UNIT 9 TECHNOLOGY FOR FINANCIAL INCLUSION

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9.1 INTRODUCTION

Information Technology (IT) is today becoming as important as 'roti', kapda, aur makan’ (bread, cloth and house). In 40's, people used to believe in secrecy of information. But in this new millennium, the concept is totally reversed. Now we like to share the information. Information is thus emerging as more and more power. Experts of this field confidently predict that our poverty line will no longer be measured in the terms of money, but in terms of information.

9.2 OBJECTIVES

After studying this Unit, you would be able to

- Discuss the information technology and its uses in banking and government sectors;
- Explain the information technology revolution in India; and
- Examine the different issues in implementing information technology for financial inclusion.

9.2 IT CHALLENGES AND OPPORTUNITIES FOR RURAL DEVELOPMENT

India, a union of states, is the second most populous nation in the Asian region behind China. The country has achieved impressive progress in the field of science and technology and is emerging as one of the strongest economies in the developing world. Information and communication technologies have brought significant changes in development of the Indian society through information dissemination. No other technology is as profound as information technology (IT) in human history. IT has had a great influence on the economy and lives of people across the world. In India the benefits of IT are beginning to be seen and the impacts of these benefits are creating great change. It is also true that the use of digital technologies in the world has not only improved people’s day-to-day life but it has also divided the world into information rich and information poor, i.e. the information haves and have-nots. The unequal access to information and communication technologies has led to a massive divide digitally. Although India has been one of the emerging super powers in IT, the benefits have been remarkably slow, particularly in rural and remote areas. Besides socio-economic factors, geographic, educational and attitudinal factors have been some of the challenges for the government when introducing IT-oriented programmes.

Technological change is the major contributor to the growth and development of the information society; e–learning, e–libraries, e–health, e–governance, etc. have become pillars
of the information society. Realising these developments, a world summit was organised by the United Nations in 2003 in Geneva. The goal of the summit was to develop a common vision and understanding of the information society and to draw up a strategic plan of action for concerted development towards realising this vision. Access to information in society is not uniform and globally there has always been a gap between those people and communities who can make effective use of IT and those who cannot, leading to a kind of digital divide which is the major concern for the governments of developing countries.

9.4 INFORMATION TECHNOLOGY DEVELOPMENT IN INDIA

In India the use of IT and computerisation began in 1978. The national government increased the pace of IT use at the district level in 1985. The National Information Centre (NIC), a central government organisation, was chosen to implement a national programme called “DISNIC,” Information System of NIC, to computerise all district offices. Commissioning nearly 500 computer centres to a country–wide network, and connecting these computers, was a major achievement. With the rapid progress of the IT industry, there have been in some places in India remarkable social changes. Earlier, people were reluctant to plunge into information and communication technology and thought IT would take away people’s jobs. But today a complete change in people’s mindset is apparent. Many state governments are giving a boost to the IT sector by developing cyber cities. Ex. Andhra Pradesh in Hyderabad, Maharashtra in Pune, Karnataka in Bangalore, Tamil Nadu in Chennai and Kerala in Cochin etc.

There are many successful information and communication technology (ICT) initiatives in India oriented towards rural development.

Box 1

Rural eSeva Kiosks

The Rural e-Seva project in West Godavari came out of the experience of the Urban e-Seva project in the twin cities of Hyderabad and Secunderabad. While a typical Urban e-Seva centre is a bill collection centre, the Rural eSeva, is the delivery of a broader set of services was meant to be the central element, as many of these services do not have a direct revenue model. The centres were thus established to balance the concern of financial sustainability with the requirement of providing an array of development services to all sections of society, including disadvantaged sections. The aim of the project was to provide different government department services at a single point and place, with the understanding that a considerable number of these centres would be run by women or youth SHG members.
The idea was to roll out a project within a short time frame – two-three months from the initial conceptualisation of the initiative – and tap into existing resources within the system and in the community that would allow for the rapid roll-out. Thus, the DRDA and the SC Corporation were co-opted and placed in charge of selecting entrepreneurs under their existing schemes.

Choosing these nodal development agencies had a positive impact in terms of selecting qualified entrepreneurs from disadvantaged backgrounds, who might otherwise have not been chosen to take lead in this innovation. Furthermore, in order to prevent conflict emerging from the power shifts caused by this new innovation and to build stakeholders amongst the power elite, the Collector “got MLAs, MPs and Panchayat representatives to inaugurate centres.” By placing the onus of the centres’ advancement and monitoring in their hands, he was able to secure their cooperation. Yet, despite the authority of the Collector within the district, there was significant resistance to the initiative on the part of government departments and Mandal Revenue Departments, who were now expected to provide their services through the eSeva Kendras, or kiosks, run by community people – this change clearly meant a loss in the power exercised by government officials over local citizens and it also made corruption more difficult. From the very beginning, women’s empowerment was part of the larger goal of this initiative, and “realising that the SHG movement was important,” technical and entrepreneurial training was provided to them so that they would take the initiative forward and make it sustainable.

The Rural eSeva centre is run by an entrepreneur or a group of entrepreneurs from SHGs. The entrepreneurs do not receive any subsidies, but are linked to commercial loans to be able to initiate the project and purchase the necessary equipment and infrastructure. They receive computer-related training and guidance in management of the centre in the initial period for 6 months, followed by periodic meetings to get inputs on new services and discuss issues and problems.

The selection of the entrepreneurs as noted above was left to certain departments, and those men and women who expressed an interest in the programme were short-listed and then selected. Guidance and encouragement had to be provided in the initial stages to the entrepreneurs, many of whom had no previous business or technical experience. One eSeva centre has been set up at every Mandal, or 46 centres in total, of which 14 have women as
kiosk owners. The eSeva centres are equipped with computers, one or more printers and other peripherals like scanners, lamination machines, web cameras, etc., and all centres have handheld devices for reading electricity meters and issuing bills. The kiosks are conceived as the front-end reception offices of the Mandal Revenue Offices, and the main services provided are in the form of utility bill payments and provision of certificates such as Birth Certificates, Caste Certificates, and so on. For each transaction, the entrepreneur is assured of a certain commission by the utility company. In the recent past, a revenue sharing agreement between the district administration and the entrepreneur has been developed, where a small portion of the earnings from each bill payment goes back to the district administration to cover connectivity and other costs. In some centres, entrepreneurs have the responsibility of reading electricity meters and issuing bills, for which they receive small amount per transaction and in all centres, information on district-level schemes, application forms for schemes, and results of district examinations are made available. E-literacy training courses for children, and of late, ICT-enabled literacy courses for SHG women have been initiated at the centres. Data entry for surveys undertaken at the Mandal level, for example, household surveys on Below Poverty Line households, is carried out by eSeva operators.

There has been a further expansion in the project with 18 sub-centres run as Rural Service Delivery Points (RSDP) at the village level, all managed by women operators. As the main focus of these centres is on affordable computer education for children (in additional to utility payment collections), not all of them have been successful, where success is defined along financial sustainability terms. Efforts are ongoing to see how these “sick” centres can be sustained on a long-term basis in light of the fact that demand is much lower at the village level than at the Mandal level, and thus, alternate means of sustenance have to be conceived. The entire project is being administered by the Collector’s office, in conjunction with NIC, which not only provides technical support but also liaisons with the different departments at the level of the government, and with entrepreneurs at the local level, to develop suitable applications. The representatives of the NIC feel that they are in the best position to perform this role as they have the “domain knowledge of the district administration in addition to the required technical skills.” Furthermore, they visit the centres frequently and interact with the kiosk operators at meetings to provide the necessary troubleshooting and problem-solving assistance. From the angle of financial sustainability, most centres at the Mandal level are functioning
well and entrepreneurs have employed additional people to help with their operations. In two of the women-run centres at Denduluru and Nidadavolu, the entrepreneurs, Ms. Nagashiromani and Ms. Venkatalakshmi, employ 4 and 1 additional people respectively, and earn a monthly income of between Rs.5000 and 8000, after paying off salaries and other recurring costs. In addition to the regular line of services, they sell non-ICT based goods and services (such as spices, groceries or show-case items) to augment their income. Aside from the financial success, there has been a change in the status of the entrepreneurs, who have moved from undertaking odd marketing jobs or working as agricultural labourers to becoming kiosk owners. Both women felt that when they were chosen initially, there was much skepticism in the community relating to their capacities to perform as IT kiosk operators and some gossip as the training called for frequent trips to the Collector’s office for the 6 month period. However, once the kiosks were opened, these women, through hard work and dedicated service, were able to ensure that the kiosk functions in an effective manner. They strongly believe that they now command a position of visibility and respect in the community, especially in the Panchayat, which would not have been possible through their traditional roles and occupations. This is echoed by Mr. Jaju, who concludes that while there is a long period of struggle on both ends initially, once women entrepreneurs reach a certain point and establish themselves, there is no looking back.

The positive spillovers of engaging women entrepreneurs is also reflected in the fact that 30-40 percent of the citizens who came to register online complaints through the grievance redressal mechanism were women, and these were complaints against non-delivery of services by the Panchayat representatives and officials in positions of power. Nagashiromani says, “Had the centre been run by a man, women would not have come forward. It is because the centre is run by a woman that they feel comfortable”. This view is recognised by district officials as well. Assessing the Project from a Gender Lens

**Gender as a practical solution or a strategic agenda**

This project attempts to provide an end-to-end IT solution and through improved efficiency and transparency in the government sector, benefit all sections of the community. Interestingly, integrating women into the project was found to be a useful strategy to ensure successful outcomes, as it was felt that women operators are more likely to stay in the position for a longer period of time and are more dedicated to serving the community. There
was also a reference to the fact that the project hinged on the successful emergence of the SHG movement in the West Godavari District in Andhra Pradesh and the social capital built on by the movement. Yet, despite the lack of attention given to gendered nature of power relations in the community, the project was able to develop and establish new role models for women entrepreneurs, and through its range of services, provide some new opportunities for women in the community. For example, it was mentioned that more women come forward to pay monthly bills and apply for certificates after eSeva centres have emerged as these were more accessible and convenient. These tasks were earlier seen as part of the ‘male’ domain because they called for standing in long queues, travelling to different offices and interacting with the power elite.

**Project implementation trade-offs**

Where IT projects attempt to bring about governance reform and challenge the power held traditionally by elites at official and community levels, projects have to confront trade-offs in defining parameters of success in their design and implementation. This was evident in eSeva, where the choices of creating stakeholder interest and bringing in maximum buy-in from different departments and officials by allowing them to choose the 'beneficiaries' under their different schemes, meant that certain other agenda – ensuring greater ownership of centres by SHG women and those from disadvantaged caste groups; securing the cooperation and involvement of local Panchayats; and setting up processes for wider community participation – all had to take a back seat. Also, the need to get the project running in an extremely short span of time so as to prove the possibilities of IT in a large-scale project meant that other processes dealing with the information and communication context, and power relations embedded within this context at the community level, had to be hastened or sidelined.

**Business models may come in the way of development goals**

The twin goals of the project were to provide the most cost effective technology solutions and ensure that the service delivery person makes a decent income through the kiosk operations. In this regard, the project was found to be sustainable as new applications and new uses of existing devices and processes are still being evolved by the eSeva implementation team. Yet, in the extension centres at the village level (RSDP centres), the inability of the centres to generate sufficient income to offset monthly expenses, due to the lack of a demand pool at
the village level, led to them being considered as “sick centres” in need of alternate strategies and services. While financial sustainability is important, making this a concern that overrides other development goals is problematic, particularly when there may be several intangible ways in which women entrepreneurs are benefitting through their new roles, statuses and opportunities and women users in the community are benefitting from the newly available information and services. Conceiving of sustainability in a narrow manner also crowds out the possibility for appropriation of technology by community members, whose needs may be completely sidelined in light of the urgency of financial viability – thus, goals of reach, inclusion and service delivery may be negatively impacted in the process.

(Adopted from Locating Gender in ICTD Projects: Five Cases from India
A research study undertaken by: IT for Change, Commissioned by: National Institute for Smart Government, MAY 2008)

The above case study demonstrates that the IT initiatives will address gender concerns and it also paves the way for empowerment of women. IT has now received due attention of policy makers, implementers for success of e-government projects through National e-governance plan (NeGP). The objective of NeGP is to provide a portfolio of services to the citizens through common services centres (CSC) integrated with e-government backbone to not only set up a good e-governance system but also to establish a support structure for sustainable livelihood opportunities. In order to support the rural households, the Government of India set up 100,000 common service centres (CSC) for 600,000 by September 2008. The financial outlay is around Rs. 23,000 Crores. These centres are expected to provide 80 common services with active support from district, state and central administration as well as business sector. The CSCs are meant for optimising transaction cost and time. It is also envisaged that these CSCs will support on-line transactions for government services. This is primarily aimed to reduce the distance that a villager normally travels to transact. A villager usually would prefer a better transaction cycle to happen in the village itself to support their livelihood prospects.

These CSCs are conceptualized on supply-driven model and are expected to provide predetermined services. At the same time, the grassroots initiatives not only supply driven, it actually encourages community especially women to participate in projects.
ROLE OF RESERVE BANK OF INDIA FOR IT PENETRATION IN RURAL AREAS

Reserve Bank of India plays a pivotal role as far as urban and rural area growth is concerned. RBI too, has provided so many tools as part of improving systemic efficiency of the banking and financial sectors. The first major step has been the setting up of an exclusive, safe and secure communication network for the use of the banking sector - the INFINET (for the Indian Financial Network). This network has been in operation for more than 3 years now. The Institute for development and Research in Banking Technology (IDRBT), at Hyderabad can take a lead of hosting this network at rural and urban segments too.

Reserve Bank has also provided many new products – all of which are aimed at reforms in the existing payment and settlement systems and providing for risk reduction. Commencing from the introduction of MICR-based cheque clearing in the late eighties (with four metropolitan centres being part of the chain), today, there are 27 cities where cheque clearing is performed using mechanised technology of “Reader Sorters” which process cheques at more than 2,000 per minute. On similar lines, the Currency Verification and Processing Systems have been made operational at various offices of the Reserve Bank which has resulted in the implementation of the 'Clean Note Policy', as far as currency notes are concerned.

The benefits of technology in the banking sector have been extended to cover transactions undertaken in respect of government securities transactions. The Negotiated Dealing System (NDS) has provided for an electronic platform for trading in government securities which has stabilised well in its two years of operation. Further, the proliferation of IT has also set the stage for improving and managing risks in payment systems in the form of the following:

- Electronic Trading Systems; Delivery versus Payment (DVP)/ Payment versus Payment (PVP); Real Time Gross Settlement (RTGS); Secured Netting Systems; and the growth of the Central Counterparty (CCP) as in the case of the Clearing Corporation of India Ltd (CCIL) and movement to Continuous Linked Settlement.

Indian Banking and HI- tech Banking Technology Services
The nature of hi-tech IT Services in the banking Industry have been addressed as under:

- Shared Payment Network System (SPNs) (SWADHAN) of Indian Banks’ Association;
- Automated Clearing House Operations;
- A network of Regional Data warehouses – Credit Information Bureau;
- Electronic Funds Transfer (EFT);
- Electronic Clearing Service (ECS) – Credit Clearing and Debit Clearing;
- RBnet;
- Computerised Message Transfer (COMET);
- Very Small Aperture Terminal (VSAT) for BANKNET;
- Regional Grid Clearing – Collection of Outstation Cheques;
- Magazine on ‘Banking Information Technology (BANKIT);
- Credit/Debit Cards and Electronic Funds Transfer (Point-of-Sale Terminal);
- Smart Cards;
- Communication through use of Optical Fibre Technology;
- INET (Packet Switched Public Data Network);
- HVNET (High Speed VSAT Network);
- NICNET (District based Information System);
- Internet Banking;
- Chat Relay (ICR) System;
- Electronic Mail (e-mail);
- Facsimile (FAX);
- Society for Worldwide Inter-bank Financial Telecommunication (SWIFT);
- Virtual/Digital/e-Sign Signatures in banking;
- Cheque Truncation process; and
- Smartquill’ Computer pen.

Check Your Progress Exercise 1

Note: i. Use this space given below to answer the question.

   ii. Compare your answer with the one given at the end of this unit

1. What is the role of Information Technology in rural development?
2. What are the Initiatives taken by RBI as technology innovation?

9.6 FOCUS AREAS FOR FINANCIAL INCLUSION
We have seen the Information Technology and its usage in banking sector in India in the previous section. In this section, we can see the focus areas for financial inclusion in banking sector.

9.6.1 Community Banking
A community bank draws upon the knowledge and expertise in the community and uses this insight to provide customized and differentiated lending and banking solutions. Community banks focus attention on the needs of local families, businesses, and farmers. Conversely, whereas many of the nation's big banks are structured to place a priority on serving only the large corporations. The following sectors, the community banking is in operational in India.

Rural banking in India started since the establishment of Banking sector in India. Rural Banks mainly focussed upon agro sector and there are 14,475 rural banks in the country out of which 91% are located in remote rural areas.

9.6.2 Business Correspondent/ Facilitator Model
The Business Correspondent model allows non-financial service providers to provide financial services (savings accounts, money transfer etc.) on a small scale basis (maximum limits imposed). The money is still held at a financial institution, however is serviced by the BC. The Business Correspondent (BC) model coupled with “Branch-Free Banking” can become a major enabler of financial inclusion in India and enable “Universal Financial Access” just as the telecom revolution in India has made “universal mobile access” close to becoming a reality.

9.6.3 Customer Education
Persons in unbanked remote villages are situated in the far flung areas still depend on local moneylenders and are denied of the affordable banking services. The role of BC/BF in the
present model is an important one. They are not only the first point of contact with the customers but they are required to educate the customer also about the benefits of having an account with the bank. The strength of public domain like strong banks with the reach of the private agencies to the far flung areas. Some of the agencies can be out of NGOs, Farmers Clubs, SHG, Co-operatives, Community Based Organizations; IT enabled rural outlets of corporate entities. The role of Bank’s Farmer Training Colleges and Information Kiosks will be in addition to the BC and BF Model for Financial Inclusion.

9.6.4 Credit Counselling
Credit counselling is important for ensuring success of farmers in the remote areas. They must be informed the credit facilities available in the bank to meet out their various needs crop loan, loan for farm mechanization as well as personal loans to meet out petty needs. The BC/ BF can play an important role in spreading the credit schemes and by providing them credit counselling to choose from the various options available to them.

9.6.5 Credit Off Take
Specific to credit off take, there exists a multitude of cards like Kisan Cards, Debit Cards, Credit cards–some usable online, while some used more as token of identity. There is a felt need that with the advancement of technology, a person in a remote area should be able to access his accounts/avail his credit limits with the use of only one card which should also double up as his multi-purpose bio-metric enabled identity card. Various options are available for meeting the above objectives.

Check Your Progress Exercise 2

Note: i. Use this space given below to answer the question.

ii. Compare your answer with the one given at the end of this unit

1. What is Rural Banking?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

2. Elaborate on Business Correspondent Model.

_____________________________________________________________________
_____________________________________________________________________
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12
9.7 APPROACH TO TECHNOLOGY IMPLEMENTATION

Technology implementation should be such that it focuses on reducing cost of achieving financial inclusion and enhance productivity and efficiency levels of the system. Further, technology tends to have the maximum impact when a key theme for leveraging technology is identified, and then all the decisions that follow rally round this central thought process. For instance, the kind of technology decisions taken by a financial inclusion intervention focused on reducing its transaction costs will be very different from another financial inclusion intervention that wants to be more productive in its outreach and delinquency management efforts. While the former may focus on basic automation of back-office processes, the latter will be better off in introducing field technologies and a more robust platform that helps in growing its scale of operations, and more objective and analytically driven credit decisions.

For example, kiosks now – and more increasingly in the future – will have to become the access points of more and more services in a manner that can differentiate them better against competing technologies, for such interventions to be financially and practically viable. Therefore, to derive maximum benefit out of any financial inclusion intervention that relies on technology, it should focus beyond just automation and digitization for its sake, to building capabilities, providing network externalities and leading to substantial improvements in the core capabilities – in manners that are difficult to realize otherwise.

9.8 CHOOSING THE RIGHT TECHNOLOGY FRAMEWORK

A variety of technologies are available in the market today, which can potentially play a meaningful role in financial inclusion initiatives. From smart-cards to mobile phones, a lot of technologies have also been explored and discussed on various forums in recent times. While each one of these alternatives has its own merits and de-merits, what needs to be explored in any significant measure is to look at building platforms using some or all of these technologies working for the community to bring inclusive finance. One has to leverages the advantages of each of these technologies in a pragmatic way. Also, the focus will then have to shift from evaluating a particular technology per say, to the problem that it seeks to solve at a broader level. Just to take forward the above point with a specific example, true advantage of smart card is its ability to store information in an offline mode. Further, lower marginal cost of provisioning multiple services interactively also differentiates smart card
interventions, as it may be difficult to achieve the same by any other delivery interface. However, in cases where network accessibility is not a problem – and it is increasingly becoming less of an issue in semi-urban and rural villages – or in interventions where medium term objectives do not envisage providing multiple services through the same delivery channel, high cost of smart cards may be economically unjustifiable? Further, even otherwise, instead of trying to adapt smart cards so that they are able to carry out every type of transaction, it may be a more prudent approach to also look at alternatives (like digital pens, for instance) that will help in more economically carrying out transactions that are not interactive in nature. Similarly, while the mobile phone is a good delivery channel because of network externalities, it needs to evolve beyond just registering a presence as a voice-enabled channel that has limited ability in carrying through a financial transaction.

As should be obvious then, one size doesn’t necessarily fit all! Therefore, if financial inclusion intermediations truly seek to leverage technology for transformational impacts, they should focus on 2 key aspects while taking decisions pertaining to it:

- Build technology-enabled interfaces that go beyond enabling transactions
- Use technology to capture information that goes beyond meeting reporting requirements.

What this implies is that it will be prudent to explore aspects of technology enablement beyond delivery channels, so as to also build core-backend that facilitates capturing of more insightful & rich customer information, enhancing business performance and realizing productivity gains.

**Check Your Progress Exercise 3**

**Note:** i. Use this space given below to answer the question.

ii. Compare your answer with the one given at the end of this unit

1. Elaborate on Importance of Choosing the Right Technology Framework?

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**9.9 RECOMMENDATIONS FOR IMPLEMENTATION**
Different Technological requirements of the banks should be compiled and implementation to be kept as per time frame. Since different banks use different framework of technology, compilation and implementation is a challenge.

Some recommendations for implementations to improve the current system are:

1. Financial inclusion needs to be standardized throughout all the banks and hence the KYC forms needs to be same across all the banks collecting the same level of information.
2. Smart cards should have option to be used across in any location, so the standardization on that also is a basic requirement.
3. A centralized hub for ATM which can link all the ATM lines across all Banks.
4. Bank wise allocation to specific areas would help in Service Area Approach.
5. Sufficient training to the Business Correspondents (BCs) on products and Processes which will aid in Customer Education.

9.10 NEED FOR STANDARDS

To summarize the above discussed points, standardization is required in the following areas:

- Appointment of BC (Qualification and Training)
- Terms and Conditions of agreement between Bank and BC
- Data storage of the Customers across all Banks
- Centralized hub for ATM switches
- Agents SOP (Standard Operating Procedure) for Banking transactions
- Process for Secured data transaction

9.11 NETWORKING OF BANKS THROUGH BANKING INFORMATION TECHNOLOGY SERVICES (BITeS)

Information Technology (IT) continues to be the single largest facilitating force behind the successful transformation of transactions and analytical processing of banking business in the country. Developments which have taken place during the last few years all have IT as the pivotal centre-point.

The introduction of Core Banking has resulted - as a natural offshoot - in the computerisation and networking of branches of banks in a larger scale. Networking of banks is of utmost
importance as the information flow should be available throughout to ensure seamless transactions. And this is possible by unified Information Technology across banks.

For becoming the BITeS to be successful, all bankers should come together and plan out the strategy on the lines of UNITeS, so as to build their own team of Net Volunteers ONLINE, which will go a long way in building the image of the Indian banking system across the globe. Online Volunteers on the banking front will be part of the BITeS community as well, often working directly with their onsite counterpart volunteers.

Specific requirements to become a volunteer under the BITeS programme depend on the nature of each assignment, but will always include:

Experience with computers and the internet at an average user level, plus technical requirements for each particular assignment, which could involve thematic experience, higher level ICT skills or language abilities; and a sense of solidarity and service, plus commitment to share knowledge and expertise with others (the volunteering “ethos” or spirit).

BITeS should be supported by an open and growing network of collaborating organisations, from governments, non-governmental organisations (NGOs), private sector, academia, development and volunteer-sending agencies. Some BITeS partners may have expertise in the use of ICT to find practical solutions to developmental problems. Others should have expertise in managing volunteers, like volunteer sending agencies (VSAs) or NGOs that operate mainly through volunteers. Over time, a coalition of partner organisations may formally be established around BITeS. The Banking-based Information Technology Programme (BITP) should function as the volunteer arm of the banking fraternity, in coordinating this innovative volunteer initiative to help bridge the digital divide.

Bankers should realize the importance of benefits accruing from the opportunities emerging from the digital revolution. Creation of a global volunteer programme should be aimed at bridging the digital divide between industrialisation and the banking system. BITeS will be an initiative that will channel the creative energies, skills and solidarity of volunteers around the world to collaborate with people to improve their capacity to make practical use of information and communications technologies (ICT) and, thus, help rural/urban banking growth. In key fields like NPA, deposit mobilisation, priority sector lending, exports, foreign exchange, treasury management, volunteers working under the BITeS programme will be able to bridge the digital divide.
9.12 RECOMMENDATIONS OF THE RANGARAJAN COMMITTEE

Further, the above implementation should be done while accommodating the various recommendations of the Rangarajan Committee, such as:

1. Rural Banks with computerized system where the information flow is effortless.
2. Improve the network of banks such that every unbanked area is covered.
3. Technology and process to go hand in hand.
4. Balancing the Operation cost by bringing in volumes of transaction.
5. Focus on reducing the cost of infrastructure and ensuring sync of various operations across the banks.
7. Seek Government sponsorship and support for making payments under National Rural Employment Guarantee Scheme (NREGS) and Social Security Payments through Technology based solutions.
8. Create a national data-base, sectoral, geographic and demographic reports, and also a payment system benefiting the cardholders from the underprivileged/unbanked population.
9. Close network of operations between Technology Providers and Bankers.

9.13 TECHNOLOGICAL REQUIREMENTS

9.13.1 Centralized Hub

It is critical that the Technology of the remote Banking is centralized in one hub. This helps in integration of all information across the nation. This hub would have the record of all transactions and data regarding all customers.

The centralization would help in:

- Unified data entry and maintenance.
- Ease of process and access to information.
- Cost effective when compared with each centre maintains the information individually.

This also benefits the customers as:

- They will have banking access in unbanked areas also
- No physical visit to banks required
- Enables Microfinance disbursement
Banks Benefit by:

- Saving on Operational cost on setting up the above services at every rural locality
- Reaches to the end customer and hence customer satisfaction
- Increases the reach of Financial Inclusion of the Bank
- Customer loyalty
- Reach of Technology to common man and hence covers Corporate Social Responsibility of the Bank

9.13.2 All-Purpose Single Card

Presently, various types of cards are floated by various Banks. Debit Cards, Credit Cards, Kisan Credit Cards, Swarojgar Credit Card, Artisan Credit Card, Bhumiheen Kisan Card, Kisan Samadhan Card, Laghu Udyami Trade Card, etc. are some of the cards issued by various Banks. There is a felt need to replace these individual purpose specific cards to a single card containing all the possible features.

9.13.3 Online and Offline Model

Based on the topography & availability of infrastructure, two models are identified for meeting the requirements of the Bank and the customers. They are the Online and the Offline Model. Online and offline refers to the connectivity through the Internet. So Technology in terms of GPRS, CDMA, GSM, WIMAX etc. are termed as online mode.

So the banking transactions may be through the above mentioned online mode which enables phone banking, internet banking, mobile banking by using username and password for transactions. In areas where the above Technology cannot be used, then use of Unified cards is possible where in recognition is through the finger prints. Depending on the topography and education level of the customers either of the above can be used for any kind of transactions of bank like cash withdrawal, fund transfer and the transaction receipt has to available to the customers then and there, which there by motivates and increases the amount of transactions.

Areas where internet is far from reach can be catered through the Offline Model. Here the transactions would be done through the Smart Card through Business Correspondents. The BCs will be equipped with a terminal which have access to information and also updates the present transaction of the Customer. There are possibilities of higher levels of Process gaps in these transactions as there are many middle men who come in between the customer and the
bank. Hence the legality as well as the authenticity and the sync of information across all geographic locations is of utmost importance and also needs continuous monitoring on the efficiency of the system.

Check Your Progress Exercise 4

Note: i. Use this space given below to answer the question.
    ii. Compare your answer with the one given at the end of this unit

1. What are the areas for need for Standard?

2. Name a few highlights of the Rangarajan Committee.

3. Elaborate on Online and Offline mode.

4. What are the cards that are available based on Financial Inclusion?

9.14 SUMMING UP

Banks have a major role in extending banking facilities to rural areas for inclusive growth and availability of financial facilities to all across the country. From policy-makers focused on development to Bankers & FIs willing to reach out to all, to vendors providing technology-enabled financial inclusion platforms, everyone needs to understand that while
doing social-good is a respectable motivation, philanthropy on its own may not always be able to ensure sustainability. Philanthro-capitalism – or the marriage of philanthropic considerations with capitalistic approach is therefore the order of the day. This gives way for value for human with economics in place. In this Unit, we have seen the Reserve Bank of India initiatives with regard to inclusive finance and the government initiatives to bring all services to the door steps of all with the help of case study.

9.15GLOSSARY
Kisan Credit Card: It is a credit card to provide affordable credit for farmers in India. It was started by the Government of India, Reserve Bank of India (RBI), and National Bank for Agricultural and Rural Development (NABARD) in 1998-99 to help farmers access timely and adequate credit. The Kisan Credit Card allows farmers to have cash credit facilities without going through time-consuming bank credit screening processes repeatedly. Repayment can be rescheduled if there is a bad crop season, and extensions are offered for up to four years. The card is valid for three years and subject to annual renewals. Withdrawals are made using slips, cards, and a passbook.

9.16ANSWERS TO CHECK YOUR PROGRESS
Check Your Progress Exercise 1
1. IT has had a great influence on the economy and lives of people across the world. In India the benefits of IT are beginning to be seen and the impacts of these benefits are creating great change. It is also true that the use of digital technologies in the world has not only improved people’s day-to-day life but it has also divided the world into information rich and information poor, i.e. the information haves and have-nots. The unequal access to information and communication technologies has led to a massive divide digitally. Although India has been one of the emerging super powers in IT, the benefits have been remarkably slow, particularly in rural and remote areas. Besides socio-economic factors, geographic, educational and attitudinal factors have been some of the challenges for the government when introducing IT-oriented programs.

2. Elaborate on Role of Reserve Bank of India for IT Penetration in Rural Areas

Check Your Progress Exercise 2
1. Rural banking in India started since the establishment of Banking sector in India. Rural Banks mainly focussed upon agro sector. In Rural Banking in India, there are 14,475 rural banks in the country out of which 91% are located in remote rural areas.

2. The Business Correspondent model allows non-financial service providers to provide financial services (savings accounts, money transfer etc.) on a small scale basis (maximum limits imposed). The money is still held at a financial institution, however is serviced by the BC. The Business Correspondent (BC) model coupled with “Branch-Free Banking” can become a major enabler of financial inclusion in India and enable “Universal Financial Access” just as the telecom revolution in India has made “universal mobile access” close to becoming a reality.

Check Your Progress Exercise 3

1. A variety of technologies are available in the market today, which can potentially play a meaningful role in financial inclusion initiatives. From smart-cards to mobile phones, a lot of Technologies have also been explored and discussed on various forums in recent times. While each one of these alternatives has its own merits and de-merits, what needs to be explored in any significant measure is to look at building platforms using some or all of these technologies working in tandem, such that such a solution best leverages the advantages of each of these technologies in a pragmatic way. Further, appropriateness of using a particular technology in a given context will become more obvious if such an approach to decision-making is adopted.

Check Your Progress Exercise 4

1. Standardization is required in the following areas:
   - Appointment of BC (Qualification and Training)
   - Terms and Conditions of agreement between Bank and BC
   - Data storage of the Customers across all Banks
   - Centralized hub for ATM switches
   - Agents SOP (Standard Operating Procedure) for Banking transactions
   - Process for Secured data transaction

2. Recommendations of the Rangarajan Committee, such as:
   a. Rural Banks with computerized system where the information flow is effortless.
   b. Improve the network of banks such that every unbanked area is covered.
   c. Technology and process to go hand in hand.
   d. Balancing the Operation cost by bringing in volumes of transaction.
e. Focus on reducing the cost of infrastructure and ensuring sync of various operations across the banks.


g. Seek Government sponsorship and support for making payments under National Rural Employment Guarantee Scheme (NREGS) and Social Security Payments through Technology based solutions.

h. Create a national data-base, sectoral, geographic and demographic reports, and also a payment system benefiting the cardholders from the underprivileged/unbanked population.

i. Close network of operations between Technology Providers and Bankers.

3. Online and offline refers to the connectivity through the Internet. So Technology in terms of GPRS, CDMA, GSM, WIMAX etc, are termed as online mode. So the banking transactions may be through the above mentioned online mode which enables phone banking, internet banking, mobile banking by using username and password for transactions. Areas where internet is far from reach can be catered through the Offline Model. Here the transactions would be done through the Smart Card through Business Correspondents. The BCs will be equipped with a terminal which have access to information and also updates the present transaction of the Customer.

4. Presently, various types of cards are floated by various Banks. Debit Cards, Credit Cards, Kisan Credit Cards, Swarojgar Credit Card, Artisan Credit Card, Bhumiheen Kisan Card, Kisan Samadhan Card, Laghu Udyami Trade Card, etc. are some of the cards issued by various Banks. There is a felt need to replace these individual purpose specific cards to a single card containing all the possible features.

9.17 REFERENCES

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### 9.18 QUESTIONS FOR REFLECTION AND PRACTICE

1. Discuss the role of government of central bank for the inclusive finance.