
Conceptualization of the Effectiveness of Fintech in Financial Inclusion

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ABSTRACT

The research revolves around the buzz word “Fintech” (financial technology). The term Fintech is not new to the world but now it has gained greater weightage in financial system for becoming cashless and branchless in need of being cost effective. The major intention of research involves studying recent developments in Fintech, role of technology in micro finance delivery model, vital distribution technologies for financial inclusion and challenges arouse due to technology.

The present research paper is conceptualized and is based on secondary data collected from various resources like books, journals, newspapers, blogs and various websites. Fintech has extensive application in inclusive financial goal accomplishment. The shifting trend in financial system is quite evident. Conventional banking technologies, when applied innovatively, have played a significant role in reducing costs and increasing outreach and penetration of the microfinance model. Management Information Systems (MIS), Point of Sale technologies (POS), Automatic Teller Machines (ATMs), Interactive Voice Response (IVR) systems and smart cards are among the major technologies that have entered microfinance over the years from the formal financial sector. Transformation from brick and mortar driven financial institutions to mobile/e- banking is apparently beneficial in increasing outreach. Besides, vast implication of Fintech in financial inclusion there exist restrains too. Though the challenges are tough but it needs to be addressed along with the changing trend at the same pace.

The conclusion is theorized and constructed on secondary data; it could have been more valid if based on primary data. It contributes in adding understanding of public and policy makers towards role of technology in providing inclusion directed financial services. The study also reveals the effectiveness of Fintech in financial inclusion programs.

KEY WORDS: *Fintech, SHG, Business Correspondent, Digitization, Financial Inclusion.*

INTRODUCTION

Financial Technology (fintech) refers to the use of software and digital platforms to deliver financial services to consumers. These digital tools often disrupt established business models by creating new and efficient means of providing services. In the context of financial inclusion, fintech holds boundless potential. As new tools and technologies are developed, and old business models are challenged, financial services can be provided with greater speed, accountability, and efficiency. Access to financial products and services is becoming more attainable than ever, especially for consumers that live in rural locations or regions without the structures of a modern economy. Not only can fintech make these products and services more accessible, it can also make them more affordable by lowering the cost of doing business for the financial institution, a savings which can be passed on to the consumer. Club this with the near abundant availability of affordable mobile phones and cellular networks, and a world where no one is excluded from the financial system may not be that far out of reach. (ACCION)

In 2016, India was ranked 3rd among 55 countries across the world in having the most enabling environment for financial inclusion. Since 2009, the public and private sector have worked together to set up an ecosystem that enables the delivery of digital financial services to low income households across urban and rural areas. By using mobile phones, innovative digital financial services have been launched in more than 80 countries (GSMA 2014) to address the issues of exclusion. “Digital financial inclusion” can be defined as digital access to and use of formal financial services by excluded and underserved populations. Such services should be

suiting to the customers' needs and delivered responsibly, at a cost both affordable to customers and sustainable for providers. The report of the committee on Medium-term path on Financial Inclusion released by Reserve Bank of India (RBI) in 2015 recommended “a low-cost solution based on mobile technology can be a good candidate for improving financial inclusion by enhancing the effectiveness of 'last mile' service delivery”. (Sa-Dhan, 2017)

As far as the growth in microfinance in India is considered, it is undergoing rapid changes and discovering new challenges. Collecting money from scattered, remote clients, the cost of service delivery transactions in the “last mile”, effective information exchange at the institutional level, and effective growth management are just a few of the many challenges confronting MFIs. As a result, microfinance practitioners' motivations to use technology interventions are the same as those for any other similar business model: technologies' ability to speed up the flow of information and capital, automate transactions, control and analyze data, improve customer experience, reduce transaction costs, and increase efficiency and customer outreach. Technology potential has, therefore, led Microfinance stakeholders to believe that technology can have a profound impact on their operations. As a result, technologies' promise and potential is being explored by both technology providers and microfinance institutions. Though microfinance significantly differs in some ways from the traditional banking industry, traditional banking technologies, when applied innovatively in developing countries, have played a role in reducing costs and increasing outreach and penetration, of the microfinance model. Management Information Systems (MIS), Point of Sale technologies (POS), Automatic Teller Machines (ATMs), Interactive Voice Response (IVR) systems and smart cards are among the major technologies that have entered microfinance over the years from the formal financial sector. Across the four major stakeholder groups, technology can meet the process requirements and increase general information sharing, efficiency, and lower costs. (BMR, 2016)

RESEARCH OBJECTIVES

- I. To study the recent development in Fintech (financial technology).
- II. To highlight the role of technology in financial inclusion
- III. To learn about the key distribution technologies for financial inclusion.
- IV. To point out the inclusion barriers due to technology in microfinance industry.

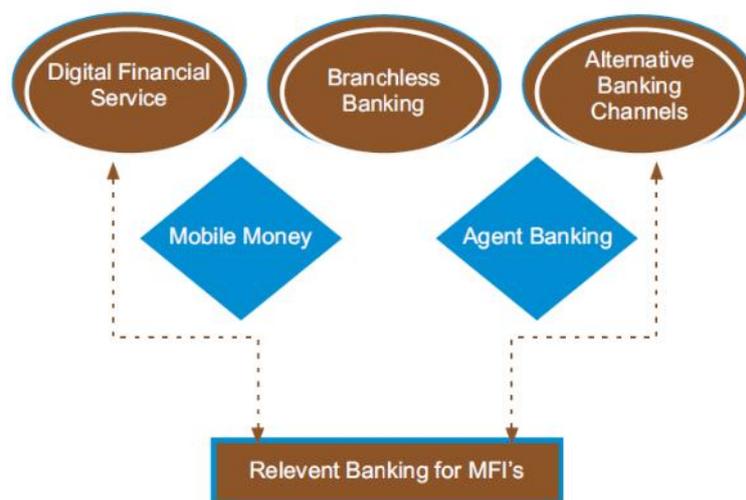
RESEARCH METHODOLOGY

The study is eventually based on secondary data gathered from various websites, blogs, journals and newspapers. The digitization project of NABARD and other microfinance industry initiatives have been studied to collect the conclusion relating to the growing need and arising restraints in the field of fintech application in financial inclusion.

KEY INITIATIVES IN THE DIGITAL ECOSYSTEM ACROSS GLOBE AND INDIA

Digital financial services such as m-PESA in Kenya and Caixa and Banco Portal in Brazil, have penetrated to the bottom of the income pyramid using different channels. Banco in Philippines also provides mobile channel services to expand their base into digital transactions for their customers majorly constituting farmers. The initiative taken in India to create public infrastructure in digital ecosystem such as Immediate Payment Service (IMPS), Unified Payment Interface (UPI) and National Unified USSD Platform (NUUP) enables digital transactions both online and offline to banks. An instrumental role of NPCI is observed in cementing the retail payment ecosystem by offering RuPay Cards, UPI and BHIM (Bharat Interface for Money) application allowing users to transact through UPI on featured phones. Other players, concentrating on serving the poor like Oxigen, Itz Cash, m-PESA, PaySe etc. have also shown a growth at front and back end. The entry of India Stack- a set of Application Program Interface (API) has encouraged presence-less, paperless and cashless service delivery for governments, business houses, startups and developers. (Sa-Dhan, 2017)

FIGURE-1. BASIC DIGITAL FINANCIAL ECOSYSTEM



Source: Sa-Dhan,2017. <http://www.sa-dhan.net/Resources/flyer1.pdf>

KEY ENABLERS OF THE DIGITAL ECOSYSTEM IN INDIA

In India, the key enabler of the digital ecosystem which has given impetus to the financial inclusion movement is the JAM Trinity which was first proposed in the Economic Survey of India in 2014-15, the overarching framework being: Jan Dhan for financial infrastructure, Aadhaar card for information infrastructure, Mobile technology for delivery infrastructure.

1. Universal Electronic Bank Account Access:

The Prime Minister's Jan Dhan Yojana, launched a massive drive to open no frill bank accounts for the unbanked. As of March 2017, the scheme has opened 278.4 Million accounts. Only 24% of these accounts remain zero-balance. (PMJDY Data).

2. Universal Identity Database (Aadhaar):

India maintains a universal electronic biometric identity database by issuing "Aadhaar" cards. So far, 93% of the population has Aadhaar cards that are linked to bank accounts and welfare programs. The National Payments Corporation of India (NPCI) launched technology systems which uses Aadhaar number as a central key for electronically channelizing the Government benefits and subsidies.

3. Improving Last Mile Access to Financial Services:

Reserve Bank of India licensed 11 payment banks, entities mandated to facilitate electronic payments. The licenses were awarded to mobile networks, the national postal service and mobile wallets that were expected to leverage their wide geographical networks. RBI also licensed small finance banks that are required to provide the entire spectrum of banking services to the unbanked sector including small businesses and employees in the unorganised sector. (Sa-Dhan, 2017)

NABARD'S DIGITAL PUSH TO FINANCIAL INCLUSION IN RURAL INDIA

NABARD, with a clear focus on pushing digital banking, has begun to support issuance of EMV chip and PIN based Cards by Co-operative Banks and RRBs. A maximum support of Rs.25.00 will be provided to these rural financial institutions within a limited period ending 30 June 2017. Alongside, with a view to increasing the card acceptance infrastructure in rural areas and enable a less cash payment ecosystem, it has been proposed to extend support for deployment of PoS terminals in one lakh villages in Tier 5 and Tier 6 areas, subject to a cap of 2 PoS devices per village under Financial Inclusion Fund.

NABARD- PROJECT E-SHAKTI

EShakti or Digitisation of SHGs is an initiative of Micro Credit and Innovations Department of NABARD for digitisation of all Self Help Group (SHG) in the country. To begin with, 2 districts Ramgarh (Jharkhand) and Dhule (Maharashtra) will be covered. The need of digitisation of records of SHGs has been felt for quite some time due to irregularities and delay in maintenance of books of accounts. Transparent and proper maintenance of records of SHGs will facilitate in nurturing and strengthening of SHGs. Digital empowerment will help in bringing SHGs on a common web based e-platform by making book keeping easy for low literacy clients. This will help in promoting national agenda of Financial Inclusion and pave the way of credibility of SHG data which can later be used by Credit Bureaus to reduce the issues related to multiple financing by banks. The progress of the project as on 2017 is depicted in table 1.

TABLE1. PROGRESS OF PROJECT E-SHAKTI

Number of Villages covered	18951
Number of Groups covered	130095
Number of members covered	1498274
Number of participating banks	179
Number of partner SHPIs	91
Number of women covered	1466587
Number of Aadhaar members	1211984
Number of members having mobile phones	515883

Source: NABARD, <https://eshakti.nabard.org/Default.aspx>

BENEFITS OF DIGITISATION OF SHGS

The advantages of implementing technology for the digitization of SHGs to increase the outreach are as under:

- J Main-streaming of SHG members with financial inclusion agenda enabling access to wider range of financial services;
- J Digitisation of SHG accounts, will increase bankers' comfort in credit appraisal and linkage of SHGs;
- J Automatic and accurate Rating of SHGs will be available online for banks;
- J Mapping of persons not covered under Aadhaar platform and bringing them under Aadhaar fold;
- J Ease of transfer of social benefits and Direct Benefit Transfer (DBT) through Aadhaar linked accounts and convergence with other Government benefits;
- J A comprehensive information base and robust MIS can be developed about poor community covered, which may facilitate suitable interventions and convergence of other programme for social and financial empowerment;
- J It will help in identifying suitable interventions and support for proper nurturing and strengthening of SHGs.

CHALLENGES IN DIGITISATION OF SHGS

- J Convincing rural community, stakeholders including banks for full participation;
- J Sourcing of information from poor database and records;
- J Large scale training and capacity building of SHGs, SHPIs and others involved in implementation of the programme;
- J Capture of field level information from SHGs in a limited time and periodic upload of savings and credit details of SHGs;

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-) Cooperation from banks;
 -) GPRS connectivity;
 -) Initial funding of the pilot is being met by NABARD. There will be a huge fund requirement for scaling this pilot from the present level to 74 lakh SHGs across the country.

FINTECH IN BUSINESS CORRESPONDENT (BC) MODEL

The Reserve Bank of India's guidelines regarding BCs allows flexibility to banks regarding the use of technology for financial inclusion. This has resulted in innovations to provide inexpensive and efficient technological solutions. Today a vast array of technology, including hand-held mobile devices, Internet, and mini-ATMs and kiosks, is available. However, in India there are challenges relating to electricity and Internet connectivity in remote areas. As a result, mobile phone technology has emerged as the most effective and prevalent solution. Most of the banks use General Packet Radio Service (GPRS) enabled mobile-based online applications. Portable printing devices are synchronized with mobile handsets. Data are transferred to the bank's intermediary server in real time. Internet security features include a default GPRS securitycheck, an HTTPS-enabled database, and log-in password security check. Each of the BC's customers is given a biometric smartcard, which makes identification easier and more secure. With the use of mobile technology, banks can reach vast geographic areas from a remote location. Technology, innovation, and knowledge have become the key drivers of economic growth today (indianresearchjournals.com).

BENEFITS OF DIGITAL FINANCIAL SERVICES FOR THE MICROFINANCE SECTOR

-) The MFIs can offer multiple products efficiently using digital finance. Thus, the MFIs can offer complementary financial and nonfinancial products and services which they might not have been able to offer otherwise. MFIs have opportunities to leverage markets where mobile services are widely used to improve on large innovative technology projects and delivery channels.
-) There is expected to be an increase transparency and security- by moving cash to electronic streams, MFIs have the opportunity to be more transparent, reduce fraud risks, provide secure options to clients and field officers and mitigate cash risk as the sector has been traditionally cash intensive.
-) MFIs can improve operational efficiency, reduce costs, provide regular alerts (for repayment, new products etc.) to clients without any additional cost; better serve the existing customer base.
-) MFIs can incorporate mobile banking into their business processes (e.g., loan disbursements, loan repayments, savings, and insurance) or act as agents of mobile money providers.
-) Other benefits include reducing branch congestion, improving the time spent by field officers in the field –e.g. less time in cash collection if done by mobile phones and more time left for loan monitoring and/or client education.
-) Business efficiency can help the MFI sector to make better business decisions in a growing digital ecosystem. They can focus on improvement and introduction of new business models, employ competitive personnel, strengthen processes and infrastructure and experience in partnership to improve their functionality in the competitive environments and to reach their objective of financial inclusion.

CHALLENGES FOR MFI'S TO IMPLEMENT DIGITAL FINANCIAL SERVICES STRATEGIES

-) Possible changes in modus operandi of the MFIs, technology instability and budgetary constraints may prevent MFIs from experimentation.
-) Personalized human touch with the clients may have an impact on the mode of faceless transaction.
-) Socio economic status of the MFI clients and the geographies may pose challenges to the decision for MFIs to digitize.
-) Lack of understanding among MFI practitioners on value proposition, appropriate technology, and investment decisions.

-) Client Protection is a major concern with digitization as associated risk factors such as fraud, misuse of platform, failure in transactions etc. would crop up.
-) There are concerns over product suitability for different kind of customers across geographies.
-) MFI's do not have adequate regulatory support and set of guidelines on usage and storage of client data.
-) The ecosystem still has not moved onto paperless documentation, such as electronic receipts and acceptance of digital agreements. (Sa-Dhan)

RECOMMENDATIONS

The recommendations made by Sa-Dhan to overcome the challenges faced by Microfinance Industry to sustain in digital environment are as under:

-) MFI's needs to consider the cost benefit analysis of converting physical cash to digital money.
-) The usage and uptake need to be supported through adequate face-to face demonstrations for products and transactions in addition to interactions with customers and adopt the concept of "Phygital".
-) Digital literacy would be an integral aspect of digitizing MFI's to shape the behavioral patterns of the customers. Clients would need handholding and capacity building support until they get on board with the digital platform.
-) The major investment decision of an MFI looking to digitize is whether to invest in in-house infrastructure or outsourcing--i.e. making a capital investment or an operational investment.
-) These depend on whether the MFI has lower or higher resources. While most MFI's undertake process digitization, transaction digitization is less common. Most investment decision for MFI's would be determined by their competency and availability of resources.
-) Product diversity, inclusion of vernacular language, quality of backend data and turnaround time can help to upgrade the client base.
-) Client Grievance Redressal mechanism should be in place.
-) Better tracking of loan disbursement and utilization of loans by the beneficiaries.
-) Risk factors can be mitigated by introducing a grading system for level of data security needs to be put in place, e-auditing needs to be customized and administered regularly. Applications need to be self-audition to ensure a smooth transition of the digitization of services.
-) There needs to be a clear set of guidelines from RBI which will help in regulating use of customer data.
-) Enhancing the ecosystem of the payment space for rural and semi-urban customers by improving physical infrastructure, connectivity.
-) Enhancing customer awareness and education on digital payment forms.
-) An enabling environment need to be provided to RRBs, cooperative banks and MFI's to perform digital transactions in addition for Fintech to interact in this space. (Sa-Dhan)

CONCLUSION

India has a vast potential for achieving financial inclusion by implementing Fintech. The current scenario is evident about the effectiveness of the Fintech. Although there are challenges faced at both demand side and supply side. The government's efforts are to facilitate the supply side with the technology led environment and on the other side the efforts are being made on the demand side for accepting and assessing the Fintech in order to get included.

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