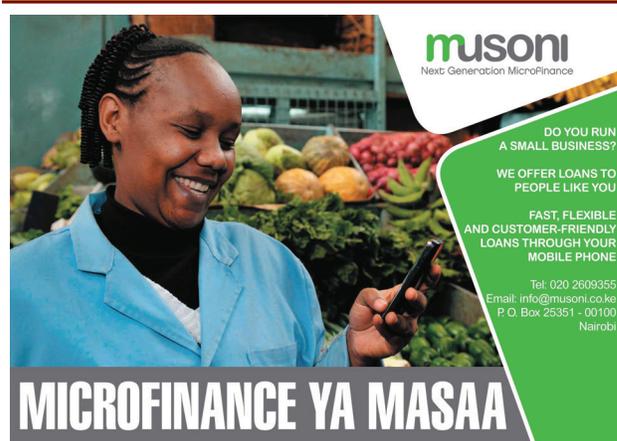
second tier (35 percent of Musoni's clients: about 2,845 in number) are usually the ones that prefer to make weekly payments in small amounts (a dollar per transaction inclusive) instead of monthly payments. This aspect of the Musoni model is considered an advantage to the client. But with transaction prices now making up about 30 percent of the total repayment, clients have been discouraged from making weekly payments. As a knock-on effect of this pricing situation, instead of making individual payments, groups have now thought about abandoning daily payments.

A solution for Musoni may be to cover part of these new rates themselves. However, being still an institution early on in the growth process, they are very sensitive about absorbing additional costs. For the time being, Musoni only works in partnership with M-PESA, but plans are being developed to bring other MNO partners on-stream. These new partnerships may offer solutions to the cost and network stability challenges that Musoni faces. Clients who are users of other mobile money services would then take advantage of Musoni's offerings without having to shift to M-PESA.

## MARKETING AND PROMOTION

Since M-PESA is well-known in the market, Musoni does not need to convince their target clientele about the channel. However Musoni notes candidly that their biggest

market challenge is promoting a brand that represents an MFI that is 100 percent mobile. Doing this requires a different kind of messaging that convincingly shows how it works and how it benefits users. Considering that Musoni is a fairly small institution, the budget for large-scale above the line marketing is not readily available; and even if it was, taking this approach would not be a prudent way of using the firm's limited marketing resources. Rather Musoni has focused its marketing effort on below the line activities and by spreading the word through their WCOs. Thus far this has had a fairly strong impact since it relies on existing peer-to-peer relationships and trust.

**FIGURE 7: Musoni Marketing Material**

More specifically, Musoni uses activities that offer direct, often personal communication, with the target audience. Being an MFI powered by mobile technology, the use of email, direct mail, events/exhibitions and telemarketing form the basis of these marketing activities. And ancillary to them are preliminary marketing efforts such as market research and segmentation, and public relations. In fact, a blend of these two streams has driven Musoni's sales and branding campaigns from the beginning. This is a way that other MFIs, and especially those relying on technology to deliver their service, can learn from Musoni. With the high cost of mass media advertising and the increasing use of email, internet and digital communications, below the line marketing is becoming a proven stand-alone approach for B2P and B2B sales and marketing.

Musoni's marketing strategy is based on:

- **Convenience:** Customer registration, loan applications, processing and disbursements are made over the mobile phone. The stated turnaround time between application and disbursement is 72 hours, but in practice 90 percent of loans are processed and approved within 24 hours.
- This level of efficiency has been the prime focus of their marketing thrust. The rationale is that, on average, other lenders can only offer turnaround times of between 3–14 days. The impact of the Musoni approach was confirmed in group meetings where most Musoni clients, impressed by the loan application turnaround time, and have shared their experiences with friends and relatives. The finding is that at one point or another these people tend to try the service out. Moreover, the cost of borrowing and receiving the funds is greatly reduced by the borrower not being required to visit a branch, instead simply applying over the phone and receiving loan proceeds through the same channel.
- **Efficiency:** Musoni provides loans as low as 5,000 KES (\$62.5). They are able to do this because of the efficiency of their loan processing procedures. This, coupled with the speed of loan processing, adds up to a very attractive value proposition for small traders

and group members who need financing sporadically and in small amounts to fund their erratic cash flow. Businesses that Musoni funds include sellers of second hand clothes, food kiosks, the retailing of fresh farm foods, and tailoring, to name just a few.

- **Transparency:** Since Musoni is not a deposit taking institution, its revenue is wholly derived from lending. Interaction with their customers is solely based on borrowing and repayments. This simple relationship has enabled Musoni develop an elaborate pricing plan that is easy to explain to their clients so that they are well aware of the cost of the loan and, underlying transactions fees (using the M-PESA platform). This creates a comfort zone for them and makes them less hesitant to borrow from Musoni. As well, all historical transactions are made available to customers via their cell phones, enabling them to track their transactions and related costs (M-PESA charges and loan interest).

Musoni's marketing objectives are driven by the desire to:

- **Create awareness:** The goal is to raise awareness about Musoni as a mobile MFI with no branches. Taking this approach amounts to a departure from the more usual focus on the technicalities, emphasizing instead the benefits to customers, which helps new users (and especially those in rural areas) to assign value to the way Musoni delivers its services. The fact that M-PESA is the main transaction channel creates confidence that the service is aligned to a well-known brand in the market.
- **Promote visibility:** Musoni branding is very similar to that of M-PESA. This is no coincidence given that the latter are the transaction channel providers and distributors (through agents). Musoni's logo is very visible and inviting, and this applies to the clothes (t-shirts and caps) worn by their WCOs during field visits. Most of the WCOs interviewed confirm that many of their new customers first approached them thinking they were Safaricom/M-PESA staff. Branch officers are also well located along busy streets and markets and

**FIGURE 8: Musoni Wealth Creation Officers**

branded with the same captivating color scheme. For Musoni, this visibility is critical.

- **Grow:** Musoni has a very clear and ambitious plan in place to increase their customer base from around eight to seventeen thousand over a year. These targets have been shared proportionately among the branches.

A review of their progress in realizing this ambitious plan's aims was very positive with most branches showing that they are on or above target. To further drive this growth, Musoni has launched a regular road campaign on which interns and wealth creation officers comb the streets and markets speaking to business owners and individuals about their financial needs and how Musoni can help in meeting them. This method is economical and has significant impact because it involves face to face interaction with the market in a localized area. Contact with

potential customers is established and then pursued on a consistent basis, which helps to build trust; eventually this leads to an uptake of the service offering. The challenge in taking this approach is that it is labor intensive, time consuming and limited in coverage.

## RISK MANAGEMENT

Musoni is still in the process of building its risk management practices. Nevertheless, some mandatory procedures have been defined in order to prevent any potentially damaging situation developing. Know Your Customer (KYC) requirements are very simple and are an integral part of the client registration process. Potential clients must provide their names backed by proof of ID with a photo and his or her M-PESA number. To confirm this information, WCOs register a potential client's phone number in the Musoni application. After registration, the client sends a 1 KES transaction to Musoni's pay bill number. This transaction is automatically rejected. But it displays the initiator's identity, allowing Musoni to confirm the identity of the mobile phone owner against their records. This KYC procedure is done twice (once with M-PESA and again with Musoni). Only clients with verified identities can receive loans.

In order to meet all of the regulatory requirements, Musoni recently formed a risk committee charged with assessing all compliance issues on a regular basis.

As for operational risks specifically, when the M-PESA platform is down, the risk of non-payments rises. However, M-PESA's platform has proven to be very stable, with down time limited to one percent of the time.

The other risk issue is related to personnel; in 2012 Musoni experienced turnover of 25 percent. Of the total number, six percent were released due to issues related to integrity. These included personnel diverting funds invested by clients as collateral. This process itself was manual and involved payments being deposited into SACCO accounts. WCOs accepted funds to deposit on behalf of borrowers and then diverted some portion of these to other uses. To eliminate this problem, Musoni stopped all manual collections of collateral deposits by WCOs and instead

asked their clients to deposit the funds using M-PESA or through direct deposits with no WCO involvement.

## IT PLATFORM

Musoni's platform was purpose-built for their operations and until January 2013, Musoni owned the I.P. related to this system. It is holistic and covers all MFI operational functions. This IT platform is a composite suite of in-house developed and off-the-shelf products brought together to provide the MFI with a comprehensive solution for their entire core-banking needs.

The system components include:

- **Platform A**<sup>12</sup>—used for data entry and group creation
- **Platform B**—provides reports-related data entered through Focus
- **Platform C**—extracts files from Focus and converts data to M-PESA/Jasper readable format
- **Platform D**—used for remote data entry, for example portfolio management, suspense handling, credit committee information

The M-PESA middleware part of the platform was Musoni Services, based out of Amsterdam, who are also responsible for the hosting of the system and providing support. The IT system assembly has been dynamic and has continued to evolve seamlessly in meeting the institution's ongoing needs. For example, an Android application was developed in 2011 (in partnership with Bityarn<sup>13</sup>, a Kenyan app development company) to meet the need for a paperless office. In fact, the paperless concept was rolled out first in two branches, then extended to include all of the others before the end of 2013.

The integration with M-PESA is very neat, allowing for communication between the two platforms which has enabled the use of mobile payments for all transactions. This system has provided streamlined and efficient data handling, which in turn has translated into huge savings for back office operations. These make up a considerable part of MFI costs. For example, working manually

it takes one to two weeks to process a loan. In Musoni's case, however, a big part of the value proposition is the guarantee that disbursement will occur within 48 hours of approval; and the funds usually hit the borrower's M-PESA account within 24 hours.

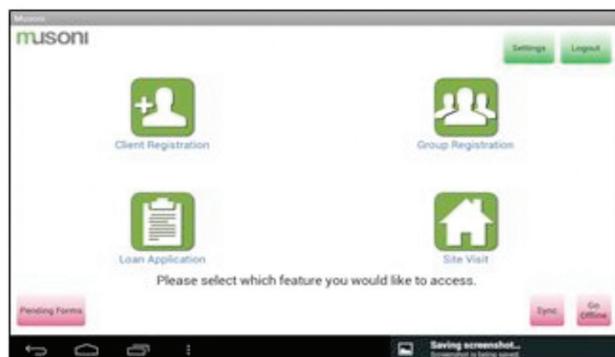
## How the system works

For Musoni's WCOs, their office is in the field, and they work only using an Android tablet. The screenshot shown in Figure 7 is the home page of the profile that they use. The application components are:

- **Client registration**—used to register new customers in the field. A series of information (Know Your Customer) data is entered including business/residential data. A photograph of the client is also taken and attached to the registration. This information is then transferred to the Musoni's core database via GPRS or through the WLAN when the loan officer returns to the office.
- **Group registration**—this function is used by the WCO to register a new group in the field. The entry fields are different from the above and capture group-specific details including name, location and members. When registering a new client, they must be linked to a group. In other words, group registration is mandatory.
- **Loan application**—Musoni uses a group lending methodology. Loans are guaranteed by members. A loan application can be initiated in the field by the WCO and once all the data has been entered and submitted, the credit committee receives the file for approval consideration. Committee members can review loan applications from their offices and approve

<sup>12</sup> By Musoni request, the platform name is not disclosed in this report.

<sup>13</sup> Bityarn is a Kenyan registered technology firm designed to provide locally sensitive solutions for Kenya, East Africa and the wider African community through development of innovative and capacity-building applications. For more information visit—[www.bityarn.com](http://www.bityarn.com)

**FIGURE 9: Musoni tablet application for WCOs**

Source: Information and picture from Musoni.

or decline accordingly. Credit committee members are not required to have a physical meeting to review applications as this can prove to be time consuming. The automation of this function shortens wait times and allows Musoni to deliver on its guarantee of a short turnaround from application to disbursement.

- **Site visit**—Wealth creation officers must visit the clients' premises to verify the existence of a business (if this is stated in the application), home address and any collateral that may be attached in case of a loan default. The WCO takes photographic evidence of the business and home for the bank's records. They also use this feature to verify Musoni's impact on borrowers by making before/after comparisons of the client's quality of life (purchase of additional home equipment—TV, fridge and so on). The method is not scientific but it nevertheless helps documenting positive changes in clients' life circumstances.

### Staff training

The system is highly interactive and very easy to use. In a country where mobile money penetration is the highest in the world, and internet penetration—mostly accessed through handsets and Android devices—is equally high, it's easy to identify and train tech-savvy wealth creation officers. However, the system is so user-friendly that WCOs are not required to be proficient in IT since the training

process is very simple. Most of the users, WCOs and customer relationship officers located in the branch offices, are able to grasp the system's functionality in little more than a day of test driving the application. The system has a simple graphic user interface and features a logical distribution of functions, so each user can easily access and manipulate the information they require with ease.

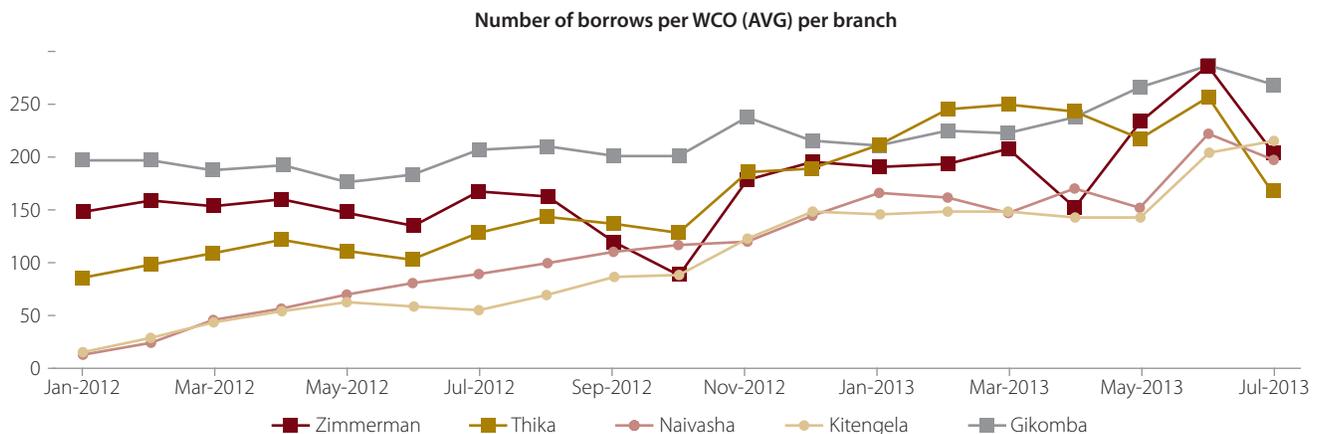
### MFI OPERATIONS AND M-MONEY

Musoni Kenya currently employs roughly 120 staff, the majority of whom are women. A large proportion of these are wealth creation officers who are located in the 9 branches. Each branch has approximately 15 people on staff complemented by an average of ten wealth creation officers. The main roles of the officers include:

- Area market analysis—identifying, mapping and pursuing business opportunities in their areas of operation
- Registering new groups and clients and managing those already in hand
- Loan processing and default-related follow-ups
- Providing ongoing business support to group members and supporting group activities, including meetings

Most WCO administrative activities, such as organizing their day or printing reports, which were formerly completed in the branches, are now minimized, since most of the tools they require to carry out their day to day activities are available on the tablet. Thus they spend very little time in the office and instead focus on business development in the field. One branch reports that WCOs spend up to 85 percent of their time in the field.

In Kenya today, a portfolio of 300 clients per loan officer is the market average. At present Musoni manages around 200 clients but expectations were for this to grow to a portfolio of 400 clients per WCO by the end of 2014. Loan disbursement and repayments are not channeled through the WCO, but they are able to track transactions on a daily basis, monitoring which groups/clients' loans

**FIGURE 10: Number of Borrowers Per WCO (Avg) Per Branch**

Source: Musoni Internal Data.

are in default. The group reports are also made available to group treasurers to inform them of the status of their loan accounts.

There are several reasons for the higher level of clients per WCO and these are shown in the lines below. The ramp-up is not yet there, but is expected over the coming months. An overall increase of WCO productivity levels for 2012 was pegged at 93 percent; as of July 2013 this has increased by an average of 14 percent. The graph below shows WCO productivity trends in terms of number of clients managed per WCO and per branch.

### Loan application process

Musoni has two types of loans: group and individual. The latter is only made available for a select number of customers who have a longstanding relationship with the organization, have additional business requirements and are not members of any group. In either case, the procedures are the same:

- Loan application: The WCO receives loan details from the borrower (individual or group) and keys them into the tablet. All background information on the borrower already exists for reference (KYC, collateral et al).
- Loan approval: The finished application is sent to credit committee members via the system. They

receive notification that there are applications awaiting approval. To view them, they simply click on each application, review, and approve or decline with comments for each—if applicable.

- This approval is received by Finance, which processes the payment by crediting the utility account (which then moves funds to and from the individual M-PESA accounts) to the recipient.

The loan application process is very simple. The Android tool has contributed greatly to the productivity increase by eliminating many manual processes related to loan application, processing and disbursement. During the team's field visits, WCOs make instant confirmations where it previously took about five minutes to fill out each of the forms presented (client registration, loan application and so on); with this tool the time needed has decreased to about one minute. This means, in aggregate, that they now have much more time to focus on growing the number of clients in their portfolios.

From the clients' perspective, this change helps them save time when dealing with the registration process. With the traditional process, the time demands were much more onerous. They needed to present a photocopy of their ID plus a picture, which in turn meant the effort needed to make these photocopies, get pictures taken and then travel some distance to get to the closest

**FIGURE 11: Musoni Group Meeting**

The Kayole Victors group had 11 members, seven of which were women. The loan officer in charge of that group recognized the benefits of using a tablet instead of manual information. John Wamathai explained how this alternative simplified his work and the importance of having reports in real time. Even when he was offline, for example, because of failures in connectivity, he could enter information offline and synchronize it once he got to the office or any GPRS zone. He perceives this as a real benefit since he does not need to come to the office to organize his daily activities. **“I can start my first group meeting on Mondays at 7:30am without going to the office”** he noted.

branch. Now these steps have been eliminated with Musoni carrying out complete KYC when registering new clients. All that the WCO now needs to do is “call up” the customer’s information and key in additional information

related to the loan application, then immediately send it online to the credit committee to approve/decline.

All loans are disbursed through M-PESA. Repayments are received through the same system. Borrowers have to deposit money with an M-PESA agent to get e-money, which they then use to pay Musoni using their bill pay number. In no instance does the WCO handle cash on behalf of clients. M-PESA is the only way that Musoni transactions can happen.

### Group meetings

During this research, the team was able to participate in two group meetings in different locations—one rural and the other urban. Despite the varying dynamics pertaining to the two groups, the meeting structure was similar. The main activities were verifying loan repayments, discussing defaults and filling transaction log books and the treasurer ledger.

Group members have specific locations identified for meetings. Normally, these locations are in central areas which provide easy access for group members. Each group member must appear in person or inform the chairperson of their absence in advance. Failure to do so incurs a fine, which varies per group. The funds raised in this way are used to pay for the meeting venue rent and any defaults left by members who have abandoned or been deregistered from the group. A typical meeting lasts one hour, making it as convenient as possible for the members, who are mostly self-employed micro-entrepreneurs. Before the meeting, the WCO provides the group with statements of their accounts for verification against the member’s individual transaction records. Each member has a small record book to record all transactions. In most cases, the treasurer maintains and retains the books on behalf of the members.

Once the transaction verification is complete, the WCO raises any issues—for example information on new products, defaults and so on. In some cases, if training were on the agenda, it would be delivered during these meetings. As well, the members can raise any issues related to Musoni products and services with the WCO. At

**TABLE 3: Comparison between Musoni Groups and Traditional Groups**

Traditional Groups		Musoni's Groups	
Activities	Time	Activities	Time
1	Make payments		45 mins
2	Verify payments	Verify Payments	10 mins
3	Talk about default-related issues	Talk about default-related issues	15 mins
4	Fill client and treasurer passbooks	Fill treasurer passbooks	15 mins
5	Training (Repayment)		20 mins
<b>Total Average Time per group</b>		<b>Total Average Time per group</b>	<b>40 mins</b>
Activities	Time	Activities	Time
6		Fill loan applications (if any)	10 mins
7	Other issues/Training	Other issues/ training	10 mins
8	Average Time per group	Average Time per group	20 mins
<b>Total Average Time per Group</b>		<b>Total Average Time per Group</b>	<b>60 mins</b>

64% time effective

17% more productive

Overall 50% time reduction

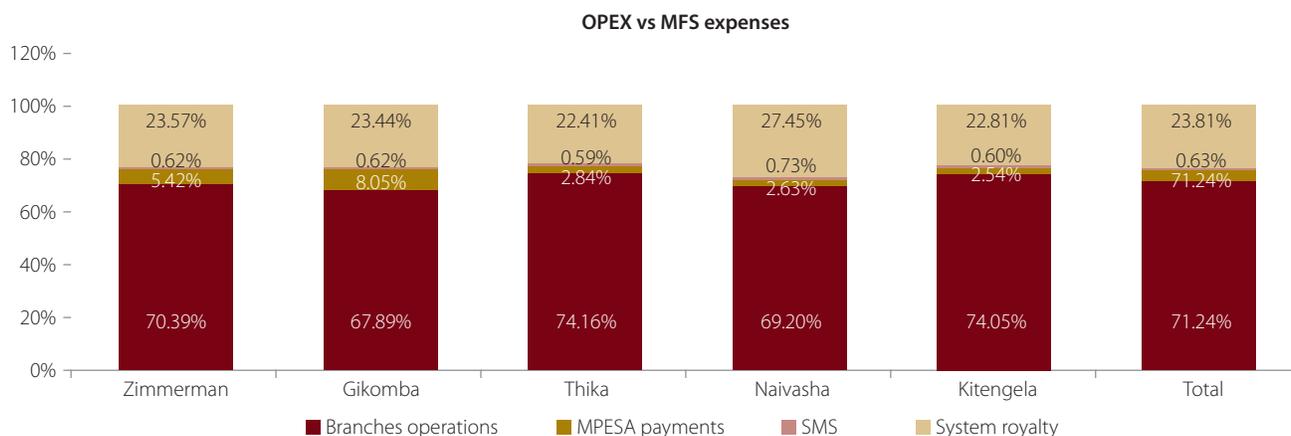
Source: Observation of Musoni Group and Estimates from Traditional Microfinance Group Meetings.

one meeting, for example, issues raised included some members wanting to access individual loans and the high cost of using M-PESA to repay loans (transaction fees). The option of repaying loans monthly rather than weekly was also a cross cutting issue in both meetings. Some members wanted more products targeting small businesses, while others felt that the maximum loan value was too low. Typically, the WCO takes the issues raised and shares them with the product development team who, in turn, provide responses in subsequent meetings. Finally, the members discuss business opportunities and shared challenges before closing with a word of prayer.

Typically a WCO visits an average of four groups per day, but has the possibility of visiting up to eight groups. By comparison, other MFIs in the Kenyan market can only visit two to three groups during mornings to allow to their members to have afternoon time available for making loan payments. Each group can have an average of 10 to 12 members. Group meetings last one hour and the percentage of women is higher. Group meetings are

normally held on a weekly basis, and plans are now being implemented to organize them on a bi-weekly basis. So far, Musoni has 60 percent of its group meetings on a bi-weekly basis and 10 percent of them take place once per month. This idea is based on the premise that these meetings were opportunities to make transactions payments. But with these now being closely monitored by the WCOs in charge, with payments done automatically without the need to have group meetings, the former scheduling is no longer a priority for Musoni. This again frees up about 50 percent more WCO time for more productive activity.

The mobility concept is very encouraging. It demonstrates how resources can be used more efficiently and supports the prioritization of activities. In the case of group meetings, the elimination of activities that do not generate any value (such as making payments) provides the opportunity of using that time for filing additional loan applications (if any), adding a productivity factor. Also, more efficient management of meeting agendas benefits all.

**FIGURE 12: MFS Expenses as a part of Operating Costs**

Source: MFS Expenses as part of Operating Costs: Musoni Internal Data.

## Operational details

As Musoni grows, it faces new operational challenges. For instance, new positions are required to make sure that the client is well served. The institution still lacks a customer service department; branch assistants still cover that aspect of the business.

In general terms, the staff reaction to Musoni's system has been very positive. When it was first implemented, staff—especially wealth creation officers—had doubts about using the tool and the security of the tablets in the field. There were, however, no doubts about payment transactions using M-PESA. This is common practice in Kenya, but the adoption of a tablet to support day-to-day activities relying heavily on technology was a striking deviation from the norm. Tablets are sophisticated gadgets that support very practical functions. Their design is very similar to a notebook so they are easy to camouflage, which is important for security in the field. Since these tablets have been introduced, there has only been one incident where a tablet was stolen. This was later recovered thanks to the GPRS tracking feature they come with.

This efficiency improvement has also resulted in new metrics being added. The MFI has a daily dashboard that captures, in detail, activities of individual branches and the performance of WCOs. In this way, the institution is able to closely monitor its growth.

## FINANCIAL AND PERFORMANCE ANALYSIS

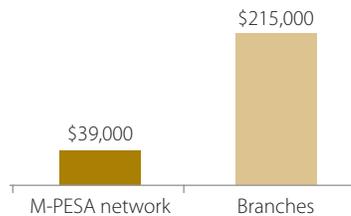
The institution's ultimate goal is to achieve profitability by a more efficient use of its resources to capture a bigger segment of the market while introducing additional products that better meet client needs. Depending on performance and other qualitative aspects, it may be possible to establish whether the model is adequate and whether it can be replicated profitably.

The figure below provides a summary of costs for 5 of Musoni's branches. Looking at the Figure below, it is clear that Musoni's biggest cost is the cashless branches. However, branches are a critical part of Musoni's model. They provide important support to WCOs and to branch operations. Importantly, these branches would be much greater in number were it not for Musoni's innovative use of the mobile channel.

### Cost and development roadmap

For its IT platform, Musoni had a standing agreement with the developers that a fee for ongoing developments to the system would be priced into license fees. But in April 2013, Musoni relinquished the ownership/license for the system that included unlimited cost-free modifications and instead negotiated more streamlined development fees. These are presently charged as and when

**FIGURE 13: Relative Costs of M-PESA Network, and Physical Branches**



Source: Musoni Internal Data.

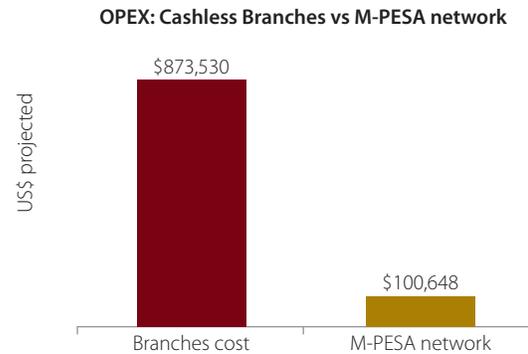
a modification is requested. The change was designed to reduce IT overheads. In January 2013, new license fees were negotiated between Musoni and the developers. As a result, costs were reduced by 50 percent and stood at 34 percent of operating costs as of April 2013. This fee is paid every quarter. Under this new arrangement, the developers can now re-sell the platform, with variations in function, to other financial institutions which intend to deploy a similar business model (verify this). To enable integration with M-PESA's platform, Musoni had to pay a one-time fee for adjusting the system.

M-PESA integration represents 8.8 percent of the total IT cost. In terms of channel implementation, capital expenditure of the platform stands at about 72 percent less than the investment in cashless branches. Nonetheless, it is important to emphasize that in Musoni's case, branches have a specific commercial function. The agent network is merely mandated to offer better service to clients vis-à-vis its transactional activities.

As for the hardware, the total cost including the tablet, insurance and cover is \$477. Currently, Musoni has over 60 tablets already in the field supporting WCO activities.

Musoni's strengths are reflected in its operational expenses. M-PESA payments represent around 24 percent of Musoni's total operational expenditures, or no more than \$5,000 per month. This means that the total cost of a mobile transaction is \$0.10.

**FIGURE 14: Operational Expenses for Cashless branches and M-PESA Network**



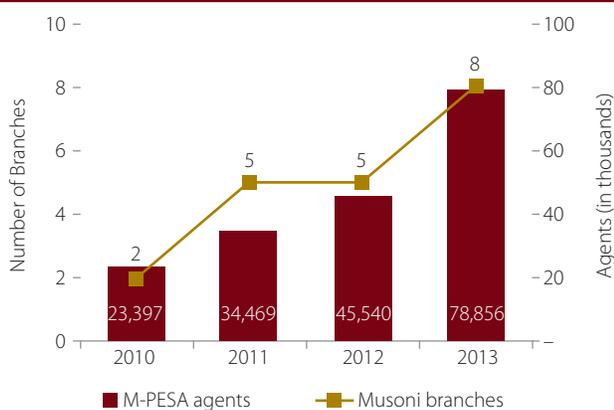
Source: Musoni Internal Data.

The operational expenses for maintaining Musoni's channels (branches and network of agents) are in Figure 11. The cost of branches compared to a network of agents are about 8:1. It must be noted, however, that each of these channels serve a different purpose and, in fact, complement each other. Musoni has currently eight points of service / contact for the clients and, through M-PESA, about 80,000 agents supporting its transactional activities.

Musoni is growing and this growth is reflected in the number of transactions managed by the channels (network of agents). The number of transactions made via this channel increased more than 100 percent (in fact 110 percent) between 2012 and July 2013 as did the volume.

Furthermore, the Musoni model also functions as a communications platform, strengthening the link to customers by informing them of new products, loan re-payment reminders, and confirmation of transactions such as repayments. Musoni has negotiated with Safaricom for a bulk SMS profile that allows them to communicate with customers affordably via their mobile handsets. The cost of this SMS service amounts to only 0.63 percent of total operational expenses.

From a financial perspective, it is easy to observe that Musoni took advantage of perceived new market opportunities and dramatically increased its service offering to the client base in bringing a non-traditional channel into its strategy. Musoni offered a convenience option to its clients

**FIGURE 15: Musoni branches and M-PESA Agents**

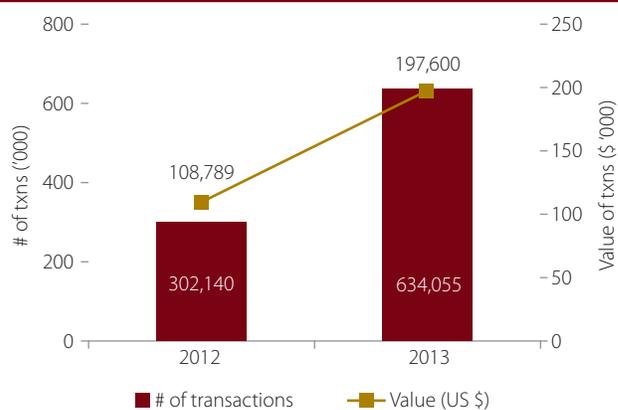
Source: Musoni Internal Data.

while working on its overall growth. Forging an agreement with a well-established network of agents (the outsourcing model) supports institutional growth via sharpening its competitive edge in providing a less expensive alternative.

## BENEFITS OF THE MUSONI MODEL

M-PESA has a strong existing network in Kenya. Some MFIs report that clients see the ability to pay via m-wallets as a basic service which MFIs must provide<sup>14</sup>. In Musoni's case, however, by starting with a mobile focus the organization was able to avoid the disruptive effects that sometimes accompany trying to promote two delivery channels simultaneously (both manual and electronic/mobile). This was decidedly contrary to the way some Kenyan MFIs thought a few years ago when the Musoni idea was first put forward.

Musoni's business model benefits its clients and the institution itself. One of the main reasons Musoni took up a mobile delivery channel for its services was the accessibility and convenience it offered to their clients. They can now repay their loan anywhere, anytime. Musoni points out that a majority of its repayments are made outside normal banking hours (42 percent), demonstrating the 'any time' convenience of mobile-enabled loan repayments. Clients are not waiting in queues in branches to repay money and

**FIGURE 16: Number and Value of Musoni Transactions**

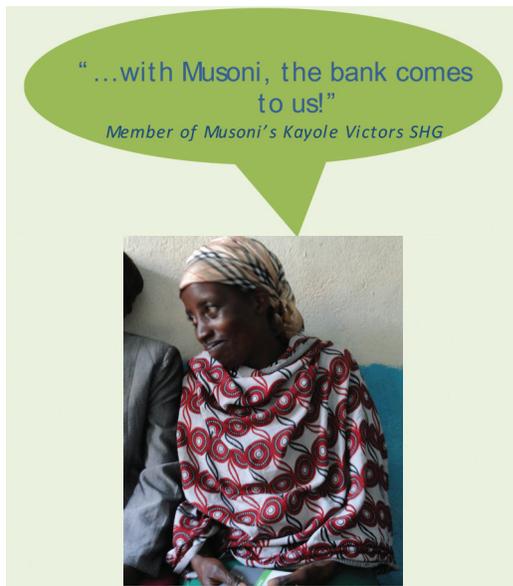
Source: Musoni Internal Data.

naturally see real value in not having to leave their businesses, or being able to do so at a time most convenient for them, from the comfort of their homes. Additionally, the cashless aspect of Musoni's operations provides greater security for clients as well since they no longer have to carry large sums of money while traveling to the group meeting or to the bank branch to repay their loans. Musoni claims that this has reduced delinquency by 10 percent.

Customer adoption and uptake of such a channel is a challenge for most institutions worldwide, but Musoni's experience shows that partnering with a well-known brand has actually spurred customer adoption. The model itself guarantees 100 percent customer adoption when making repayments because the clients already know how to use M-PESA.

Musoni also confirms that the absence of cash in the system has helped boost efficiency because of the reduced time spent in group meetings. Weekly group meetings take about half the time they used to since there is no cash collection. Thus in the firm's client meetings, more time is spent on other activities, such as client training needs, client feedback, and other issues. They report that group meetings which do not focus exclusively on cash collection actually improve the relationship between the

<sup>14</sup> Hanouch, Michael and Rotman, Sarah (2013). "Microfinance and Mobile Banking: Blurring the Lines?"

**FIGURE 17: Musoni Client Feedback**

loan officer and the clients; and so between the institution and its clients. Clients, for their part, report that they want other kinds of training during the group meeting time, such as greater financial literacy training or business training, both of which will improve their incomes.

Musoni also uses the mobile phone innovatively to improve repayment rates<sup>15</sup>. PAR for Musoni is around three percent, confirming this claim. Clients receive reminders via text messages when their loan installment is due, and the clients appreciate the reminder, viewing it as an example of high quality customer service.

Operationally, from Musoni's perspective, the decision to partner with M-PESA has eliminated the high cost of setting up MFI branches for cash management with their attendant need for specific infrastructure. Rather, Musoni's flexibility allows the setting up of branches in the most important areas as a point of contact for clients and as a meeting place for staff.

The M-PESA partnership carries with it additional opportunities for Musoni, such as the possibility of allowing new clients to specifically request "working capital loans" for M-PESA agents.

The benefits of Musoni's cashless/ cash-lite nature don't end there. They have the effect of increasing

**FIGURE 18: Musoni Client**

Potential for new products: Ruth is an M-PESA agent and also a Musoni client. She applied for a loan to be able to work as an agent (she executes more than a 100 M-PESA transactions per day).

personnel productivity because they do not have an obligation to report to the office at all times; and wealth creation officers (WCOs)<sup>16</sup> are free to use this discretionary time for other field activities such as prospecting new clients. When meeting a client, a WCO spends less time filling out forms (approximately 80 percent less time) because these streamlining tools allow them to select information by simply clicking the menu displayed.

Musoni's mobile model also reduces fraud opportunities among Musoni employees. Cash handling and collection costs have been much reduced. Branches and wealth creation officers no longer need to be "stocked" with cash. This removes important risks while reducing costs.

Secondly, having an electronic trail of all transactions is valuable. Client financial histories can be used for credit scoring and facilitating future transactions. Using mobile technology enables Musoni to leapfrog the common barrier of weak infrastructure. The Musoni platform opens the gate to a broader range of information; it improves management supervision capabilities, giving them the tech tools to better monitor and follow up on personnel activities.

The mobile phone delivery channel also enables Musoni to offer an optimal customer value proposition. Once

<sup>15</sup> Smart Campaign (2012). "Appropriate Product Design and Delivery at Musoni" Smart Notes Number 13

<sup>16</sup> Wealth Creation Officer (WCO): Musoni's equivalent of a Loan Officer

loans are approved, it takes between 24 to 72 hours for disbursement. In other words, a faster turnaround time for loans, which has a direct impact on the firm's growth.

## LESSONS LEARNED

However, as their mobile model has evolved, a few lessons have been learned that bear on the challenges Musoni faces. These are cited below:

### Technology-related

The Musoni system was not built to work outside the M-PESA system. Thus, it cannot process other forms of payments, such as checks. Additionally, with this dependency on M-PESA, Musoni's uptime is determined by M-PESA's uptime. While researching this paper, the M-PESA platform was down for four hours on a particular day. This meant Musoni customers could not make or receive payments for that period of time. Even if this amounts to minimal downtime, the M-PESA model is strictly dependent on partner reliability.

Furthermore, WCO tablets depend on batteries. When batteries die, WCOs can't manage their activities. Musoni is already at work finding solutions to improve battery life—and making sure spare batteries are readily available.

Finally, since Musoni's mobile model is technology-based, improvements can always be made once tools are working in the field. Some applications are very useful but still have room for improvement. For example, GPS<sup>17</sup> coordinates take too much time to download. Overall, this means that guaranteeing efficiency is a non-stop job.

### Client-related

As with all technology, there are users that struggle with functionality issues. Musoni finds that explaining the mobile delivery channel to clients takes time. Many want assurances of the new model's reliability. Most of the issues arising from the system relate to users not fully understanding the basic features, such as loan repayment details/abbreviations. Musoni, through its WCOs, continues to provide user support,

either directly or through peers, by 'tech savvy' group members. However this is an ongoing challenge that can only be resolved through regular use of the service.

### Product-related

Musoni reports that its client base is eager to access additional products through its mobile channel, including savings products. However, from a regulatory perspective, Musoni cannot offer any products beyond credit. In response, the MFI has moved proactively in applying for a license so that they can deliver what their clients are demanding.

### Partnership-related

At present, Musoni has limited negotiating power. Musoni's ability to negotiate with M-PESA, a well-established institution, is limited. Moreover, dealing with Musoni's incoming needs can be challenging, as in the case of tariffs. Because of the new pricing, Musoni had to explain in detail to its clients, to make sure they will be operationally prepared to make one group payment instead of individual loan payments.

The risk of default will be always there when the M-PESA system is down. M-PESA clients can also be targets of fraud, always a real risk for an institution that receives people's money.

### Regulation-related

Technology-based solutions are innovative in many markets, Kenya among them. Musoni clients sign their tablets electronically, in lieu of the traditional paper forms; and Musoni always faces the challenge of making sure that electronic signatures are legally approved by the regulator.

As the MFI grows, repeat clients take larger loan amounts, by number and value. In order to be able to make larger disbursements, Musoni had to develop alternative solutions, such as disbursement by bank transfer.

---

<sup>17</sup> GPS: Global positioning system, a space-based satellite navigation system that delivers location and time information

# Musoni Product Information

<b>MUSONI LOAN PRODUCTS INFORMATION</b>				
	<b>Nawiri loan</b>	<b>Stwai loan</b>	<b>School Fees loan</b>	<b>Wepesi loan</b>
<b>Overview</b>	Entry level, business loan for MSMEs	Larger loan amounts for repeat borrowers	Meant for school fees so that productive loans are not diverted for this purpose	Emergency loan
<b>Prerequisites</b>	Must be a business loan	Clients must have paid 80% their required repayments in full and on time over the past two loan cycles	Clients who are in their third loan cycle or been clients for nine months and have repaid at least two loans	Clients for six months/ or completed one loan cycle
<b>Principal (KES)</b>	5,000–140,000	75,000–140,000	5,000–70,00	20% of current outstanding business loan
<b>Group Size</b>	5–30	5–30	5–30	N/A
<b>Loan Tenure</b>	3, 6, 9, and 12 months	3, 6, 9, and 12 months	3, 6, 9, and 12 months	
<b>Upfront fees</b>	3%	3%	3%	
<b>Interest Rate (flat p.a)</b>	22%–21%–20%	20%	22%	
<b>Pre-requisites</b>	Group guarantee, compulsory savings, pledge	Signed pledge, group guarantee, 30% cash collateral, "Group Security" on loans above KES 100,000.	20% savings for total loans held by the borrower, group guarantee, compulsory savings, pledged house-hold items to group members.	
<b>Repayment Frequency</b>	Weekly	Weekly	Weekly	
<b>Late Fees</b>	N/A	2% of scheduled repayment	N/A	
<b>Security Collateral</b>	20% of outstanding credit	20% of outstanding credit	20% of outstanding credit	Three guarantors required