

## USING TECHNOLOGY TO BUILD INCLUSIVE FINANCIAL SYSTEMS

Innovative use of information and communications technologies to inexpensively process a large volume of small transactions and deliver a wide range of financial services may help to make microfinance institutions (MFIs) more efficient and commercial banks more interested in serving poor people. Falling hardware costs and growing support infrastructure are making these technologies increasingly available. Debit and credit card readers now cost as little as US\$125 and operate wirelessly, according to Santanu Mukherjee, VISA International country director (South Asia). From 1999 to 2004, the number of mobile subscribers in Africa grew from 7.5 million to 76.8 million (LaFraniere 2005). Besides reducing delivery costs for banks, poor people may ultimately prefer using these channels because they are inexpensive and convenient. Many who are unbanked now may gain access to financial services for the first time.

### How It Works

In a recent CGAP survey, 62 financial institutions in 32 countries report using technology channels, such as automated teller machines (ATMs), point of sale (POS) card readers,<sup>1</sup> and mobile phones,<sup>2</sup> to handle transactions for poor customers. Some are using new technology to better serve existing customers; others hope to reach new clients in areas where setting up a bank branch may be too costly.

<sup>1</sup> POS terminals are devices that handle payments of disbursements by reading debit or credit cards or barcodes and communicating transaction information via a telecommunications connection.

<sup>2</sup> Orders for money movements (and records of the transaction) can be sent by mobile phones using a short messaging service or other protocol.

In Brazil, private-sector banks, such as Banco Bradesco and Lemon Bank, and state-owned banks such as Banco do Brasil and Caixa Economica Federal, have developed about 30,000 so-called “banking correspondents.” Lottery outlets, post offices, supermarkets, grocery stores, petrol stations, and other retail outlets act as agents for the bank, using POS terminals or PCs to distribute a range of banking services, such as savings, credit, money transfers, insurance, and government benefit distribution. Using this approach, Brazilian banks opened about 10 million new current accounts since 2000.

### Scaling Up Too Early to Declare Success

Will branchless channels be profitable enough to convince banks that low-income customers are a viable long-term market? It is too early to know. To make money, a branchless channel needs to serve a critical mass of customers and deliver a wide range of services. One challenge is building successful long-term client relationships when customers’ main interface is not the bank itself but a supermarket or drugstore. Banco do Brasil found that 30 percent of the accounts opened at its banking correspondents never become active (*Valor Economica* 2005). Profitability also hinges on banks’ ability to make loans to their new customers. Making good credit decisions on borrowers who lack a credit history or any form of collateral requires partnerships with MFIs, new scoring techniques, or other innovative approaches. These methodologies are now being tested.

Are these new branchless channels being used by poor and very poor people? Evidence from Brazil is encouraging. Approximately 48 percent of clients served by Caixa Economica banking

correspondents earn less than R\$200 (or US\$ 75) per month, less than the country's minimum wage (Kumar, Parsons, and Urdapilleta forthcoming). Still, CGAP is doing more research to understand why some poor people do not use these technology delivery channels.

### Emerging Lessons

Understanding and communicating with the customer is the key to a successful channel. Experiments with offering debit cards to the employed poor in India have shown that, unless clients are specifically told not to reveal their PINs to others, they often will write these numbers on the debit card itself, rendering account security useless. In Uganda, Stanbic set up tents where bank staff taught customers how to use an ATM.

Much of the operational risk involved in developing branchless delivery channels emerges from the need to accept, store, and dispense cash. According to Andre Cano, director of Banco Postal, Banco Postal eliminated the need to transport large amounts of cash in and out of remote communities by working with local businesses and municipal governments to ensure they make timely end-of-month deposits, thereby permitting pension and welfare recipients to withdraw cash at the beginning of each month.

Government plays a critical role. They can pass laws or use influence to stimulate banks to serve poor people, as they have done in Brazil, South Africa, and India. In Brazil, rules governing use of correspondents have steadily evolved since the 1970s, permitting Brazilian banks to cost-effectively deliver financial services through a dense network of retail and postal outlets. To help banks attract low-income customers, regulators in South Africa and Brazil relaxed norms on identification requirements to open bank accounts with limited maximum balances.

### Conclusions and Avenues for Further Work

Initial experiences with branchless banking channels point at three areas for further attention. First, policymakers should think broadly about ways to balance improved access with appropriate regulation and oversight. Second, further study is needed to understand what key design features will render technology channels comfortable, convenient, and trustworthy to poor customers, and thereby generate the transaction volumes required to make them profitable for banks. Finally, MFIs must evaluate the challenges and opportunities created by technology channels.



### Resources

LaFraniere. 2005. "For Africa, a Godsend in Cellphones." *The New York Times*. 25 August.

Valor *Economica*. 2005. "Brazil: Banco Popular do Brasil Hit by High Levels of Debt Default and High Cost." *Valor Economica*. 11 November.

Kumar, Anjali, Adam Parsons, and Eduardo Urdapilleta. Forthcoming. *Banking Correspondents and Financial Access: The Experience of Brazil and Potential for Other Countries*. Washington, D.C.: The World Bank.

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- Visit [www.cgap.org](http://www.cgap.org) to access relevant material, including
  - "Using Technology to Build Inclusive Financial Systems," by Gautam Ivatury. Focus Note 32, January 2006.
  - "Mobile Phones For Microfinance." CGAP Brief, May 2006.