

Chapter – 9

Technology Applications

Technology – The Driving Force for Low-cost Inclusion Initiatives

9.01 The recent developments in banking technology and expansion of telecommunication network in the hinterlands of the country have provided the perfect launch pad for extending banking outposts to remote locations without having to open bank branches in the area. The Committee feels that this could be achieved by leveraging technology to open up channels beyond branch network and create the required banking footprints to reach the unbanked so as to extend banking services similar to those dispensed from branches. In short, technology has to enable the branch to go where the customer is present, instead of the other way around.

9.02 Further, RBI's Annual Policy for 2007-08 also urged the banks to scale up efforts for IT-based financial inclusion and develop technologies that are highly secure, amenable to audit and follow widely accepted open standards to allow inter operability among the different systems adopted by different banks. The enabling provisions and support of RBI has facilitated successful pilot projects in use of IT for extending the banking outreach for the "excluded". These projects are premised on technology which uses hand-held devices and connectivity with host computers through General Packet Radio Service (GPRS) / Global System for Mobile Communications (GSM) / Code Division Multiple Access (CDMA) / landline networks. The devices also come in several forms like Simputers (Simple In-expensive Multi-lingual Computers) / personal digital assistants, programmed mobiles, etc. There are also rural bio-metric ATMs which have been introduced by banks and found to be very popular among rural masses. Some major banks are introducing low cost rural ATMs for cash dispensing and other services in rural areas.

9.03 The Committee took cognisance of the fact that the RBI has set up an advisory group for IT-enabled financial inclusion to facilitate development of IT solutions for delivery of banking services. It is understood that the group will advise certain minimum parameters and standards that are essential for setting up robust inter-operable systems on open platforms. The Committee, while concurring with this approach, is of the view that nearly all models converge on certain essential components and processes to be followed in a technology application. The essence of all the models under consideration features the issue of a smart card to the farmer on which all his transactions are recorded, a hand-held terminal with the BC at the village level and a Central Processor Unit (CPU) linking the smart cards and BC terminals with the banks. The precautions taken ensure that every transaction made is accompanied by a print-out being provided to the farmer. There are also other models where smart cards are dispensed with and mobile telephones, etc. are used.

9.04 However, for better clarity, the Committee has thought it appropriate to delineate the fundamental outlines of a technology-based model in Annexure VIII which may be examined for application in such manner and to such extent as may be deemed fit.

9.05 The Committee also perused two initiatives – the SBI Tiny Initiative on Banking Facility thru' use of smart card facility and Government of Andhra Pradesh (GoAP) Project on Social Security Payments thru' Smart Cards – to draw conclusions

that can be helpful in devising the strategy for achieving 100% financial inclusion in the country. These are indicated in Annexure IX.

9.06 The operating costs of the various models outlined in Annexure VIII are expected to be minimal and can be easily absorbed by banks as the increase in business volumes will justify the absorption of incremental operating costs. Also, the costs of the models are substantially lowered if the infrastructure is shared. It is, therefore, recommended that a shared infrastructure of different banks enabling nationwide financial inclusion for the participant banks would confer large scale benefits and also enable effortless transfer of funds between the card holders of the various banks.

9.07 Essentially, the start up costs are the initial investment costs comprising cost of the smart card, terminals to the BC and the CPU. The Committee is of the view that the Financial Inclusion Technology Fund can provide the necessary support for defraying technology application and hardware costs of technology adoption.

9.08 As the technological capability for achieving outreach has been satisfactorily proved in the ongoing projects at Andhra Pradesh, Karnataka, Mizoram, etc., banks are urged to scale up the projects all over the country to achieve financial inclusion.

Optimisation of Existing Infrastructure

9.09 The Committee is of the opinion that the existing banking infra-structure and NGOs which have already developed extensive inroads into rural areas should be made optimal use of for enabling outreach of banking services. The BF/BC models backed by technology applications should encourage a role for the small players and integrate them into the national system. The Committee is of the opinion that State Governments should make payments to NREGP and Social Security Payments through such technology-based solutions.

Building database

9.10 The Committee having discussed extensively the issue of using technology as a driver is of the opinion that the requirement of rapid financial inclusion as a national goal can only be achieved by using appropriate IT. The creation of a national database, sectoral, geographic and demographic reports, and also a payment system among the card holders to benefit the under privileged unbanked population of the country is not possible without extensive use of IT. This alone can bring down the costs of the small ticket transactions of the financially included and make nationwide financial inclusion a reality.

9.11 The technology suppliers and banks should evolve common minimum standards for ensuring inter-operability between their systems.