Since early 2012, Red Financiera Rural (RFR) has been leading a mobile banking initiative that is providing 382,220 rural Ecuadorians with greater access to financial services and products. This initiative brings transactional kiosks to remote communities and deploys loan officers to visit rural areas with digital devices, all powered by a secure, cloud-based digital infrastructure. As a result, rural Ecuadorians can easily make payments, receive loans, and deposit savings regardless of geography.
31.5% of Ecuador’s population lives in rural areas. Only 42% are banked (defined as having an account at a bank, cooperative, or microfinance institution), owing to the limited availability of services in rural and peri-urban areas of the country.1

Ecuador enjoys a high literacy rate of 91%. The population also skews young, with 63% between the ages of 15-64.2 High mobile penetration—over 78% of households own cell phones3—vs. relatively low banking penetration, alongside these demographic factors, suggests the promising potential for mobile money technologies to advance financial inclusion.

Over the past 2.5 years, Red Financiera Rural (RFR), an association of 47 diverse financial institutions in Ecuador, has been implementing an innovative mobile banking project to facilitate wider and better access to financial services for rural and peri-urban populations. Prior to this initiative, rural clients often had to travel substantial distances to conduct any financial transactions, with significant time and monetary costs incurred. RFR’s initiative employs technology-enabled solutions, including mobile banking and transaction networks, to bring financial services to remote areas and directly into underserved communities. As a result, rural clients can re-dedicate resources to their families, jobs, and/or agricultural production because financial institutions come directly to them, rather than the other way around.

By serving as an aggregator of services for its members, RFR has been able to substantially reduce barriers to their entry into the mobile services market. Typically, high start-up costs, maintenance of infrastructure, and the time and knowledge resources required to form and manage partnerships with technology providers can prove prohibitive to individual institutions, leaving them unable to develop and expand services for which there is high client demand. Owing to RFR’s facilitating role, financial institutions participating in the technology initiative are now able to offer basic services such as deposits, payments, loans, and transfers to clients at substantial savings, thereby meeting client demand, enhancing financial inclusion, and optimizing their own sustainability.

With the support of USAID, RFR’s mobile banking initiative currently engages 31 institutions nationwide, among them credit and savings cooperatives, credit and savings associations, and NGOs. The program is open to any financial institution in Ecuador, whether or not it is a member of RFR. To be eligible, an institution is required to have a focus on service to vulnerable populations, which is in line with RFR’s mission and goals.

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**Key components of RFR’s mobile banking initiative**

**Core banking on the cloud**

RFR utilizes an Authorized Service Provider (ASP) model to power its core banking infrastructure via cloud computing. On the “cloud,” financial institutions have access to data storage and real-time transaction services, which are available for a monthly fee based on storage size, transaction volume, and other factors. This system, which is less dependent on physical infrastructure than traditional IT systems, brings significant cost savings to RFR members. It also affords the opportunity to easily take advantage of cloud-based technological innovations, and facilitating the provision of mobile banking services to clients.

**Transactional kiosks operating in remote, rural areas**

RFR currently hosts and maintains a network of 31 transactional kiosks throughout the country. Individual clients and financial institutions are able to conduct cash-in, cash-out banking transactions at these kiosks. The kiosks are securely connected via internet, cellular networks, and/or satellite to the core cloud banking infrastructure hosted by RFR.

**Use of smartphones and tablets by loan officers**

Loan officers are equipped with digital tools that enable them to carry out financial transactions at the client’s location. Using smartphones or tablets, officers can access client data in real time to facilitate loan disbursements, collect loan payments and savings, perform loan assessments, and render other services remotely. Virtually all client transactions, data, and visit records may be securely stored electronically, rendering them immediately accessible via a portable, small device.
Key stakeholders in the implementation of the mobile banking project

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Role</th>
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</table>
| Red Financiera Rural                 | 1. **Opportunity identification, proposal development, resource mobilization**<br>Based on strong member and market demand for solutions to improve financial access in rural areas, coupled with previous expertise in the development of mobile banking solutions, RFR developed a comprehensive project proposal and secured funding from USAID for a 2.5 year mobile banking project (Feb 2012 – July 2014). The funds covered most of the costs associated with program design and initial implementation.  
2. **Identification and coordination of market linkages**<br>Because this ambitious project required the management of complex technologies and multiple vendors, RFR assumed the role of main coordinator during the initial roll-out. It researched and defined product specifications, then recruited, selected, and contracted partners that aligned with the project’s vision and were willing to provide services that benefited the most vulnerable populations.  
3. **Member capacity building**<br>The implementation of this program required significant changes to the operations of participating financial institutions. RFR provided thorough capacity building, training, and support to ensure that institutions were adequately equipped to bring mobile banking services to their clients. Key capacity building areas included:<br>• Financial processes as mediated by the new system of cloud computing<br>• MIS<br>• Transparency and client protection<br>• Loan assessment processes<br>• Loan officer training in mobile banking<br>To cite one specific example, RFR has supported the development of a system functionality by which providers could set a minimum or maximum amount for a determined transaction (deposit, withdrawal, loan payment, etc.) in accordance with their internal control policies. This will ensure compliance with relevant AML/CFT regulations and will also serve as an important security measure, as bank attendants will not handle an excessive amount of cash. |
| Participating financial institutions  | Participating institutions had to share the costs associated with hiring new staff to manage the mobile banking services, the staff responsible for carrying out transactions in the kiosks, and any construction costs required for the installation of the transactional kiosks. The program covered all production, transport, and implementation costs of the kiosks, the costs of technological and mobile equipment for the kiosks, and the internet/connectivity charges for the first year of operation. After this initial period, participating institutions covered these costs themselves. |
| Core banking provider                | An Ecuadorian company selected via an international tender provides the cutting-edge technology required for the mobile banking system to function smoothly. It is also used by well-known MFIs regulated by the Bank Superintendency, as well as various international institutions. |
| Information administrator and communications provider | An Ecuadorian company selected via an international tender manages system information in accordance with international standards and certifications. It has an exclusive communications service network that guarantees coverage anywhere in the country. |
| Datacenter provider                  | The chosen company has high standards, guarantees, and security in place for the processing, storage, and backup of data for financial institutions. This ensures optimal availability of information and confidence in its management. |
| Additional providers                 | Other companies have been contracted to provide complementary products, such as the construction of transaction kiosks, and to provide technology equipment such as tablets, mobile printers, and computers. |
Challenges to the implementation of mobile banking

Participation in the mobile banking project required that RFR’s member institutions comply with stated best practices and implement substantive changes in their operations, from increased transparency, to new MIS, to changes in loan assessment methodologies. Internal operational challenges arose within a few institutions during this transitional period, leaving these institutions feeling threatened. Consequently, they almost quit the project. However, after intense negotiations, including external mediation, they began to see the value of the innovations and are now among the biggest promoters of the project.

“We are sincerely grateful for the 3 mobile kiosks that were donated to us as part of the ‘Mobile Banking’ project. With the new kiosks we are able to improve our service to the rural areas as we must do since we are an institution in the Provinces of Imbabura and Carchi. The Santa Anita Savings and Credit Cooperative Ltd recognizes the coordinated efforts of USAID and RFR to provide resources to our institutions and we hope that these efforts will continue to benefit the development of people in rural areas.”

-Cotachai, July 2014

Program outcomes to date

After 30 months of project implementation, RFR’s mobile banking initiative has recorded positive outcomes for individual clients and participating MFIs alike:

<table>
<thead>
<tr>
<th>Client-level indicators</th>
<th>Projected</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of clients served by the cloud-based computing system for basic banking services</td>
<td>250,000</td>
<td>382,220</td>
</tr>
<tr>
<td>Number of clients served by the mobile banking system</td>
<td>40,000</td>
<td>214,217</td>
</tr>
<tr>
<td>Number of clients served through the transactional kiosks in targeted areas</td>
<td>10,000</td>
<td>144,476</td>
</tr>
</tbody>
</table>

Benefits for participating MFIs

RFR estimates that an MFI would spend approximately US $20,000 in infrastructure and start-up costs and about US $2,500 monthly on general expenses to open and maintain a remote office with 2 staff members. Institutions participating in the technology initiative were able to avoid these physical branch costs thanks to the transactional kiosks they received in the program. With these kiosks, MFIs have been able to improve their outreach and increase their client base, now serving an average of 500 new clients in remote areas.

4. Indicator data has been provided by RFR and reflects project metrics through July, 2014.
Lessons for microfinance associations

Assemble a dedicated implementation team with technical expertise

✔ When engaging in technology-related projects, associations should have at least one technology expert in-house, or otherwise work to establish a partnership with a company specialized in the field. This will enable optimal management of the initial stages of the project, including the funding proposal, project design, and implementation plan. Once funding has been secured, a dedicated operational area within the association can and should be formed to ensure successful implementation of the project. In RFR’s case, the mobile banking project was housed in the product development department. This department had been created in response to a need expressed by RFR’s small- and medium-sized members who did not have these resources and capabilities within their individual institutions, coupled with a general market demand for new technology products and solutions. Having a specific department responsible for implementation proved instrumental to the success of programming outcomes.

Assume a balanced role between direct service provision and facilitation of services for members

✔ RFR’s experience illustrates that conflicts with members may arise when associations provide technology services directly, given the complex nature of relationships with and dependence on providers of various technologies (i.e. software, hardware, communications, applications, etc.). It is optimal that the relationship between a service provider and user (in this case, an association member) be explicit and based on a signed contract to minimize potential issues. Today, RFR assumes a supportive role in researching and defining product specifications, establishing implementation and training processes, working on promoting products, and perfecting them—but services are and should be rendered by specialized companies who contract with the association under strategic partnership agreements.

Think strategically to ensure sustainability

✔ Associations should strive for sustainability of service offerings, even when funding for pilot projects and/or initial implementation comes from donors. Identifying and providing services on the basis of member demand will ensure that services are aligned with the market in a way that will support their long-term financial viability. As the development of new technology products stems directly from the expressed needs of its members, RFR’s approach is simultaneously responsive to members and in its own financial interest. This reinforces the long-term sustainability of its offerings.

RFR’s next steps to ensure the scale up and sustainability of mobile banking services

1. Transition from a provider to market facilitation role
   » RFR is currently working to establish agreements with other vendors who will provide the technology products and services to its members directly. These include vendors for PDAs, kiosks, MIS, etc. This strategic shift will leave RFR free to focus on developing new product and service ideas, and will also minimize any potential conflicts arising from institutions being both members of RFR and recipients of technology services from the network.

2. Build a business model to enable sustainable expansion after the end of program funding
   » RFR is developing a business model that will outline its role with technology projects going forward, as well as the ways in which it will continue to support its members in their implementation of mobile banking services. This will include determining the fee structures for organizations that are already participating vs. newcomers who join later; identifying and defining strategic growth targets, both in terms of clients served as well as number of institutions offering mobile banking; and codifying the types of services it will offer to its members.
About Red Financiera Rural

RFR is a non-profit organization established in Ecuador in 2000. Its mission is to expand financial services to rural and marginalized urban areas of the country. Currently, RFR’s 47 institutional members consist of savings and credit cooperatives, NGOs, and specialized financial institutions. Together these members reach 1.2 million clients with US$3.4 billion in loans, and 2.6 million clients with US$2.4 billion in savings. This represents almost the entire microfinance market in Ecuador. More information on RFR projects can be found on their webpage, www.rfr.org.ec.

Microfinance in Ecuador

Ecuador’s microfinance industry is comprised of nearly 60 institutions of various types, including commercial banks, MFIs, credit and savings cooperatives, and NGOs. They serve 1.3 million borrowers with a collective outstanding loan portfolio of approximately US$4 billion, and they hold US$3.4 billion in deposits for 2.7 million depositors. In the 2013 Global Microscope of the Microfinance Environment assessment compiled by the Multilateral Investment Fund, Ecuador’s ranking fell 12 places, to 23rd overall. This reflects increased operational obstacles facing non-regulated microcredit institutions, along with a loss of technical expertise in the country’s credit information system (CIS) owing to the transfer of its private credit bureau to a new public system. It is hoped that new technologies and knowledge-sharing initiatives—like the case profiled here—will strengthen the sector and enable the continued availability and expansion of high-quality service offerings.

About this Series

This article is one in a series developed by SEEP with support from Citi Microfinance titled Spotlight on Financial Inclusion Leaders. The series profiles selected microfinance associations, showcasing the ways in which they are supporting their members and meeting the challenges of value-added growth in financial inclusion. These associations are leaders in implementing innovative and locally-responsive approaches to financial inclusion. Their work is having a clear and measured impact on the lives of their clients, and their experiences bring valuable new knowledge to the industry at large.

About SEEP

Founded in 1985, The SEEP Network was a pioneer in the microcredit movement and helped build the foundation of the financial inclusion efforts of today. In the last three decades, SEEP members have continued to serve as a testing ground for innovative strategies that promote inclusion, develop competitive markets, and enhance the livelihood potential of the world’s poor.

SEEP members work together and with other stakeholders to mobilize knowledge and foster innovation, creating opportunities for meaningful collaboration and—above all—for scaling impact.

About Citi Microfinance

Working across Citi’s businesses, product groups and geographies, Citi Microfinance serves more than 150 microfinance institutions (MFIs), networks and investors as clients and partners in nearly 50 countries, with products and services spanning the financial spectrum - from financing, access to capital markets, transaction services and hedging foreign exchange risk, to credit, savings, remittances and insurance products - to expand access to financial services for the underserved. For more, please visit http://www.citi.com/citi/microfinance/

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