Technology Program Focus Country

INDIA

November 2010

Population:	1.18 billion
% below $2 per day:	75
% Urban:	30
% under age 25:	50
GDP/capita (PPP):	$3,100
No. Bank Branches:	65,000
Targeted BB Outlets:	100,000
No. Bank Accounts:	310 million
% Adults w Accounts:	45
No. SIMs:	636 million
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Summary

India is the second most populous country in the world. It has 1.2 billion inhabitants, three-quarters of whom live on less than $2 per day. India also boasts a vibrant and fast growing economy with sophisticated banking and technology sectors. Enhancements to the regulatory environment for branchless banking have accelerated in the past three years and particularly in the past 12 months. Various banks and agent networks are actively pursuing branchless banking. Early efforts have opened tens of millions of new “no frills accounts” for the unbanked.

Nevertheless, most banks are not highly motivated to use branchless banking because they generally see branchless banking as a corporate social responsibility with limited-to-nonexistent business potential. The lack of motivation often means insufficient investment, lack of creativity, and unclear pathways toward viable commercial operations. CGAP’s work in this area aims to leverage partnerships and relationships and will focus on ensuring increased customer adoption by working with banks and their partners to build the business case for branchless banking; support

technical know-how, especially among banks; and support product innovation that can enhance channel viability. CGAP will also proactively engage with policy makers, particularly the Reserve Bank of India (RBI) and the Inter Ministerial Group (IMG) Committee on mobile phone banking.

Background

India has a long history of promoting financial inclusion. The earliest formal efforts in the 19th century promoted a range of cooperative financial institutions that retain a significant presence across India, though many have suffered from undisciplined operations and political interference. Nationalization of the commercial banks in the 1960s combined with priority sector lending requirements introduced in the 1970s has given the banking sector a decidedly pro inclusion bent. And in the 1970s even greater focus was sought in rural areas, and a new class of regional rural bank was introduced sponsored by the larger public sector banks whose presence in rural areas was considered inadequate. In total just under one-half of adults have a bank account, a figure ahead of other low-income countries, but nevertheless well behind well-developed economies.

India's priority sector lending policy has helped facilitate two major financial inclusion initiatives. In the 1980s the first self-help group (SHG) models began to emerge. Today this approach reaches 4.5 million groups, which include 58 million individuals, making it the single largest microfinance "system" in the world. However, the pace of growth of SHGs has slowed in the past few years and remains concentrated in a few southern states.

The late 1990s witnessed the rise of microfinance institutions (MFIs), which began as nonprofits but increasingly are forming as (or transforming into) regulated nonbank finance companies (NBFCs). These MFIs reach nearly 28 million clients and are the fastest growing model for financial inclusion in India. Nevertheless, some policy makers, and especially RBI, are wary of MFIs, arguing that they do not provide a full range of services and are too profit-oriented to serve the poor well. The recent crisis erupting in Andhra Pradesh may force the MFI model to adapt to a changing policy environment and public perception of MFIs.

Over the past four years, and particularly in the past 18 months, the promise of technology-enabled branchless banking has risen to the top of the financial inclusion policy agenda. RBI prefers this unproven approach because it holds out hope that it can deliver a wider range of services and may

keep banks at the heart of service delivery. RBI looks to stability to keep the financial sector dominated by large commercial banks. Branchless banking marks its beginnings in 2006 when RBI enabled banks to use sites outside their branches to deliver services. And in 2009 and 2010, RBI further relaxed restrictions, enabling for-profit organizations to act as front-end customer service points and as agent network managers (ANMs) and permitting banks to charge extra fees for the delivery of services. However, it is unclear if RBI will permit NBFCs to act as agents on behalf of banks; this matter is under deliberation.

Some of the recent changes are due to heightened attention to policy. The IMG convened a government discussion and released the consensus report "Delivery of Basic Financial Services Using Mobile Phones" in May 2010. This group included a range of ministries that created wider government agreement to push mobile phone banking. The IMG continues to meet regularly to monitor progress and reports on this progress to the cabinet secretary. Having attracted the attention of the cabinet and the prime minister, branchless-banking-enabled financial inclusion has pushed the minister for finance to compile board-of-director approved targets from all the banks. Policy makers have identified 100,000 villages of over 2,000 inhabitants, and these localities have been divided up among the commercial banks as places to install agent points of service.

Heightened policy attention has also prompted RBI and a collection of commercial banks through the National Payment Corporation of India to establish a specialized switch specifically for mobile phone transactions. This switch (IMPS) has been inaugurated and will be linked to a unique mobile money ID (MMID); in turn, this identifier will be linked to a specific bank account. By making this link, mobile phone accounts will be tied into a backend switch that will enable any transaction between banks on this switch.

In 2009 the Government of India launched a new initiative to provide all Indians with a unique identification (UID) number and to create a new UID Authority of India (under an Act of Parliament, which is expected to pass into law). All residents of India will have access to a unique identifying number that can be verified biometrically (initially by fingerprint). UID planning documents identify financial access and a national micropayments switch as one of the key components of a broader UID strategy (see Micropayments). This includes UID-proposed standards for agents and the technology deployed by agents that could, over time, influence how branchless banking evolves.

Over the past four years, a range of new branchless banking deployments has hit the market. This has been led by innovative small technology firms that have teamed with banks. These smaller firms have demonstrated functional technologies (both mobile phones and cards) and innovative business processes. A few efforts have been successful in opening large numbers of new accounts, but none has demonstrated commercial success due to a number of reasons.

First, despite large numbers of new accounts opened for government-to-person (G2P) payments, customers are not using the accounts to store money or make transactions. Such accounts are a cost drag and bring in no revenue beyond the initial fees for the one-time transfer. Second, market actors have faced many challenges in learning how to scale agent networks that must hire and manage several thousand individuals in distant localities. And third, the banks have been largely passive partners that have failed to adapt, investing insufficient capital and not creating services that the poor demand. This stands in contrast to regulations, which place banks at the heart of branchless banking delivery.

One of the important services being delivered by branchless banking is a range of G2P payments. Among the largest G2P programs in the world is the National Rural Employment Guarantee Scheme (NREGS), which guarantees 100 days of paid labor to anybody who seeks the work. State governments charged with administering these programs have, in some cases, teamed up with banks and technology-enabled agent companies to deliver these payments. However, the use of electronic branchless banking is highly variable and used regularly in only a few states. NREGS represents the largest flow of G2P payments, but there is a wide range of other programs across India: pension payments, health insurance, prenatal care, and a many other services.

Donor and funding agencies have also begun to take more interest. The World Bank is awaiting a request for technical assistance from the Department of Financial Services of the Ministry of Finance to branchless banking models (the World Bank may in turn request CGAP involvement). DFID is considering including a significant branchless banking component into a new project that will focus on four states. The most active funder has been the Bill & Melinda Gates Foundation, which is promoting several pieces of work exposing learnings and keeping branchless banking on the agenda. Efforts include research on “corporates” as agents, making the business and economic case for electronic payments (Boston Consulting Group), current use of remittance channels (Center for Microfinance), and a mapping of stakeholder views on branchless banking (Monitor

Group). Bankable Frontiers Associates aims to work with one bank in India under the global Gateway Financial Innovations for Savings (GAFIS) project intended to research how to convert basic no-frills accounts to more actively used services. MicroSave is active in branchless banking focusing on customer adoption issues and has some funding from Omidyar Network. The Michael and Susan Dell Foundation seeks to engage in customer adoption research aimed at promoting more savings use by the poor, which may have key links to branchless banking delivery methods.

Situation Analysis

Regulatory Environment

For the past four years, RBI has been moving in a positive direction, albeit incrementally, with respect to branchless banking regulation. There are several areas of regulation relevant to the expansion of branchless banking efforts, including regulations pertaining to business correspondents (BCs), anti-money laundering/combating the financing of terrorism (AML/CFT), mobile banking, and prepaid payment instruments. In all, the regulations would enable basic bank-based branchless banking models to emerge. However, RBI is firm about keeping large commercial banks at the heart of the financial system, and regulation has been slow to allow roles for nonbanks, including mobile network operators (MNOs), and other for-profit corporations. However, changes in September 2010 have opened the door for MNOs and other for-profits to act as BCs. NBFCs, and specifically MFI NBFCs, are still excluded, and it is unlikely this will open up soon as the whole regulatory treatment of MFI NBFCs is being examined by RBI.

In January 2006, RBI issued a "Business Correspondent" circular empowering banks to engage BCs for a variety of basic services, including providing cash-in/cash-out services for bank accounts, identifying and processing/submitting loan applications from borrowers, and receiving and delivering small-value remittances and other payment instruments. The initial regulation placed important restrictions on the kinds of institutions that could be BCs, the ways in which banks could charge customers for BC transactions, and how close BCs needed to be to bank branches to be eligible. These restrictions are partly to blame for the slow uptake of the BC model over the past several years.

In November 2009, RBI revised the BC circular to (1) permit banks to charge customers "reasonable fees" for using BCs under board-approved policies and (2) to expand the scope of permissible BCs to include individual "kirana,"[1] medical, and fair price shop owners; individual public call office operators; individuals who are petrol pump owners; agents of small savings/insurance schemes; retired teachers; and functionaries of well-run SHGs linked to banks.[2] Also, earlier in April 2009, RBI increased the maximum distance permitted between the place of business of a BC and the bank branch, from 15 km to 30 km.[3]

Most recently, in September 2010, RBI issued a revision enabling for-profit companies registered under the Indian Companies Act, 1956, to become BCs. With this regulation, RBI hopes that existing companies with large existing retail networks, such as MNOs and FMCG distribution companies, will leverage their reach, resources, and sophistication to more rapidly and cheaply expand access points. NBFCs, however, are still excluded from eligibility to be a BC, seemingly due to ongoing sensitivity around NBFC MFIs' high-profile profits and rates of interest. RBI shows no signs of opening BC eligibility to NBFCs in the short term.

Other areas of relevance for branchless banking are as follows:

- **Mobile Banking Guidelines.** In October 2008, RBI issued the Operative Guidelines for Mobile Banking Transactions in India,[4] pertaining to branchless banking initiatives from banks for existing customers. In summary, these guidelines (including a 2009 amendment) provide that (1) only banks licensed and supervised in India *and* with a physical presence in India can offer mobile banking to customers (i.e., MNOs and nonbanks cannot offer mobile banking services); (2) mobile banking services are limited to existing customers of banks; (3) cross-border and foreign currency remittances are not allowed; (4) services must be interoperable across MNOs within six months of offering; (5) daily transactions are limited to a value of Rs. 50,000 for transactions; and (6) banks offering mobile banking services must obtain a one-time prior approval of RBI. These guidelines also required a two-factor

[1] Kirana shops are small, owner-staffed shops used by the majority of Indians (particularly rural) for basic groceries and fast moving consumer goods.

[2] RBI, DBOD.No.BL.BC. 63 /22.01.009/2009-10, 30 November 2009.

[3] RBI, DBOD.No.BL.BC.129 /22.01.009/2008-2009, 24 April 2009.

[4] RBI, Circular DPSS.CO.No.619/02.23.02/ 2008-09, 8 October 2008 (hereinafter Mobile Banking Guidelines).

authentication (including mPIN) and suggested end-to-end encryption (except for transactions under Rs. 1,000).

- **Prepaid Instruments.** Until 2009, only banks and financial institutions were permitted to issue e-money and collect funds for payment to third parties. In April 2009, RBI issued its Prepayment Instrument Guidelines. The Guidelines identify three categories of prepaid instruments, which include smart cards, magnetic stripe cards, Internet wallets, mobile accounts and wallets, and paper vouchers. The three categories are (*i*) "closed" system payment instruments, which may be used only for the purchase of goods and services from the issuer itself; (*ii*) "semi-closed" payment instruments, which may be used at a group of clearly identified merchant locations and/or establishments that have contracted to accept such instruments, but which may not be used for cash withdrawal or redemption; and (*iii*) "open" system payment instruments, which may be used at any point-of-sale (POS) enabled merchant and for cash withdrawal at automatic teller machines (ATMs). Only banks may issue all three types of instruments (and only those banks that have been permitted by RBI to provide mobile banking transactions may launch mobile accounts and wallets). NBFCs and "other persons" may issue only semi-closed or closed instruments, subject to minimum capital requirements, special AML/CFT policies, and maximum value and validity periods. There are also limits on how the collected funds can be used. For example, nonbanks must keep the funds collected in a noninterest-bearing escrow account with a scheduled commercial bank and can collect interest on only a portion of these amounts, and only if other conditions are met. This practice ensures that banks largely continue to control and benefit from the float, and encourages nonbanks to focus only on fee-based (rather than float-based) business models. In August 2009, RBI amended the guidelines to permit "Other Persons" to issue mobile phone-based semi-closed prepaid instruments, although such instruments are restricted to a maximum of Rs. 5,000 value, cannot be purchased or recharged with mobile phone airtime, and can be used only for the purchase of goods and services (i.e., no person-to-person transfers).[5] RBI has since suggested that these revisions were intended in part to provide MNOs a way to offer customers a "mobile wallet" through banks, thus ensuring that the float would remain with banks, a clear objective of RBI.
- **AML/CFT.** AML/CFT issues are regulated under the Prevention of Money Laundering Act 2002. The law applies to banks and financial institutions. Banks have complained that know-your-customer (KYC) procedures are a challenge for many low-income customers,

[5] RBI, Circular DPSS.CO.PD.No.344/02.14.06/ 2009-10**,** 14 August 2009.

prompting RBI to further simplify the process for small-value accounts (maximum balance of Rs. 50,000 and maximum annual deposit of Rs. 100,000). Now KYC requirements can be satisfied for these accounts by (*i*) introduction by another account holder who (*a*) went through full KYC procedures and opened an account at least six months prior and (*b*) can certify the applicant's address and provide a photograph of the applicant **or** (*ii*) production of any other evidence as to the identity and address of the customer to the satisfaction of the bank. Under this KYC regime it is unlikely that customer identification and address verification constitute a problem for small-value transactions. Further simplifications have been discussed, but revisions have been stalled and it's not clear when or if such proposed changes will be made. There is a separate and further relaxed regime covering certain prepaid instruments under the 2009 "Policy Guidelines for Issuance and Operation of Prepaid Payment Instruments in India."[6] RBI also allows for nonface-to-face customer identification, but only if there are specific and adequate procedures to mitigate the higher risk involved.[7] The guidelines' recommendations—certification of all documents presented and requiring the first payment to be effected through the customer's account with another bank—are likely to create high barriers for remote account opening.

- **Money Transfers.** Only banks and the India Post may provide domestic money transfer services,[8] though banks may offer mobile services as a channel for existing customers. International money transfers into India are addressed by RBI's Money Transfer Service Scheme,[9] which permits the following institutions to receive international remittances: authorized dealers (primarily banks authorized to deal in foreign exchange under the Foreign Exchange Management Act [FEMA] 1999), RBI-licensed fully fledged money changers, NBFCs, and travel agents with a minimum net worth of Rs. 250,000. Prepaid instruments may be used for cross-border transactions only if the issuer is authorized under FEMA and is a participant in a payment system.[10]

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[6] RBI, Circular DPSS.CO.PD.No.1873/02.14.06/2008-2009, "Policy Guidelines for Issuance and Operation of Prepaid Payment Instruments in India," 27 April 2009 (hereinafter Prepaid Instrument Guidelines).

[7] RBI, Circular UBD.BPD(PCB)MC.No.9/13.01.00/2005-06, Master Circular "Maintenance of Deposit Accounts," 11 August 2005, Annex A to Annexure III.

[8] Indian Post Office Act (1898), Chapter IX, authorizes post offices to engage in money transfer services through money orders.

[9] Money Transfer Service Scheme, 2003, http://www.rbi.org.in/scripts/NotificationUser.aspx?Mode=0&Id=1217.

[10] The Prepaid Instrument Guidelines, Art. 6.2.

Commercial Banks

India's financial sector comprises a wide array of banks, including a wide collection of smaller banks, such as urban cooperatives, state cooperatives, and regional rural banks. However, the national financial system has long been dominated by 27 public sector banks that still own a majority of assets in the banking sector. Reforms beginning in the 1990s have allowed greater space for private sector banks and branches of multinational banks. These reforms have raised the bar across all banks improving overall performance, which now compares favorably with others in the region on metrics such as growth, profitability, and asset quality. In the coming years, significant pressures will continue to keep pace with the growth of the broader economy. Competition and regulation will leave little room for complacency—for example, historical treasury arbitrage margins are likely to continue to shrink, forcing some banks to consolidate. Banks will be under pressure to upgrade their staff skills and reduce the costs of intermediation; some weaker banks may in time be forced out.[11] To further strengthen the financial sector, RBI is considering offering new bank licenses, something that has not happened in many years.

In addition to the broader, more competitive, banking sector under pressure to keep pace with Indian growth, policy has also put the lion's share of branchless banking opportunity and responsibility with large commercial banks. At a meeting with RBI at the end of 2009, banks were asked to submit financial inclusion targets that they would need to meet, combining lending to MFIs and SHGs with more BC targets. The targets pushing bank service points out to 100,000 villages (locales with more than 2,000 residents) out of a total of 600,000 villages across India. In standard central planning practices, India's credit planning mechanisms have allocated specific locations to banks. The targets will be tracked each year, and banks are responding quickly.

The main challenge is motivating banks that still see financial inclusion as a corporate social responsibility rather than as a business opportunity. Banks are committed to meeting the targets they have set and have appointed senior managers to new divisions to meet these targets. It remains to be seen, however, if the banks can also innovate in ways that make this a viable business opportunity. In the past, banks have made inroads as wholesale financers to SHGs and MFIs, but they have left the retail interaction with the end clients to these intermediaries. The same might be the natural inclination for branchless banking, for banks to outsource as many of the retail

[11] McKinsey&Company, "India Banking 2010: Towards ad High-performing Sector."

functions as possible. However, unlike SHGs and MFIs, with branchless banking, banks have a more significant brand risk and will need to entrust nonemployees with taking in deposits. And regulators are holding banks accountable.

Other key challenges for the banks include the following:

- Developing a winning operational model for BCs and a viable business model for financial services via BCs given the pressure to meet commitments on accounts and geographical coverage made to RBI.
- Keeping a consistent focus on the BC business on an ongoing basis when most divisions are also pursuing wholesale lending to MFIs, setting up new branches in rural areas, and competing for other business across the fast growing Indian economy. Will branchless banking garner sufficient attention and resources?
- Building successful partnerships with MNOs and other "corporates" that could operate as BCs for banks.

In another recent development, the Mobile Payments Forum of India (MPFI), a consortium of the leading banks and MNOs in India, has been working on the development of the NPCI (a national switch, which is already doing 100,000 transactions a day) and a new mobile-based transfer service that participating banks can offer, called Inter-bank Mobile Payment Service (IMPS). This initiative will enable customers to register for a Mobile Money ID (MMID) linked to accounts of the customer, and send/receive funds to/from the account via the MMID, and routed through IMPS. This new switch has been launched and offers an important piece of infrastructure that can be accessed only by the banks, but it also does little to address front-end banking and cash access challenges. Building agent networks will be as important as ever.

Out of India's overall banking sector, CGAP has narrowed its focus on six banks that are more likely to be active in branchless banking in the coming one to three years. This expectation is based on market intelligence and the profile of some of India's larger banks that have the wider networks to build off. This includes three public sector banks that are among the three largest banks in India: State Bank of India (SBI), Union Bank of India (UBI), and Punjab National Bank (PNB). Three private domestic commercial banks are also active: ICICI, HDFC, and Axis. At this juncture, these six banks have been the earliest entrants, though there are multiple efforts underway beyond this narrower group. Two smaller banks are worth keeping track of given their pursuit of an alternative use of BC

regulation. KBS Local Area Bank and YES Bank are pursuing branchless banking as an extension of their mostly credit offerings and so offer an alternative model for the use of BC regulation. However, neither is likely to have wide national reach or to pursue scale at the national level.

Figure 1. Profile of some banks with branchless banking initiatives

Bank	Branches	No-frills accounts	No-frills targets	Employees	Profit per employee (Rs. lakh)	Deposits	Interest income	Other income	Operating expenses	Cost of Funds	Return on Assets
State Bank of India	11,447	4 M	not available	205,896	4.74	742,073.13	63,788.43	12,690.79	15,648.70	5.85	1.04
Punjab National Bank	4,323	not available	not available	54,780	5.64	209,760.50	19,326.16	2,919.69	4,206.20	6.05	1.39
UBI	2,850	6.4 M	3.6 M	29,014	6.28	138,702.83	11,889.38	1,482.55	2,214.11	6.15	1.27
ICICI Bank	1,408	1 M+	20 M	34,596	11.00	218,347.82	31,092.55	7,603.73	7,045.11	5.97	0.98
HDFC Bank	1,400	not available	not available	52,687	4.18	142,811.58	16,332.26	3,290.60	5,532.81	6.83	1.28
Axis Bank	786	2.8 M	4.8 M	20,624	10.02	117,374.00	10,835.00	2,897.00	2,858.00	5.88	1.44
Yes Bank	118	not available	200 K	2,671	11.38	16,169.42	2,003.32	435.02	418.55	8.41	1.60

SBI is India's flagship bank and publicly claims to be the "Banker to Every Indian." SBI is far and away the largest bank in India, with nearly 12,000 branches and a strong brand in India. SBI has been an early, if somewhat reluctant, entrant into branchless banking. It has established relationships with 15 BC companies (though it relies mostly on three to four of these). Its most substantial partnerships are with Eko and A Little World (ALW). Eko is a boutique mobile-phone-based solution with some potential to go to scale with a basic person-to-person (P2P) service. ALW has an innovative mobile-phone-based POS that primarily is used to deliver government payments electronically in the state of Andhra Pradesh in early 2007.

SBI has loose commercial arrangements with its BC agent partners. The agent companies have targets to acquire customers and are paid per customer acquired and per account annually. This pricing structure has proven problematic because it rewards early sign-up but offers no cost coverage for account servicing or subsequent marketing. SBI has run these channels under its rural banking division, which is charged with a range of rural business for the bank.

UBI is one of India's large "networked" public sector commercial banks, with 2,850 branches, and is growing—it expects to increase the number of branches to 3,650 over the next two years. UBI has been one of the leading banks opening no-frills accounts having opened 6.4 million accounts

through biometric cards through a significant relationship with the BC company FINO. A large share of these accounts funnels NREGA payments.

PNB is the second largest commercial bank in India with 4,500 branches and a regional focus across the plains of North India. It is one of the few banks with a head office in Delhi rather than in Mumbai. PNB was involved in the Bhamashah G2P project in Rajasthan and registered close to 4 million account holders in a short two-month period. This program was derailed by a change in state government and only recently the project was released from a court injunction that blocked further implementation. It is not clear whether it will be revived.

ICICI Bank has been the fastest growing of private sector banks over the past decade. It has been an innovator in the use of technology, and it has pushed into untapped markets. It innovated new wholesale lending arrangements with MFIs under the "Partnerhip Model" and remains the largest lender to MFIs among the private banks.

Axis Bank is another of the new generation of private sector bank that emerged out of investments by various public sector financial institutions, including the Life Insurance Corporation of India and UTI. Axis rebranded its name and its image in 2007. It currently has 2.8 million no-frills account customers, half of which are in Andhra Pradesh and the rest in Haryana, Karnataka, and Chattisgarh. Axis has recently appointed a new senior manager to head all financial inclusion activities. This includes wholesale lending to MFIs and SHGs, but also includes a new push into branchless banking. Axis has worked with FINO and other smaller BCs until now; will look ahead to different kinds of partnerships to grow the branchless banking side of its business.

HDFC Bank is one of the two largest private sector banks. It emerged as the commercial banking entity related to the well-known Housing Development Finance Corporation (HDFC) of India. HDFC is a corporate bank, but has tied up with Vodafone in a trial of M-Paisa in Sikar, Rajasthan. Sixty-seven Vodafone air-time resellers have been converted to agents. Its financial inclusion efforts focus heavily on its wholesale lending to MFIs and SHGs.

Mobile Network Operators

The delivery of voice and text services has reached a state of high competition, with prices having been competed down to rock bottom levels. There are about a dozen providers in India, though about six hold the largest portion of the market share. Market leaders, such as Airtel, are actively seeking ways to broaden their business moving from being telecommunications companies to "lifestyle" companies that provide a wide array of services beyond voice.

Mobile Operator	Subscribers (millions)	Average Revenue Per User ($)
Airtel	136	4.73
Reliance	110	2.85
Vodafone	109	4.20
BSNL	72	N/A
Idea	68	4.29

There are over 10 MNOs in India, making it the most competitive telecommunications market in the world. Market structure has ensured that there is no single dominant player, rather the market is led by the top five firms. This structure and falling ARPUs result in a general view that mobile operators need new revenue sources.

MNOs, especially Vodafone, Airtel and new entrant Uninor, have been enthusiastic about branchless banking. Regulators have given MNOs a backseat role, prohibiting the issuance of nonbank, e-money services and, until September 2010, not allowing MNOs (or any for-profits) to act as BCs. While the restriction against MNO BCs has been lifted, and many MNOs are looking for arrangements with banks, MNOs still have limited scope to drive the branchless banking business.

Earlier this year, **Airtel** brought on a new team that is focused on mobile commerce and mobile payments. In September 2010, it received approval from RBI to be the first India MNO to develop a closed-loop payments scheme via cell phones. The scheme is not relevant for unbanked customers, but it reflects RBI's gradually changing position on MNOs and Airtel's maturing posture in the market.

Airtel has had other mobile banking initiatives, one of which was focused on unbanked customers. Airtel partnered with mChek, a mobile payment solution, making the solution available on all new Airtel SIMs. The partnership was developed to reach banked customers who could pay via mChek wherever visa was accepted.

After having been stymied from repeating its Kenyan success in India and repeated challenges at getting schemes approved by RBI, **Vodafone** successfully struck a partnership with HDBC bank to launch a pilot of its M-PESA platform. Having launched this pilot and with the barriers to further bank arrangements with MNOs, Vodafone is presently searching for other bank relationships that can create new avenues to grow its M-PESA service.

Technology cum Agent Network Managers (aka BC Companies)

One of the effects of a highly entrepreneurial environment coupled with regulations has been the emergence of at least a half dozen companies that combine a technology solution with an agent network to partner with a bank. Many of these companies began as technology providers but soon realized that their business would not work unless they also could bring an organized network to the partnership with a bank. These companies have proven highly innovative and motivated to develop creative solutions with technology and agent systems that are low cost, meet regulatory requirements, and can quickly extend services with new accounts opened.

These companies, with their bank partners, deploy a range of approaches and services. They deliver G2P, no-frills accounts, and remittances, and in a few instances they extend credit. The agent networks are managed quite differently in some cases from fixed locations and others as mobile agents. Cash management practices vary widely. Both mobile phone and card-based solutions are in play; however, market preferences are shifting toward mobile phones. Some significant progress has been made in improving financial performance, but there is a long road to travel for these approaches to demonstrate commercial viability. Several common challenges remain: agent infrastructure must be built and maintained before sufficient revenue is available to pay for this infrastructure; revenue is insufficient because clients are not transacting enough over the network. Client use is challenged by a lack of trust, poor design of services, and little marketing. Many of these problems are compounded by the absence of meaningful enthusiasm of investment on the part of the banks. Furthermore, it is not yet clear how the business will change for these smaller players after the introduction of the MPFI-sponsored (IMPS) offering/platform by banks.

Eko is a technology firm that arose from promoters with a telecommunications background. Eko sits as a technology provider cum ANM. Eko has been at the forefront in India of developing mobile-

based user interface, processes, and technology that work reliably in remote rural as well as urban settings among low-income clients. Over the past year, Eko has pivoted away from a reliance on Airtel to acquiring and building its own agent network with some success. Eko has successfully integrated with SBI, its main bank partner, technologically as illustrated by the ability to transact across all Eko and main SBI accounts. Eko received an equity infusion of $7 million from 4B Capital in the second half of 2010.

FINO is the largest and best funded technology cum ANM. It was born out of an in-house project at ICICI to provide low-cost core banking and management information system solutions to MFIs. FINO is funded by IFC, ICICI, and several other banks. FINO has acquired the largest number of accounts in India. In the past three years, it opened roughly 20 million accounts offering a range of different kinds of services from insurance accounts to basic no-frills accounts. Its largest bank partners are UBI and Axis. A majority of the accounts were opened in Andhra Pradesh and Haryana, where state governments pay banks on NREGA disbursements (2 percent). FINO has been a strong proponent of the use of smartcards, although recently it has been exploring a mobile solution. It is also exploring a small-value credit offering over its platform as a way to enhance the viability of the channel.

ALW is also a technology company cum ANM. In the past three years, ALW has partnered with 24 banks, opened over 4 million accounts, and set up over 10,000 BC locations. However, over 95 percent of the accounts and BCs are SBI's. ALW raised money in 2008, but earlier this year found itself near bankruptcy. SBI came to ALW's rescue and recently approved an overall investment of $18 million, which is to be made in tranches. For its part, ALW will winnow its list of bank partners to just four in the SBI group and find ways to improve the business case, including exploring cell phones and trialing domestic remittances, especially focused on migrant workers.

Eko, FINO, and ALW are the most advanced BC experiments in India in terms of scale and technical sophistication. Eko is notable because it is an example of a mobile-phone-based solution; though it remains much smaller than FINO and ALW. In addition to these three lead efforts, there are some notable smaller BC and bank tie ups. Vodafone and HDFC Bank are using the M-PESA platform with 67 agents in one town in Rajasthan as a business process test case. A new service called Green Money has been launched between Paymate and Corporation Bank using public call offices as

agents for internal remittances. And a tie up between Nokia Money, Obopay, and Yes Bank has pilots in Pune and Chandigarh using phone-based technology with Nokia phone retailers as agents.

UIDAI reports that a few large technology firms are pursuing technology solutions including TCS, HCL, and Infosys. Large corporate firms with distribution networks, such as Bayer, Indian Oil, and ITC, are contemplating agent networks. And debit card acquirers, such as Venture Infotek and Prizm Payments, are actively looking into this space.