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The first monthly magazine on ICT4D

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Information for development

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Using technology to reach remote areas

Hivos

Building an inclusive financial system for poor

Microfinance in India

Rationale for single state-wide e-Procurement systems

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knowledge for change

ICT and Microfinance

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Indian Telecentre Forum2006

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I wanted to let you know that we do include quite a few summaries of information gathered from i4d on The CI website. If you search for i4d from the keyword search on the left navigation bar (*http://www.comminit.com*), you will find over 40 matches at present. These are either articles summarized from and linked to i4d issues or summaries of events or materials that were sourced from i4d, with links back to this source included in our summaries.

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Note for the authors:

We would like to inform all our readers and authors that i4d monthly magazine would like to receive relevant articles and event reports for all issues latest by 10th day of any month for the next issue.

Kindly follow the editorial guidelines available at *http://www.i4donline.net/guidelines.asp* and send your articles/reports accordingly.

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EDITORIAL GUIDELINES

i4d contains articles and features on the theme of 'ICT for development' and related issues. Authors are requested to follow the guidelines while sending their articles to i4d.

Please also consult the editorial calendar to choose the theme of your interest. We also accept soft or hard copy submissions of your contributions. We encourage you to share your original research with our readers.

The Editor's decision will be final to select, accept, modify or adjust your write-ups due to space constraints.

Editorial guidelines are available at *http://www.i4d.csdms.in/guidelines.asp*

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We would like to acknowledge the support of Hivos in producing ICT and Microfinance issue. This issue features articles on diverse initiatives happening globally for ICT and Microfinance.

i4d Editorial Calendar 2006

Month	Theme
January	ICT and evolution process
February	ICT and rural development
March	ICT Policy
April	e-Health
May	ICT and Microfinance
June	Cultural diversity, localisation and ICTs
July	Open content
August	Media and ICTs
September	ICTs and SME
October	Gender and ICT
November	ICTs for the disabled
December	HIV/AIDS

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i4d is a monthly publication. It is intended for those interested and involved in the use of Information and CommnicationTechnologies for development of underserved communities. It is hoped that it will serve to foster a growing network by keeping the community up to date on many activities in this wide and exciting field.

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Editorial

No more fencing for (micro)finance!

Let's have a look at the development scenario of the global economy. On one side, there is a cusp of technological revolution, ushering in a new era of economic prosperity for advanced countries while on the other side, many of the world's poor countries find themselves still scourged by massive poverty.

The lack of access to credit to the poor is more or less due to practical difficulties arising from the discrepency between the mode of operation of the financial institutions and the economic characteristics and financing needs of low-income households. Microfinance services have shown an alternative to solve this problem. Microfinance is now being promoted as a key poverty alleviation strategy which can enable poor people to cope with the adverse socio-economic impacts of structural adjustment policies and globalisation.

The access to microfinance services such as credit, savings, insurance and pensions, is still highly unequal among men and women. Therefore while talking about microfinance, we must consider two issues simultaneously, one is poverty alleviation and the other is women empowerment through emphasising the gender sensitive issues. But we must find out the inter-linkages between access to savings and credit and empowerment. The microfinance programmes may contribute to both social and political empowerment, but that depends on the intensiveness of the success of the programmes.

Microfinance institutions can broaden their resource base by mobilising savings, accessing capital markets, loan funds and effective institutional development support. Convenience of location, positive real rate of return, liquidity, and security of savings are essential for successful and proper savings mobilisation. Ample savings facilities can serve the demand for financial services by the customers and also can fulfill an important requirement of financial sustainability to the lenders.

In the entire process, ICT as a tool, can facilitate to a great extent through saving time, energy and manpower. It has already been found that the ICT sector can either emerge as the leading sector of growth and innovation for the economy, or it can contribute enormously toward productivity growth through their across-the-board adoption in the economy, that is analytically equivalent to leapfrogging. In this issue the articles will provide you the idea about the role of ICT in microfinance sector in various nations around the world. It is high time to start thinking about more areas for ICT intervention to facilitate microfinance for the economically weaker sections of the society.

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ccTLD IN AFGHANISTAN

Creating an identity in cyberspace

ccTLD supportive software CoCCA enables the best practice environment and views policy development, core technical functions and commercialisation as discrete administrative functions to incorporate Afghanistan into developing domain

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Every country is denoted on the world map by its name. Likewise, every country is represented in the proverbial cyber space by what is known as a 'Country Code Top Level Domain' (ccTLD). In the last three decades, the world community formulated and joined the world wide web (www), while Afghanistan was in the throws of war and domestic turmoil. With the stability returning, Afghanistan has been joining various regional and global organisations to assume its rightful place in the community of nations.

To assist the transitional government, the United Nations Development Programme (UNDP) ICT project stepped in to help re-establish Afghanistan's Internet presence in the global arena. By working with the Ministry of Communications (MoC), UNDP's role was to restore a DNS service, to build technical and administrative capacity within Afghanistan, and to 'shift technical operations to a community-based management structure inclusive of multiple sectors within Afghanistan when feasible and appropriate'.

Afghanistan in the domain

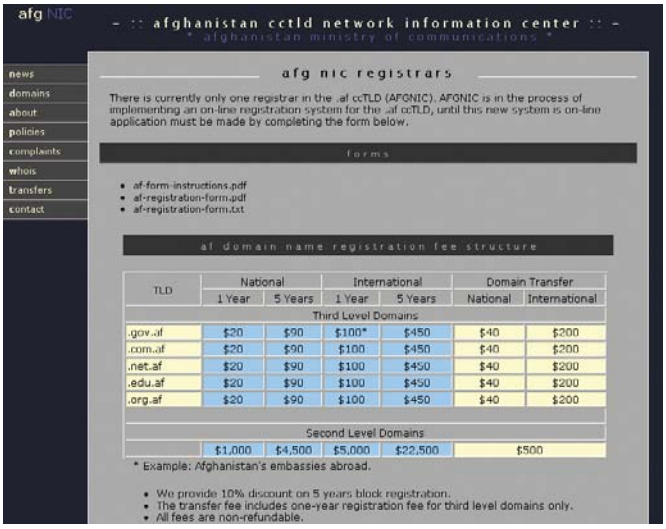
On January 8th 2003, UNDP's efforts paid off and the Internet Assigned Numbers Authority (IANA) assigned the .af (dot af) ccTLD as the unique designation in cyber space for Afghanistan. The Internet domain name system is considered a public asset, and the .af ccTLD is the asset of the people of Afghanistan and is under the sovereign control and administration of the Islamic Republic of Afghanistan. The MoC is designated as the Manager of .af ccTLD along with technical support through national staff of UNDP.

Since the assignment, UNDP has established systems and processes to assist the MoC with the management of .af. To date, UNDP has established comprehensive governance, administrative and control policies and has finalised plans to officially launch .af and online registration. The launch will occur during the National ICT Conference, planned for first quarter of 2006. Marketing campaigns will encourage businesses, NGOs, foreign agencies and individuals, who operate in the context of Afghanistan to register their domain names. Revenues from registration will be used for sustainability of the required infrastructure and human resources in MoC to manage this very visible responsibility.

Even before the official launch, the demand for .af domain names has been very high. To date, 350 domain names have been registered and are operating. Government agencies and the newly formed parliament have gained web presence with .af domain name.

Capacity building software

To satisfy the technical reader, the .af ccTLD is using a shared registry software called CoCCA Registry software. This software supports the best practice environment and views policy development, core technical functions and commercialisation as discrete administrative functions - even if carried out by the same entity. Like all good open source software, CoCCA software is constantly enhanced and has been in use for over four years by a variety of small ccTLDs around the globe. The decision to select this software for .af was based on its proven stability, open source code and adaptability to variety of computer operating systems. The software utilises proven and readily available open source software packages such as PostgreSQL database and Resin Java interpreter. The



software is written in New Zealand with voluntary financial and other contributions from CoCCA.

With the support from the local staff from MoC and close coordination with the ministry directorates, the .af ccTLD is currently administered and supervised by the UNDP ICT project team. After the official launch of .af, UNDP feels confident that the trained local MoC staff will have the capacity and skills to successfully assume full responsibility for managing this important function and resource in Afghanistan.

As the next exciting feature, Internet users in Afghanistan will enjoy using one of the most advanced features in domain name registry – the ability to create names in the local Dari and Pashto languages. The feature known as Internationalised Domain Names (IDN) is now being rolled out in other non-English speaking countries and opens the door for endless possibility to create imaginative and culturally relevant domain names. UNDP will continue to assist in bringing this feature to the Internet community in Afghanistan.

Internet enabled recovery process

Afghanistan's road to recovery and modernisation is assured with cooperation between the government and international development organisations such as UNDP. Global representation of Afghanistan on the world wide web is yet another prime example of the excellent cooperation between UNDP and the Government of Islamic Republic of Afghanistan, the information of which (.af ccTLD) can be accessed at *www.nic.af*

Advocating for community radio in Bangladesh

Community radio getting deferred

The operation of community radio, the radio for disseminating news and information of individual community, is yet to be started in Bangladesh, due to the indifference of the government. It is told that community radio, which has been playing an important role in transmitting local information, e-Learning, entertainment, disasters management and mass awareness on different issues in most of the countries of the world, could be turned into a major means of transmitting information in the country during natural disasters in the coastal areas.

It was learnt that Mass-Line Media Centre (MMC) took an initiative to establish community radio in the disaster-prone coastal areas in 1997, but could not succeed, as the government did not approve its proposal.

Infrequent wavelengths in disaster handling

Kamrul Hassan Monju, executive director of MMC, asserts the frequent incidents of natural disaster, including high tide and cyclone, wrought havoc in the coastal areas every year. On a conducted study, it was found that the regular broadcast of the Bangladesh Radio could not be heard clearly in the deep sea and the fishermen, sometimes, failed to understand the signals delivered in standard language.

Role of community radio

Community radio can solve the problem instantaneously, as it would deliver news in their colloquial languages.

AHM Bazlur Rahman, the chief of the executive department of Bangladesh NGO's Network for Radio and Communication (BNNRC), told that during the last six years they have been advocating the government to establish community radio and the Information ministry took a dillydally tactics in the name of preparing a coordinated regulation for radio broadcast.

The stand of Information Ministry

The Ministry of Information, on the other hand, shows various demerits of establishing community radio on the grounds of being hijacked by terrorist acts and used for political purposes. Sources said that a community radio could cover only between 20 to 25 kilometres area and could easily be jammed by the BTRC authorities in case of such situation and as the operation committee of community radio would be from the selected people from local community and the government representatives.

Ahmed Swapan, the Executive Director of Voices of Interactive Choice and Empowerment (VOICE), told that the community radio could not be operated as the broadcast rule has not yet been prepared. If a new broadcast regulation is passed, there would be no bar in functioning community radio.

Concerned sources said that the Asia-Pacific Institute for Broadcasting Development (AIBD) has prepared a draft on broadcasting rule in June, 2003 that is yet to be approved by the ministry. Ministry officials refrained from providing any information about the matter.

However, the fact could not be neglected that community radio is in operation in many countries, including the neighbourhoods such as in Nepal, Sri Lanka and India, and playing an active role in developing the individual communities.

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Successes and failures: A retrospective

In this article some of the products and initiatives, undertaken in the area of appropriate exploitation of IT have been examined along with learnings that hold for the sector

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BASIX is a new generation livelihood promotion institution, established in 1996, working with over 190,000 poor households in 44 districts and eight states across India. Its mission is 'to promote a large number of sustainable livelihoods, including the rural poor and women, through the provision of financial services and technical assistance in an integrated manner'.

As of March 2006, the BASIX group companies have disbursed more than Rs 5200 million, and have more than 2,40,000 active borrowers. The performing assets were 97.8 percent. In addition to microfinance, BASIX also provide Agricultural and Business Development Services, as well as Institutional Development Services.

Appropriate exploitation of IT aims to:

- achieve efficiency
- scale up the operations
- better decision support
- better monitor, reduce the chances of fraud, and
- manage product complexity

From the beginning, BASIX conceived of ICT solutions as being useful for the whole sector. Given the then small size of BASIX, it was not possible to spend its own resources on these efforts. Therefore, as a public good, much of its ICT efforts were funded by other organisations. BASIX received technical assistance contracts from the International Finance Corporation (IFC), and with the Small Industries Development Bank of India (SIDBI). In addition, the CARE CASHE project and the ICICI Social Initiatives Group funded software customisations.

Software

FAMIS: This is short form for Financial Accounting and Management Information System. It served BASIX from 1997 to 2005, and it continues to serve 50 other MFIs at 110 installations. FAMIS was developed by its software partner, Sadguru Management Consultants, based on its specifications. At that time, most MFIs used manually prepared charts to determine repayments. In addition to being laborious and error-prone, this reduced the flexibility of their products, and prevented them from scaling up.

So BASIX started providing FAMIS to other MFIs. It may be noted that BASIX charged these users only for training and customisation. Different MFIs had different lending methodologies and interest calculation methods. In each case, our analysts invested a lot of time in understanding the requirements and tailoring FAMIS accordingly.

Today, FAMIS is a very mature piece of software. It can support credit, savings, and insurance. It has extremely rich reporting features, leading to improved tracking and increased recoveries. It is very flexible regarding terminology, interest calculation method and lending/saving methodology.

FAMIS' main negativity has to do with the database it uses – FoxPro. This database is not as robust as the other databases available today.

Delphix: Plan was laid for the creation of a new software based on the Oracle database. Delphix was also written by Sadguru, based on company's specifications. It drew heavily from its experience of creating FAMIS. The design of the new system was done in the year 2000, and the development largely took place in 2001. It underwent a very long pilot testing phase, and two rounds of systems auditing. Today, Delphix is used for all our lending operations.

IDIAS: IDIAS stands for Insurance Distribution and Administration System, and is a software developed in-house to manage some of the insurance services offered by BASIX. It is usually the practice to outsource all software development to

third parties. However, in the case of IDIAS, expediency drove its requirements. In 2003, BASIX was to start roll out its insurance products. It necessitated to include support for these products in the MIS. However, due to the long-drawn-out migration from FAMIS to Delphix, implementing the insurance-related features in Delphix would have involved a significant delay. Hence, it was decided to create a new software package, and thus IDIAS was born. Today, in BSFL, IDIAS is used to handle health, rainfall and livestock insurance.

Projects and initiatives

BASIX POT - The Sudama Project: Currently, the methodology, used by BASIX, involves door-to-door service. While our customers are very happy with this arrangement, it has its drawbacks. If this could be avoided, the transaction costs could be reduced, enabling us to serve even poorer customers. The idea of 'BASIX POT' (Point of Transaction) was developed as a solution to this problem. Instead of BASIX going to the customer, the customer would come to BASIX's agent who would be present at an easily accessible, fixed location.

The project was piloted in February 2000 in the Anantapur district of Andhra Pradesh. This involved loans of Rs 500 and Rs 1000, with repayment over 14 or 28 weeks. Every customer had a smart card, which stored information about her previous transactions. Three PCO operators were selected as BASIXPOT agents (BPA), and trained extensively. This project ran for 3 years, and the learnings from this project have informed all the subsequent efforts at increasing the outreach of BASIX.

Some salient points:

- BASIX reached 437 customers, of whom 40 percent were women
- 83 percent ontime repayment
- Each BPA earned Rs 900 as commission per month, thus establishing the attractiveness of this model for the BPA

Issues:

- The hardware and software costs could be recouped only with a much higher scale
- Inadequate infrastructure: irregular power supply, intermittent connectivity, and even a lack of sufficient space for the hardware

STEMS: STEMS stands for Single Terminal Enabling Multiple Services. STEMS is the outcome of the application of some of the learnings from the Sudama POT initiative. One of the main drawbacks was that the infrastructure for the POT that was often absent in the areas where BASIX wished to operate. In STEMS, it attempt to solve this issue by locating the POT at an existing Internet kiosk. Discussions are being held with several organisations regarding this project. This tie-up would result in a win-win situation for all the parties concerned. BASIX will be able to reduce transaction costs, the poorer sections will find it easier to get access to financial services, and the kiosk operator will not only earn commissions on the transactions, but will also be able to derive extra income from the BASIX customers by providing them other services.

Field hardware

The Simputer: The Simputer was designed to be a low-cost, portable alternative to PCs. It has a touch-sensitive screen, built-in smart-card reading and writing abilities, and runs on AAA batteries or off the mains. Our attempt here was to use it to reduce the time and effort involved in recording transactions. The simputer was programmed for its purposes and was trailed in the field. However, it had a few limitations-

- *Printer:* The Simputer does not have an in-built printer
- *Build quality:* The Simputer was not rugged enough for our purposes
- *Data entry:* Mass data entry was next to impossible using the touchscreen

The Simputer also had the attractive feature of text-to-speech conversion. It was initially intended that after every transaction, would have the Simputer speak out the transaction in the local language, so that even illiterates could feel secure about their payments. However, because of the problems mentioned above, the Simputer initiative was scrapped off.

Simputer

Portfolio manager: Two palmtop devices – Psion and Osiris were also tried. Executives are able to record the transactions in the device, which would print out the receipt on an external printer. BASIX's partner, Safal Solutions, developed software that could also do some analysis on the data – a mini-FAMIS, called Portfolio Manager. This project ran successfully for over two years, during which 18 field staff used it to record over 50,000 transactions, worth about Rs. 22 million (USD 0.48 million) . However, after about two years, the devices started to have hardware problems. Since they were manu-factured abroad, they could not be repaired locally.

Portfolio Manager, on the Osiris, with a printer attached

Data upload through a telephone line

Handheld devices: In Company's bank, currently hand-held devices are being used from Edgar Interactive Pvt Ltd to record transactions and issue receipts. Every day, all information about transactions due that day is copied into the device from a PC. After every transaction, the agents can quickly print out the receipt for the customer. When the agents return from the field, all transactions can be entered into the MIS simply by connecting the device to the server, thus further saving time, reducing effort, and increasing the accuracy. This has also cut down on the possibility of fraud.

Cellphones: In its urban operations in Hyderabad, cellphones are used to track the operations. BASIX had made a tie up with Acceltree to develop software to enable it to track its transactions in near real-time. The agent only needs to key in the transaction amount for each loan due that day. A java applet in the cellphone informs the central server of the transaction immediately. This is a feasible solution, given network connectivity. Unfortunately, this solution cannot be used in all rural areas, though the situation is improving almost daily.

Lessons

Selection of technology

Robustness and suitability: We should ensure that the technology is well suited to the use it will be put to, and the scenarios it will be used in. In the case of FAMIS, the FoxPro database could not scale up well with its operations.

Cost: In general, open standards, whether in hardware or in software, are attractive because it leads to low prices. It is a good idea to ensure that your software would run on commodity hardware, and that it does not need specialised hardware. For instance, the software developed in the Khammam Initiative was based on the Symbian OS, which is widely supported on a range of hardware.

Life: It has to be ensured that the software technologies being used do not become outdated too soon (like in the case of FoxPro). Similarly, the hardware should also be well-supportive so that it can be used for a long while.

Selection of the IT Partner

Care should be taken to research the technological and project management capabilities of the partner to ensure that he will be able to deliver the solution and support it in the long run. The technologies chosen for the project will largely depend on the capabilities of the partner.

Proper architecture

While individual programmes need to be architected well, it is also important to ensure that all the different programmes used by the organisation should be crafted so that they can talk to each other.

Using multiple applications to handle multiple services would result in dissipation of development energy and managerial attention among them. If several services are used by the same customers, it might be useful to build in the functionalities required for the different services into one application.

Software and operations in sync

If a new product or process is being introduced, the development of the software required should start well in advance.

Pilot testing

The designing of software is essentially iterative. The first versions will need to be refined over a period of time before they can be used in a production environment. It is vital to test the software/hardware thoroughly in the field before using it company-wide. This will help the field staff to get used to the new way of doing things, and also will catch issues well in time.

Good project management and documentation practices

The project should be monitored closely by all the parties involved, and we should work with the IT partner to resolve issues immediately. In the IT industry, the employee turnover is generally very high. The project should be process driven and not person driven. If the required documentation is in place, the maintenance of the application will become easy later. Documentation will also help us in evaluating whether the needs are met as per requirement once the project is over.

End-user involvement

The operations staff have to be inducted into the project right from the conceptualisation stage to ensure that the solution meets their needs. This will help to ensure that the application is easy to use for those who actually use it. ■

Basix Livelihood Service Agent giving a printed bill

Using technology to reach remote areas

How can a wallet-sized plastic card with an embedded computer chip that can store data or process information increase security, save time and money and overcome limits caused by illiteracy, local languages or remote locations? Microfinance institutions working in the Bolivian highlands and in remote rural areas in Uganda have been experimenting with the use of smart cards for their clients and profit from the benefits of this state-of-the-art technology.

UMU

The Uganda Microfinance Union (UMU) aims to provide quality financial services in a fair and transparent manner to entrepreneurs and low-income earners in the Republic of Uganda. Since its establishment in 1997, UMU has strived to apply a flexible, innovative and client-oriented approach, which is reflected in the various saving and loan products offered with, for example, flexible payment schedules or informal guarantee requirements. UMU has a head office in Kampala and 20 service centres across the country which ensure accessibility throughout Uganda, although, recent developments gave new meaning to UMU's operating procedure and accessibility. Together with two other Ugandan Microfinance Institutions (MFIs) UMU is involved in a pilot, testing Remote Transaction Systems (RTS) that allow clients in remote areas without service centres to carry out transactions using a Point of Sale (PoS) terminal supported by a GSM line for online communication.

UMU conducts the pilot with independent third-party agents who act as 'human Automated Teller Machines (ATMs)' or virtual extensions of UMU's business providing financial services to UMU clients. The two current agents are local merchants who have some daily financial liquidity through their business operations. Each agent has a PoS terminal and a special agent smartcard, and transactions are handled predominately in an online mode. UMU clients travel to the agent where they perform financial transactions, all of which are captured electronically through the PoS terminal. Cash is exchanged between the agent and the client depending on the type of financial transaction. Maximum and minimum limits are built into the system as they are in an ATM system to control the amount of money that can be withdrawn on a given account in a day.

When a transaction occurs, the agent is actually distributing and collecting cash and a corresponding electronic cash transaction is executed at the MFI. Client and agent accounts are debited and credited as the transaction requires. Since this is done internal to the financial institution no clearinghouse authority or functionality is required. At the end of the day, all the transactions still on the PoS terminal are uploaded to the RTS back-end through the cellular network. Since the agents are also UMU clients, funds are reconciled nightly through UMU accounting procedures. The management information system handles the transaction similar to a teller transaction."

This unique solution was developed by a consortium of public-private microfinance leaders, technology specialists and business thinkers assembled by Hewlett-Packard, to increase the scale of microfinance by addressing issues related to operation costs, financial costs and industry dynamics, aiming to create new ways to offer better service to more rural and remotely placed clients. The RTS allows clients to easily access information about their account balances and account statements using their own smart cards.

The benefits of the RTS solution are experienced at all levels of the microfinance chain. The clients have simple and safe access to a secure and confidential means of payment; save time and travel costs and experience convenience of payment at nearby locations and speed of transactions. The agent of the PoS attracts more customers; has increases related sales; builds customer relations and generates a fee revenue. The MFI benefits from the improved data quality; reduced delinquency or fraud; expended client services; reduced operating costs and secured expansion of delivery channels.

More information are available at www.umu.co.ug, www.hivos.nl

PRODEM FFP

Imagine an ATM that identifies its users by a digital fingerprint scan, operates with a touch screen, gives spoken instructions in local languages and that saves all client information on a personal smart card. Eduardo Bozzaberry, general manager of PRODEM FFP Bolivia, introduced this idea to several ATM manufacturers, but couldn't find anyone interested in bringing such a machine into production. PRODEM FFP decided to develop the machine themselves and presented the first prototype in 2001. It is a globally applicable and extremely innovative approach, extending banking services to rural villagers excluded from the banking system. To date, 55 machines are installed and operating in remote areas, with another 10 to be placed this year. 60 percent of the ATMs are located in rural areas, 40 percent in urban areas.

PRODEM FFP is a well-managed private financial fund (FFP) that operates as the legal vehicle for microfinance entities in Bolivia. It is dedicated to micro lending for small entrepreneurs and indigenous populations and has developed rural finance activities. It has its main portfolio in the remote areas of Bolivia where there is little access to microfinance but nonetheless has the largest network of branches (62 in total) throughout the country. PRODEM FFP aims to offer financial products with uptodate technology and excellent services to permanently satisfy the needs of their clients in urban and rural areas. PRODEM FFP is strongly engaged with the quality of changes, innovation, efficiency and profitability of their services.

PRODEM FFP offers a wide range of high-tech, non-credit services, amongst which the saving accounts operated with smart card technology. Rather than adapting the circumstances in rural areas to the requirements of operation for a regular ATM, such as a 24 hour online connectivity, PRODEM FFP designed an ATM that suffices the conditions and needs in remote rural areas. The service only costs $ 7 a year per client. These low costs are possible through the local production of the ATM, which make the machine twice as cheap as conventional ATMs. The use of smart cards brings down the costs as well, because the machine does not have to be permanently online.

The ATM developed by PRODEM FFP is designed with specific technology that makes its use as simple and safe as possible. The fingerprint recognition is far more safe than the 4 number PIN that regular ATMs operate with. The spoken instructions in Spanish, Aimara or Quechua make it even possible for illiterate people to use the machine.

The smart card saves all the clients information such as personal data, account number and transactions realised. All the client has to do is go to the nearest ATM, insert his/her smart card, press their fingertip against the fingerprint identification screen and follow the spoken instructions on when and where to touch the screen in order to carry out the desired service. In Bolivia, 40 percent of the people live in rural areas. Of these, 29 percent are illiterate of whom 70 percent are women. Increasingly, MFIs are becoming interested in the ATM and several deals are soon to be closed to implement the machine in quite a few other countries to make banking services accessible in rural areas. ■

More information logon to www.prodemffp.com
www.hivos.nl
***Text:** Hivos*

"Set to leapfrog?"

Where are we with e-Banking in a microfinance setting nowadays?... Can e-Banking deliver services to the poorer strata of society in low-income countries?... This article will try to answer these (and other) questions.

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Hivos Foundation in e-Banking

Hivos Foundation is following these developments as we are in the fortunate position since mid last year to have an intertwined approach where we have an ICT development department and a financial services development department. This integrated approach gives us the opportunity, both material and intellectual, to combine resources. A new and re-focussed policy is currently under development. In the concluding part of this article we will identify the principle guidelines on which Hivos' new policy will be based.

So what is the relevance of electronic banking when we want to support and offer microfinance services? In brief, the proposition on the demand side is one of lower service fees and improved customer convenience, also for customers who live in remote or rural areas and who may be semi-literate. On the supply side it is lower transactions costs and reaching new and un(der)served customers, driven by falling costs of technology and increased competition. But is this the full picture?

Let's start with a brief explanation of what we mean with e-Banking in a microfinance context. From a technical point of view it can consist of:

- Personal Digital Assistants (PDAs) used by field staff ('front desk' officers) to streamline and automate their record keeping in the back office processes while offering personalised and custom-made product information to the individual customer in front of them;
- Automatic Teller Machines (ATMs) located mostly in (semi-)urban areas, although in some cases trucked around in a sea container, while in other cases low-cost ATMs are used that can deal with heavily soiled banknotes in humid and hot circumstances;
- Cellphone banking where there is no common banking infrastructure available or not preferred;
- Point of Sale (PoS) devices that consist of a card reader, mobile phone, or standard computer to service the customer with pay-in and pay-out transactions in a grocery shop, local post office or at a local banking correspondent.

From a customer service point of view, e-Banking covers a variation of person-to-person, person-to-business and business-to-business transactions, where the business party is often operating in the informal sector of society (having no legal representation or formal registration).

ATMs and PoS devices

In a recent CGAP survey, among financial institutions, including microfinance institutions, it was found that ATMs (and PoS devices) are becoming increasingly available for microfinance customers. One factor is the falling price of technology, from initial costs of an ATM of about USD 35,000 to half of that by Prodem, to even below that by ICICI Bank. The latter has calculated in 2002 the benefits to be gained with the use of ATMs. ICICI Bank found that in India, where already the costs of labour versus capital are much in favour of the former, the transaction costs are as follows: at a branch office they are for each transaction Rs. 34 (USD 0.68), for a call centre (phone) transaction Rs. 28 (USD 0.56), and at an ATM only Rs. 20 (USD 0.40).

Nevertheless sufficient transaction volume, that is the usage of the ATM, is required to offset the investment, which is one of the reasons to locate an ATM in a populated area, or having trucked around in a sea container. Add here that ATMs need to be refilled or emptied without too much travel costs. Technical constraining factors are copper wire theft (cutting of telecommunication cables), the need for reliable electricity and telecommunication. But these problems are becoming less

Credit: http://brytodd.com/images1/detroit04/at%20the%20ATM%20-

prominent with the increasing use of cellular connected ATMs and battery-backed Universal Power Supplies.

For the low-income customer there is still a bit of a pricing issue, especially when the withdrawals or deposits are very small, as each transaction also needs to cover the inter-bank switch costs. Combine this with the unfamiliarity with ATMs by low-income customers and costing plus financial education clearly needs further attention. Regulatory issues may in some cases also hinder progress. In India for instance, only security guards may manage ATMs, making it difficult to offer assistance to poor customers in their use of an ATM.

For PoS devices similar regulatory issues exists, where e.g. cash-back or pay-out is not allowed in some countries. Still the advantage of PoS devices to penetrate wide and deep in all corners of society, makes this an attractive channel to deliver financial services to low-income customers. As these devices are installed in groceries, local postal outlets, and banking agents (correspondents), it takes away the uncomfortable feeling among many low-income customers to deal with bank tellers or ATMs. In these retail outlets the human contact is there to explain in a local language or dialect any financial query, service feature, and to handle the cash. In return the 'hosting' shop can expect higher sales in addition to a share in the bank fees.

Brazil has introduced banking correspondents, equipped with a PoS device with a dial-up or high-speed connection, in lottery outlets, postal offices, groceries, or petrol stations, which has lead to an almost complete coverage in every municipality in the country, reducing the distance between the customer and the correspondent to nothing more than about three kilometres. In the poorest regions these correspondents are the only ones around. Available data suggests that a majority of these customers are on very low incomes. Brazil's leading operator of correspondents, Caixa Economica Federal, reports that 48 percent of these customer earn less than USD 75 per month.

PoS devices are relatively cheap, starting at around USD 350 up to USD 2,800, and need to use a telephone line. Increasingly a cellular connection or wireless Internet access is used, depending on the transaction volume and the remoteness of the location. When it comes to low population density and remote rural areas, Africa is rapidly making use of the benefits of mobile telecommunication, with almost 100 million mobile subscribers by the end of 2005, three times the number of fixed-line connections, and an annual mobile increase of 65 percent, and even 150 percent in some African countries (according to the ITU).

Cellphone banking

Cellphone banking is another low-cost channel that can reach many poor customers. Several operators are now offering an expanding range of financial services with easily accessible and secure technology. In South Africa 48 percent of the population, or 15.5 million people age 16 or older, are un-banked. Combine this with 21 million prepaid cell phone users of whom there are 30 percent un-banked, and we have a very interesting window of opportunity.

Similar opportunities are available in other African countries where the cellphone use is high and rapidly growing. What a new customer need is a basic, standard cellphone and a special banking SIM card to plug into the cellphone. The costs of a basic cellphone is for many South African low-income customers still a barrier, with the cheapest new one at about USD 30, but the strong second-hand market offers substantial lower deals. The special banking SIM cards are inexpensive and the competition is driving the costs further down.

The type of services varies from making bill payments, person-to-person money transfers (very popular as many families have members working at great distance and depend on their regular money transfers), bank balance inquiries, and storing balance data. Most providers use fully encrypted data storage and transfer, while some have added security features as voice recognition and security questions (like asking and checking the answer of questions as what is your mother's name).

To make the customer familiar with the service, all providers supply a manual in English and a pre-programmed speed-dial access to a call-centre where the customer is guided through the features

Credit : http://www.dashatm.com/images/3700_front_c.jpg

Credit: http://siteresources.worldbank.org/NEWS/Images/

in a local language of choice. Personal assistance is often available at the shop of purchase. To let the cellphone communicate with the bank under who's license the provider operates, different technologies are used. The continuous sessions under USSD is one common, while the asynchronous SMS is another one. WIG is a hybrid of these, where the messages are send as SMS but with the advantage to have menus on the phone for an easy user interface.

Complete faceless cellphone banking is only possible in a limited manner by making use of an exemption clause of the South African financial Act. But this would hardly be necessary (nor advisable) for most microfinance clients, nor from a commercial point of view as customer contact is vital for additional services like (more profitable) loan products. On this point it is also crucial for a microfinance institution not to lose close contact with their customers, as the whole lending methodology is based on it to identify new clients, to do the due diligence of small unsecured loans, and to track the repayments.

Some significant observations

If there is one thing that jumps out of all discussions and briefing notes, it is the huge technological potential, but that financial education and cultural adjustment to the customers is vital. This includes educating not to reveal the PIN code by writing them on the back of a debit card (not uncommon unfortunately), to making call-centres and ATM user interfaces accessible to semi-literate customers in local languages, and last but not least how to address customer hesitation and suspicion of new technology.

Another significant observation is that for microfinance institutions to implement some (or all!) of these techniques, they need to have a solid and sound Management Information System. This needs to be backed by clear, proven and tested operations where dealing with volume, fraud detection and maintaining control has become a systematic routine. Then a few in-house ICT specialists, each with a focus on the business, the technology, and the users, should complement this.

What does all this mean for a co-financing agency like Hivos Foundation? The Virtual Conference on Electronic Banking for the Poor, organised by MicroSave in 2004, has come up with six valuable general principles:

- Donor subsidies should focus on building shared infrastructure and consider scalability;
- The recipient institution should cover the recurrent costs of the eBanking initiative;
- A careful cost-benefit analysis should be conducted before an eBanking initiative is launched;
- There is a considerable amount that can and should be learned from the successes and failures of existing and previous initiatives; donors should document this experience;
- There is a potential role for donors to help governments understand and develop appropriate policy environments in which electronic banking initiatives would flourish;
- Donors can invest in promoting e-Literacy.

Hivos Foundation intends to base its new policy on these guidelines. ■

References

- *CGAP Focus Note 32, Using technology to build inclusive financial systems, January 2006*
- *FinMark Trust, The cell phone banking wars, Forum 5 October 2005*
- *ICICI Bank, Extending banking to the poor, by D. Bikram and A. Singhal, March 2002*
- *MicroSave Briefing Note 31, Electronic banking for the poor, by D. Cracknell, 2005*
- *MicroSave, Virtual conference on electronic banking for the poor, held 16 - 27 February 2004.*

Columbia Microcredito

ACCION International, a pioneer and leader in global microfinance, announced the creation of Columbia Microcredito, partnering with Argentina's Banco Columbia to deliver financial services to the country's entrepreneurial poor. Argentina's first commercial microfinance venture, the new alliance will deliver microloans through Banco Columbia's national branch network,with the goal of reaching 20,000 clients within four years.

Banco Columbia, a mid-sized Argentine bank with approximately 300,000 credit clients, has a history of serving low-income individuals, as well as processing a high volume of relatively small loans. To date, few institutions have offered financial services to Argentina's impoverished classes. Recently, however, macro economic and regulatory environments have become increasingly favorable for the development of microfinance. The Argentine government has revised legislation that had precluded commercial banks and finance companies from entering this market. The government also relaxed the prohibitive provisioning requirements for small loans that prevented the development of sustainable microfinance.

Source: ACCION International, http://www.prnewswire.com/

GTZ RURAL FINANCE PROGRAMME WITH NABARD

ICT in SHG bank linkage

The low income, predominantly rural communities are finally becoming a key driver of technology innovations in a large part because of their sheer scale and the huge size of the market which remains to be tapped

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Network of credit linkages

Microfinance is generally understood as providing financial services to poor people. There are certain stereotyped beliefs that the poor are too poor to save and therefore do not need savings services, and the poor cannot repay loans and therefore there is a serious default risk. Last, but not the least, small loans have a high cost for dispensation with large numbers of micro borrowers and a relatively small volume. Therefore small loans are more expensive than large loans.

In India, the National Bank for Agriculture and Rural Development (NABARD) led self-help groups bank linkage programme has to a large extent, dispelled this widely believed myths about the credit and savings behaviour patterns of the poor. Self-help groups generally have an advantage in reaching out to the poor because of proximity, trust, commitment, flexibility, and the fact that they know each other. The concept acknowledges that establishing financial services to the poor on a commercially viable basis contributes to the sustainability of the financial service delivery. NABARD was able to build the Linkage Banking Programme upon an existing network of banks and NGOs.

SHG - a facilitator

A Self Help Group (SHG) is a small group of 10 to 20 members. It is formed and groomed by an NGO or a bank branch or a government agency called a Self Help Promoting Institution (SHPI). The members are encouraged to collect regular thrift on a weekly or fortnightly basis and use the pooled thrift to give interest bearing small loans to needy members and in the process learning the nuances of financial discipline. This is followed by bank credit. The SHPI trains the members to maintain simple accounts of the collected thrift and loans given to members. The regular meetings also provide the platform to discuss and resolve many social and common issues, thus fortifying their togetherness. A savings bank account is opened with a bank branch and regular thrift collection and loaning to members build up the financial discipline among the members to encourage the bank to provide larger loans to the group.

Credit: http://images.search.yahoo.com/search/

The Self-Help Group (SHG) – Bank Linkage Programme in India today is the largest microfinance programme in the world. As on March 2005, the programme covered more than 1.6 million SHGs that were bank linked. The linkage programme has managed to involve participation of diverse stakeholders, consisting of all 48 commercial banks, all 196 Regional rural banks and mostly all 316 cooperative banks. It partners with over 3,000 NGOs from different parts of India.

Challenges in phases

Since the programme is continuously expanding its outreach, challenges are also to be met in phases. One such task is the book keeping of the SHGs. Book keeping in SHG Bank Linkage Programme includes that all primary books of accounts such as cash book, ledgers, members' passbooks, individual members' ledger, receipt book and vouchers in the SHGs are maintained. A trial balance sheet also is part of the requirements. It is also important that the record keeping is done accurately, without mistakes. The records should clearly state each member's savings, loans outstanding, interest and principal paid and such other relevant information. Furthermore, it is also

essential that the accounts are kept up-to-date. Summarising, SHG bookkeeping means completeness, accuracy, up-to-date information and transparency.

A good book keeping consists of a major challenge for SHGs and their members, especially when illiteracy or low levels of education are still a reality in many backward areas of the country. Some NGOs have originated a concept and a system where a so-called Munshi or bare foot accountant handles the accounts of a large number of groups. NABARD through one of the well-known NGOs PRADAN went even further and developed a system which computerises the accounts that these barefoot accountants maintain. This is an innovation, which deserves attention and could become a learning case for many other SHG promoting institutions and MFIs.

Credit: http://www.downtheroad.org/Asia/images/Cambodia_pictures/DSC00007.JPG

The computerised accounting system in PRADAN is a community based system in which the computerised bare foot accountant acts as a service provider, equipped with a computer and financial software for SHGs. The financial transactions of an SHG meetings are recorded in every SHG meeting and, channelled from about 100 SHGs via a collection system using drop boxes and messengers. After putting the hand written data into the computerised system, the computerised bare foot accountant prepares financial statements for the following SHG meeting. The records are in the local language so that group members can use them. The computerised accountant acts as service provider and is paid by the SHG members. The software being used by the Computer Munshi is also capable of generating statements and information for monitoring by the SHPI and the bank. The more the users for the information, the better it is from sustainability point of view.

In March 2005, about 6,000 SHGs promoted by PRADAN were served by the 48 computerised bare foot accountants. Currently, the average workload for a computerised bare foot accountant is about 100 to 125 SHGs. It is estimated that a viable scale of economical operations would be reached at a level of 150 to 200 SHGs, expandable up to 300 SHGs. The computerised bare foot accountant would collect his monthly fee which amounts to about Rs. 2,500 per month. This should attract him/her to run it as a viable business in the longer run. Each computerised bare foot accountant has a monitor, a printer and CPU that is loaded with standardised software. The computer is placed in a relatively more developed locality with electricity supply for about 5 to 6 hours a day, including normal supply plus back up battery.

For an effective functioning of this system a number of criteria need to be paid attention which are as follows:

- records must be in local language,
- a functioning and reliable collection/ distribution system for the records,
- computerised bare foot accountant are trained and have a functional working place,
- supportive role by the promoting agency,
- understanding and awareness of the SHG members about the necessity of accounting and payment to the service providers:

Credit: http://images.search.yahoo.com/search/images/

Lessons to be learnt from computerised bare foot accountant

Design: The SHG accounting system, designed by PRADAN is comprehensive. The software links up book keeping and management information requirements of SHGs, while a trial balance is prepared every month. The formats are simple, easy to understand and transparent. The software generates trial balance and other information, required by the promoting institution.

Consistency: In all the 6,000 SHGs, the same system of book keeping can be used.

Viability: The computerised bare foot accountant system is based on viability over a period of time. SHGs are responsible for the payment to the service provider.

Replicability: The concept of the computerised bare foot accountant has a good potential for replicability. SHGs promoted by PRADAN are perceived as high quality groups. There are some efforts by other organisations in other parts of India to apply this practice.

Better information from such a system: This system can offer information to various stakeholders. Individual SHG members can get information on their cumulative savings, loan outstanding as also the overall financial position of their group. The bank manager can assess performance of the SHGs with respect to loan repayment from the accounting records. The promoting institution can observe regularity in terms of attendance of members and savings in each meeting. A trial balance of a SHG for three to four consecutive years would indicate the direction of the growth of the group as also the indication of the accumulation of the group capital. The computerised accountant could eventually act as a service provider, not just to SHGs under one promoter, but also for other SHGs with different promoters in the same region including the banks.

Alternative innovative systems

In another part of India, NABARD through the support of Sri Visakha Gramin Bank, an RRB (Regional Rural Bank) in the State of Andhra Pradesh is piloting another innovation which uses smart cards and hand held devices that capture the SHG transactions during the meeting and subsequently transfer the crucial financial data into computerised systems of the bank. Accounts can be reviewed daily as they are directly transferred to the main computer database, literally hours after group meetings, thereby eliminating fraud and error. Smart cards will enhance information to be updated on real-time basis and consequently allow management to monitor operations and respond to problems at the earliest. The advantages of this system include automation of transactions, reduced client time, accurate book keeping; better MIS for the bank and the SHGs. The RRB (Sri Visakha Gramin Bank) has financed over 50,000 SHGs to an extent of Rs. 180 crore (approximately U$ 40 million).

Another innovation is being developed in the state of Tamil Nadu where a technology company is closely working with a federation of SHGs to pilot test a mobile phone camera enabled rural information services. Here, a software application in a mobile phone camera captures SHG transactions from interactive paper forms and communicates the data over the mobile network to a central transaction server which stores and processes data of the SHGs. The transaction server is also integrated with an MIS software. This provides a secure, low cost, convenient and affordable solution to the rural masses. This system also provides a better MIS and a monitoring system for the federation or the bank which uses this technology.

ICTs infiltration via micro credits

The low income, predominantly rural communities located at the edge of the technology advantage are finally becoming a key driver of technology innovations in a large part because of their sheer scale and the huge size of the market, which has by far not been tapped. NABARD likewise supports many other innovations in the field of micro and rural finance by partnering with banks, NGOs and technology companies. In the context of the Rural Finance Programme GTZ is a partner of NABARD. ■

MFIs: All is not too well?

MFIs are in news recently for wrong reasons in the state of Andhra Pradesh in India. Andhra Pradesh has a strong network of over 300,000 Self Help Groups (SHG) nurtured by government as a measure against fighting poverty. This perhaps has initiated the micro credit facilities alluring enough for the weaker and lower strata income communities, monopolised by the MFIs in the state.

The situation has become grave with a count of about 60 suicides been reported till the month unable to bear the alleged harassment met from MFIs. It seems the haunting ghosts of suicides by debt-ridden farmers in the recent past. It is disturbing fact to notice that a state like Andhra Pradesh which is well quoted for its high-tech infrastructure and equally supportive microfinance facilities for the surviving poor is narrating the grey shades of the same story.

The situation has already said to be perturbed the consistency of SHG. Loans availed by SHG are given at a huge subsidy of 9 percent interest by commercial banks. SHG members who collect one rupee per day are finding themselves in precarious conditions in inability to save regularly to repay the bank linkage amount owing to the divisive condition created by MFIs. The high adeptness to the new emerging technologies and much agile and sophisticated candidates of MFIs has made it easier for the institutes to penetrate into interiors in comparison to other nationalised or commercial banks unaware of the pitfalls in cultural orientation and crude realities of the Indian masses.

The allegation substantiate that, petty borrowers finds the access to such institutions easy compared to the discouraging rules and regulations involved in applying for an institutional loan. But when it comes to recovery of the dues, coercive methods are said to be adopted. The state government seriously contemplating on the issue to keep check on MFIs and, bring in a code of conduct which ironically otherwise, is emerging as popular icon of anti-poverty movements.

The intervention of the government ceded MFIs to revise its interest charges. Accordingly MFIs are also to recover loan on monthly rather than weekly basis. That raised opposition from certain quarters of MFIs on account of being stressed on supposed isolated cases. Media was also lamented at for getting exaggerated. When the tone of all the groups - communicators, technocrats, financiers, policy makers - is to give a lending hand to the less privileged to develop a welfare oriented economy, it gives little meaning in vying among themselves to steer clear one's image. The pending duty is to develop sensitiveness in understanding the conditions that are still in raw format to reach the masses out their in penury.

Building an inclusive financial system for poor

Building strong microfinance institutions entails improving governance, professionalising management, strengthening internal controls and accounting practices, and introducing low-cost ways of doing business

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Inclusive financial systems in fighting poverty

For most people, finance is an obscure, alien subject. And the immediate assumption about finance is that it cares only about helping the rich get richer. Yet, a growing body of research, some of it by the World Bank, shows that well-developed and inclusive financial systems are associated with more rapid growth and better income distribution. A well-functioning financial system gives households and businesses access to credit and allows them to link-up with the modern, formal economy. It gives people access to savings and insurance, allowing them to protect themselves against future calamities and live a more secured life. And then there is the 'empowerment' dimension of finance, which gives ordinary people access to opportunities that allow them to escape poverty and live a more dignified life. It is perhaps symbolic of this evolutionary thinking that 'building inclusive financial systems that work for the poor' became the mantra of the United Nations International Year of Microcredit 2005.

How inclusive is India's financial system?

In India, since the early national plans, successive governments have emphasised the role of finance in promoting equitable growth. With the majority of India's poor living in rural areas, policies aimed at financial inclusion have understandably had a rural focus. Today, India has a vast network of state-owned banks, regional rural banks and cooperative banks that are mandated to intermediate savings and credit for investment, particularly in the countryside and to weaker segments. And while there has been increased competition and liberalisation in India's financial sector since the early 1990s, which has certainly helped to improve financial sector depth and stability, some of the key features of credit planning, quantitative credit targets and subsidised credit, persist for the rural poor and other disadvantaged segments.

Paradoxically, access to finance on affordable terms remains woefully inadequate for large segments of India's population, particularly for the rural poor. According to a recent study on India by the World Bank and the National Council of Applied Economic Research, some 70 percent of rural poor households do not have a bank account and 87 percent do not have access to credit from a bank or other formal institution.

A key problem is that Government's imperative of deficit financing has driven banks to divert financial resources to safer government bonds. Moreover, there are perhaps not enough incentives for public sector banks to do business, particularly with the poor. Procedures for opening an account or seeking a loan are made cumbersome and costly. It takes an average of 33 weeks for a loan to be approved by a public sector bank in rural India. And banks invariably demand collateral, which the poor lack.

Not surprisingly, moneylenders, who charge exorbitant rates of interest, ranging from 36 percent to 120 percent per annum, remain a strong presence in rural India.

The challenge of improving access to finance

The challenge of ensuring that all Indians have access to the financial services they need to make the best possible use of their human potential is clearly enormous; microfinance programmes can make an important contribution to meeting this challenge, provided outreach can be expanded in a sustainable manner. Estimates suggest that Indian microfinance currently reaches about 12 million customers directly through credit

Credit www.digitaldividend.org/graphics/sks2.jpg

services. This, however, is sorely inadequate in a country where 300 million people live in poverty. And outreach is concentrated in the southern states. In contrast, microfinance in Bangladesh is believed to reach more than 60 percent of the poor across the country.

India is fortunate to have seen some pioneering approaches to microfinance. The Self-Help Group-Bank Linkage programme, for instance, has had worldwide influence on the design of microfinance. But if Indian microfinance has to reach all of India's poor in a sustainable way, some fresh thinking on the subject is necessary.

Building strong microfinance institutions

There is a need to build strong microfinance institutions. This entails improving governance, professionalising management, strengthening internal controls and accounting practices, and introducing low-cost ways of doing business. The biggest hope on cost reduction comes from new technology, for example, transferring funds via mobile phones, as successfully experimented by the Philippines' GXchange, or debit cards for the poor, as introduced by South Africa's Standard Bank.

Cost reduction can also come from approaches that leverage existing infrastructure to deliver financial services to the poor, for example, Banco Postal Brazil's use of the country's vast post office network, and Uganda's Cerudeb and Brazil's Caixa Economica, which have used Point-of-Sale outlets. In all of these, partnerships between microfinance institutions and established commercial financial institutions can play an important role.

Improving transparency

These efforts must go hand-in-hand with improvements in transparency. This means better information to both clients and lenders on interest rates, loan problems, and operating practices, as well as enhanced public disclosure of financial accounts of institutions and their dependence on subsidised capital. Pakistan's microfinance institutions, for instance, have made impressive progress in the public sharing of their financial accounts, for example, on the MixMarket website.

Providing financial services to poor

A third priority is for microfinance to expand beyond credit into a wider range of financial services for the poor, including savings, insurance, money transfer, remittances, etc. Today, only a few microfinance institutions in India are seriously offering insurance or remittance services, even though the demand for such services has increased.

Creating financial infrastructure

As microfinance grows, it will need the financial infrastructure to support it. For instance, as microfinance institutions turn to commercial sources for their funding, they require independent assessments from credit-rating agencies. While India has shown the way by establishing the first microfinance rating agency, there is need for greater competition and better rating methodologies.

Appropriate regulation and super-vision

Last but not the least, governments need to ensure that regulatory and supervisory policies genuinely support access to finance for the poor. One common temptation is to impose ceilings on the rate of interest that can be charged on micro-loans. While such ceilings may appear to ensure cheap credit for poor people, in practice, they reduce the supply of credit, especially to the poor, who are driven instead to borrow from money lenders whose rates are not capped and whose collection methods are notorious. Interest rate ceilings can also reduce the transparency of the cost of credit to borrowers, as lenders evade the caps by adding various service charges and application fees. Evidence shows that a far more effective way for governments to ensure that interest rates are not excessive is to foster healthy competition within the financial sector.

The Reserve Bank of India's recent decision to leave interest rates on microfinance to the discretion of the lending banks is praiseworthy. However, the challenge remains to implement this policy uniformly across all states, as does the challenge of doing away with the interest rate ceiling on small loans (below Rs. 200,000) from commercial banks to rural clients.

While scaling up microfinance is an urgent priority, and it can clearly play an important role in improving access to finance for India's poor, it is not a substitute for an efficient formal financial sector.

After all, over the longer run, microfinance clients will need to graduate to banks where they can access standard loans of larger sizes. So, along with efforts to expand sustainable microfinance, a new wave of reforms is needed to improve the efficiency of India's banks and other formal financial institutions so they can serve underserved sectors in a profitable and sustainable manner. Our estimates suggest that this could raise India's GDP growth by at least 2 percentage points a year, with a significant impact on poverty reduction. ■

Initiative for strong microfinance

MISFA is committed to building a system that provides flexible, convenient and affordable financial services for poor people throughout

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The origin of MFIs

The end of the war in December 2001 saw a huge unmet demand for microfinance in Afghanistan. But the picture looked bleak. With a non-functioning financial sector, a total absence of commercial players, willing to serve the poor and lack of delivery capacity among existing Microfinance Institutions (MFIs), foreign donors were asked to step in. The issue facing everyone - foreign donors and Afghans alike - was how to meet that demand and energise the development of an entire microfinance sector that will serve the Afghan people beyond tomorrow.

Strong donor interest in post-war reconstruction efforts in Afghanistan led some to see it as an opportunity to build a microfinance sector from scratch. Without new thinking, they realised, donors and government policy makers could easily fall into the kind of 'bad practice' witnessed in other post-conflict situations. The tendency to see microfinance as a 'quick fix' for immediate problems of poverty and unemployment could result in a heavy influx of donor money that the institutions on the ground would be ill-equipped to administer. Or worse, politically-motivated subsidised credit could severely distort the financial market and damage its future long-term growth.

So instead, they came up with the idea of MISFA, the Microfinance Investment and Support Facility, Afghanistan. MISFA was set up into 2003, at the invitation of the Afghan government, to get donor coordination 'right' from the start and avoid the counter-productive efforts that have emerged from conflicting donor objectives in other post-conflict situations. It was the first facility of its kind, pooling diverse donor funding mechanisms and converting them into streamlined, flexible support to microfinance institutions in Afghanistan, tailored to local priorities and accompanied by technical assistance and strong performance monitoring.

A vision for citizens

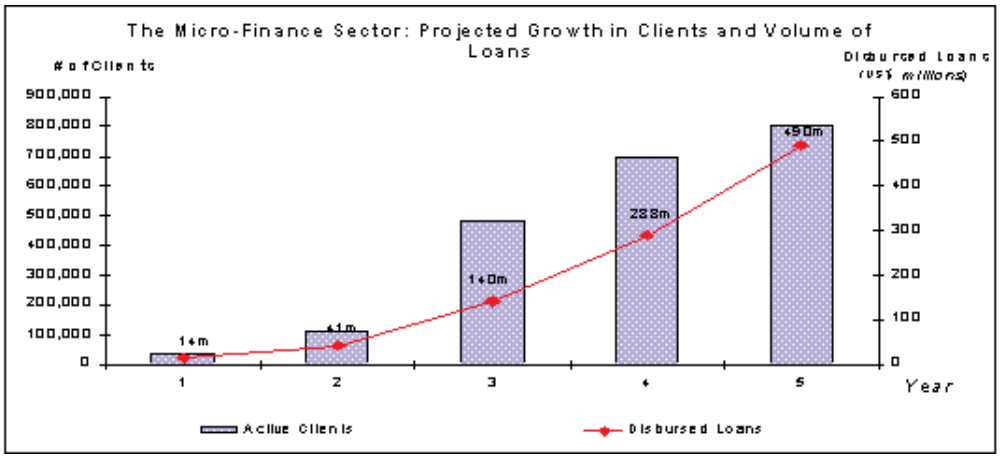
Today, MISFA is committed to building a system that provides flexible, convenient and affordable financial services for poor people throughout Afghanistan. The goal is to build an integrated financial sector, removing the barriers that separate the microfinance community from the broader financial system, and, ultimately, to provide access to financial services for all. While MISFA has started with direct support to the development of NGO led MFIs, it seeks ultimately to work with a whole range of distribution systems - NGOs, commercial banks, cooperatives, insurance companies – serving different segments of the low-income market.

Working towards the vision

As of November 2005, after two years of operations, MISFA has provided US $29.9 million in loans and grants to twelve partner MFIs with 149,000 clients in 17 provinces and 120 districts. Almost 80 percent of the clients are women. The sector employs over 1500 Afghans (two-thirds are women). MISFA has trained over 300 Afghans in microfinance. MISFA has also launched an ambitious programme of expansion of microfinance into poppy-growing provinces to provide alternative sources of finance to opium-based credit and to support new livelihoods opportunities. All these been done with an overhead of 3 percent for MISFA operations. The greatest achievement of all is a loan repayment rate of nearly 100 percent proof of both the demand for services and a guarantee that future clients will be able to access microfinance services.

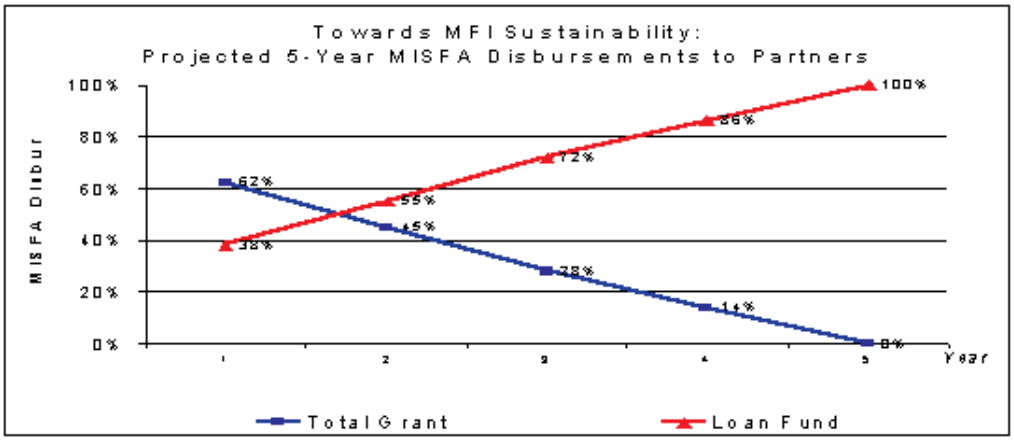
Future challenges

Microfinance in Afghanistan still faces significant challenges, especially for increasing the reach of services to the poor, particularly in rural areas, and for building a sector that will outlast subsidy and will really offer the poor people of Afghanistan a chance to improve their own. Very importantly, the imperative to develop Afghan capacity to fully manage and operate MFIs is another challenge.



Scaling up: MISFA is committed to rapidly scale up financial service delivery to poor Afghans. By the end of Year fifth of operations, an outreach of 800,000 households is projected with nearly $500M in loans disbursed. This would be the fastest growth in outreach in any country.

Building a sustainable sector: MISFA is pledged to build fully sustainable MFIs that can offer services that are competitive, transparent and effective. MISFA has made it a priority for partner institutions to ensure strict financial discipline with a focus on improving their own efficiency. The facility is committed to supporting MFIs that will be operationally sustainable by their fifth year and will no longer require grant funding. After that, access to capital will be offered at market rates.



Beyond the NGO model

The starting point for MISFA has been building up the NGO-MFIs to provide services. But a competitive and sustainable financial sector that serves the needs of poor people in Afghanistan must look beyond the NGO model to commercial providers. MISFA sees the future of microfinance in Afghanistan in developing a truly competitive sector, by reducing subsidy and encouraging competition between traditional NGOs and commercial players. Ultimately, an integrated financial sector will only be created when both kinds of institutions broaden their client bases – NGO-MFIs, by reaching up from the bottom and banks by reaching out to new markets of poorer clients.

Towards an Afghan microfinance sector, MISFA partners are generally managed by expatriate consultants. Since local experts in sustainable microfinance were extremely scarce after the war, this was understandable. But it is far from ideal. MISFA is committed to developing local capacity. MISFA partners are beginning to establish Afghan institutions, with local staff, management and governing boards. Current projections indicate a significant decline in expatriate involvement over the next five years. The plan is a transition into an entirely Afghan-run operation within a few years.

Just the beginning

Just in two years, MISFA has made important strides in establishing a sustainable microfinance sector, working in a challenging environment. MISFA's rapid outreach, often to still treacherous and remote rural areas, and its development of a broad range of products to meet the diverse needs of poor clients, have been unparalleled. Much of that success is due to government commitment to MISFA's long-term strategy.

MISFA is now ready to become a permanent legal entity in the Afghan private sector, with both government and microfinance experts represented on its board, eventually adding private sector representatives as well. With a well-constructed law for non-bank financial institutions (similar to the well-constructed banking law, recently promulgated in Afghanistan), MISFA partner MFIs could also become permanent Afghan entities under the supervision of Da Afghanistan Bank. The institutionalisation of MISFA and MFIs would help create an inclusive and integrated financial sector that serves the poor, making a major contribution to national objectives of fostering economic growth and reducing poverty and vulnerability. ■

i4d
Information for development
www.i4d.csdms.in

Agriculture

DrumNet project to make Kenyan farmers ICT enabled

Pride Africa with support of IDRC's connectivity Africa program is addressing the poor condition of farmers through the DrumNet project in Kenya through an ICT enabled network.

DrumNet is helping smallholder farmers who make up 70 percent of the population in most African countries within a network of farmer support centres delivering a targeted set of marketing, financial and information services. Farmers get access to ICT-enabled information on critical business decisions such as; which crops to grow; when to plant; what varieties to plant; which agro-chemicals to use; real-time market information (prices and opportunities) using mobile phone technology. The initiative would get even further if it used community radio approach in mobilisation and information dissemination.

www.digitaldivide.net

Education

ICT agreement for e-Framework initiative

New Zealand's Ministry of Education (on behalf of New Zealand's Education Sector ICT Standing Committee and Ministry of Research, Science and Technology) collaborates with the Joint Information Systems Committee (JISC) for a close co-operation between the two organisations in the e-Framework initiative.

This collaboration is central to the development and deployment of IT standards and systems is to explore more flexible approaches to the technical infrastructures for e-Learning, e-Research and e-Administration. The development of such a service-oriented technical framework, based on open standards, is argued to maximise the flexibility and cost effectiveness of IT systems.

www.egovmonitor.com

e-Book offerings from Sony Electronics and Borders Inc

Sony Electronics and Borders Inc have declared a joint venture of a reading device for e-Books and text documents, available through about 200 Borders stores in the US.

The Sony Reader will debut in Borders and more than 30 Sony Style stores around the country as well as online at *www.sonystyle.com*. The Reader will allow active readers to carry as much as they want to read whether they are travelling on the road or just around the corner.

www.thehindubusinessline.com

Becta school website to bring transformation in teaching

The British Educational Communications and Technology Agency (Becta) will reduce the number of online services and brands it provides for schools in response to the Department for Education and Skills five-year strategy and e-Strategy, 'Harnessing Technology'.

Over the coming months some changes would be seen in Becta's online presence. The aim is to work towards a position where teachers should be able to work from any Internet access point at any time, linked to the tools and learning services they need in order to plan, prepare, manage and follow up learning experiences for their students. This site is an example of the Government's ongoing commitment to ICT and the drive to transform teaching and learning in schools.

www.ngfl.gov.uk

e-Commerce

e-Auction success brings a huge profit to CIL

The credibility for high profit of Coal India Limited (CIL) in previous year can largely be attributed to the success of e-Auction.

e-Auction made it easy to manage multiple online auctions bringing transparency in marketing of coal. Under the e-Auction route, the company sold 19.5 mt of coal, which generated additional revenue of about Rs 920 crore.

www.financialexpress.com

HP on an innovative move for IT solutions in Middle East

Managing Director for HP in Middle East, calls for technology for all at World Summit on Innovation and Entrepreneurship in Muscat.

HP with its commitment is to meet with ministers and other industry leaders to discuss on how governments and multi-national companies in the region can use technology to improve education to foster a culture of entrepreneurship and facilitate economic growth. Besides HP uses its products, services and skills, for various philanthropic activities also, so as to increase children and young adults' access to Information Technology world-wide. HP was a child of innovation and it strongly believes that IT is a critical component for transformation of economy. It supports initiatives such as the Young Arab Leaders Forum and WSIE, along with mentoring programmes, with diligent responsibility to contribute meaningfully to the communities.

www.ameinfo.com

Finger print identification e-Registry

CMC Ltd, an IT solutions and services provider and a subsidiary of TCS, India has recently developed a biometric application for Nasscom called the national skills registry, where employees in IT-related fields would have fingerprinted identification and records.

This has enhanced the assistance to government by providing land record automation services and treasury management. The versatile computerised operations for police stations (VCOPS) is a solution by which an entire police case can be put in computerised records from the registration of the crime to the closure of the case. The company's clients for these e-Governance solutions include foreign countries as well.

www.thehindubusinessline.com

e-Governance

KSRTC to introduce e-Ticketing facility

Karnataka State Road Transport Corporation (KSRTC), India is going to launch e-Ticketing facility, known as Any Where Any Time Advance Ticket Reservation (AWATAR) for bus commuters.

The system allows booking of tickets from any place for any destination. A commuter can pay the fare through Internet. KSRTC would launch a new website, ksrtc.in, to offer e-Tickets and other information to the public while the existing site, *ksrtc.org*, would be used for in-house information sharing. The new system would enable booking of advance tickets up to 30 days. A commuter could also exchange the e-Ticket with a regular ticket at KSRTC counters at the boarding point. The new system also allowed intermediate booking of advance tickets.

www.hindu.com

Karnataka High Court to put its judgments on Internet

The Karnataka High Court, India will shortly be putting its judgments on the Internet. The plan will greatly benefit advocates and litigants. This initiative will link the Advocate-General's office with the Law Department.

As of now, only the Supreme Court and a few High Courts are putting their judgments on the Net. The computer savvy solutions that the court wishes to adopt would bring more transparency, simplify the court rules and procedures and make them more people friendly. Many of the problems is expected to be ironed out if the 'e-Link' between the High Court and the Government comes through.

www.hindu.com

Oman's vision for eOman

An e-Governance project launched in Muscat for a countrywide awareness drive.

Oman's vision is to transform the settings of the society into a 'digital society' in which every citizen and resident has access to a vast range of convenient, cost-effective and customer-oriented electronic services. The campaign, titled 'eOman', aims at providing improved services to the public that will empower them and change their lives for the better, key officials overseeing the programme explained. It would lay down an effective government-community-citizen infrastructure.

www.khaleejtimes.com

Citizen centric e-Governance programme by CMC

The Calcutta Municipal Corporation (CMC), West Bengal, India, will offer a host of services including renewal of trade licence, collection of property tax, distribution of mutation forms and granting permission for water supply connection — through the e-Seva booths, to be run by authorised agencies.

Taking a cue from the Hyderabad civic body, CMC will soon be retailed through a network of e-Seva booths across the city. The objective is to offer hassle free citizen centric service. The scheme will also generate self-employment opportunities. To restructure the ongoing e-Governance scheme in the CMC, it has engaged Tata Consultancy Services (TCS) for the project and signed an agreement with BSNL for installation of networking facilities. The work is likely to end by 2008. Once the e-Governance scheme is ready, the civic body will be able to decentralise its activities.

www.telegraphindia.com

Health

C-DAC released softwares for health consultation

The Centre for Development of Advanced Computing (C-DAC), India, has unveiled three new softwares- Mercury Web interface Real Time Technology for atmospheric research and Prakriti Vichaya.

The Mercury Web interface has been designed to provide web-based teleconsultation models that could function over the Internet. It can be interfaced through web, Internet, intranet, or even wireless. The output obtained from the Real Time technology could be used for understanding the condition of the atmosphere over the region. Prakriti Vichaya, plays an important role in the prevention, diagnostics, and treatment of diseases. The software is a solution for psychological constitution assessment and tissue quality assessment in Ayurveda (indigenous medical science).

www.thehindubusinessline.com

Livelihood

ICT to increase social capital

ICT can help communities to generate higher social capital and thus better quality of life while suggesting some policy priorities to address social capital gap in society.

Social capital, defined as the reserve of goodwill generated through people's social interactions - is a key resource on which individuals and communities can draw to support their everyday activities. ICT can foster local community ties through education, job opportunities, encouraging community activities and increasing general sociability. There is also evidence that communication tools provided by community networks can help groups to self-organise to achieve various goals.

www.egovmonitor.com

BCS website to offer career advice to IT professionals

The British Computer Society (BCS) web-site is going to give career advice to IT students and professionals as a part of the news which would be supported by personalised accounts from people working in a wide range of IT roles.

The career section offers guidance on securing the elusive 'first job' and switching to a career in IT as well as identifying the roles available and how to access them. The website as a whole benefits from 600 additional pages providing all-embracing information on all aspects of the IT profession. A new students section, much of it written by students for students, also provides young aspiring professionals with advice, career profiles, new IT developments and reviews, project news from other colleges and universities and networking opportunities.

www.publictechnology.net

Internet helps Americans in decision-making

According to a survey conducted by the Pew Internet and American Life Project, a non-profit group, Internet is becoming increasingly important to users in their everyday lives of Americans.

The survey found that some 45 percent of Internet users, or an estimated 60 million Americans, said the Internet helped them make big decisions or face a major moment in their life during the previous two years. An estimated 21 million Americans turned to the Internet when seeking more training for a career, while 17 million used it to choose a school for a family member or to help another person with a major illness. Some 16 million Americans used the Internet when buying a car or making a major investment or financial decision. An estimated 10 million Americans used the Internet when looking for a new place to live; 8 million when changing jobs; and 7 million when dealing with their own major illness or health condition, the survey said. However, better online content and more widely advertised websites may also contribute to the rising use of the Internet with major life decisions, the survey said.

www.cnn.com

No longer to type keywords for Google search

http://elliottback.com/wp/wp-content/google-x-ajax-application.png

The search giant Google is developing a service wherein you don't need to give any text based search queries, just say it loud. Google has patented its new search innovation - voice based search.

Instead of using text-based search queries, Google would be able to receive voice-activated search queries. The system receives a voice search query from a user, derives one or more recognition hypotheses, each being associated with a weight, from the voice search query, and constructs a weighted boolean query using the recognition hypotheses. The system then provides the weighted boolean query to a search system and provides the results of the search system to a user. Users can have a demo of Google voice search on Google Labs, Google's pre-beta-test site. The application is targetted at cell phone users.

infotech.indiatimes.com

Open source

An open source, multi-platform software for digitising libraries

The Greenstone Digital Library was introduced by John B. Rose at the British Council, in the University of Waikato, Hamilton, New Zealand.

The advantage of digital libraries is that they provide access to and storage of multimedia and, allow for cooperative input. The software has provision for multi-lingual interfaces and data entry. Hindi and Kannada databases have been created by some of the Indian users. The Indian Institute of Management, Kozhikode, Indian Institute of Science, Bangalore, Indian Institute of Technology, Bombay, and the Archives of Indian Labour are among the institutions that have put the software to use. The Greenstone software is available at *www.greenstone.org* and the digital library of the University of Waikato

www.nzdl.org

Technology

e-Sniffer, Lost Mobile Tracking Solution (LMTS), developed in India

e-Sniffer, a Lost Mobile Tracking Solution (LMTS) is developed Micro Technologies and to trace lost mobiles. This software allows the owner of the lost mobile to track the exact location of the handset and the number of the new SIM (subscriber identity module) card that has been inserted.

The code, downloadable at Rs 200 to Rs 300 a year on most handsets from Micro's website. When a phone is stolen, the thief generally sells the device in the grey market. When a new SIM card is inserted, the solution embedded in the phone will send an email or voice message to the original owner notifying him of the number on the new SIM card and the location of the phone. In this situation the third party has to return the gadget procured from the grey market. The e-Sniffer is awaiting a patent right. It was created with an investment of over a million dollars.

economictimes.indiatimes.com

Dell adds different taste to its next generation notebook

Dell offers it next generation notebook, Dell Precision M90 and Delhi M65, which are Wi-Fi enabled, re-engineered with new levels of features and stringent application-specific demands for engineers, artists, developers and other professionals content creation anytime and anywhere.

M90 designed to deliver the highest workstation performance available in a mobile platform, giving the freedom to replace the desktop workstations without sacrificing performance. The M65 version would be of special use for financial analysts. Dell also announced the launch of two other products, Dell Latitude D620 and Latitude 820, slimmer and lighter Notebook computers targeted at business customers. The Wi-Fi enabled models with hyper connectivity, and added layer of security of biometrics also boasts extended battery life.

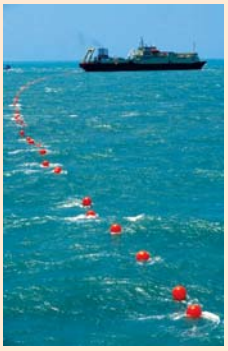
www.thehindubusinessline.com

Dispute over ICT project in East Africa

A World Bank loan offer of over $100m (about sh183b) is causing a dispute between the bank and the companies promoting the East African Submarine cable System (EASSy) project.

The EASSy project is a fully-integrated multi-technology network of a 9,900 km undersea fiber optic cable for telecommunications that will link East Africa to the rest of the world. It was launched three years ago and is expected to be complete by the end of 2007. Vincent Waiswa, a leading ICT policy advocate in Africa, said companies that instigated the project and invested in it before the closure of the window of opportunity to invest are motivated by profit.

allafrica.com



Credit: eassy.org/program_clip_image002.jpg

'Office 2007' is coming soon

Microsoft, software giant, would launch the latest version of its office software suite by the end of the year.

India development team has played a key role in developing Office 2007. It has designed tools that support unified communication, pocket applications for mobile usage and has worked on many other functionalities. Microsoft Corporation also previewed the 2007 Microsoft Office version, which is currently in beta phase. It is based on the theme 'Innovating for and with India'. It has its application in the areas of e- Governance, education and defence, in addition to specific vertical solutions for the banking, publishing and retail sectors. The applications on exhibit included the e Gram application by the Department of Panchayat, the National Manuscript Project by National Informatics Centre (NIC) etc.

www.thehindubusinessline.com

Telecentres

Rwanda to invest a hefty amount to set up telecentres

The Government of Rwanda announced a lucrative multi-million dollar Community Information Centres' (CIC) project, to set up hundreds of telecentres all over the country in three years.

A hefty Frw1.68b (US$3m) will be invested in setting up the telecentres. The project is a result of a study conducted by the International Telecommunications Union (ITU) in 2002. Rwanda is implementing a highly ambitious strategy to achieve sustainable economic growth, through ICTs.

allafrica.com/

Public access centres in Myanmar

The number of Internet users in Myanmar has gone upto 63,700 as of the end of 2005, which was merely a few thousands in 2000.

Myanmar has projected to add Internet service centres known as the Public Access Centres (PAC) over 100 townships in the country to facilitate communications especially in the sectors of business and education. The country is striving to have such service centres cover the whole country's 326 townships in the near future. Meanwhile, the Ahaed Co. of Myanmar and the Teleglobe of Canada have signed a memorandum of understanding (MoU) to run an Internet Service Provider (ISP) in Myanmar.

english.people.com.cn

Telecommunication

Low cost handset users to be increased in rural India

According to a study titled 'Enabling India's Broadband Economy - The 3G Way', by the US based research and analysts firm Yankee Group, nearly 50 per cent of the mobile handset sold in the country was below the sub $50 level by the end of 2005 was released by the Confederation of Indian Industry.

The study also points out that 35 per cent of the new cellular users in the country will be from the rural segment by 2010. Multiple operators are set to launch 3G services in India to overcome capacity constraints in the existing networks.

www.thehindubusinessline.com

Zero charges for video telephony over computer

To make telephone calls from a computer is no longer an exotic action because new software has made it easier to make video telephone calls using computer. This software is invented recently in Hannover, Germany.

The hardware is affordable and the communication software is often available at no charge. The requirements for video telephony software vary. A sound card, a headset with headphones, microphone and a camera are a must. New users must first register an account with the video telephony software. Connections can be secured by using a special calling number or user name. The video telephone call itself is free; only Internet charges apply.

www.newkerala.com

Wireless

Citywide Wi-Fi network in Portland

In the city of Portland announced, MetroFi is to deliver and operate a citywide Wi-Fi network that will provide free wireless Internet access and improved public services to Portland residents.

The city will use wireless capability to make its own operations more efficient, including processing city parking metre transactions, connecting government employees stationed at field offices, and providing better information to emergency services. The system will be built at no cost to the city.

www.govtech.net

General

Digital approach to fight against crime in Zambia

Zambia Police is planning to digitalise the operation system to fight against crime because criminals are becoming sophisticated day by day.

Jere, a senior Officer in Zambia Police, called on the media to join hands in fighting crime and creating peace in Zambia and, challenged the media to verify their information before publishing to avoid misleading of public. Police would soon be conducting a press tour to the three police training institutions to familiarise press people with the training inducted to officers.

allafrica.com

Bringing technology to the field

One of the most promising MFI technologies currently available, for improving efficiency is PortaCredit™, an application pioneered by ACCION International and designed to run on a handheld computer or personal digital assistant (PDA)

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Critical factor and crucial technology

Efficiency is critical in order for microfinance institutions (MFIs) to cover the high costs of offering microloans, to both urban and – especially – rural borrowers. Therefore, MFIs are doing everything they can to reduce overhead expenses and streamline the loan application process, in order to enable them to serve more low income people, more efficiently. MFIs benefit from such technological advances – and so do clients, more of whom can be served as a result of the scalability and sustainability that these cost-effective methods provide.

PortaCredit™

One of the most promising MFI technologies, currently available for improving efficiency is PortaCredit™, an application pioneered by ACCION International and designed to run on a handheld computer or personal digital assistant (PDA).

PortaCredit, was originally designed to be used with individual lending, when the lending methodology requires assessment of a client's microenterprise and family budget. Using a PDA equipped with PortaCredit, loan officers input client data, complete and process applications, and make loan calculations all while in the field at the client's home or place of business. Data can then be quickly uploaded to the MFI's centralised database, eliminating the time-consuming task of re-entering it, and reducing the chance for errors.

Originally developed by ACCION to increase the operational efficiency of its microfinance institution partners, PortaCredit has been successfully implemented in a number of MFIs in the last five years. The software application has the flexibility to be adapted to the specific needs of a given MFI. Typically, the software includes client contact information, financial data, credit history and other business data. Field coordinators and programme managers are able to receive synchronised information or download it to office-based PCs, which are equipped with the complete loan portfolio management software. By collecting information and synchronising it to the main office from the field, loan officer can eliminate time-consuming trips, leaving significantly more time for activities that require direct interaction with clients and for outreach to new clients.

In addition to efficiently recording client information in the field, the software programme can upload a loan officer's portfolio into the hand-held computers. This enables the loan officer to calculate financial ratios and in some cases this allows the officer to approve loans right away.

PortaCredit technology can decrease the use of paper, improve quality of data entry, improve information flow, increase efficiency, improve loan recovery, provide faster service, and increase loan officer caseload productivity. All of these benefits result in giving more microentrepreneurs access to financial services.

Since its inception in 1999, PortaCredit has evolved into a highly specialised and functional tool. The synchronisation between the PDAs and PCs and the interface between the PCs and the institution's central MIS has progressed as improvements have been made to the available technology. PortaCredit can now accommodate multiple loan products, and the new platform incorporates various credit scoring tools, further contributing to the MFIs' efficiency.

Challenges in implementation

The main considerations in implementing PortaCredit at an MFI can be broken into

two broad categories: technological and operational. Technological issues relate mostly to the interface between the PDA and the institution's main loan tracking system and the hardware used. These issues can be difficult to resolve due to their costly nature and the high level of expertise needed to address them. From an operational perspective, challenges arise mainly in relation to how various staff (management, loan officers, the information technology department and back office staff) respond to, and internalise, the new technology. The operational issues are often the most important and difficult to address.

The most significant technological problem has been with the synchronisation and interface between PortaCredit and the institutions' central databases. Another technological issue frequently encountered is choosing the most appropriate PDAs and understanding how to budget for the new technology.

The early introduction of PortaCredit to field personnel – including agency managers, the IT department and loan officers – is critical to the successful adoption of the technology. Among all of the functions at the MFI, it is most important to garner buy-in from loan officers when rolling out PortaCredit. Beyond the challenge of mastering the hardware itself, which has proven relatively easy to manage, one of the core challenges is to create among loan officers the willingness, enthusiasm and capacity to change.

Field results

MFIs implementing the PortaCredit programme have reported impressive cost-savings in non-salary operational costs. For example, BanGente, in Venezuela, has reported savings of up to 20 percent due to the elimination of office supplies such as paper, copiers, toner and file folders. Files that were previously made up of hundreds of sheets of paper are now neatly and cost effectively stored within the loan officer's PDA and the central MIS.

In addition to administrative cost-savings, ACCION network partners have also reported significant productivity gains thanks to PortaCredit. Among Latin American MFIs, some claim productivity gains of 50 percent or more per loan officer, and as much as a 35-50 percent reduction in the number of loan applications referred to the credit committee, resulting in a faster turnaround time for clients.

There are a number of reasons for this increased productivity. Besides replacing the paper-based loan application, PortaCredit fulfills the important task of incorporating internal controls at the loan officer level. First, it ensures that every field within the loan application is complete before moving to the next screen, saving time that was previously spent tracking down incomplete information during the final credit approval process. Next, because the underwriting criteria of the MFI are incorporated into the PortaCredit programme, applications that make it through the pre-approval filter are likely to ultimately be approved, and there is more consistency in loan approval criteria. Finally, PortaCredit allows loan officers to present different repayment scenarios to clients using a Financial Simulation Module based on different loan terms. This increases customer satisfaction as applicants are able to see how a change in loan size, term or interest rate will affect their payment size.

Loan officers can also better organise their daily work plan using the electronic agenda, which replaces the traditional route chart common in MFIs. Most important, loan officers have found tangible time savings. Time previously spent on administrative processes (such as inputting client data into the system, producing and filing forms, correcting forms that had been incorrectly filled out in the field, and manual control in fulfilling loan policies) can be invested in customised client service, sales and performing follow-up with existing clients.

Experience has shown that, with the implementation of PortaCredit, data entry staff can be re-assigned to other, more high-value tasks. While they were often required to work extra days during particularly busy times, the time freed up by PortaCredit allows them to take on new responsibilities. Data entry staff can take on customer service responsibilities, with the goal of increasing customer satisfaction and client retention.

Credit: www.gre.ac.uk/schools/business/images/microfinance1l.jpg

As technology and MIS systems continue to advance, PortaCredit has the potential to significantly ramp up efficiencies throughout the industry. As more MFIs adopt these kinds of technological solutions for operational challenges, they can also benefit from improving their institutional transparency, accountability and profitability and, inevitably, opening the door to accelerated growth and up-scaling of microfinance.

CRISIL'S MICROFINANCE INITIATIVES

An endeavour to mainstream MFIs

CRISIL is now the only mainstream credit rating agency in India to receive accreditation from CGAP for microfinance grading.

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Background

While CRISIL was set up in 1987, its initiatives in the microfinance sector took shape only in the wee years of the 21st century and, in that sense, may be called fledgling in relative terms. However, these initiatives have, since inception, slowly but steadily made progress not only in domestic operations, but also in getting recognition in the global context. CRISIL has today executed microfinance assignments for multilaterals like CGAP (Consultative Group for Assisting the Poor), the microfinance arm of the World Bank and HIVOS of the Netherlands. In fact CRISIL has also executed an assignment for an entity based in Philippines, for which the team was at Manila for a few days. Apart from this, CRISIL has also executed an assignment in the Caribbean. In the last few years CRISIL has analysed more than 60 MFIs.

What are MFIs ?

What microfinance is and what microfinance institutions (MFIs) exactly are still remain unclear to many. Microfinance refers to extending loans or financial assistance where the value of the same is 'small' or 'micro' in nature. For example, in India, the average size of one such loan would be less than Rs.10,000/-, which, in contrast to a car loan or a housing loan that may run into more than a million rupees.

To be specific 'Microfinance typically deals with people who constitute the weaker sections of the socio-economic strata and who reside in rural and suburban areas. Consequently the business model and skill sets required to make a success of microfinance initiatives are very different from that required in say car finance or housing finance'.

Also a number of entities in the microfinance are non-governmental organisations (NGOs) and not-for-profit entities where the objective is more altruistic and aimed at social development rather than making profits. In CRISIL's opinion, there are over 800 entities in India involved in microfinance.

CRISIL in microfinance

CRISIL's bouquet of services in the microfinance space can be broadly divided into three categories:

- Grading
- Risk assessment and
- Diagnoss services

Grading: CRISIL uses a unique framework for evaluating MFIs, given the specificities of these organisations – their small size, geographic concentration, high operating expenses, the non-profit making nature of many etc. This grading framework evaluates the scalability and sustainability of MFIs rather than their debt repayment ability, which is indicated by the conventional CRISIL ratings. The grading framework is customised to analyse the specific parameters, that an institution should look at, while commencing a business relationship with an MFI or simply to look at the future growth possibilities of the MFI. CRISIL's grading process for MFIs is built on the 'MICROS' framework and uses an 8 point grading scale (mfR1 to mfR8 with mfR1 being the best). The MICROS framework is an acronym which describes the methodology used by it as follows:

- M – Management capability,
- I – Institutional arrangement,
- C – Capital adequacy and asset quality,
- R – Resource mobilisation ability,
- O – Operational effectiveness,
- S – Scalability and sustainability,

Risk assessment: Sometimes rather than the grading, MFIs and/or lenders to MFIs request CRISIL to furnish them an

assessment of risk report which highlights the strengths and areas of improvements of the MFIs without giving them the grading.

Diagnostic services: There are certain clients, typically multilaterals who may request CRISIL to analyse in detail, the business model of an MFI and carry out a diagnostic assignment to validate the feasibility of the same based on CRISIL's expertise in the sector.

According to Mr.R.Ravimohan, Managing Director and Chief Executive Officer, CRISIL, "Microfinance Institutions fulfill a critical objective of ensuring credit availability to the poorer sections of the society to fulfill their entrepreneurial ambitions and enhance their economic status. Microfinance will create a visible impact on the economically challenged only if they are provided on a sustainable basis. To make this happen, CRISIL provides gradings, opinions and solutions that help MFIs and apex MFIs mitigate and manage their business and financial risks. Banks and financial institutions also stand to benefit substantially from CRISIL's inputs in their endeavour to assess the key monitorables in micro credit and, consequently, ramp up their microfinance portfolios".

Corporate alliances

A unique issue, faced by CRISIL in the microfinance space is that because typically the MFIs themselves are small entities (excepting a few large ones), they find it difficult to bear the professional fees charged by CRISIL. This, in spite of the fact that the professional fees charged by CRISIL are much lower than that charged by it in conventional ratings when juxtaposed with the effort involved in these assignments. This is in line with CRISIL's commitment to social development and the role that MFIs play in channelising credit to the weaker sections of the society where the reach of other organised financial institutions like banks, non banking finance companies (NBFCs) and housing finance companies (HFCs) is severely limited or non-existent.

CRISIL has also entered into arrangements with entities like the SIDBI Foundation of Micro Credit (SFMC, an arm of SIDBI), the World Bank (through CGAP), HIVOS and most recently NABARD. One of the primary objectives of these entities is to enhance credit flow to the underprivileged and the poor and they use MFIs as a conduit for the same. For this, such entities would lend to MFIs, provide technical and consulting support to them or facilitate their process flow so as to ease credit availability from banks to them. One of the salient features of CRISIL's arrangement with these entities is that the professional fee payable to CRISIL is significantly or, in some cases, even fully borne by these entities. This, in CRISIL's opinion, is good structural framework for the growth and development of the MFIs in India.

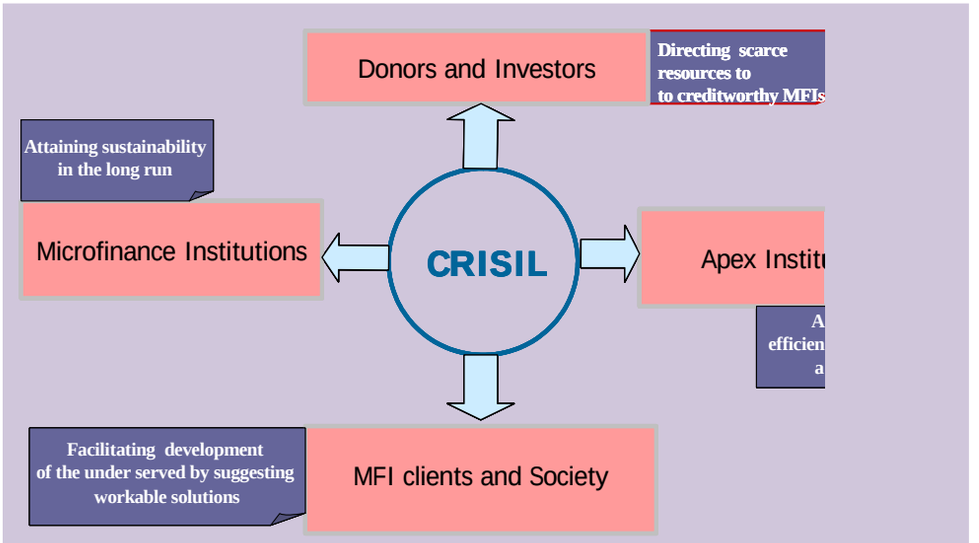
International recognition

CRISIL's international recognition in the microfinance space is also growing. CRISIL is now the only mainstream credit rating agency in India to receive accreditation from CGAP for microfinance grading. Also CRISIL is in dialogue with entities like Microfinance Information Exchange (MIX) based in Washington as regards the analytical framework appropriate for grading such entities. Further, CRISIL's gradings are also covered in the CGAP website *(www.ratingfund.org)* which is the first port of call for anyone globally when one thinks of MFIs.

In fact, CRISIL has been also included recently in the website of 'Year of Microcredit' (a group formed by among others Citigroup, ING and United Nations) and one can view it along with Mr.Ravimohan's above quote at '*www.yearofmicrocredit.org/pages/whos-involved/whosinvolved_mfpartners.asp#crisil*'. Also a number of international players, looking at the microfinance space in India, including Grameen Foundation, have been in dialogue with CRISIL, to see how they can have a greater presence in this sector in India.

CRISIL's commitment to microfinance sector

CRISIL's commitment to the sector is clearly evident in its attempts to play an enabling role in the structured evolution of the sector by helping all constituents. This is as illustrated in the diagram provided.



CRISIL's commitment to microfinance

Recent developments

In the past decade, in India both the central and state governments have emphasised on delivering credit, training and capacity building through self-help groups (SHGs) as part of their poverty alleviation programmes to the rural populace. By classifying bank credit to SHGs as priority sector lending, the government has encouraged banks to emerge as major microfinance service providers. Similarly, the Union Budget 2005-06 has some positive measures for the microfinance sector like

Credit: ICTA, Sri Lanka

enhancing the corpus of the microfinance development fund and allowing MFIs to act as banking correspondents. These measures could enhance the availability of equity and debt funding, strengthen bank-MFI relationships, and open up opportunities in micro-insurance.

Hitherto, only MFIs were focused on the microfinance sector. With the increased focus of banks as microfinance service providers, the sector is gaining greater recognition. India has a considerable rural and semi-urban network of bank branches and by allowing banks to appoint MFIs/NGO-MFIs as correspondents, the outreach of microfinance will be expanded.

Banks have been slowly recognising this opportunity and bank funding as a proportion of the MFIs' total borrowings, has more than doubled in the last 2 years. Also CRISIL's experience is that asset quality of a number of players in the sector has been good due to the joint liability characteristics in loan agreements. With yields also at high levels, risk adjusted returns can be very high in this sector.

Conclusion

All in all, things are getting more structured for the sector in India. The Reserve Bank of India has indicated certain opportunities for the sector like MFIs, operating as banking correspondents for banks. The possibility of setting up a separate regulatory framework for this sector is also being explored. Also the ECB route has been opened for NGOs, to facilitate their resource mobilisation efforts. Several banks and international lenders have been evincing increasing interest in the sector. CRISIL in its own way is also trying to achieve its objectives of 'mitigating and managing business and financial risks' and 'making markets function better' for the sector. With the combined efforts of a multitude of organisations, it is CRISIL's firm belief that the widely shared goal of 'mainstreaming MFIs' is on the way to being achieved. ■

Poverty and types of ICT intervention

Correlates of poverty	What ICTs can do	Category of poor that benefits	Comparative advantage of ICTs over traditional tools
Lack of sufficient nutrition, health, water and sanitation	Information improves delivery of health services. ICTs can do little or nothing for nutrition, water and sanitation	Does not help the poor significantly	ICTs cannot provide basic infrastructure and services, but information can improve them, eg., Medical information
Lack of employment or income earning opportunities	Employment in ICT profession (eg.) mobile phone operators, (IT industry work); but may be marginal	May benefit the lower rungs of income distribution but not necessarily the poor	ICTs can help in disseminating employment information
Lack of information and social capital	Market information agriculture and cottage industry produce, labour market conditions and other income earning opportunities	May benefit the lower rungs of income distribution but not necessarily the poor	ICTs can be used in complemen tary fashion or integrated with traditional media, eg. Radio broad casting, Internet information
Poor quality of governance	More efficient government	Potentially all can benefit, including the poor	ICTs can be used in conjuction with traditional practises
Lack of voice and participation	e-Mail access to decision makers, participation in news, discussion fora, etc.	Potential of all segments of society, including the poor can benefit	ICTs can be used to complement traditional avenues such as news papers and other media
Lack of skills or education	Distance education or learning assisted ICTs	Potentially all can benefit, but the poorest segment is likely to be excluded. However, some lower income individuals, not necessarily the poor, might be able to take advantage	ICTs can complement traditional teaching resources

Source: Information and Communication Technologies and Poverty: An Asian Perspective, ADB Institute working paper 12.

DHAN FOUNDATION

Microfinancing to enable rural communities

Microfinance intervention in India shows its potential to integrate many development issues and themes – education, health, natural resources management and now ICT.

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Why microfinance?

Perhaps no other instrument of intervention in development has generated so much excitement and promise as microfinance in addressing poverty. It is now globally recognised that microfinance impacts poverty by expanding choices for livelihood opportunities of the poor. Microfinance in the Indian context is quite unique because it is not so much about finance per se, as to the building of development perspectives and addressing a host of issues connected with poverty. The predominant model of microfinance in India, the self help bank linkage programme is an enabling model, which has brought dividends in more ways than one. Beyond finance and economics the SHG model has triggered chain of development processes including empowerment of women.

The microfinance intervention in India has been instrumental in a big way in establishing and building grassroots institutions. The SHGs have also networked into federations with distinct identity as people institutions involved in beyond microfinance initiatives on the social and development front. DHAN, as an enabler, has strong belief in this approach of building grassroots institutions with microfinance interventions. It is, therefore, widely acknowledged that the striking gain from the microfinance intervention in India is the potential of microfinance to integrate many development issues and themes – education, health, natural resources management and now ICT.

DHAN Foundation's microfinance programme Development of Humane Action (DHAN) Foundation, a professional development organisation, was initiated on October 2, 1997. It has been incorporated as a trust under the Indian Trusts Act (1882). The Trust has been promoted with the objective of bringing highly motivated and educated young women and men to the development sector. They would work on bringing out new innovations in rural development and for upscaling development interventions to eradicate poverty in vast areas of the country. The Foundation works towards bringing significant changes in the livelihoods of the poor through innovations in themes and institutions. The broad purposes for which it stands are:

- ***Mothering of development innovations:*** The institution aims to promote and nurture new ideas on different development themes, which have larger potential to address the livelihoods and development of the poor in a region viz., microfinance, small scale irrigation, dry land agriculture, ICT for poor, working with panchayats.
- ***Promoting institutions to reach scale:*** Exclusive thematic organisations will be promoted to undertake development work with a sub-sectoral focus. The primary role of the institutions is promotional and to ensure that benefits reach a large number of poor with quality.
- ***Human resource development:*** The institution would bring young professionals into the development sector and provide them an opportunity to practice and develop relevant knowledge, attitudes and skills to work long term in the development sector.

Kalanjiam Community Banking Programme

The microfinance programme of DHAN Foundation known as Kalanjiam Community Banking Programme is the largest and flagship programme. The Kalanjiam Community Banking Programme focuses on women and believes

that localised financial institutions owned and controlled by women are an effective strategy to impact on poverty and gender issues. The primary unit of community financial institutions is the Self-Help Group of 15 to 20 poor women is called the Kalanjiam. They act as a single window at their doorsteps for the savings and credit transactions. The cluster and federation at panchayat and block levels are the nested institutions at next higher levels. They help the Kalanjiams address other social and development needs of the members such as drinking water, health, education, sanitation, access to basic infrastructure, alcoholism, gender issues, etc. thereby enhancing the sustainability of these institutions. This scheme has so far reached 300,000 poor families spread over six states in Tamil Nadu, Andhra Pradesh, Karnataka, Madhya Pradesh, Orissa and Pondicherry.

Federations and clusters help create linkages with banks and apex financial institutions to meet the multiple credit needs of members, collaborate with other development agencies such as government to demand and access their entitlement, implement civic programmes such as in health and education for their members, provide insurance services, etc. The programme has taken the shape of a movement called the 'Kalanjia Iyyakam' working towards bringing more women into the fold of the Kalanjiams. The Kalanjiam Movement is implementing a number of innovative programmes for reaching out to more women.

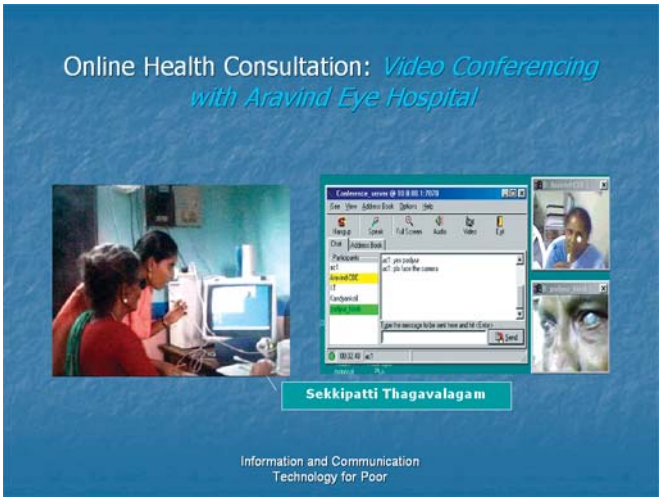
DHAN's foray into ICT

As the world is heading towards a concept of global village connecting every organisation and individual through Internet, Indian villages and not to speak of poor are being left behind. Information technology as a tool has broken many barriers in availing and using information across the world and increased the efficiency of organisations and individuals. DHAN Foundation, conscious of the technological change and poor being left out in the whole process, has seen the great potential of ICT to impact on poverty when integrated with microfinance programmes. Interestingly, it is seen how microfinance connects communities with ICT in more ways than one – connectivity, providing information / knowledge, livelihood opportunity, enabling health care, etc. Moreover, ICT applications for efficient and effective management of microfinance programmes have also been recognised. The programme on ICT for poor has been introduced in the year 2001 under thematic name 'Thagavalagam'.

Village Information Centres (VICs)

The Village Information Centres known in vernacular as Thagavalagam offers a variety of Information and Communication Services to the members of the Self Help Groups (Kalanjiam) & Tank Farmers' Association (Vayalagam) and also to the public at large in the villages. Thagavalagam provides the following services.

The children of the members of the Kalanjiam Community Banking get coaching for their school education in VICs, where the rural youth also get exposure to basic computer education. VICs are



also resource centres with offline content for the local economic, business and social sector particularly health, agriculture, animal husbandry, etc. The VICs located in the Melur block of Madurai district provides unique eye care by connecting to Aravind Eye Hospital. Cataract problem is diagnosed through this connectivity for treatment in the Aravind Eye Hospital. Similar online consultations with leading hospitals in Madurai for general health care is also being tried out.

Enthused by the success of this eye care experiment, project Distance Health Care Advancement project (DISHA) has been launched for health care in Theni district in partnership with Philips, Indian Space Research Organisation (ISRO) and Apollo Hospital. While Philips, provides mobile diagnostic bus with latest equipments with ISRO provide VSAT connectivity and Apollo Hospitals for consultation.

- Computer aided school education
- Computer aided adult literacy
- Computer education
- Local newspaper
- Offline content and training
- Local content development
- Job work
- e-Mail and browsing
- e-Post
- e-Talk
- e-Governance
- Online Resource Consultations
  - Eye care
  - Health
  - Agriculture
  - Legal
  - Education
  - Animal husbandry
  - Fishery sciences
- Community web portal
  - ECKO
  - Vyapaar (Business)

S.No.	Coastal District	Community College	Village Information Centres
1.	Madurai	4	50
2.	Kancheepuram	1	12
3.	Pondicherry	1	12
4.	Cuddalore	1	12
5.	Nagapattinam	2	24
6.	Karaikal	1	10
7.	Pudukottai	1	12
8.	Ramanathapuram	1	12
9.	Tuticorin	1	12
10.	Vizakapattinam	1	5
	Total	**14**	**161**

In the post tsunami scenario, DHAN has established 100 VICs in the coastal belt of Tamil Nadu hit by tsunami for providing weather information and also online content for the fisheries sector.

Thagavalagam hub as community colleges

A group of VICs need a hub for effective coordination and connectivity in a particular geographical area of block or district. The potential of hub as an educational centre has been recognised and the Thagavalagam hubs are being used now for impacting computer education to students of Kalanjiam / Vayalagam families at an affordable fees. With local communities owning the centre and the courses designed according to local needs, the hubs have emerged as a community colleges. The courses offered include-:

- Post Graduate Diploma in Computer Application (PGDCA) – 1 year
- Diploma in Computer Application (DCA) – 6 months
- Certificate course in Computer Application (CCA) – 3 months

13 such community colleges are functioning in Madurai district and also coastal areas affected by tsunami. The courses offered include computer hard ware, repair and maintenance software development, content development, etc. Around 100 students pass out of each community college per year and some of the students are also absorbed as operators of the Village Information Centres.

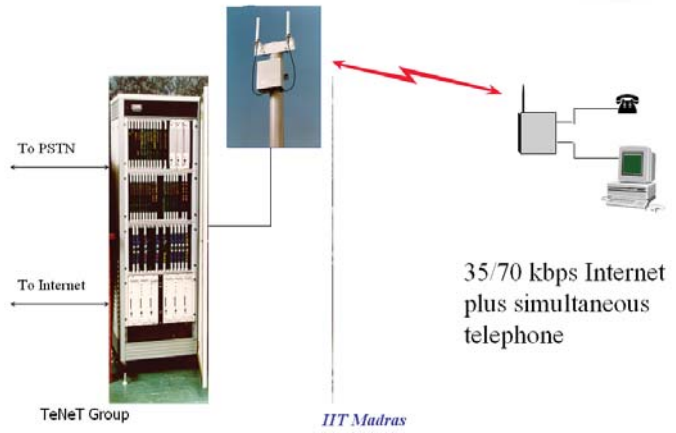
e-Learning for adults

More than 80% of the members of the Kalanjiams are illiterate and they do not know to read and write Tamil. As the members graduate to become leaders in their groups and ultimately manage the groups, clusters and federations, illiteracy is a big handicap. Without literacy, members cannot understand their own books of accounts and cannot read newsletters written about them. Thus making the members literate is critical. When an Adult Literacy Programme was conceived, the TATA Consultancy Services came forward and helped by giving the Computer-aided Adult Literacy Software and some old/used computers. With this infrastructure the adult learning centres were started. The members learn using the software during the evening and night times. A local youth was trained to facilitate the learning in these centres. The course for period of 8 months (4 months for reading and 4 months for writing) and on completion, the illiterate adults are able to read and write Tamil. Some of the people who are not members of the Kalanjiam also make use of this service. The Computer-Aided Adult Literacy is much more effective and makes learning easier and interesting compared to conventional adult literacy programmes.

The reach of ICT initiative

ICT initiative triggered by microfinance programme in Madurai district initially and later on to the tsunami affected coastal districts have reached over 10 districts now with 13 community colleges and 161 VICs.

Technology for Rural Internet Connectivity



Thagavalagam - future direction

While DHAN has integrated microfinance with ICT with the objective of bridging the digital divide and building the knowledge in the villages, the local communities now are excited about the benefits and the changes the ICT has brought about in the lives and looked to a future full of promise. The Thagavalagam communities visualises the following areas for advancement the future :

- ICT driven livelihoods
- Community web blogging
- Building local knowledge societies
- Community business process outsourcing
- Connecting to the global market.

Thus ICT has helped in building knowledge societies with global connectivity through the Thagavalagam. ■

ICTD Make ICTs work for people

ICTD Project Newsletter

Rationale for single state-wide e-Procurement systems

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Many government agencies in India – just as elsewhere in the World – are in the process of implementing certain modules of e-Procurement such as e-Tendering, e-Auctions and Contract Management modules.

Background

Under e-Governance, implementation of e-Procurement is being taken up on a priority basis. In India's National e-Governance Plan (NeGP), e-Procurement is identified as one of the eight Integrated Mission Mode Projects (MMP). Thanks to a few well-publicised success stories, active marketing efforts of e-Procurement product vendors and directives issued by the Central Vigilance Commission (CVC), there is wide-spread awareness about e-Procurement among government agencies. Consequently, many government agencies in India – just as elsewhere in the World – are in the process of implementing certain modules of e-Procurement such as e-Tendering, e-Auctions and Contract Management modules.

Objectives

So far, implementation of e-Procurement has been takenup primarily at the departmental level. Many agencies engaged in the procurement of public works have taken the initiative to implement the e-Tendering aspects of e-Procurement. But it may be noted that e-Procurement is more comprehensive than just e-Tendering. Further, it is explained that the implementation of certain modules of e-Procurement at the departmental level is not an efficient and architecturally sound development. As a remedy, it is recommended that with well-planned project development efforts, each state government implements a single, comprehensive e-Procurement system, the usage of which shall be made mandatory for all government agencies in the State.

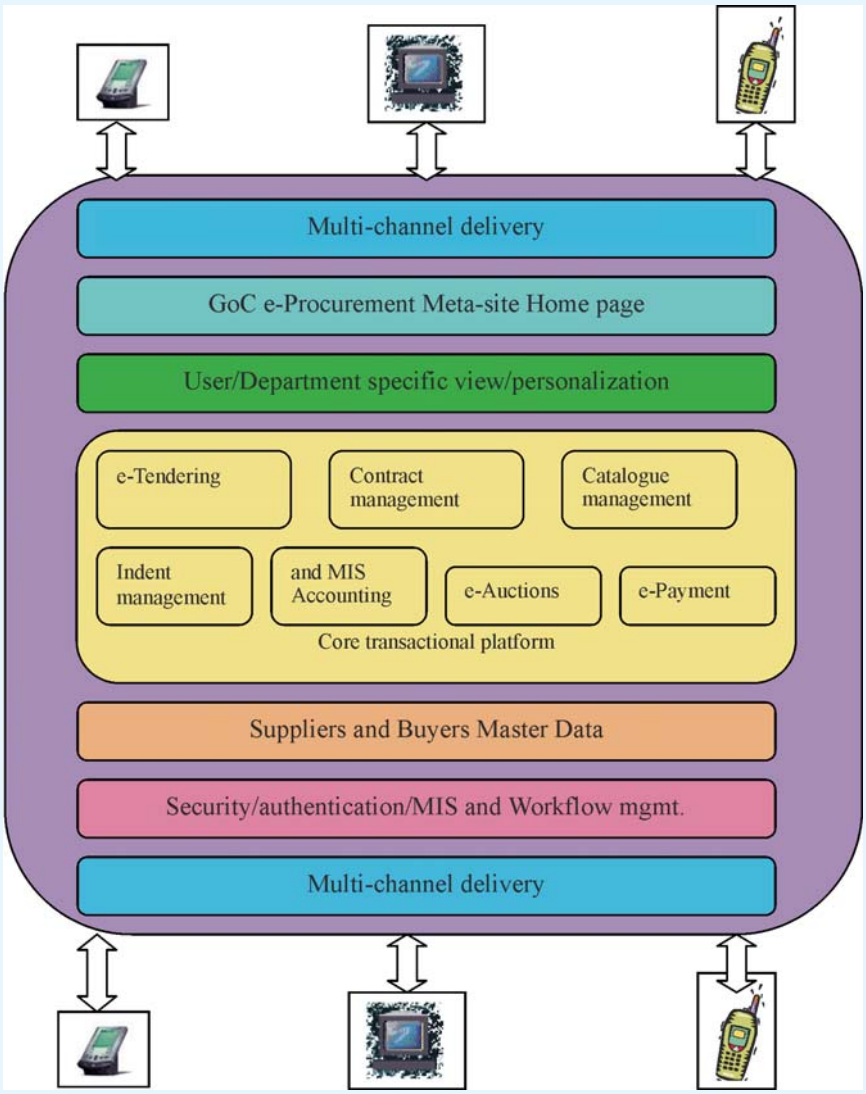
Functional components of e-Procurement

In India, e-Tendering is quite often mistakenly referred to as e-Procurement. e-Tendering is only one of the modules of e-Procurement. An end-to-end e-Procurement system is comprised of the following modules, a high level description of which is given below:

i) Supplier registration,
ii) Indent management,
iii) e-Tendering,
iv) Catalogue management,
v) Contract management,
vi) e-Auction,
vii) e-Payment,
viii) Accounting,
ix) Management Information Systems.

(i) Supplier registration: Being a large buyer, the government procures goods, works and services from hundreds of suppliers. The suppliers are registered with the Government in different classes depending on their capabilities and proven performance. Typically, Government agencies in a State tend to register suppliers independently. This results in duplicative work on behalf of Government and additional effort and cost on behalf of the suppliers/ contractor community. In recent times, governments are taking efforts to register suppliers in a centralised location. In supplier registration module, information about suppliers and their performance is stored. The stored information is taken as base data for automating the evaluation of pre-qualification and technical bids.

(ii) Indent management: The flow of



documents during the course of preparing a tender is handled by the workflow automation module. The hierarchy of personnel from Assistant Executive Engineer up to the Engineer-in-Chief has to use a workflow module for transferring documents across offices with comments/changes and to seek approvals. As the documents are electronically transferred, the time taken is reduced when compared to having it done manually. In a digital workflow scenario, the performance of the administrative hierarchy can be monitored. Reports generated by the MIS are helpful for identifying clog areas and taking remedial action.

(iii) e-Tendering: The processes involved in advertisement of tender, downloading of tender documents, reception of bids, evaluation of bids and award of contract are performed electronically with the e Tendering module. With e Tendering, contractor community has easier access to public procure-ment opportunities. Additionally, contractors enjoy the comforts of submitting their bids electronically from their own premises in anonymity. Moreover, the time taken to handle the tendering activity gets reduced as tender documents are processed electroni-cally. The reduction in time helps Government to complete projects in shorter duration.

(iv) Catalogue Management: In the catalogue management module, an online database with rate contract information (item name, item description, rates, contractor name, contractor address and delivery details) negotiated by nodal agencies in a State are posted online. End users learn about the rate contracts negotiated by the State by accessing the online database. The online database shall be searchable and organised in a structured manner. With the development of online database, publicising information about the negotiated rate contracts becomes effective.

End users, present all across the Government, can learn about the rate contracts negotiated by the State/departments with relative ease. End users in the Government use the negotiated rate contracts and directly place orders for goods and services with the supplier community. Thanks to the built-in logic, the module automatically checks for authorisation, handles accounting formalities, generates usage reports and forwards delivery information. Since access to rate contract information is made easier with the module, the utilisation of rate contracts by the end users is expected to increase. The MIS reports generated by the module help purchasing officers in estimating the demand for a product or a service.

(v) Contract Management: The processes involved in between issuance of work order and completion of the work are handled electronically in contract management module. With the contract management module implemented, Government is able to maintain an overview of the works in progress. Once a part of a work is completed, then payment to the supplier is quickly arranged as bills associated with the work are

processed in an automated system. Once the bills are approved, arrangements can be made to have the payment transferred automatically from Government's bank account to that of the suppliers' account. When in place for a period of time, the system collects a repository of knowledge that can be used to measure the performance of a contractor.

(vi) ***e-Auction:*** The auction module is a facility that allows suppliers to dynamically out-bid their competitors within a time-frame specified by a buying agency. The auction module should have facilities for both buying (reverse auction) and selling (forward auction) of goods, works and services. In reverse auction, suppliers quote a price lower than their competitors to undertake a task; implying in a two-dimensional graph, the arc representing price goes on the reverse as quoted price gets lower. Forward auction is used to sell off excess items held by Government. The suppliers keen on purchasing the items quote higher than their competitors, which results in the price curve moving in upwards/ forward direction. Both the auction types should allow suppliers to participate in the bidding activity as anonymous actors.

(vii) ***e-Payments:*** The e-Payments functionality facilitates online transfer of funds – both inflows and outflows – happening during the course of public procurement activity. The online transfer can be done in multiple ways such as through Credit Cards, Purchasing Cards and Internet Banking applications. In the public procurement context, implementation of e-Payments functionality is required in the following areas:

- Sale of tender documents,
- Online transfer of EMD and
- Making payments to suppliers/ contractors for purchase of goods and completion of works.

(viii) ***Accounting:*** The accounting functionality calculates payments made to contractors for completion of works and for purchase of goods. For works procurement, the system automatically calculates the money to be paid to a contractor based on information available in the measurement book, and rates quoted by the contractor for undertaking the work. For goods procurement, the system maintains data on the extent to which negotiated rate contracts have been used. As well, the system generates reports on the time taken to process tenders, number of bids received in response to a tender, time taken to complete a work and purchase goods.

(ix) ***Management Information Systems (MIS):*** The MIS is a critical component, which collects, records, stores and processes data collected from all the departments in an integrated manner. Tightly coupled with rest of the modules, the MIS performs the following roles: functional support, decision support and performance monitoring.

e-Procurement as an integrated system

The various modules of e-Procurement will have to work together in an integrated manner to seamlessly handle the processes involved in procurement of works, goods and services. In case of works procurement, the following modules will have to work together in an integrated manner: Indent Management, e-Tendering, e-Auctions, Supplier Registration, Contract Management, Accounting and MIS. Only when an integrated e-Procurement system is in place, the Government can enable the 'transformation' of public procurement. Else, when the modules are implemented as islands, public procurement procedures are merely 'translated' and handled electronically. With the intention of transforming public procurement, Governments should aim to implement integrated end-to-end e-Procurement systems.

Logical separations in State-wide e-Procurement system

The procedures adopted by government agencies for public procurement tend to be similar since the principles that govern public procurement remain the same: transparency, accountability and efficiency. Since the procedures are similar, it is possible to have a common e-Procurement infrastructure for all Government agencies in a State. However, each government agency will have to be treated as a unique entity and provided with a logically separated access to the common e-Procurement infrastructure. Since there could be as many as 100 government agencies accessing the e-Procurement infrastructure, the system must be adequately robust to handle the logical separations. Despite the multiple logical separations, the core processing engine for each of the modules will remain the same. The sharing of the e-Procurement infrastructure does not have to result in centralisation of public procurement. The Government agencies using the e-Procurement system will continue to handle their public procurement activities independently i.e. issue Notice Inviting Tender (NIT), evaluate bids, award contract and make payment etc.

Drawbacks of implementing e-Procurement systems at the departmental level

In recent times, many Government agencies across the country have taken the initiative to implement e-Tendering at the departmental level. The uptake of e-Tendering has been catalysed by the active marketing efforts of a few product vendors. While the efforts independently taken by the departments will have to be

appreciated, there is as well the need to reflect on the larger picture and see if the emergence of islands of e-Tendering systems and certain modules of e-Procurement system is good for the State and for the Government as a whole. From such a reflection, it was realised that implementation of certain modules of e-Procurement at the departmental level has the following drawbacks:

Myopic vision: To enjoy the full benefits of e-Procurement, it is necessary that all the nine modules explained above are implemented in an integrated manner. The departments typically have implemented e-Tendering or certain modules of e-Procurement as independent units and as such there is not a plan to introduce additional modules so that the vision of end-to-end e-Procurement can be attained. Further, critical issues such as exit management and data ownership are left unaddressed. Since public procurement is a critical activity, it is important that government agencies plan the implementation of e-Procurement with a long term vision.

In order for the implementation to be effective, it is a requirement that certain amendments are made to the legislation and the usage of an e-Procurement system is mandated; activities which require centralised coordination. Such centralised coordination is difficult to implement when e-Procurement is implemented at the departmental level.

Certain activities such as supplier registration will be effective only when it is handled in a centralized manner. As it is now, a supplier who is blacklisted by a department in the State, continues to do business with other departments in the State. With the implementation of a centralised supplier registration system, the performance of a supplier can be effectively monitored.

Expensive in totality: When departments independently procure the e-Procurement system, they will essentially be buying access to the same set of functionalities (i.e.) the e-Tendering module procured by a department will not be very different from the e-Tendering module procured by another department. In addition to paying for the procurement, the departments will have to routinely subject the e-Procurement system to stringent security audits so the high security standards required of an e-Procurement system is met. Further, each system will have to be well-maintained, so that the Quality of Service (QoS) be high. To procure and maintain multiple e-Procurement systems at high standards is an expensive proposition. The Government will be making redundant investments in procuring and maintaining high quality systems at the departmental level. While certain large procuring entities such as the Public Works Department (PWD) may be able to afford such expensive systems, other agencies which handle small volumes of procurement will be able to ill-afford such systems. With the deployment of an e-Procurement system that is meant to be used by all departments in the State, the Government can afford to procure a 'best-of-the-breed' e-Procurement system and maintain it at high standards.

To handle public procurement in an end-to-end manner, the e-Procurement application will have to be integrated with external systems, such as treasury management, payment gateways and inventory management systems. When e-Procurement systems are implemented at the departmental level, the cost of integration work will be exorbitant.

Rationale for State-wide e-Procurement systems

The yearly expenditure for State governments in India is in billions of Rupees. Even though a significant amount of the budgeted expenditure is spent on public procurement, Government agencies lack analytical data on their procurement expenditure and the procedures adopted for public procurement are varied and in many ways outdated. The implementation of Statewide e-Procurement systems provides an opportunity to enhance efficiency in handling public procurement through automation and process engineering cutting across multiple departments in the States. When public procurement activities are handled electronically in an end-to-end manner, Governments will be able to maintain a clear picture of their procurement activities on a real-time basis. Further, transparency in public procurement will be enhanced as all in the supplier community will have equal and unbiased access to opportunities advertised online.

The implementation of a Statewide e-Procurement system is a *vision*, a *policy* decision and an *architectural* decision. When there isn't a Statewide e-Procurement system, Government agencies independently tend to take the initiative and implement certain aspects of e-Procurement systems. Such independent initiatives will result in asset specific investments, which may sometimes range in crores of rupees. Government agencies, which have made the investments, will tend to get attached with their efforts and consequently resist adopting the Statewide system. With further delay in planning State-wide e-Procurement systems, many more islands of overlapping/redundant systems will emerge. The emergence of such islands will make it increasingly harder to implement State-wide systems. Hence, empowered officials in State governments should show urgency in implementation of Statewide systems, so the opportunity to develop end-to-end e-Procurement systems consistently across the nation is not missed!

Disclaimer*: The views presented in this article are that of the author's and not that of the organization he is employed in.* ■

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Technology for inclusive financial systems

The solution lies with new delivery channels that make innovative use of ICTs to inexpensively process a large volume of small transactions and deliver a wide range of financial services

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Providing financial services to poor people is costly, in part, because they have small amounts of money, often live in sparsely populated areas, and rarely have documented credit histories. Many specialised microfinance institutions (MFIs) have developed methodologies to serve this market, but they often charge relatively high interest rates to cover administrative costs and typically do not provide a wide range of services. Moreover, MFIs have so far reached only a fraction of the approximately 3 billion people who do not use formal financial services.

By contrast, commercial banks know how to deliver a full range of services. But often view microfinance as unprofitable, due to legal restrictions on interest rates and high costs of handling transactions at bank branches. This is bad news for poor people. Despite their considerable resources and large branch networks, most banks will not aggressively target these customers until they see profit in it.

The solution may lie with new delivery channels that make innovative use of information and communications technologies (ICTs) to inexpensively process a large volume of small transactions and deliver a wide range of financial services. 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. From 1999 to 2004, the number of mobile subscribers in Africa grew from 7.5 million to 76.8 million. Besides reducing delivery costs for banks, poor people may ultimately find these channels cheaper and more convenient to use than bank branches. 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), POS terminals, and mobile phones to handle transactions for poor customers. Some are using new technology to better serve existing customers. But other institutions are using technology to develop 'branchless' channels that reach new clients in areas where setting up a bank branch may be too costly.

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. No bank staff are present; an employee of the correspondent conducts all transactions on the bank's behalf. Using this approach, Brazilian banks opened an estimated 8 million new current accounts since 2000.

Mobile phone operators such as Vodafone's Safaricom (in Kenya), MTN (in South Africa), and Globe Telecom (in the Philippines), are also beginning to offer banking services, usually in partnership with banks or MFIs. Their main aim is to increase the volume of text message traffic and to increase customer loyalty. In South Africa and the Philippines, customers can deposit and withdraw cash at airtime top-up booths or retails and post outlets.

Too early to declare success

It is still too early to know whether branchless channels will prove profitable enough to convince banks that low-income customers are a viable long-term market. To

Credit: http://www.darianhickman.com/image/microcredit.jpg

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 Popular do Brasil found that 30 percent of the accounts opened at its banking correspondents never become active. Profitability also hinges on banks' ability to make loans to their new customers. But making good credit decisions on borrowers who lack a credit history or any form of collateral will require partnerships with MFIs, new scoring techniques, or other innovative approaches. These methodologies are now being tested.

A second open question is whether these new branchless channels are 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. Still, more research must be done to understand why some poor people do not use these technology delivery channels. Is it because they are not comfortable using technology, do not trust the operator, are illiterate, or do not feel the financial products offered are suitable for them!

Emerging lessons

Perhaps the most important lesson that banks and MFIs have learned in serving poor people is that 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 staffed with bank staff to walk customers through using an ATM for the first time.

Much of the operational risk involved in developing branchless delivery channels emerges from the need to accept, store and dispense cash. Banco Postal (a division of Banco Bradesco) has 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 end-of-month deposits on a timely schedule, thereby permitting pension and welfare recipients to withdraw cash at the beginning of each month.

The critical role which governments play is also becoming apparent. 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 the identification requirements to open bank accounts with limited maximum balances.

Conclusion

Initial experiences with branchless banking channels point at three areas for further attention. First, policymakers that want to harness the potential of technology should think broadly about ways to balance improved access with appropriate regulation and oversight. Useful lessons could be derived from studying what regulators have done in the Philippines, South Africa, Brazil and other countries where branchless banking is growing rapidly.

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.

Credit: http://www.sustainabletimes.ca/images/leas04b.jpg

Finally, technology channels raise questions about the future role of MFIs. If technology delivery channels become a profitable way for banks to offer a broad range of affordable services to the poor, MFIs may find it hard to compete with their narrow product and relatively high interest rates offerings at present. For banks to win the edge, however, they will need to develop credit scoring and other risk appraisal techniques which have heretofore been the comparative advantage of MFIs. ■

Books received

e-Commerce in the Asian context

Selected case studies

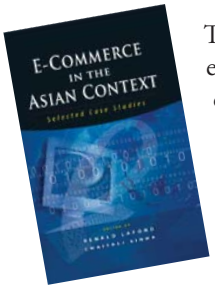
Published by: Institute of Southeast Asian Studies (ISEAS) Publications, Singapore and International Development Research Centre (IDRC), Canada

Edited by: Renald Lafond and Chatali Sinha

ISEAS ISBN 981-230-302-2 (soft cover)

IDRC ISBN 1-55250-179-5 (e-Book)

Pages: 95



The need to document Asian experiences with e-Commerce in its expansion towards digital development was an inevitable motive behind this book. The concept of e-Commerce extends into communications, promotion, customer service, statistics, and usage patterns. The absence of an agreed-upon definition for e-Commerce creates a challenge when comparing e-Commerce modalities in different countries. Businesses need to look beyond issues such as what products and services to offer, how to design and maintain a portal, and how to handle security issues. They must closely examine less tangible, but equally important issues, such as social and cultural norms in the region; sustainable funding strategies, and the formation of strategic partnerships. Meticulous efforts have gone in the compilation of several case studies by different authors of this book and the time, patience and professionalism of the contributors is laudable.

The International Development Research Centre (IDRC) has published this volume, jointly with the Institute of Southeast Asian Studies, Singapore. The IDRC's Pan Asia Networking (PAN) programme, which supported this work, has been actively involved with ICT for development in the region for more than a decade.

Telecentres, Access and Development

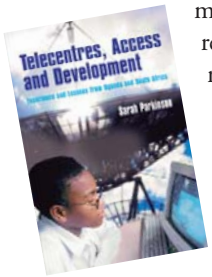
Experience and lessons from Uganda and South Africa

Published by: ITDG Publishing Schumacher Centre for Technology and Development, Bourton Hall, Bourton-on-Dunsmore, Warwickshire CV23 9QZ, UK

ISBN 1 85339 619 2

Authored & Edited by: Sarah Parkinson and Fountain Publishers, Kampala, Uganda

Pages: 145



The telecentre movement is more than two decades old. What started as an attempt to help farmers in rural Sweden to learn more about their financial accounts from spreadsheets has morphed into a worldwide movement. What is the role of research and the researcher in this type of movement? Does the researcher stand outside the movement and offer detached empiricist observation disconnected from the actual development experience?

The volume illustrates the intellectual movement of its author from that of abstracted positivist to applied telecentre partisan. The research isn't aimed at a disinterested academy where the goal is only professional promotion. It is focused as much on helping the telecentre practitioners understand from one another's experiences as building a bridge to those who don't yet understand, and should. Since the telecentre movement is without the normative patterns of more traditional institutions, it is sometimes difficult for academics to understand what they are observing. It is only by entering the gestalt of the digital development experience the telecentre represents that understanding of its assets and its need for further development can really be achieved, is well represented in the book.

At the crossroads

ICT policy making in the East Africa

Published by: East African Educational Publishers Ltd., Kenya and the International Development Research Centre, Canada

ISBN 9966-25-439-0

ISBN 1-55250-219-8 (IDRC e-Book)

Edited by: Florence E. Etta and Laurent Elder

Pages: 299

Much has been attempted in the area of ICTs in Kenya. The book attempts to be loyal to its rich history. The volume comprises 22 chapters in 5 sections namely: introduction, the Kenyan history, sectoral and thematic histories, learning from others and conclusions. The subject matter for five of the 22 case studies conducted as part of the above effort was ICT for Development (Acacia) projects undertaken in Mozambique, Senegal, Uganda and South Africa. There were two very mundane reasons for writing this book. First, it was unavoidable as one of the four general objectives of the project was to 'document and share project experience using multimedia'. The second reason is simply to join fellow voyagers to the new El Dorado, to add small illuminations to this topic of growing importance and interest.

The pieces in this book were commissioned to tell a story, living histories of living individuals, projects, institutions and countries.The book is useful for ministers, decision makers, parliamentarians, experts and students. ■

Discussion

Bytes For All discussion in April was as exciting as ever with discussions ranging from educational reforms, ICT4D and FOSS. Have fun reading!

India's education reforms

India's National Knowledge Commission has made far-reaching recommendations for tertiary education reforms. Dr. D.C. Misra writes that the commission's website *http://www.knowledgecommission.org/aboutNKCPage.aspx* is silent about these recommendations. In the age of 'good governance,' 'e-Governance,' `transparency' and `right to information,' et.al., is it too much to ask India's Knowledge Commission to at least post its recommendations on its website, leave alone ask comments from the public on specific issues, affecting us all? More importantly, the Commission appears to have overlooked the two important issues facing the education sector in India, namely, problem of the educated unemployed and second, barriers to entry to government and academic world.

How IT is changing rural India?

Surajeet Das Gupta writes: Farmers in a remote village in Honavar, 600 km away from Bangalore, are using ATM machines to open a bank account. An ATM machine loaded on a van winds its way through the dusty roads of over five villages offering 22,000-odd farmers perhaps their first experience with a bank - they can open an account, request for a loan and be able to deposit as well as withdraw cash at will in the near future.

Says S. S. Satchidananda, professor in Indian Institute of Information Technology who piloted the project with funds from a consortium lead by Microsoft: "What we wanted to demonstrate is a cost saving solution for banks that are seeking to expand their rural reach but have no other choice but to set up a branch which is expensive and unviable".

For the last few years state governments, NGOs and some pioneering companies have tried to crack the technology barrier - by developing pilot projects to showcase the marvels of IT in a rural setting. The phenomenon is better known as 'Bridging the Digital Divide'.

The name of the game is clear: how to scale up and still be viable. Microsoft, for instance, has set up an ambitious target. It hopes to set up over 50,000 broadband connected kiosks across villages covering over 50 percent of the rural population in the next three years under the 'Saksham' scheme. Not to be left behind, Intel recently joined the club announcing a new programme 'Jagruti' whereby it will offer PC makers an innovative platform developed exclusively for the rural market. Points out Bill M Sui, vice president, Intel: "The requirement for rural India is not cheap PCs, but PCs which work in that setting."
http://in.rediff.com/money/2006/apr/07spec.htm

Ajit Maru expressed interest in providing ATM based services for rural communities and suggested that the next step is to use the debit cards on the ATM to provide credit through overdraft facilities, such as to a limit of Rs. 5000, to all rural debit card holders. This will achieve two purposes. First is providing access to micro credit to small farmers and small rural entrepreneurs which will enable them to participate in local markets as a prelude to participating in other markets. The second is that it will help pump financial investment into rural development.

Linux - a big hit in India

It has been over a year since UTI bank set up its call centre that handles over 7,000 calls per day. The bank was looking for a robust platform that could guarantee it 'high availability of services and uninterrupted call traffic'. It had options but finally decided on Linux for its core business applications. UTI is not the lone player to swear by Linux. Eveready, a leading manufacturer of dry cell batteries and flashlights in India, has built a mission-critical resource system to automate all functionalities of its daily business using the oracle e-Business suite running on a Linux platform. Central Bank of India has implemented Linux in nearly 3000 branches.

The Penguin (official mascot of Linux), it appears, has finally marched into enterprises like IDBI Bank, Canara Bank, New India Assurance, LIC, BSNL, IRCTC, ABN Amro, Airtel and even the governments of Maharashtra and West Bengal. The list, of course, is not exhaustive. "Linux has become prettly stable. We never considered Windows because of the perception that it has a lot of vulnerabilities. Hence, we adopted the Linux route and are satisfied with the results," says Tejinderpal Singh Miglani, CTO, Indiabulls. Gartner predicts that by 2008, 95 per cent of Global 2000 organisations will have formal open-source acquisition and management strategies. The Penguin, it appears, will give its competitors an icy path to walk on.
Read the complete article at: http://in.rediff.com/money/2006/apr/08spec.htm

K-Yan?

Fredrick Noronha informs about K-Yan which is a low-cost new-media product for community learning that aims to bring the benefits of information age to the masses across the country. K-Yan, the VEHICLE of KNOWLEDGE is a joint effort of the Indian Institute of Technology (IIT), Mumbai and IL&FS ETS. K-Yan combines the computing power of a computer with an appropriate high luminosity, high resolution and large screen projection system. K-Yan provides: High speed Intel based, Pentium IV, processing capabilities DVD/ VCD/ ACD/ MP3 facility CD writer Audio amplifier and built-in speakers, large data storage facility (120 GB) and 512 MB RAM Internet connectivity, TV

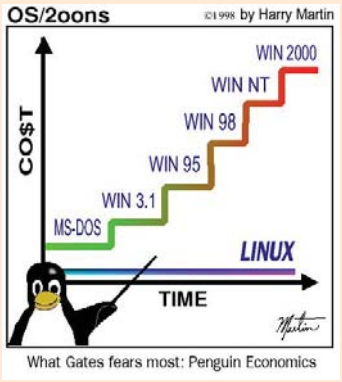
cable connectivity,1800 Lumens LCD projection system capable of projecting images of up to 300 inches and ability to connect to multiple peripheral devices such as web-camera, printer, scanner, graphic tablet etc.

Fred's honest opinion about K-Yan, I don't know how effective this is or isn't, as a solution. But my dream has been to set up a computer club at my village school. If we can meet even once a month, we could probably plant a seed of knowledge and skills in the future generation.

For more information about K-Yan, please visit: http://www.schoolnetindia.com/ky an_intro.htm

Laptops running on human power Rediff One-on-one with Professor Nicholas Negroponte

How have you managed to cut costs so dramatically?
We are not commercialising the $100 Laptop. Typically, that accounts for 60 per cent of the cost of a laptop. In the case of the display, we have reduced the price to about $40. We lower the cost of everything else by running the laptop on Linux. It is by no means a network computer or dumb terminal. FAT operating systems spend most of their energy supporting their own fat.
Who are the main supporters of the project? Who will manufacture the product?
The nine companies supporting OLPC are: Google, Quanta, AMD, 3M, RedHat, Nortel, NewsCorp, Brightstar and Marvell.



What Gates fears most: Penguin Economics

How is the response for the project from India? Is there a key market for such a laptop? Have you had discussions with the Indian government and looking at having trial runs here?
Again, we are a non-profit venture hence do not think in terms of 'markets'. We think in terms of children and working as an NGO and humanitarian effort with the ministry of education. Of the seven countries we hope to have in the launch, the trial run would be one million units in 2007.

Read more at: http://inhome.rediff.com/money/2006/apr/07laptop.htm

Events and Announcements:

FOSSFP-Free and Open Source Software Professional Skills Development Literacy

FOSSFP is accepting application for its Free and Open Source Software Professional Skills Development Literacy Program for the public in the region of Lahore. The program is open for everyone interested in gaining FOSS related professional ICT skills. FOSSFP will provide hands on training on Ubuntu-Linux. You may contact FOSSFP at *training@fossfp.org* for registration.

Manthan Award 2006

Manthan-AIF Award is a first-of-its-kind initiative in India to recognize the best practices in e-Content and Creativity. It was launched on 10th October 2004, by Digital Empowerment Foundation in partnership with World Summit Award, American India Foundation and PlaNet Finance India.

Award categories include; e-Business, e-Culture, e-Entertainment, e-Science, e-Health, e-Government, e-Learning, e-Inclusion & Livelihood, e-Education, e-News and e Localization.

For more information please visit: http://www.manthanaward.com/

Semapedia introduced to Africa

The Ghana-India Kofi Annan Centre of Excellence in ICT introduced the Semacode technology and the Semapedia application to a segment of the Ghanaian public in a presentation delivered by Guido Sohne, Developer-In-Residence at the Kofi Annan ICT Centre for Excellence and Chief Software Architect of CoreNett Ltd, a Ghanaian electronic transaction processing company.

Introduced for the first time in Africa, the Semapedia is an application of the vast information available on the Wikipedia and the simple yet practical URL barcode, called the Semacode. A physical entry is made into the Semapedia when a real world object or location is tagged with a high capacity, two dimensional, error correcting bar code technology called Semacode.

Expose Urban Solutions! photo contest by IDRC

On the occasion of the World Urban Forum, we are organising a photo competition seeking photos that show us the thousands of creative ways people living in cities of the South or the developed world are tackling the challenges of urban living. We are looking for the best digital photos that fit under these four themes:

- Cities Feeding People (growing food in urban and peri-urban areas);
- Liquid Gold (productive uses of water);
- Waste Not, Want Not (recycling processes); and
- Avoiding Disaster (risk-proofing the urban environment)

The deadline for this contest was April 20.
Learn more about the contest: *www.idrc.ca/wuf/photocontest.*

Bytes for All: *www.bytesforall.net*
Bytes For All Readers Discussion: *http://groups.yahoo.com/group/bytesforall_readers*
Bytes for All RSS syndication: *http://www.bytesforall.net/index_html/RSS*
Bytes for All Readers Forum RSS syndication: *http://rss.groups.yahoo.com/group/bytesforall_readers/rss*
Bytes for All Summary Archive: *http://www.bytesforall.net/Summary/*
Bytes for All discussion summary compiled by: Farah Mahmood, Bytes for All, Pakistan

Sustainable software and business systems

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'Bridging the digital divide' was the topic of a recent collaborative research planning workshop organised by the Engineering and Physical Sciences Research Council (EPSRC) in the UK. A range of British academics and practitioners from computer science, social sciences and economics came together to share experiences, discuss research priorities and develop new projects to be funded by the EPSRC.

A main focus of the brainstorming was how to address sustainability issues in ICT design and delivery by fostering greater participation and ownership and by developing, at the same time, financially sustainable solutions. A team from Sheffield Hallam University, Cambridge University, the Overseas Development Institute and Saral Services (an Indian NGO) decided to focus on service delivery in Indian Cooperatives, as an excellent way to engage with a large beneficiary base, and as this is an area where ICTs offer enormous opportunities for local development.

Key interests of the research team are participatory software design (e.g. paper prototyping, agile methods), Human-Computer Interaction (HCI), micro-enterprise business analysis and business development, rural development and collaborative methods. To bring this range of interests and priorities together, the team will be working over the next three years to look at how participatory rural appraisal can be used with participatory software design methods to develop appropriate (and appropriated!) ICT solutions in cooperatives. At the same time, we will be investigating enhanced business models using the opportunities afforded by ICTs.

The main goal of all these will be to improve cooperative service delivery in India by leveraging ICTs to enhance impact on underserved communities. Although the focus will initially be on microfinance, one aim will be to develop concepts for a flexible platform for multiple services that can be adapted to the unique combinations of different business strands we find in many cooperatives.

Specific aims of the project

- To unify and relate methods from rural development, sustainable business modelling, and ICT design;
- To understand the specific needs and problems of rural cooperatives and how these can be met through ICTs;
- To find ways of undertaking ICT for development that contribute to building innovation capacity in beneficiary communities;
- To create innovative sustainable business models for ICT supported services delivery and information inequality reduction in disadvantaged communities;
- To disseminate the methods and findings to academic and practitioner communities;
- To explore the transfer of lessons learnt from one location to others (e.g. India to China).

The project roadmap

As part of the initial learning phase, the project team are keen to hear from projects, cooperatives and cooperative associations who can share experiences of ICT and business development projects, particularly those that have involved collaboration with external suppliers and/or with international development projects.

The project is likely to start in late 2006 and have field work components carried out during 2007. It is on look out for partners from local cooperative associations in Andhara Pradesh, Maharastra and Madhya Pradesh and academic institutions such as Indian Institute of Technology (IIT) and Indian Institute of Information Technology (IIIT). It will also aim to partner with technical service providers such as Safal Solutions, a software development company who specialise in software development for microfinance and cooperatives. The project would be particularly interested in working on software development pilots that take advantage of newly installed community network access infrastructure.

Fieldwork will begin with a study of existing ICT applications (especially IT enabled service delivery) in the rural and cooperative sector. This will enable to understand the key problem areas in requirement understanding, design, implementation and maintenance. The team will also seek to understand the problems in microfinance that have not yet been addressed by ICT. ■

What's on

Africa

03-05 May, 2006
IST-Africa 2006 Conference and Exhibition CSIR International Convention Centre Pretoria
South Africa
http://www.ist-africa.org/Conference2006/

Australia

09-11 May, 2006
Cebit Australia 2006
Sydney
http://www.cebit.com.au/

5-7 June, 2006
9th Annual e-Health and EHR Congress
Carlton Crest
Sydney
http://www.iir.com.au/conferences/

Austria

12-14 July, 2006
10th International Conference on Computers Helping People with Special Needs (ICCHP 2006)
University of Linz
http://www.icchp.org/

27-29 September, 2006
Interactive Computer Aided Learning (ICL), Villach
http://www.icl-conference.org/

Cambodia

10-13 May, 2006
CAMBODIA ICT WORLD EXPO 2006
Natural Cultural Centre
Phnom Penh
http://www.idg.com.vn/ENG/Events/ICT_in_Cambodia_2006/media_center.htm

Canada

30 April-3May, 2006
e-Health2006:e…for Everyone!
Victoria, B.C.
http://www.e-healthconference.com/

Ethiopia

24-26 May, 2006
1st International Conference on ICT for Development, Education and training, UNCC, Addis Ababa, Ethiopia
http://www.elearning-africa.com/

Italy

25-27 October, 2006
1st World Congress on Communication for Development, Rome
http://www.devcomm-congress.org/worldbank/

Kenya

17-21May, 2006
ICT e Africa 2006 Conference and Tutorials, KICC
Nairobi, Kenya
http://www.nepadcouncil.org/ICTeAfrica2006/

Norway

12-14 June, 2006
Tromoso Telemedicine and eHealth conference (Ttec06), Tromoso
http://www.telemed.no/index.php?id=196385

Oman

14-16 May, 2006
USTDA Making Connections in the Middle East and North Africa,
Shangri-La's Barr Al Jissah Hotel
Muscat
http://www.trademeetings.com/ssMeetingDetails.asp?meetingId=145

Singapore

19-23 June, 2006
The EUSEA2006 Conference and Exhibition, Shangri-La Hotel, Singapore
www.eusea2006.org

20-23 June, 2006
Communic Asia, 2006
Singapore
http://www.communicasia.com/show_statistics.htm

Spain

10-12 May, 2006
eHealth 2006 High Level Conference and Exhibition, Malaga
http://www.ehealthconference2006.org/

17-19 May, 2006
Online Educa Madrid 2006, Madrid
http://www.online-educa-madrid.com

07-09 June, 2006,
HealthGrid'06, Valencia
http://valencia2006.healthgrid.org/

25-27 October, 2006
eChallenges e-2006 Conference
Barcelona
http://www.echallenges.org/e2006/

Switzerland

29- 30 September, 2006
Technology transfer from universities: a critical appraisal of patents, spin-offs and human mobility Lausanne
http://www.eastchance.com/

Tanzania

10-12 July, 2006
IEEE 4th International Workshop on Technology for Education in Developing Countries, Iringa
http://www.cs.joensuu.fi/tedc2006/index.htm

Thailand

6-8 June, 2006
Asia Commons: Asian Conference on the Digital Commons
Bangkok
http://www.asia-commons.net

United Kingdom

16-18 May, 2006
ITEC 2006, ExCel, London
http://www.itec.co.uk/

United States

19-22 August, 2006
The Second International Conference on Environmental Science and Technology (IC EST 2006),
Houston, Texas.
http://www.aasci.org/conference/env/2006/topics.html

Get your event listed here: **www.i4d.csdms.in/events**

e-Payment institutions

List of financial institutions that use e-Payment to serve the poor in some selected nations (for which information are available):

Financial institutions	Type	Technology
Botswana Saving Bank, Botswana	Bank	ATM
Afrilandfirstbank, Cameroon	Bank	Internet
Falulu Kenya (Safaricom), Kenya	NBFI	Cell phone
Kenya Cooperative Bank, Kenya	Co-op	PoS, ATM
Opportunity International Bank, Malawi	Bank	ATM, PoS
Fist Merchant Bank/ FINCA, Malawi	Bank/MFI	ATM
New Building Society, Malawi	Building Society	ATM
Bank Windoek, Namibia	Bank	ATM, Internet
ACEP, PAMECAS, PAME-AGETIP, Senegal	Coop	ATM, PoS
Teba bank, South Africa	Bank	PoS, ATM, Internet, Cell phone
WIZZIT, South Africa	Bank	PoS, ATM, Internet, Cell phone
SAPO, South Africa	NBFI	PoS, ATM
Standard Bank, South Africa	Bank	PoS, ATM
ABSA, South Africa	Bank	ATM
First National Bank, South Africa	Bank	PoS, ATM
Standard Bank, South Africa	Bank	PoS, ATM
Peoples Bank Limited, Sub: PEP Bank, Part of Nedcor Banking Group, South Africa	Bank	ATM
Tanzania Postal Bank, Tanzania	Bank	ATM
CRDB, Tanzania	Bank	PoS
Uganda Microfinance Union, Uganda	NBFI	PoS
FINCA Uganda	NBFI	PoS
Centenary Bank, Uganda	Bank	PoS, ATM, Internet, Cell phone
Jewel Bank, Zimbabwe	Bank	PoS, ATM
Central Africa Building Society, Zimbabwe	Building Society	PoS, ATM, Cell Phone

Financial institutions	Type	Technology
The International Visitors Programme, Bank Rakyat, Indonesia	Bank	PoS
Rural Banks Assoication of the Philipines	Bank	Cell Phone
Czech savings Bank, Czech Republic	Bank	ATM
Victoria Bank, Moldova	Bank	PoS, ATM, Internet, Cell phone
AgroInvest Bank, Tajikstan	Bank	PoS, ATM
FFP Prodem S.A, Bolivia	NBFI	PoS, ATM
Unibanco, Brazil	Bank	PoS, ATM, Internet, Cell Phone
Banco do Brasil (Banco Popular), Brazil	Bank	PoS, ATM, Internet
Caixa Economica Federal, Brazil	Bank	PoS, ATM, Internet
Lemon Bank, Brazil	Bank	PoS, ATM, Internet
Banco Postal (Banco Bradesco), Brazil	Bank	PoS, ATM, Internet
Banco Estado, Chile	Bank	ATM, Internet
Bandesarrollo, Chile	Bank	PoS, ATM, Internet, Cell Phone
Fundacion Social, Colombia	NBFI	Cell Phone
Banco Popular de Ahorro, Cuba	Bank	PoS, ATM
Grupo BHD, Dominican Republic	Bank	PoS
Banco Solidario, Ecuador	Bank	ATM
Banrural, Guatemala	Bank	PoS, ATM, Internet
Bancafe, Guatemala	Bank	PoS, ATM, Internet
Banamex, Mexico	Bank	Internet
Paraguay, Mexico	MFI	PoS, ATM,
EI Comecio, Mexico		Internet
Janata Bank, Bangladesh	Bank	ATM, Internet
BASIX, India	NBFI	Internet
Canara Bank, India	Bank	PoS, ATM
Corporation Bank, India	Bank	PoS, ATM
ICICI Bank, India	Bank	Internet

ATM - Automatic Teller Machine *PoS- Point of Sale* *NBFI- Non Banking Financial Institution* *MFI- Micro Finance Institution*

Courtesy: Adopted from an article by ***Gautam Ivatury,*** *Focus Note, No. 32, CGAP*

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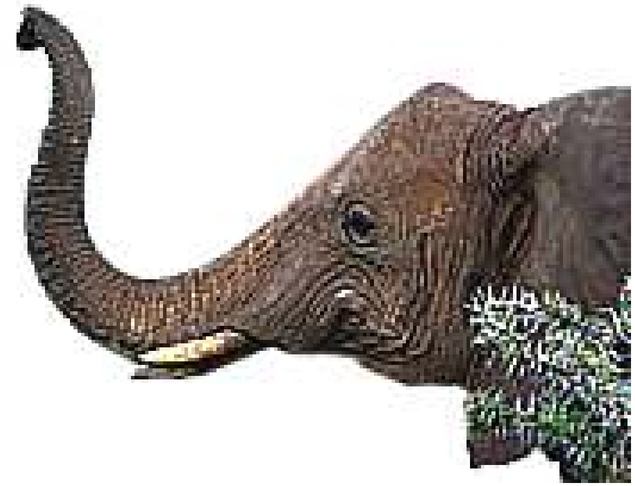

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