



Grameen Foundation: Improving lives through better microfinancing

Overview

The Need

Institutions serving the world's underdeveloped economies through microfinance needed to gain better control of transaction and accounting information in order to generate growth and obtain new funding.

The Solution

The nonprofit Grameen Foundation and IBM teamed to develop Mifos—a scalable, centralized, open-source banking platform, designed specifically to meet the needs of microfinance providers.

What Makes it Smarter

Accurate, near-real-time information enables banks like India's Grameen Koota to predict capital requirements, freeing up more cash to lend to its clients.

The Result

"Information that once took us weeks to compile is now available in real time, so we can more easily shift resources to where they are needed."

—Suresh Krishna, managing director,
Grameen Financial Services

In developing countries, access to financing and other banking services can be a major challenge for those wanting to raise their standard of living. People often have little or no income or property—resources taken for granted by most in the industrialized world—to use as collateral to secure a loan.

For these individuals, even a small amount of money—enough to buy a farm animal, purchase seed or set up a market stall—can mean the difference between poverty and subsistence. Conventional banks are unwilling to deal with such small sums because the income they generate cannot cover costs.

Unable to get loans from established financial institutions, these people are often forced to turn to unregulated local moneylenders who charge interest rates that can easily top 10 percent per month, and even exceed 100 percent per month. The result is a cycle of endemic poverty that is almost impossible to break.

It was out of this need that the microfinance movement was born. Starting in the 1970s, outreach efforts were made to extend microcredit—very small, short-term loans—to the world's underprivileged on a philanthropic basis. Since then, an entire industry that includes other financial services such as insurance, savings and money transfer has evolved, while still maintaining a focus on reaching out to the underprivileged. Microfinance institutions (MFIs) now serve enormous client bases; in India, for example, MFIs serve some 18 percent of the population, with approximately 188 million accounts.





Business Benefits

- Allows MFIs to accurately predict cash requirements in real time, freeing up capital to support greater lending activity
 - Provides timely, accurate information to help raise new capital from global financial institutions
 - Enables rapid growth through faster product introductions and branch openings
 - Offers the scalability needed to handle large transaction volumes using low-cost technology
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Resource limitations that affect how business is done

The circumstances and culture of microfinance clients means that MFIs must operate very differently from conventional financial institutions. Since many customers cannot travel easily to visit bank branches, MFI representatives travel to villages and meet with them at home or in village meetings, actually carrying cash for the loans and receiving payments. With no consistent technical infrastructure for MFIs to rely on and a need to keep costs as low as possible, simple spreadsheets or even handwritten paper records are often used to handle transactions.

The result is that the information is often inaccurate due to recording and data entry errors, and the business processes at many MFIs operate very slowly. Bank management does not have visibility into the actual cash position of branches at any given time, because it can take as long as six to eight weeks to close the books. Thus, it lacks the information needed to forecast true capital requirements, forcing it to keep excess cash on hand. Also, the lack of timely, correct information hurts the bank's credibility among customers and the financial institutions that provide capital.

The need for a technological solution

Conventional integrated banking software—developed to meet the needs of larger commercial institutions—is neither suited to nor affordable for MFIs. These institutions need simplicity, low maintenance, low cost and the flexibility to run on various hardware platforms. More importantly, they need the ability to centralize

Smarter Banking:

Leveraging technology to bring microfinance to more people



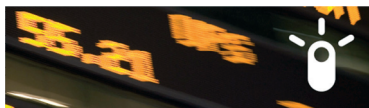
Instrumented

Microfinance representatives visit rural villages and conduct business on location, entering transaction data into the Mifos system on the spot.



Interconnected

Transaction data from 46 bank branches is combined in a centralized, Web-based repository.



Intelligent

Accurate, real-time information helps the bank predict cash requirements and allocate resources more wisely, improving access to capital, helping raise new funds and enabling growth that delivers financial services to the disadvantaged.



Solution Components

Software

- Eclipse Toolkit

Services

- IBM Global Business Services – software architecture & design, testing and implementation
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“Microfinance is about connecting the world’s poor to the global financial system in a practical, sustainable way, and Mifos lets us do that better than ever before.”

—Suresh Krishna

information in order to increase visibility, roll out new products faster, efficiently add new customers and branches, and raise capital—all important factors in growing the business.

The Grameen Foundation was formed to address this need. With a mission that included finding ways to use technology to better deliver microfinance services and improve the lives of the poor, the Foundation set out to develop a software platform designed specifically for the needs of MFIs.

“We saw MFIs trying to buy or build their own systems, and having a hard time,” says George Conard, executive director of technology at the Grameen Foundation. “There was a gap in capabilities; the systems tended to be either too large, complex and expensive, or too small, poorly supported and unable to deal with the huge transaction volumes that are typical of microfinance. We decided to take a different approach. We wanted to bridge the gap between custom software development and commercial packages by building a targeted, open-source platform with a strong social mission. That was the origin of Mifos.”

IBM, as part of longstanding efforts to find new ways to use technology to serve people, teamed with Grameen to take the first, Foundation-developed version of Mifos to the next level. The goal was to increase the platform’s maturity, scalability, robustness and feature set, while also helping to put in place advanced development processes and tools to make future development faster and more efficient.

IBM engineers from three continents worked closely with Grameen Foundation developers, bringing expertise not only in software development, but testing, quality assurance and architecture as well. In keeping with the vendor-neutral, sustainable and low-cost nature of the project, the team made use of the Eclipse Web Tools Platform development environment, an open-source toolkit originally developed by IBM. The result was accelerated development. “IBM jump-started our efforts, helping us adopt a more modern architecture, moving us forward and helping us think through the challenges,” Conard says.

Bringing it to the field

Because of the challenging business environment and conditions facing MFIs—such as the lack of robust local technical support, unpredictable power, Internet outages and extreme pressure to keep costs low—it was essential to gain real-world experience with the platform. As part of the development effort, Grameen Foundation and IBM worked closely



with Grameen Koota, an MFI serving parts of India. The organization became a key contributor to the success of the project, providing vital input that helped the team optimize the new investment in Mifos.

Grameen Koota was facing significant barriers to its growth. Its legacy systems were spread across 46 branches and there was no centralized data or application repository. Staff was spending a great deal of time on manual data entry and processing, taking transaction records from the field and manually rekeying them into the branch systems. “We were serving some 70,000 customers,” says Suresh Krishna, managing director, Grameen Financial Services. “We wanted to expand our service significantly, targeting two million within five years. We could not do that with our existing processes and systems.”

There was some skepticism among the local Grameen Koota branches, according to George Conard. “MFI managers are very entrepreneurial, but they don’t have a strong background in thinking about technology strategically,” he says. “They’ve not seen enough proof that technology holds value for them. However, once they saw how much more efficiently the local offices could run, they quickly turned around. Since adopting Mifos, there hasn’t been a single day when the books could not be closed.”

Suresh Krishna says that the hesitancy stems from past experience. “Local technology providers are sometimes unreliable and they may not be in business when we need them in the future. We wanted something global and sustainable, with the ability to manage and upgrade the technology without being locked into a single vendor. So open source was very important to us.”

The deployment experience provided valuable lessons, highlighting key considerations for the industry. “We learned three important things from this project,” Krishna says. “First, data migration is key. It is very easy to underestimate the scale of that challenge. Second is the need to adapt to the new technology; training is essential. And third is the need to align business processes with the technology. Many organizations want the software to mirror their processes, but that’s often not efficient or wise. It’s better to adapt processes to closely align with the technology.” IBM gave Grameen Koota valuable assistance with its data migration challenge, and also provided training.



A new way of operating

With the Web-based Mifos platform, Grameen Koota field representatives can record transactions as they are conducted, with no need to rekey the data. This information, updated in real time, makes it possible to produce reports much more quickly. “Information that once took us weeks to compile is now available in real time, so we can more easily shift resources to where they are needed,” says Krishna.

The bank now knows its cash position at the close of each day, which lets it allocate money more wisely. Field representatives can carry less cash, which reduces the risk of theft, and with less need to keep excess funds on hand to cover its open financial positions, the bank can free up more capital to lend to its customers.

Mifos has also created much greater flexibility. “We can introduce new products very easily,” Krishna notes. “Before it was almost impossible. With our systems scattered across our branches, changing any policy would require that we revise many instances of our software. It was a nightmare and it could take three months. Now, it takes just three days. We can also open new branches in a fraction of the time it once took.” The growth enabled by Mifos has been impressive. Grameen Koota now serves some 350,000 customers, and is on course to reach its goal of two million within five years.

Fulfilling the mission

The transparency provided by Mifos gives Grameen Koota much more than operational business benefits; it goes straight to the core of the microfinance mission. “Accuracy and timeliness of information is very important from a strategic perspective,” says Krishna. “That’s where Mifos really helps us.” Access to better information enables the MFI to more easily raise money from global financial institutions, providing a critical source of new capital to support growth. “That’s the key link. Microfinance is about connecting the world’s poor to the global financial system in a practical, sustainable way, and Mifos lets us do that better than ever before.”

For more information

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