ICT as a tool of Financial Inclusion

Anindita Banerji
Asst. Professor
BMM/ BMS
Vidyalankar School of Information Technology
Mumbai, India

Abstract

ICT as a tool for Financial Inclusion

Financial inclusion is the process of ensuring access to financial services and timely and adequate credit needed by weaker sections and low-income groups at an affordable cost. Financial inclusion has become a global policy priority and the growth of Information and Communications Technology (ICT) has become almost synonymous with the topic. This paper looks at an overview of financial inclusion in India and discusses the impact of ICT on reaching individuals who were otherwise financially excluded. An important goal of policy-makers in both the developing and the developed countries is to have an inclusive growth. Financial services have the potential to achieve this objective and help create a more just and equitable society. Financial Literacy and financial inclusion have been important policy goals of India for quite some time but in spite of policy measures and technological innovations adopted by RBI and banking sector, the extent and penetration of financial products and services to marginalized sections of the society, needs attention. Financial inclusion is now on the top of the menu for policy makers for finalising a multi-pronged action plan as it is believed that is the only way for financial development. This study is an attempt to analyse the existing literature and understand the role played by Government/ Financial Institutions in promoting inclusive growth and obstacles and challenges and study the tools of ICT used for facilitating financial inclusion in India. Even though the Government and the banking sector have adopted various policy measures and innovative tools to ensure access of financial products and services to weaker and under privileged sections of the society but financial illiteracy, lack of convenience, technological issues and viability has emerged as significant impediments the path of achieving inclusive growth.

IndexTerms - Financial inclusion, ICT, Financial Literacy, inclusive growth.

Introduction

Financial Inclusion is the process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular at an affordable cost in a fair and transparent manner by mainstream institutional players. Unrestrained access to public goods and services is the foundation of an open and efficient society. Banking

Services are in the nature of public goods and essential need of life; the availability of banking and payment services to the entire population without discrimination is the prime objective of this public policy. This will help in bringing every person of the society in the main stream of the nation. Raghuram Rajan outlined, in conceptual terms, what inclusion should be. "Simplicity and reliability in financial inclusion in India, though not a cure all, can be a way of liberating the poor from dependence on indifferently delivered public services and from venal politicians" he said. Further, "in order to draw in the poor, the products should address their needs — a safe place to save, a reliable way to send and receive money, a quick way to borrow in times of need or to escape the clutches of the money lender, easy to understand life and health insurance and an avenue to engage in savings for the old age."

Financial Exclusion

Before delving into the topic of financial inclusion one has to understand how financial exclusion took place in India. There are various reasons for financial exclusion.

According to the European Commission, Financial exclusion is 'a process whereby people encounter difficulties accessing or using financial services and products in the mainstream market that are appropriate to their needs and enable them to lead a normal social life in the society in which they belong'. In the Report of the financial inclusion in January 2008 by C Rangarajan, Financial exclusion is defined as restricted access to financial services to certain segment of the society. Generally, this large section of the population comprises individuals or family falling into low income groups, which are not able to access even the most basic banking services like bank accounts, credit, insurance, financial advisory services and payment services. So basically, financial exclusion is the situation where certain group of population is excluded or unable to access low cost an appropriate mainstream financial products and services.

Some of the reasons of financial exclusion are illiteracy, lack of awareness of banking services among the underprivileged population, non-availability of banking facilities, gender issues, place of living, psychological and cultural barrier, technological barriers, level of income etc. Financial exclusion has a large social and economic cost. Consequences vary depending on the nature and extent of services denied. It may lead to increased travel requirements, higher incidence of crime, general decline in investment, difficulties in gaining access to credit or getting credit from informal sources at exorbitant rates, increased unemployment, etc. The small business may suffer due to loss of access to middle class and higher-income consumers, higher cash handling costs, delays in remittances of money.

RBI has been pursuing the goal of financial inclusion for a long time. RBI's financial inclusion efforts can be traced back to the 1960s when the focus was on channelising of credit to the neglected sectors of the economy and weaker sections of the population. While the Government of India nationalised the banking operations of few commercial banks in two tranches in 1969 and 1980; RBI also took initiatives like laying down priority sector lending requirements for banks, Lead Bank Scheme, establishment of Regional Rural Banks (RRBs-1975-76), Service Area Approach (1989), Self-Help Group-Bank Linkage Programme (1989- 90), setting up of Local Area Banks etc., all aimed at making available benefits of banking services to the masses.

Although these measures resulted in impressive gains in enhancing the outreach of banking services and extent of credit to the population, there were certain structural challenges which impeded the progress of financial inclusion. On the supply side, absence of technology was a major impediment as it restricted expansion of banking services to far-flung areas of the country comprising of 600 thousand plus villages. In the absence of technology, developing a cost-effective delivery model also remained a challenge.

Since 2006, RBI has adopted a planned and structured approach to address the issues of financial inclusion. RBI's approach has been to focus both on the demand as well as on the supply side. This has, in a large way, been possible due to the availability of technology and its gradual adoption within the banking processes.

Institutionalisation of the framework of Banking Correspondents (BCs) has been a major step towards enhancing access of banking services. RBI advocated a combination of 'Brick and Mortar' structure with 'Mouse and Click' technology for extending financial inclusion in geographically dispersed areas. The Business Correspondent (BC) model, which is the most successful model adopted by the banks for financial inclusion, would not have been possible without ICT. The total number of transactions in BC-ICT accounts which were around 26 million during 2010-11 have increased to 826.81 million as on March 31, 2016.

The number of banking outlets in villages went up from 67,694 in March 2010 to 5,86,307 in March 2016 after RBI permitted appointment of BCs and laid out a roadmap for spreading banking services in rural India through a mix of bank branches and BC outlets. In addition, the number of urban locations covered through BCs has also surged from 447 in March 2010 to 1,02,552 in March 2016.

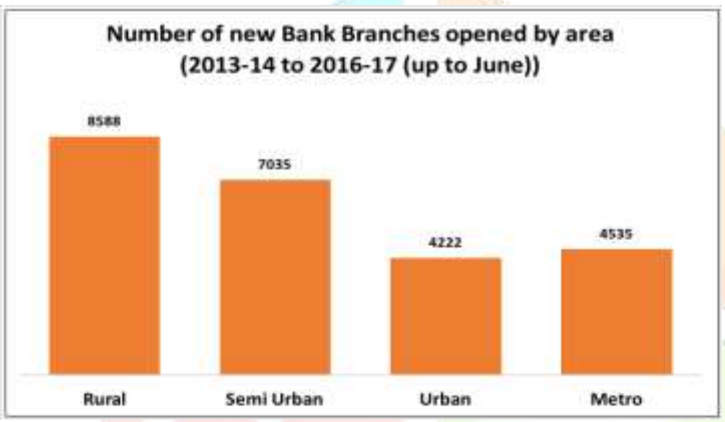
The Basic Savings Bank Deposit Accounts (BSBDAs) have gone up from 73 million in March 2010 to 469 million as on March 31, 2016. Under the PMJDY alone, until June 1, 2016, 220 million accounts have been opened with an approximate balance of ₹384 bn.

ICT and Financial Inclusion

Success of Financial Inclusion dependents predominantly on ICT. ICTs allow for greater financial inclusion, and the financial services sector is a primary driver of communications and network technology. It is striking to see the role that ICT and innovative business models have played in the explosive growth of financial inclusion. The degree of financial inclusion is likely to increase in the next few years since, (i) the absolute income levels of those at the bottom of the pyramid are rising, (ii) new technologies such as mobile financial services reduce transaction costs and increase outreach, and (iii) financial inclusion has become a policy priority at high global levels.

Developments in the field of Information and Communication Technology (ICT) have made a big impact on the technology adoption, particularly in the banking sector, and has changed the face of the industry. Banking sector is the backbone of any economy and a healthy inclusiveness of the population into the banking sector will facilitate an inclusive economic growth. It has not only enhanced the efficiency of the banking by strengthening the back end administrative processes and also front end operations thus bringing down the transaction costs for customers which has been the major focus of the ICT for financial inclusion. Today banks have centralized operations, using core banking solutions, network based computing and are using ICT for customer relationship management. The average cost per transaction through an ATM is Rs. 18 whereas the same for a bank branch is Rs 45. ICT has not just helped to reduce the transaction costs but it is acting as a tool to facilitate financial inclusion overcoming the barriers such as limitations of physical infrastructure and high cost of maintaining setup. Of the 47,443 bank branches in the rural areas over 73 per cent is constituted by regional rural banks and nationalised banks. Both SBI and nationalised banks have just over 30 per cent of their bank branches in rural areas, and over 40 per cent in urban areas. Private sector banks largely cater to the urban and semi-urban population with over 80 per cent bank branches concentrated in these areas. While the proliferation of bank branches in rural and urban areas is almost equal, the number of branches per lakh adults in rural and semi-urban areas is far less. This is obviously because a majority of the country, more than 80 per cent, resides in the rural and semi-urban areas. A total of 24374 new bank branches were opened by public and private sector banks between 2013-14 and 2016-17 (up to June). More than 35% (8588) of these branches were opened in Rural areas followed by 7035 in Semi-Urban and 4222 in Urban areas.

Chart 1



The experience of countries where digital payments are more widely available does suggest that this can be certainly a relevant and fast way of expanding access to financial services. A case in point is Africa's recent surge in mobile phone penetration looks promising for future progress towards greater financial inclusion (Faye and Triki, 2013). Technology developments such as telecommunication infrastructure and more advanced payment systems do not only reduce transaction costs but also expand reachable areas.

Review of Literature

Joseph J. and Varghese T. (2014) in their study have made an attempt to assess the current status of financial inclusion on the development of Indian economy by analyzing five state bank group and five private sector banks. The variables considered for the study were bank growth rate in terms of number of bank branches, offsite and onsite ATM,usage of credit cards and debit cards. The findings of the study suggest that the usage of debit card has increased tremendously throughout the study period and banks focused more on semi-urban areas and rural areas.The study also found that the number of people with access to the products and services offered by the banking system is very limited despite inclusive banking initiatives in the country.
Varun Kesavan(2015) in his study focused on the approaches adopted by various Indian banks towards achieving the ultimate goal of financial inclusion for inclusive growth in India and analysed pastyear's progress and achievements based on secondary data. The most important measure initiated by RBI is use of local

language in application forms and relaxing Know-Your-Customer (KYC) norms for small accounts with balances not exceeding INR 50,000. Some of the other notable measures are adoption of Information and Communications Technology (ICT), adoption of Electronic Benefit Transfer (EBT) and SHG Bank linkage model.

Chakraborty (2011) addressed the role of banks in promoting financial. Access to financial products are restricted due to lack of awareness about the financial products, unaffordable products, high transaction costs and products which are inconvenient, inflexible, not customized and of low quality. Banks are expected to tackle these supply side factors affecting financial inclusion. India’s financial inclusion is designed as a bank led ICT based model. Four basic products viz : pure savings account, variable recurring deposit account, kisan credit card and general purpose credit card are expected to be delivered through the above model.

Minaxi Rani developed a conceptual framework to analyze the impact of financial inclusion by investigating the availability of banking and financial services in rural areas. The author stated out that financial illiteracy, lack of awareness about the product, failure in reaching the poor, various regulations, financial literacy, income level, trust and non-availability of bank branches in rural areas are challenges of financial inclusion faced by banks. Financial services have been inaccessible for the rural people mainly due to the distance from the banks and lack of awareness about financial products and services.

Objectives

i)To study financial inclusion and its importance.

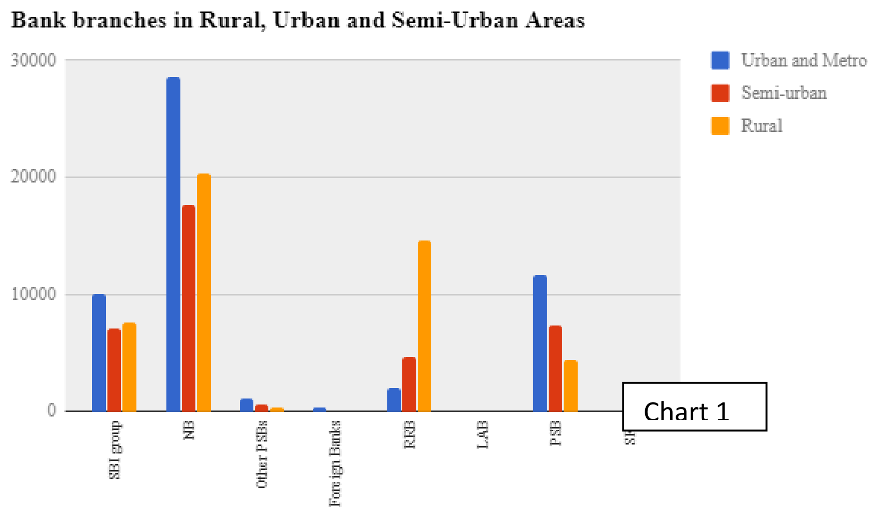
ii) To find out the approaches adopted by the Central Government and initiatives taken by banks and regulatory bodies to achieve financial inclusion.

iii) To examine the role of ICT as a tool of financial inclusion.

Research Methodology

The study is based on secondary sources of data/ information. The secondary data was mainly collected from Report of RBI, Ministry of Finance, Government of India, Reports on trend and progress of banking in India, Newspapers, Research Articles, Research Journals, E-Journals, Books and Magazines. Various websites were also used like RBI, Ministry of Finance, and Government of India (GoI) have been consulted in order to make the study an effective one.

Chart 2



(NB: Nationalised Banks, RRB: Regional Rural Banks, SFB: Sm all Finance Banks, LAB: Local Area Banks | Data: RBI)

Tools of ICT for financial inclusion

KIOSK banking is an important concept and basically developed for rural areas where there are less number of bank branches. Kiosks function with the support of leading banks in the private, public and cooperative sectors and using the shops as a touch-point for basic banking services such as cash deposits, withdrawals and remittances apart from micro-credit and insurance. Like the ordinary bank branches, the kiosks offer all the basic services of banking. SBI Kiosk transactions are bio-metrically secured; printed acknowledgment for each transaction is issued to the customer and has end-to-end process of account opening & transactions online. Micro savings and Micro remittance are done through No Frills Savings Bank Account. Kiosks are located in areas where financial inclusion is likely to lead to significant increase in transaction.

Mobile Banking

The RBI's 'Report of the Technical Committee on Mobile Banking' (2014, India), describes in detail the the various mobile banking channels offered such as SMS, USSD, IMPS and mobile banking applications etc from 2008. These range from voice and SMS channels to more sophisticated means such as software applications or web browsers. Mobile banking, which is catching up fast in the cities and rural areas, is helping the government to take a step forward towards fulfilling its aim of having one bank account for every household and also saving it crores of rupees by way of reduced transaction costs. Leveraging mobile phone penetration and mobile phone service, providers are introducing innovative methods of bringing the unbanked populations into the formal economy. India has witnessed rapid growth in mobile adoption and today more than 70 per cent of the population owns a mobile phone. The extensive reach of mobile phones offers an innovative low-cost channel to expand the reach of banking and payment services especially to the large section of rural mobile subscribers. It has advantages over traditional banking methods because it breaks down geographical constraints. Other advantages being immediacy, security and efficiency. Mobile banking also reduces the cost of financial transactions as it involves little or no infrastructure cost to the bank .The mobile acts as a branch of the bank by storing a database of customers. London-based professional services firm E&Y study finds that there is a large untapped rural population in India waiting to be covered under the financial net, which is only possible through mobile-based services. With over 90% of the villages in India without a commercial bank branch, and over 350 million rural mobile subscribers, there is a large (nearly 47%) untapped population to be covered under the financial net, the company said in its finding.

Chart 3

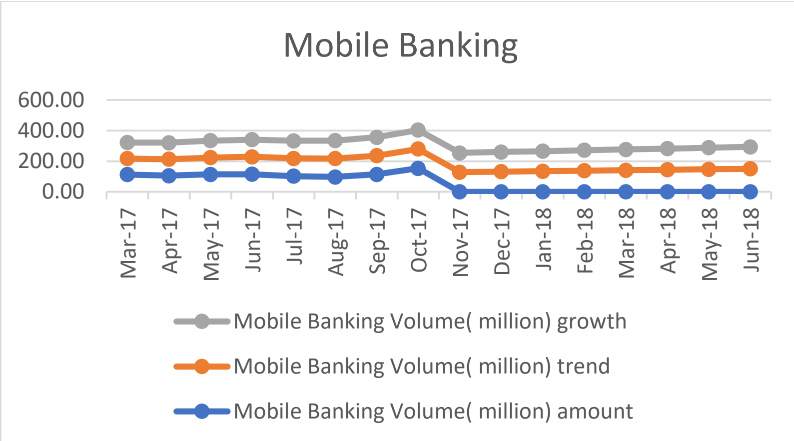
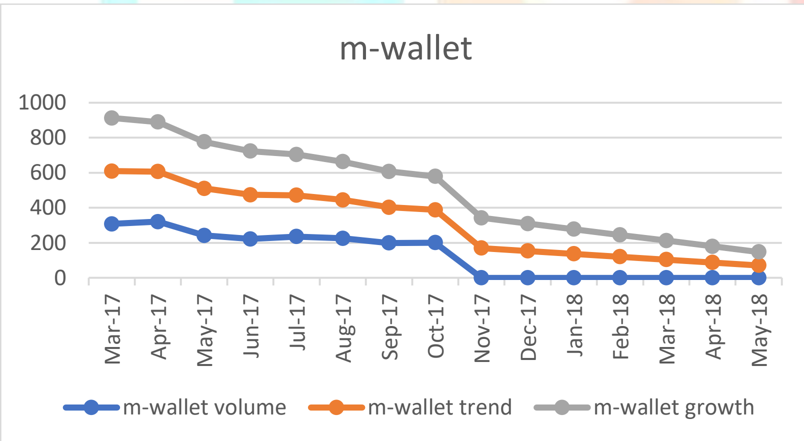


Chart 4



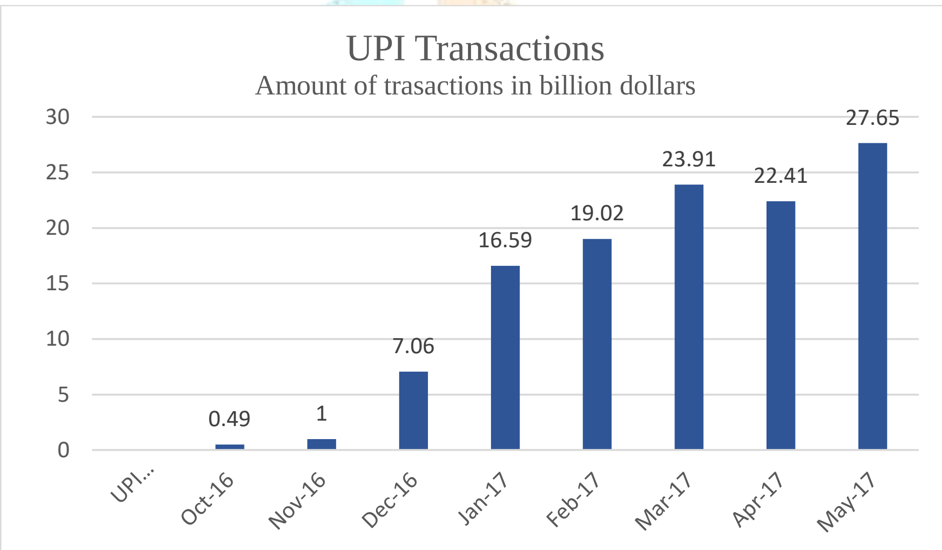
According to RBI data, wallet transactions, which had skyrocketed in December 2016, dropped subsequently with enough cash entering the market. Digital payments peaked again in March with 307 million transactions – an increase of 24% month-on-month. However, RBI data showed a similar trend in March 2016, when wallet transaction volumes had grown over 9%. With easing of the liquidity crunch, transaction volumes for overall retail electronic payments has seen a marginal dip in the past few months, suggesting a slow reversal in the usage of digital platforms. It is noted that there has been a gradual tapering in volumes M-wallets as well after the initial bounce. Going forward the projected trend analysis for the next eight months up to May 2018 as well as the growth projections for the same period show a downward trend indicating that transactions are likely to taper further. This can be a result of increased KYC requirements made mandatory for m-wallet transactions above Rs.10000 from April 2017. The other positive factors can be seen in the increasing usage of other electronic modes of payment.

UPI and BHIM

According to the latest NPCI data the Unified Payment Interface (UPI) transactions made a giant leap from 1,03,060 transactions in October, 2016 to 91,67,277 transactions in May 2017, recording an astonishing 89 times growth. Whereas value-wise, UPI recorded a growth of Rs. 0.49 billion to Rs. 27.65 billion, more than 56 times growth during the same period. According to RBI data, during April, 2017, total cash of Rs 2,171 billion was withdrawn from ATMs alone (no data of bank withdrawals is considered here), while the UPI transaction figure was just Rs 22.41 billion during the same period. That is, UPI-based transactions replaced cash by around 1%.

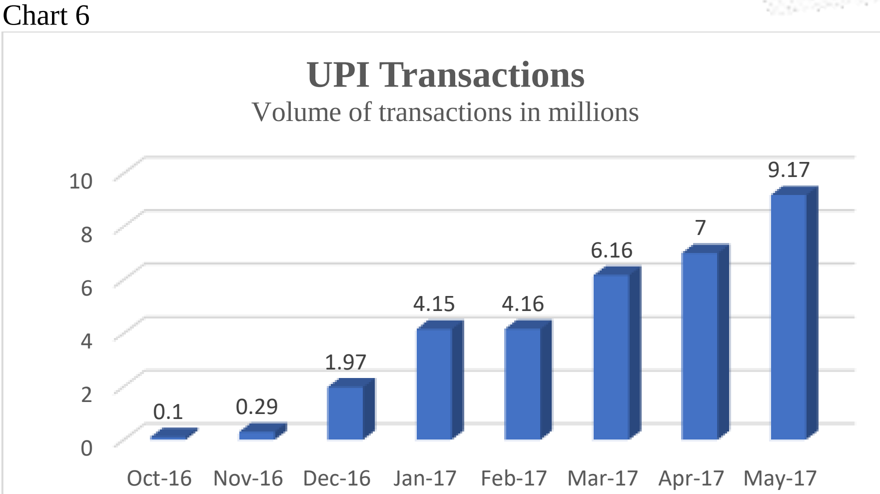
The graph below illustrates the extraordinary growth achieved by the UPI transactions, prepared based on RBI data.

Chart 5



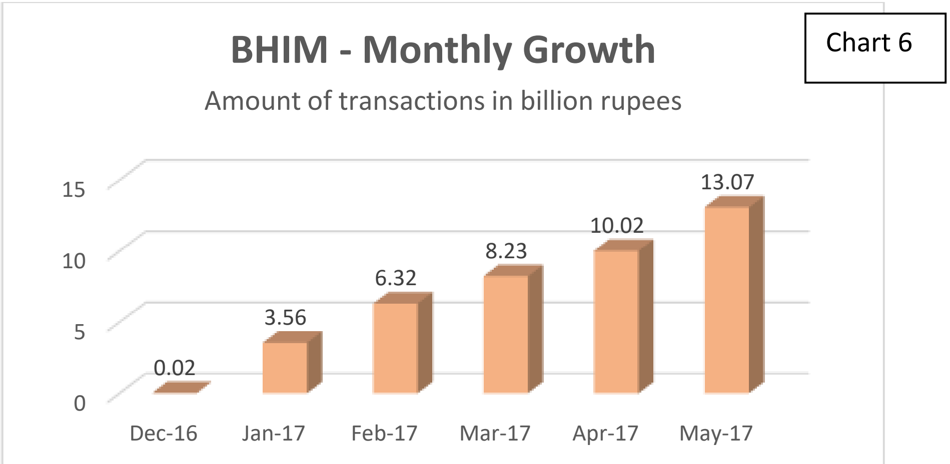
(Source: Monthly Bulletins for 2016, Reserve Bank of India.)

Chart 6



(Source: Monthly Bulletins for 2016, Reserve Bank of India.)

Chart 7



(Source: Monthly Bulletins for 2016, Reserve Bank of India.)

BHIM (Bharat Interface for Money) was introduced by Prime Minister Narendra Modi, at a digi dhan mela at Talkatora Stadium in New Delhi on December 30, 2016. It is a mobile app developed by NPCI, based on the UPI interface. BHIM recorded growth in transactions from 17,17,696 transactions in January, 2017 to 39,75,750 transactions in May, 2017, which is almost 2.3 times growth. Amount-wise, BHIM recorded a growth from Rs 3.56 billion to Rs. 13.07 billion during the same period.

Aadhaar Enabled Payment System (AEPS)

AEPS or the Aadhaar Enabled Payment System was built with a vision to extend banking and financial services to the unbanked pockets of the country, through a system called Micro ATM.The Micro ATM machine is identical to POS hardware, but comes with an in-built, keypad, printer and scanner to allow for authentication through biometric information (fingerprint). The basic range of services enabled through AEPS are cash deposit, cash withdrawal, payments, fund transfer, and balance enquiry. Since the machine supports payments, it can be very useful even at merchant locations and *'kirana stores'* for making easy, cashless payments. AEPS through the Micro ATM system allows people in remote areas to access to banking services without the need to set up a full-fledged branch. In addition, the sheer size of the Aadhar program with more than 88% (1.12 billion) of India registered under the program provides a solid base to build and scale solutions that can have widespread impact. Over 40 crore Aadhaar cards have been linked to bank accounts and this number is only going to grow, paving the way for digital, less-cash India.

Aadhar Pay App

The Aadhaar Pay App is a system that is specially designed for merchants and enables digital transactions through the Aadhaar identity system, via a simple smartphone app with no additional need for any hardware or POS equipment. Since the whole Aadhaar payment system is authenticated via biometrics, the app also functions only in conjunction with a fingerprint scanner. Once Aadhaar Pay app installation is complete, merchants can easily start accepting payments. The Aadhaar Pay app heralds an era where digital, cash-less transactions can be made without the need for even debit or credit cards, something that was never imagined before. From the cost and convenience point of view, the Aadhaar Pay app removes the need of investing in expensive POS equipment, completing all transactional requirements with just a single app. Registered Aadhaar identities along with the app on the merchant phone is all that is needed to process digital payments via Aadhaar, thus removing the multiple layers of friction that merchants and customers generally encounter.

Aadhaar Payment Bridge (APB)

Aadhaar Payment Bridge or APB is a centralised system that uses Aadhaar credentials to transfer welfare benefits from government agencies to individuals via Aadhaar linked bank accounts. APB links government agencies and banks on one side and beneficiary banks on the other side in order to ensure direct transfer of benefits to people. APB is one of the main channels to make disbursements for Direct Benefit Transfer (DBT) today and according to PTI, the disbursements via APB as of April 2017 were 43%, a steep rise from April 2016, where the disbursements stood at 21.57% of the total disbursements. Simple, yet powerful and transparent Aadhaar based payment solutions can prove to be great way to bring the remote, financially excluded segments of the country under the umbrella of digitized banking and financial services.

ATM

Cash is a dominant means of transacting in India. ATMs installed in remote areas can ensure that the holders of the PMJDY accounts can withdraw the subsidies credited into their accounts, through the ATMs. Banks can also enable video-teller services on the ATMs for financial education or solving customer queries. From the banks' perspective the ATM channel is an effective channel to service the customers coming under financial inclusion. While transactions through the mobile and internet have the potential and have already started making small contributions to the 'less cash economy' objectives of the Government and the RBI, the importance of ATMs cannot be ignored. ATMs can provide the fuel for accelerating the financial inclusion process. The Committee on Medium Term Path for Financial Inclusion set up by RBI has recommended the use of the Rs.2000 crore Financial Inclusion Fund managed by NABARD, for deploying ATMs in the semi-urban and rural areas. If implemented, it would surely enhance financial inclusion.

Jan Dhan Accounts

Pradhan Mantri Jan-Dhan Yojana is a government scheme launched by the government of India to provide easy access to financial services such as Remittance, Credit, Insurance, Pension, Savings and Deposit Accounts to poor and needy section of our society. This is a financial inclusion scheme which was officially launched on 15 August 2014. The main purpose behind the launch of this program was to ensure an easy financial access to everyone at national level. Some distinctive provisions include no minimum balance requirement for bank accounts, an accident insurance cover of Rs.1 lakh, banking services on non-smartphones (which were previously only available on smartphones), grievance-redressal mechanisms, and active State/ District-level monitoring.

Post-demonetisation, 23.3 million new accounts were opened under the Pradhan Mantri Jan Dhan Yojana (PMJDY), bulk of which (80 per cent) were with public sector banks. Of the new Jan Dhan accounts opened, 53.6 per cent were in urban areas and 46.4 per cent in rural areas. Deposits under PMJDY accounts increased significantly post demonetisation. The total balance in PMJDY deposit accounts peaked at ₹ 746 billion as on December 7, 2016 from ₹ 456 billion as on November 9, 2016 - an increase of 63.6 per cent.

Table 1: **Deposits under PMJDY: Number of Accounts** (in million)

Bank-Group	**As on November 9, 2016**			**As on March 1, 2017**			**Variation (March 1, 2017 over November 9, 2016)**		
	Rural	**Urban**	**Total**	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**
Public Sector Banks	114.3	89.3	203.6	122.1	100.8	222.9	7.8	11.5	19.3
							(6.8)	(12.9)	(9.5)
Regional Rural Banks	37.1	6.0	43.1	40.0	6.4	46.4	2.9	0.4	3.3
							(7.8)	(6.8)	(7.7)
Private Sector Banks	5.3	3.1	8.4	5.4	3.6	9.0	0.1	0.5	0.6
							(1.3)	(16.8)	(7.0)
Scheduled Commercial Banks	156.7	98.4	255.1	167.5	110.9	278.4	10.8	12.5	23.3
							(6.9)	(12.7)	(9.1)

Note: Figures in parentheses are percentage variations.
Source: Pradhan Mantri Jan Dhan Yojana website.

Rupay

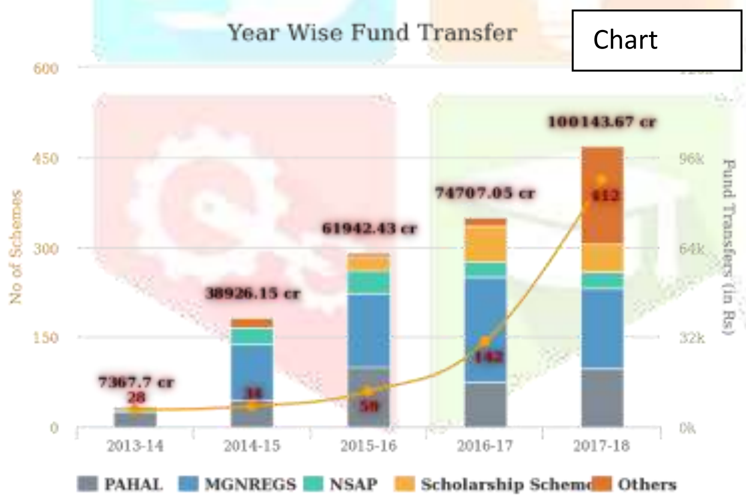
RuPay, a new card payment scheme launched by the National Payments Corporation of India (NPCI), has been conceived to fulfill RBI's vision to offer a domestic, open-loop, multilateral system which will allow all Indian banks and financial institutions in India to participate in electronic payments."RuPay", the word itself has a sense of nationality in it. "RuPay" is the coinage of two terms Rupee and Payment.

Swabhimaan

Swabhimaan" is a path-breaking initiative by the Union Government and the Indian Banks' Association to bridge economic gap between rural and urban India. This campaign is a big step towards socio-economic equality by bringing the underprivileged segments of Indian population into the formal banking fold for the first time. The vision for this programme is social application of modern technology.

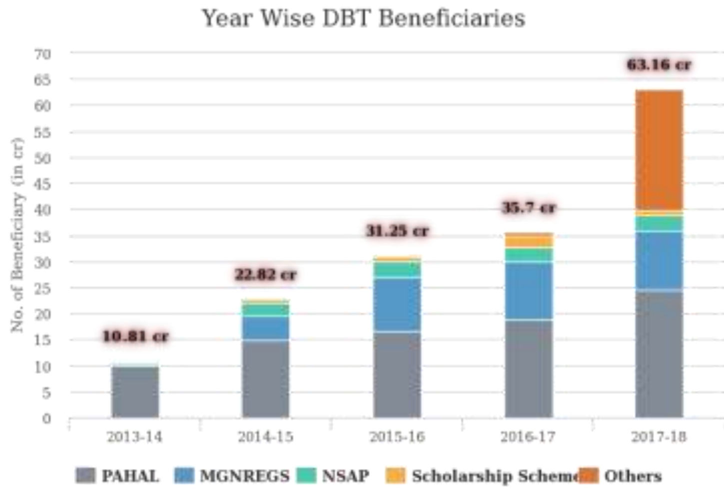
DBT(Direct Benefit Transfer)

A decision was taken in the meeting of the National Committee on Direct Cash Transfer held by Hon'ble Prime Minister that Direct Benefit Transfer (DBT) will be rolled out from 1 January 2013 in 43 identified districts. The purpose of Direct Benefits Transfer is to ensure that benefits go to individuals' bank accounts electronically, minimising tiers involved in fund flow thereby reducing delay in payment, ensuring accurate targeting of the beneficiary and curbing pilferage and duplication. 28 schemes were introduced for DBT rollout in 43 identified districts from 1st January 2013. The launch of DBT through Aadhar and bank account is one of the biggest development that activated and retained people in the newly opened account.



Source: NPCI website

Chart



Source: DBT website

EBT(Electronic Benefit Transfer)

EBT is used for routing social security payments through banking channels. With the emphasis on financial inclusion and extension of banking facilities in uncovered areas, the reach of banking services has increased considerably and will see a further growth. So, it has become necessary that a greater impetus is given to the Electronic Benefit Transfer (EBT). EBT brought in greater efficiency in the transfer of benefits and has also reduced pressure on the bank branches for dealing with these transactions. It has also reduced the requirement of multiple accounts for various schemes and has facilitated the process of financial inclusion.

Conclusion

Banks should make an effort for technological upgradation but that should precede the process re-engineering so that efforts in technology upgradation become more directed and banks should derive advantage of technology. Business Process re-engineering is required for effective implementation of ICT based Financial Inclusion and to achieve improved efficiency of internal operations like productivity, quality, speed and customer service as well as better business efficiency. New innovative projects have to be designed based on the requirement of customers type linked with technology.

The speedy growth of mobile telephony has brought improved connectivity and this, in turn, has contributed significantly to the socio-economic mainstreaming of rural India. However, intensive penetration of internet through speedy broadband is necessary for digital and financial inclusion at affordable cost, which will ensure overall development. Rural India has huge untapped potential. Financial inclusion and Digital inclusion are the same in the way as both involves two elements, one access and other awareness. It can be concluded that the Government of India and the Reserve Bank of India have been taking efforts to promote financial inclusion with the fundamental objective of providing financial services to the financially excluded Indian population. In addition, the sheer size of the Aadhar program with more than 88% (1.12 billion) of India registered under the program provides a solid base to build and scale solutions that can have widespread impact. Over 40 crore Aadhaar cards have been linked to bank accounts and this number is only going to grow, paving the way for digital, less-cash India. But banks require to implement an all-inclusive approach in creating more awareness about financial products, money management, debt counselling, savings and affordable credit by designing and organizing aggressive education cum promotion campaigns in unbanked parts of any region. It can also be observed that considerable progress has been made in implementing the reforms. The performance of the banks are also measured under their financial inclusion initiatives. The banks can simplify the registration process for customers to feed their mobile number for alerts as well as financial services considering the wide spread availability of mobile phones. The Reserve Bank can also conduct surveys across states to identify the issues and challenges and ascertain the extent of financial literacy. The findings will give a better understanding to the policy-makers of the demand-side requirements. Region specific issues can be identified by the rural branches and schemes can be devised for inclusion of different groups. A more focussed set of quantitative and qualitative indicators can be developed keeping in mind the access and usage dimensions of financial inclusion. Efforts should be made to align the indicators with the international standards. The banks can identify their concerns by leveraging ICT and design innovative products and service models to further enhance financial inclusion machinery.

References

1) Raghuram G. Rajan (2009), “A Hundred Small Steps - Report of the Committee on Financial Sector Reforms”.

2) Chakrabarty K.C (2013), “Revving up the Growth Engine through Financial Inclusion”, address at the 32th SKOCH Summit held at Mumbai.

3) Radhika Dixit and M. Ghosh (2013) “Financial Inclusion For Inclusive Growth of India – A Study”, International Journal of Business Management & Research, Vol.3, Issue 1, pp. 147-156.

4) Reserve Bank of India - “Annual Reports and ‘Report on Trend and Progress of Banking in India”, various issues.

5) Status of Microfinance in India: 2010-11, NABARD

6) M.M.Gandhi, Financial inclusion in India - issue and challenges, International Multidisciplinary Journal of Applied Research, 1(3), 2013, 12-20

7) Kaur Paramjeet (2014). A study on financial inclusion - Role of Indian banks in implementing a scalable and sustainable financial inclusion strategy. International Journal of Management, 5(11) ,103-110

8) D. R. K. Reddy, Financial inclusion: Road Ahead, The Journal of Indian institute of Banking & Finance, 2012, 40-45

9) Ashu (2014). Measures for financial inclusion in India. International Journal in Commerce, IT & Social Sciences, 1(1), 13 -24

10) Shah, P., & Dubhashi, M. (2015). Review Paper on Financial Inclusion-The Means of Inclusive Growth. Chanakya International Journal of Business Research, 1(1), 37-48.

11) C Rangarajan, Report of the committee on Financial Inclusion, 2008,1- 31.

12) Ramnath Pradeep, A. Garg, Financial Inclusion - Viable Opportunities in India, 4-39. Retrieved from: http://books.google.co.in/books?id=WcCXBT4AQeIC

13) N.Mehrotra, V. Puhazhendhi, G. Nair G, B. B. Sahoo, Financial Inclusion – An overview(Occasional Paper – 48), Department of Economic Analysis and Research & National Bank for Agriculture and Rural Development, Mumbai, 2009, 1-24.