

Branchless Banking Brief 1

Contextualizing Innovation: Technology-Enabled Microfinance in Haiti, Nicaragua, and Zambia

MEDA believes that low-income customers are better able to access and benefit from financial services when microfinance institutions (MFIs) work with technology providers to innovate for improved products, services and delivery channels. In order to further explore this hypothesis, MEDA organized a workshop, "Contextualizing Innovation: Technology-Enabled Microfinance in Haiti, Nicaragua, and Zambia" at the 2012 SEEP Annual Conference. The workshop invited three of MEDA's partners-- Zoono, Fonkoze, and MiCrédito-- to discuss their first-hand experiences in building partnerships, reducing costs, and assessing risks in Zambia, Haiti, and Nicaragua, using technology-based solutions. This Branchless Banking Brief summarizes the opportunities, challenges and lessons learned of these diverse partners and countries, and highlights practical experiences in the implementation of technology for inclusive financial services.

Snapshot of Three Financial Sectors

	Zambia	Haiti	Nicaragua
			
Population	13.8 million	9.8 million	5.7 million
% Rural population	64% rural	48% rural	43% rural
Number of MFIs	33 MFIs	9 MFIs	34 MFIs
% Adults that do not have an account at a formal financial institution	78% adults	78% adults	85% adults
# Mobile money providers	5 companies	1 company	1 company
# Mobile phone subscriptions	8.1 million	4.2 million	4.8 million
# ATMs per 100,000 adults	7.52 (2011)	0.58 (2009)	9.96 (2011)
% Population that has a debit card	15.7% population	2.7% population	8.3% population

Sources: Bank of Zambia, Mix Market, GSMA, World Bank Global Findex Database, World Development Indicators

Background on MEDA's partners

			
Company overview	<ul style="list-style-type: none"> Started in 2009 in Zambia Mobile and electronic payments company 	<ul style="list-style-type: none"> Started in 1994 in Haiti Non-bank financial institution and Foundation 	<ul style="list-style-type: none"> Started in 2004 in Nicaragua Began as foundation, now

	<ul style="list-style-type: none"> 95 active mobile money agents in Zambia 	<ul style="list-style-type: none"> 46 branches in Haiti 	<ul style="list-style-type: none"> private company MFI 7 branches in Nicaragua
Products and services	<ol style="list-style-type: none"> Consumer payments <ul style="list-style-type: none"> Money transfers Bill payments Airtime purchase Subsidy payments <ul style="list-style-type: none"> eVouchers Enterprise payments <ul style="list-style-type: none"> Bulk payments to banked and unbanked users Receipt of payments 	<ul style="list-style-type: none"> Solidarity group and individual loans Business development loans Voluntary savings Catastrophic event insurance Asset-building program for ultra poor Currency exchange Domestic remittances 	<ul style="list-style-type: none"> Individual loans for: <ul style="list-style-type: none"> Business Education Home improvement Agriculture Credit life insurance Currency exchange Government cheque cashing Debit cards/savings accounts through bank
Strategic Technology Partnerships	Partnered with VisionFund Zambia, an MFI, to disburse microfinance loans	Fonkoze branches double as TchoTcho Mobile Super Agents	Partner with BAC, a commercial bank, to offer debit cards for loan disbursements and savings Partnered with TransUnion, a credit bureau, to develop a mobile credit check application for loan officers
# Clients	20,000 transactions for MFI clients (90% unbanked clients)	250,000 savings clients - who are able to receive remittances to their mobile wallet and save in their Fonkoze account 60,000 credit clients	4,000 loan clients, 500 debit card clients in pilot phase
Average loan	\$300	\$215	\$450
Total Portfolio	\$4.7 million in loans disbursed to VisionFund MFI clients \$20,600 in MFI loan repayments	\$25.7 million in deposits \$15.7 million in loans	\$4 million in active loan portfolio

Opportunities for technology innovation in microfinance

In most developing countries a majority of the population does not have access to formal financial services. Microfinance institutions serve market segments that require innovative products, services and delivery channels to overcome the barriers to access in traditional banking institutions. MEDA's partners explained how their partnerships with mobile network operators, commercial banks, or mobile and electronic payments companies enabled them to leverage technology to better serve their clients. Some common opportunities emerged:

Opportunity 1: Partnerships enable MFIs to develop new products or extend services in order to diversify the financial options offered to their low-income client base.

- In Nicaragua, MiCrédito partnered with BAC, a regulated commercial bank, to offer clients savings accounts and access to debit cards. Most of these clients had never before had a formal bank account or a debit card.
- In addition, MiCrédito partnered with TransUnion, a credit union, to develop a mobile credit check application so that loan officers could prequalify clients for microfinance loans in the field. This reduced the loan turnaround time from 4 days to 1-2 days.

- In Haiti, Fonkoze extended mobile money services to its clients by opening TchoTcho Mobile agents at each of its branches. Now, Fonkoze clients can easily transfer or receive money using their mobile wallet and deposit it into their Fonkoze savings account.
- In Zambia, Zoono partnered with VisionFund to enable clients to easily withdraw their loans using Zoono's mobile money agents. Consequently, a small number of VisionFund clients have begun to use Zoono agents to also repay their loans. Clients said they felt more comfortable going to a Zoono agent than to the bank to repay their loan. Additionally, clients receive financial literacy training from loan officers on how to use Zoono's mobile money service to save and send money.

Opportunity 2: Expansion of services to clients in urban and rural areas through technology-enabled delivery channels helps MFIs reduce operational costs and improve efficiency.

- In Zambia, VisionFund was able to double their points of service in one year from 6 branches to 12 locations by leveraging Zoono's agent network. VisionFund and Zoono made an agreement to open up new agents in remote locations as VisionFund expands its client reach.
- Through the partnership with Zoono, VisionFund was able to decrease the time it spent to disburse loans from 2 weeks to 1 day by removing the burden of distributing cash to clients or having clients travel to branches to obtain their loan. As a result, the MFI was also able to refocus its staff time on recruiting and approving new clients.
- In Nicaragua, MiCrédito hopes to reduce the costs of hiring money trucks to deliver cash to its branches for loan disbursements through the partnership with BAC since clients are now able to use their debit cards to withdraw their loan money from any of BAC's 130 ATMs or 24 bank branches.
- As a result of the mobile credit check application, MiCrédito was able to reduce loan-processing times from 4 days to 1 day.
- In Haiti, Fonkoze has 46 branches but it still takes some clients 5 hours to get to branches. Once Digicel's mobile money product TchoTcho Mobile becomes more widely used, Fonkoze recognizes that the service would increase Fonkoze's points of service and possibly correlate to a savings on travel costs to service clients in remote locations.

Challenges to technology-enabled microfinance

Successful implementation of technology-enabled financial services greatly depends on the ability of partners to deal with a number of operational and client challenges. MEDA's partners highlighted some of the challenges they are facing in their technology partnerships, which are summarized here.

Challenge 1: Agent or other point-of-service liquidity

One objective of MFI partnerships with a mobile money or branchless banking provider is to ensure that clients can receive money when and where they need it. Mobile money agent networks often suffer from the common issue of low agent liquidity, which means that the agent may not have enough physical cash on-hand to pay out the requests from MFI clients. This problem can be particularly acute with high volume or high value payments, like microfinance loan disbursements. To overcome these challenges, our partner institutions have tested creative solutions, such as:

- In the partnership with VisionFund, Zoono worked with agents to ensure their float (e-money + cash) was high enough for microfinance loan payouts by arranging local "super agent" partnerships, liquidity assistance through KIVA-sponsored credit lines, or providing float top-ups (cash-injections) directly from Zoono.
- Zoono also created a "Champion Agent" model to ensure that their network had a core of dedicated mobile money agents- agents whom Zoono could regularly monitor for good customer service and float levels. This model also made it easier for Zoono to set up and guarantee active agents in locations where VisionFund has customers.

Super Agents are mobile money agents who have access to a lot of cash or electronic money and can support smaller agents with less float. When an agent is low on cash and has an excess of electronic, mobile money, the agent can go to a super agent to exchange their mobile money for cash or vice-versa.

Challenge 2: Customer Education and Usage

Another issue the institutions raised is in catering to the needs of MFI clients who may be illiterate or uncomfortable with new technologies. Ensuring that people understand and use technology for financial services on a regular basis requires MFIs to offer education on technology use to clients and appropriately sequence the human interface and technology to ease the transition. Some of the solutions that the partners offered included:

- Fonkoze found that clients used the TchoTcho Mobile service for cash-transfer programs without any problems, but it was more difficult to get clients to withdraw their microfinance loans because of a lack of knowledge about mobile money in Haiti. To sensitize clients to mobile money, Fonkoze has used the similarities of cash transfer or remittance services to explain mobile money to loan clients. Fonkoze also decided to convert their branches to TchoTcho Mobile agents to start to increase their customers' awareness of mobile money.
- Additionally, Fonkoze was concerned that their solidarity group-lending model would be weakened by the use of mobile money. This prompted them to explore the best way to sequence the use of technology for loan disbursements with financial literacy training or business management education from Fonkoze staff. Ultimately they decided not to proceed with mobile money-enabled loan disbursements and repayments.
- In Nicaragua, an assessment of the mobile payments market found that there were no viable mobile money service providers and very little public awareness of these types of products. As a result, MiCrédito decided not to use a mobile money solution and instead created the debit card partnership with BAC.
- MiCrédito also faced the issue that many of their clients are illiterate and because BAC is a regulated institution, they require clients to complete a lot of paperwork to receive their debit cards. Now, MiCrédito tellers and loan officers help clients with this barrier to service.
- In Zambia, challenges around incorrect VisionFund client details and understanding of Zoono's mobile technology revealed tension and confusion between MFI clients and mobile money agents. For this reason Zoono and VisionFund worked together with [Microfinance Opportunities](#) to provide training to MFI clients on how to use mobile technology and to Zoono agents to better explain mobile money to MFI clients.

Tools to develop partnerships, products and services

In order to develop successful partnerships, products and services, MEDA's institutional partners have developed and used a variety of tools to assess stakeholder needs, develop processes internally and across partners, and provide the right types of financial products and services to clients.

Tool 1: Design Research

- Prior to the decision of utilizing the TchoTcho Mobile service to disburse loans, Fonkoze conducted focus groups to understand the client's perspective of the new technology product.
- Before deciding to partner with BAC to provide debit cards to clients, MiCrédito conducted an assessment of the mobile payments market in Nicaragua.
- For the development of the mobile credit check application, MiCrédito identified the need for the technology. Realizing the opportunity for a new, out-of-the-box solution, MiCrédito approached TransUnion to develop and launch the application, the first of its kind in Nicaragua.

Tool 2: Internal Assessment & Implementation

- Converting Fonkoze's branches to mobile money points of service required inter-departmental collaboration between the branch operations, accounting, and information technology departments to integrate the mobile money product with Fonkoze's information management and accounting systems. MEDA worked with Fonkoze to develop internal controls and reporting, as well as ensuring that the integration would pass an external audit.
- In preparation for integration with these new technologies (Transunion and BAC debit cards), MiCrédito updated their MIS to a core banking software, in order that it would be robust and flexible enough to support the new technologies and to be able to automatically reconcile accounts.

Tool 3: Process Evaluation

- Approximately 8 months into the partnership with VisionFund, Zoona and MEDA conducted *user story workshops* - a complete evaluation of Zoona's partnership with VisionFund Zambia, which mapped the stakeholders and processes involved in disbursing loans through Zoona's agents and pinpointed "moments of truth" where there was a breakdown in the partnership resulting in inefficiencies or poor service to the end user. This evaluation also led Zoona to begin scoping opportunities to use their eVoucher product as a potential microfinance payments solution.
- With support from MEDA, MiCrédito established benchmarks and indicators at the beginning of the pilot of each partnership to properly determine progress during the rollout of each new product. A mid-term review of the BAC debit card product for example (including interviews with clients) found that card usage has not been as robust as expected, leading MiCrédito and BAC to discuss how to revamp the training and marketing strategy to encourage improved uptake and usage of the savings product.

Lessons learned

Zoona, Fonkoze and MiCrédito's experiences reflect important lessons for developing partnerships between MFIs and technology providers. MEDA's partners offered some of their own suggestions for other MFIs that might want to engage in technology partnerships for microfinance.

Lesson 1: Market research and a clear assessment of client capacity to adopt technology are important in the successful delivery and uptake of products. MFIs and technology providers both have knowledge about their respective markets, which can be utilized to build user profiles and determine the ability of various user types to access technology and understand its uses and benefits. This internal knowledge can also be used to formulate plans to support users with well-targeted marketing, education, or customer service.

Lesson 2: Clear and manageable goals are necessary for the partnership to succeed. From the very start of a technology partnership, it is important to be clear about the goals of the partnership and a plan for how the goals will be achieved. This requires an agreement on the division of responsibilities, costs and implementation timelines as well as an understanding of “client” needs (in this case clients could be internal or external to the institutions, such as staff, end-users, service providers at points of sale, or other) to determine if additional support is necessary for the successful execution of the partnership objectives. For example, when an institution adopts a new technology it is important that staff have appropriate training to understand how it works so that they in turn can work with their clients. On both sides of the partnership, “point persons” or “project champions” should be responsible for successful implementation and for taking initiative to solve operational and customer service challenges.

Lesson 3: A phased approach for implementation minimizes institutional risk and helps to ensure that new products and services work optimally. When implementing a new product or service, it is not always feasible to launch everything at once, and it is usually best to phase the implementation. Proper analysis of the benefit to the client, the risks to the institution and the ease of implementation are important factors contributing to the implementation strategy. For example, Fonkoze started to sensitize clients by setting up mobile money agents at their branches and MiCrédito prepared for technology adoption with upgrades to their MIS.

Technology has the potential to optimize many products or services, however partnerships need time to develop and may not be able to handle the challenges of delivering multiple products or services at once. Zoono and VisionFund started with loan disbursements and now that the processes for approving and disbursing loans and handling client problems between the two organizations is running smoothly the next step will be to plan for loan repayments.

Looking to the future

The intersection of technology and microfinance is a dynamic new field with numerous possibilities for improving service delivery. As more and more MFIs enter into innovative partnerships to test new technologies and delivery channels, the possibilities of financial services for low-income clients are being redefined.

Emerging products and services

- eVoucher products for microfinance clients: this product would eliminate the need for clients to own a mobile phone, thereby improving the ease of loan disbursements and increasing

eVouchers are like a prepaid card. They can take the form of a scratch card or can be sent via SMS. eVouchers have a reference number that is linked to a client's identification number and a PIN code that only the recipient knows. eVouchers can be redeemed for goods, services or even cash. In most cases organizations use eVouchers to make payments or transfer cash to beneficiaries to be redeemed for goods.

accessibility. Depending on the MFI, clients could redeem eVouchers for cash, goods or services directly from retailers. The eVoucher would allow institutions to not only track disbursements but also what the client purchased with the eVoucher.

- Branchless banking for insurance premiums and claims payments: employing one of the technologies discussed here could decrease the time it takes to make insurance claim payouts, especially when natural disasters occur. Large-scale insurance payouts will also require a good foundation of staff that are trained and ready to investigate and process claims, depending on the type of insurance product.

Marketing and financial education geared toward building awareness of technology for financial services.

- For branchless banking, mobile money, and other electronic payments technologies to grow and reach scale, institutions will need to invest in creative and educational marketing techniques that helps the public to understand and feel comfortable using new technologies.
- Financial literacy tools will need to consider innovations in technology in order to help clients stay updated on the financial services available to them. In some cases organizations have used radio campaigns to explain the use of technology for financial services to farmers.

Use of technology for improved and more frequent data collection and data mining

- With the increasing use of technology for payments, institutions can also benefit by capturing more information about their clients. For example, Zoono will start collecting information on the gender of each money transfer client to better understand how women and men respond differently to mobile money products and marketing.
- Zoono is implementing new business intelligence software that collects and visualizes data, improving their ability to make real-time improvements to product delivery and to better analyze and manage the social impact of their services.

As technology becomes cheaper and more accessible for low-income customers and as branchless banking networks become more robust and far-reaching, the microfinance sector and other organizations with similar ambitions, will advance further to reaching the poorest, most remote, and most vulnerable people. MEDA looks forward to continued work in this exciting sector with our partners to both improve the usage of technology and to expand financial inclusion. MEDA would like to thank the SEEP workshop panelists and participants for an engaging discussion of their experiences in the field.

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The panelists for the conferences session were Charles Petty, Financial Analyst and Special Assistant to the CEO, Fonkoze, Verónica Herrera, CEO, MiCrédito, and Azalea Carisch, Rural Finance Advisor, Zoono. The workshop was facilitated by Nicole Pasricha, MEDA.