Over the last decade or so, the world seemed to have woken up to the reality that to empower the rural marginalised communities and to alleviate the poverty scenario in the world, they need to be given opportunities to save, borrow and repay loans. Till a few years back, banking institutions, for the purpose of offering banking services to the marginalised, experimented with subsidised credit which affected the overall performance of the banks and contributed to the rise in Non-Performing Assets (NPA). Thus subsidised credit as an option gradually lost its popularity among banks. Moreover more than the cost of credit, it was access to credit which was considered as the major barrier for the poor. With little or no means to afford the collaterals/mortgages, the poorer section of the society had to resort to unscrupulous moneylenders for loans which pushed them further into the vicious cycle of indebtedness. The reason behind this was access or the lack of it and not interest rate.

Microfinance has come to be recognised as the most viable, efficient and result-oriented mode of financially empowering the poor. For Robinson “Microfinance refers to small scale financial services for both credits and deposits – that are provided to people who farm or fish or herd; operate small or microenterprises where goods are produced, recycled, repaired, or traded; provide services; work for wages or commissions; gain income from renting out small amounts of lands; vehicles, draft animals, or machinery and tools; and to other individuals and local groups in developing countries, in both rural and urban areas”. Microfinance also entails the condition of sustainably delivering the services and is not merely confined to credit (microcredit) but encompasses in its range savings, insurance, and fund transfers. In the last few years of its existence, many organisations have jumped onto the microfinance bandwagon which includes not-for profit NGOs, development professionals, corporates, commercial banks, international donor agencies, etc. The reasons for the enthusiasm varies from the belief that microfinance offers a good developmental alternative to the belief, especially among the commercial banks, who have opened microfinance branches for their microfinance operations, that microfinance offers a good, sound banking option. The government has also routed various developmental schemes through microfinance. Microfinance leaders are gaining prominence and it is said that some of the leaders, particularly women, have been taking a more active role in other social spheres, including contesting elections for the panchayat and so on.

The microfinance sector has grown exponentially over the past few years and the World Bank estimates that there are now over 7000 Microfinance Institutions (MFIs), serving some 16 million poor people in developing countries. The total cash turnover of MFIs worldwide is estimated at US$2.5 billion and the potential for new growth is outstanding. It is estimated that worldwide, there are 13 million microcredit borrowers, with USD 7 billion in outstanding loans, and generating repayment rates of 97 percent. It has been growing at a rate of 30 percent annual growth.

However, several issues and impediments to the success of microfinance as an industry have cropped up, the primary of them being: scalability and sustainability of MFIs, and outreach and impact of the microfinance initiatives. Thousands of MFIs around the globe are realising that the solution for the scaling up, and ensuring maximum outreach and sustainability of
MFIs lies in leveraging the benefits of technology, more specifically information and communication technologies (ICTs). ICTs have opened new windows of opportunities for the MFIs to reach out to more people, controlling the risks making the business sustainable, and bringing down the costs of operation. With new software specially designed to cater to the needs of MFIs, mobile phones, efficient Management Information Systems, among others, technology can and will in the near future bring about a paradigm shift in the domain of microfinance.

ICT usage for MFIs

The current discourse on and practice of microfinance has inevitably redirected itself through the ICT route for maximising outreach and ensuring sustainability. Adoption of ICTs also brings about business processes re-engineering because they provide efficient, transparent and cost-effective mechanisms to run the business of MFIs. MFIs have readily adopted ICTs for they have been looking for a change agent that will harness the benefits of ICT tools for best possible management and reduce costs, time and efforts.

Management Information Systems (MIS)

To monitor the quality, sustainability, and efficiency of the loan portfolio, to measure its development impact, and properly manage the administration tasks of an MFI, computerised Management Information Systems comes in very handy. MIS are the most fundamental aspect of an MFI's hi-tech infrastructure and it is difficult for an MFI to upscale significantly and maintain the accuracy and transparency of its loan portfolio without an MIS that can grow with the institution. There is no denying the fact that an appropriate backoffice MIS is the backbone of ICT innovation for the delivery of microfinance services.

However, for MIS to really contribute to the efficiency of the MFI, it has to be accurate, and up to date. MFIs find it difficult to maintain updated records as they have their offices in remote locations which rely on manual data-entry and paper based transaction records. ICT innovations like mobile computing applications and palmtops at the hands of the loan officers who can directly record the transaction into the MIS can make this system more efficient and up to date. The data entered into the palm top computers is typically uploaded to the MIS at the end of the day, either directly in the branch office or via a remote communications link. Furthermore, the roll-out of wireless broadband infrastructure will enable these systems to be always online resulting in true real-time data collection and monitoring of the loan portfolio at branch and institutional levels.

**Correspondent banking**

One of the key challenges for MFIs is providing financial services to clients in remote areas including rural areas where the population density is low, the market is smaller and providing service entails high costs. Correspondent Banking – whereby a bank links itself with third party merchants located in remote areas – has emerged as a solution for this problem of outreach. Correspondents manage transactions on behalf of the partner institution and are remunerated on a fee-for-service basis. Bank Correspondents are expected to be having long-term businesses, and should be respected and trusted in their communities. The Bank Correspondents should also be ‘ICT-enabled’: generally equipped with equipments such as an Electronic Funds Transfer at Point of Sale (EFTPOS) device, barcode readers and/or keypads, a personal computer, etc. They are linked to the partner institution's servers using a telephone line, cable or satellite link. Post offices, supermarkets, general stores, grocery stores, telecentres, etc, are good examples of Banking Correspondents. In India, commercial banking entities like State Bank of India, HDFC, have tied up with the respective Service Centre Agencies (SCAs) in the states under the framework of National eGovernance Plan (NeGP) to provide Banking Correspondent status to the Common Service Centres (CSCs) equipped with ICT infrastructure and provide microfinance services through them.

**Credit cards, and ATMs**

In today's world of banking, consumer credit cards are an indispensable part of the bouquet of services offered by a financial institution. Some of the advantages of consumer credit cards are reduced costs associated with small transaction lending, unsecured credit, small transactions, and pre-defined credit limits. Other salient features of credit cards include on-demand borrowing, re-draw facility, and repayment flexibility within pre-defined guidelines. Since these services address the needs of small borrowers also due to their potential to relieve them from their dependency on moneylenders for the same set of services that are not provided by MFIs. Due to this utility of credit cards the concept of Microcredit Cards have emerged and with more opportunities. A credit card enabled MFI can implement microfinance tuned credit-scoring algorithm which ensures that clients who have proved their credit worthiness over time through successful business transactions with MFIs can have their credit limit increased and be given access to additional sources of credit. Smart cards have an embedded computer chip that can store client and transaction data, as well as process information. Smart cards function as electronic passbooks, thereby reducing reliance on printed receipts. However, the introduction of card based services would demand setting up of EFTPOS functionality and/or Automatic Teller Machines (ATMs). Because all relevant client data is stored on the card,
MFIs can utilise EFTPOS systems and ATMs that do not need to be always online. This is a significant advantage in areas where telecommunication services are unreliable and/or expensive. One more value addition to the services of MFIs are the use of biometric technology (such as fingerprint scanners) which ensure client identification as well as privacy and data security.

**Internet banking**

Internet Banking, in many ways, has revolutionised the banking scenario as it provides clients with real-time information about their accounts, and the ability to transfer funds between their accounts. It has become an integral part of the banking operations and by giving clients the liberty of using their own convenient time to bank, it has become an empowering tool. MFIs, however, face the challenge of limited or more often than not no access to Internet services of their clients. The rural telecentre network, being rolled out across the developing world, could come in handy here too, by providing access to the clients.

**Mobile banking**

Cellular phones, especially with GSM backbone, due to its accessibility and affordability are becoming an indispensable communication tool for the poor in the developing countries. As per the World GSM Association report, during the year 2003-2006, more than 800 million mobile phones were sold in developing countries. Mobile phones in today's scenario have become the only option for communication from being one of the options because of the ubiquity of its use and popularity even among the poorer section of the society. It is estimated there will be three billion mobile subscribers in the world by 2010. World GSM Association, further adds that mobile phone is the first and only communication technology to have more users in developing countries than in developed countries. Mobile phones have become mobile wallets by facilitating electronic payments in exchange for goods and services. m-Commerce has assumed tremendous significance under the circumstances and this development in m-commerce has positively affected the microfinance industry also with usages like facilitating savings deposits, loan repayments and other funds transfers. For the cost of sending an SMS message, the phone user/microfinance client uses an application stored on his mobile phone to initiate a transfer from his mobile phone account to his bank account.

**Microfinance softwares**

In tune with the emergence of service delivery technologies, various softwares have also been developed by technology innovators helping the microfinance industry to tackle challenges associated with efficiency, transparency, outreach and sustainability. The softwares and tools like, FINO (Financial Information Network and Operations), SafalFin, etc., vary in their nature and function. However, their utility to the smooth functioning of the operations are subject to speculation as some of the softwares come with high investments which a startup MFI may not be in a position to afford. However, low cost solutions like Computer Munshi System developed by an Indian NGO named Pradaan has promised to address this issue of affordability for MFIs. Built at low cost, this software aims to improve book keeping of the Self Help Groups (SHGs) as also to improve transparency, equity and longevity of its groups. The model basically aims to improve the accounting and book keeping of the SHGs.

**Conclusion**

In a nutshell, various experiments for integrating microfinance and ICT have been undertaken and even more numbers are going to come in the future. The issue however, is to enable the MFIs to meet their goals by helping them have maximum outreach, be sustainable and be transparent in their business and processes. ICT can only be an enabler, and not the driver, and the real success of MFIs has to be measured vis-a-vis their social performance and not by their ICT/technology readiness and preparedness.

**References:**

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