

## FINANCIAL INCLUSION: THE ROLE OF FINTECH AND DIGITAL FINANCIAL SERVICES IN INDIA

VINAY KANDPAL\* AND RAJAT MEHROTRA\*\*

### Abstract

*The cashless transaction system is achieving its growth day by day, as soon as the market becomes globalized and the development of the banking sector more and more the people moves from cash to a cashless system. The cashless system is not just a necessity but also a need of today's order. Over the past few years, efforts to drive financial inclusion in India have delivered mixed results. Access to bank accounts has increased dramatically, driven by a strong policy and regulatory push. However, the usage of these accounts and the uptake of formal financial services beyond savings accounts has remained exceptionally difficult. The recent initiatives by the Government around demonetization and the move to cashless transactions will further drive innovation and new entrants into the Industry. The amendments to the banking act clearly demonstrate the Government, RBI and Banking institutions intent to ensure stable growth of the economy by ensuring a healthy BFSI. Building Trust within the industry will be paramount to India's further growth. Newer technologies pose different challenges to the banks and regulators, with security being a key concern. With cyber-frauds on the rise, the regulators and the bankers would have to come together to ensure control mechanisms are in place. A strong push from the Government of India has given the non-banking population easy access to financial products. Payment organizations have demonstrated the advantages of mobile-led solutions and the traditional banking organizations are now trying to make inroads into rural India by launching innovative mobile-based banking solutions. With support from the government, large technology companies are using new ways of reaching out to the rural masses and educate them about the various financial products, thus ensuring that their hard-earned income is rightly invested.*

**Keywords:** Financial Transactions, Digital Apps, Rural Population, JEL  
**Classifications:** G

### INTRODUCTION

With the progress of the Indian economy, especially when the focus is on the achievement of sustainable development, there must be an attempt to include the

---

\* Assistant Professor, University of Petroleum & Energy Studies, Dehradun, Email: vkandpal@ddn.upes.ac.in

\*\* Assistant Professor, Lal Bahadur Shastri Institute of Management & Technology, Bareilly, Email: akki06jr@gmail.com

maximum number of participants from all the sections of the society. The lack of awareness and financial literacy among the rural population of the country is hindering the growth of the economy, a majority of the population does not have access to formal credit. This is a serious issue for the economic progress of the country. In order to overcome such barriers, the banking sector emerged with some technological innovations such as automated teller machines (ATM), credit and debit cards, internet banking, etc. Though the introduction of such banking technologies brought a change in the urban society, a majority of the rural population is still unaware of these changes and is excluded from formal banking.

Fintech is a new term and has been gaining popularity since early 2015. This term is usually confused for being a strictly technological and tech-savvy term. When in reality this term is the merger of financial services provided by various clients with the developments and advancements in the technological arena.

The basic point is that Fintech developed more as a necessity out of the developments in the areas of financing services and the rapid growth of the technology that due to the need of such services. The merger of technology with financial service here means that various applications and platforms are being built and developed to provide you with an ease of using financial services including applying for business loans, online personal loans, etc. easily.

## **Review of Literature**

**Development Research Project (2013)** attempted to understand the financial needs of poor in long-term and short-term by exploring, how the surplus fund is used to meet short-term, long-term and emergency requirements to develop strategies for financial inclusion and designing financial products. The rural households follow their own strategies of cash management for their daily expenditure and thereby taking advantage of this, several informal financial institutions and instruments are serving this section of society. In this context, the report examines 107 households of Ernakulam district in Kerala, as was suggested by the RBI. The aim of the study was to understand the nature of the cash flows and outflows of a sample of poor households in the district. The project also analyzed the cash flow management strategies of the poor households. Further assessment was done to analyze the structure of the financial assets and liabilities of the poor households. The project focuses on the saving patterns of the poor households and examined factors responsible for the extent of dependence of the poor on formal and informal financial instruments /institutions for savings and credit. Two methods were used in this project for collecting data. First, the sample of poor household using questionnaire and keeping a track using financial diary method of the same sample. Second, the analysis provided emphasis on rural and urban

**CRISIL (2013)** measured the extent of financial inclusion in India in the form of an index. It makes use of the non-monetary aggregates for calculating financial inclusion. The parameters used by the CRISIL Inclusix took into account the number

of individuals having access to various financial services rather than focusing on the loan amount. The three parameters of the index were the branch, deposit and credit penetration. These parameters were updated annually and based on the availability of data; additional services such as insurance and microfinance were added. The key findings of the report were as follows: one in two Indians has a savings account and only one in seven Indians has access to banking credit; CRISIL Inclusix at an all-India level stood at a relatively low level of 40.1 for 2011 (on a scale of 100). In short, CRISIL gave ground-level information regarding the progress of financial inclusion in the country's rural and in urban areas.

**RBI (2014a)** focused on the provision of Financial Services to small businesses and low-income households. Among the main motives of the committee included designing principles for maximum financial inclusion and financial deepening and framing policies for monitoring the progress in the development of financial inclusion in India. Thus, in order to achieve the goal of maximum financial inclusion and increased access to financial inclusion the committee proposed the following measures: provision of full-service electronic bank account; distribution of Electronic Payment Access Points for easy deposit and withdrawal facilities; provision of credit products, investment and deposit products, insurance and risk management products by formal institutions. The main findings of the report highlighted the following key issues. First, the majority of the small businesses were operating without the help of formal financial institutions. Second, more than half of the rural and urban population did not have access to the bank account. Third, savings in terms of GDP have declined in 2011-12. To address these issues, the Committee recommended that each individual should have a Universal Electronic Bank Account while registering for an Aadhar card. The committee also proposed for setting up of payments banks with the purpose of providing payments services and deposit products to small businesses and low-income households. In addition, banks should purchase portfolio insurance, which will help in managing their credit exposures. Further, the Committee recommended for setting up of a State Finance Regulatory Commission where all the state level financial regulators will work together. For the interest of the bank account holders, the committee recommended for the creation of Financial Redress Agency (FRA) for customer grievance redress across all financial products and services, which would coordinate with the respective regulator.

**RBI (2014b)** presented a report to study various challenges and evaluate alternatives in the domain of technology that can help the large-scale expansion of mobile banking across the country. The report divided the challenges into 2 broad categories – Customer enrollment related issues and Technical issues. Customer enrollment related issues include mobile number registration, M-PIN (mobile pin) generation process, concerns relating to security as a factor affecting onboarding of customers, education of bank's staff and customer education. On the other hand, technical issues include access channels for transactions, cumbersome transaction process, and coordination with MNOs (Mobile Network Operators) in a mobile banking eco-system. The report has a detailed comparison of four channels of mobile

banking - SMS (Short Message Service), USSD (Unstructured Supplementary Service Data), IVRS (Interactive Voice Response System) and Mobile Banking Application, and evaluates each one of them based on accessibility, security, and usability. To resolve the different problems identified, the report suggests developing a common mobile application, using SMS and GPRS channels, for all banks and telecom operators. The aforementioned application should enable the user to perform basic mobile banking operations such as enquiring his/her account balance, transfer and remittance of money. The application is expected to be developed in such a way that it provides a simple menu driven, interactive interface to the user. Such an application can be developed by the combined efforts of telecom operators and banks. The application can be embedded on all new SIM cards so that any person buying a new card has a pre-installed application. For customers already using SIM cards, the application can be transferred “over the air” (OTA) using a dynamic STK (SIM Application Tool Kit) facility.

### **Issues Affecting Fintech in India**

Although India has been rising to match the other countries with their Fintech developments, it is clear that India is quite behind when compared to them. India has a huge market for growth in this sector. However, there are many factors, which make it hard for the Fintech sector in this country to rise and be equal to the more developed markets and economies.

Some of these factors are discussed below:

**Low Internet Penetration:** For Fintech sector to grow in a population as big as India’s population, we need a good connectivity. However, as we know, India does not have that. The majority of the population is still very new to the concept of smartphones and other gadgets; therefore, the connection via the internet is still in the developing stage.

**Bank Accounts:** India has a huge population and is a great economy for the Fintech sector, but sad as it sounds the majority of India’s population lives in rural areas or is below the poverty line. In addition to this, there are many people who do not even own bank accounts, which makes it hard for Fintech to grow in the Indian economy.

**An absence of Hardware and More Hands:** The absence of the right hardware and the right information makes it rather hard for this new sector to grow. The growth of this sector largely depends upon the understanding of the new language and put that into work. The absence of the easy to understand language for the local people has been causing a lot of trouble for the sector. This not only leads to fewer hands and minds to work in the given sector but also reduces the population that understands the working of the new Fintech sector.

**Lack of Funds:** Majority of the Fintech sector applications are the children of start-ups. In addition, it is common knowledge that start-ups usually are not able

to raise enough funds for their projects. A lack of resources, difficulty in getting business loans is as bad as a lack of idea. India could grow into a great market for Fintech, but the present scenario with the funds and money does not give enough space for this sector to grow up to its potential.

Although India has a huge population, which favors the growth of the new and budding Fintech sector, the economy and the present scenario of the country is not favorable for its growth. The major difference between the global Fintech sector and the Indian industry is the presence of various factors that hamper the growth of Fintech in India, as discussed earlier. India may be able to stand shoulder to shoulder with the more developed economies when all these factors as mentioned will begin to disappear. The primary requirement for any Fintech start-up to settle will be a consumer base, a high internet penetration, and more minds to work on the project.

India is growing at a fast pace, and due to many changes in the economy, a great revolution is coming in the financial sector with the emergence of Fintech. As the need for business loans rises, more and more people are coming to terms with the idea of digital lending. The market is still new, and our economy is still growing. Therefore, in the coming years, this sector will grow as well.

Innovative business models have enabled fintech companies to emerge as a catalyst for growth for SMEs, not just locally but globally too. Fintech companies are thus becoming a 'one-stop shop' for the financial needs of small enterprises. Online lending platforms (as opposed to sub-sectors such as payments or wealth management) are seeing several new entrants in the market offering novel financial products. The potential impact of fintech's efficient lending processes can be measured in sever

According to McKinsey, a substantial majority (about 75%) of fintech lenders are focusing on retail banking, lending, wealth management, and payment systems for MSMEs. The numbers look promising despite the ineligibility for classification as direct or indirect finance to MSE sector that takes all such loans to NBFCs out of the 'priority sector classification.' It isn't surprising then that MSMEs are turning away from traditional, collateral-chasing banks. Even the investor sentiment is positive vis a vis the touted success of Fintech.

### **Future Prospects of Fintech towards Financial Inclusion**

The importance of MSMEs as a major driver of the economy and a critical employment generator cannot be overstated. Moreover, there is a large market of unserved/underserved populations that Fintech can reach out to. This game changer for inclusion has only reached elite customers in Tier-I and Tier-II cities of India so far. The need of the hour is to innovate for the mass market and address challenges such as lack of financial and digital literacy and restrictive regulatory policy. In addition, being able to sustain relations with SME customers despite delinquencies is an onus that rests entirely on a Fintech organization. The problem of delayed

payment in financing, more so in the MSME space, tantamount to being an occupational hazard that cannot be done away with. However, looking at the bigger picture, ensuring continuity of partnerships, and staying resilient is the key. In addition, there is substantial interest from foreign investors in the Indian Fintech space, wanting to capitalize on the country's steadily growing GDP. Initiatives such as 'Digital India', 'Make in India', the recent demonetization drive and the push to make India a cashless economy are laying strong foundations for synergies between Fintech and MSMEs.

### **Technology and the Financial Services in the Indian Market**

Understood simply, Fintech refers to the scope of financial services that can be available on digital platforms. This new disruption in the banking and financial services sector has had a wide-ranging impact.

#### **Scope for Growth in India**

Fintech service firms are currently redefining the way companies and consumers conduct transactions on a daily basis. This is why global investments into Fintech ventures have been increasing at record speed – tripling to US\$ 12.2 billion in 2014 from US\$ 4.05 billion in 2013, and reaching US\$ 19.1 billion in 2015. In India, the scale has been much smaller but at similar growth rates – investment in India's Fintech industry grew 282 percent between 2013 and 2014 and reached US\$ 450 million in 2015.

Additionally, India has a large untapped market for financial service technology startups – 40 percent of the population is currently not connected to banks and 87 percent of payments are made in cash. With mobile usage expected to increase to 64 percent in 2018 from 53 percent currently, and internet penetration steadily climbing, the growth potential for Fintech in India cannot be overstated. Moreover, by some estimates, as much as 90 percent of small businesses are not linked to formal financial institutions. These gaps in access to institutions and services offer important scope to develop Fintech solutions (such as funding, finance management) and expand the market base.

#### **Disruptive Potential in the Traditional Finance and Banking Sector**

Fintech firms are breaking new ground in the formal finance sector through the innovative and dynamic use of technology in the lending process. For instance, while traditional banks (around 100) and NBFCs (around 1100) in India use technology to simply calculate credit scores, Fintech ventures use machine learning algorithms and alternative data points such as social media footprints, call records, shopping histories, and payments to utility service providers to increase efficiency and provide greater access to credit. The turnaround time is also much faster for the approval and disbursement of loans by Fintech firms despite several banks (State Bank of India, ICICI, HDFC, and Axis bank) digitizing and speeding up these processes markedly.



### Challenges and Opportunities for Fintech Expansion

While digital finance firms have benefited from the government's pro-startup policies and flexible regulatory conditions imposed by the Reserve Bank of India (RBI), formal institutions possess an established infrastructure and legacy that is not easily replaceable. Fintech startups need to instill greater confidence among Indian customers, already known for being conservative in their financial preferences. Figuring out how to market to their needs and influence financial behavior are some of the biggest challenges, as is setting up a strong and responsive regulatory infrastructure to keep pace with the speed of technological innovation.

On the other hand, traditional banking and financial institutions can leverage their existing customer base and adopt digital products that nurture strong financial relationships while improving service efficiency and broadening access to meet changing needs. The disruptive potential of Fintech firms can provoke the much-needed modernization of the traditional sector, reducing costs in the process and increasing the size of the banking population.

Responding to these opportunities and challenges, banks like HDFC and Axis have launched mobile phone applications to ease digital transactions; Federal Bank announced a partnership with Startup Village to develop innovative banking products; U.K. giant Barclays is set to operationalize its fifth global Fintech innovation center that will be located in India; and Goldman Sachs Principal Strategic Investments Group (GSPSI) is looking to invest in Bengaluru's Fintech startup scene.

Thus, the growth prospects in technological innovation may not necessarily produce a mutually exclusive relationship between traditional institutions and Fintech firms in India.

### The Right Combination of Incentives, Policies, and Regulation

Initiatives by the RBI and parallel government efforts have focused on fostering financial inclusion. This has meant encouraging competition and innovation in India's nascent Fintech sector on a more or less even playing field. This has allowed both online and offline solutions to emerge and has created a safer financial system with far-reaching access.

**Reserve Bank of India:** The RBI recently set up a multi-disciplinary committee to study the Fintech business in India. The goal is to understand the risks involved and the emergence of new models and assess how the banking system could then adapt and respond to them. The RBI has so far promoted the Unified Payments Interface and the Bharat Bill Payments System, as well as digital payments, P2P lending, and the use of automated algorithms to offer financial advice. Moreover, the RBI has granted licenses to 11 Fintech entities to establish payment banks that provide savings, deposit, and remittance services.

**Government Schemes:** These include the Jan Dhan Yojana, Digital India program, and Aadhar's Unique Identification system that have provided important enabling platforms for technology innovators. In addition, e-governance systems promoted by the current government facilitate transparency by removing the involvement of intermediaries. The removal of surcharges on electronic transactions, tax benefits for consumers and businesses using e-payments, and changes in authentication requirements are other examples of the government's efforts to encourage the growth of a Fintech ecosystem in India.

**Fintech Startup Sector:** This is probably the greatest empowering incentive towards the expansion of Fintech ventures in India. An encouraging regulatory environment has enabled the launching of 174 Fintech startups in 2015 alone, as per data analytics company, Traxcn. As mentioned earlier, several national and international banks and investment groups are also investing in India's Fintech startups and funding Fintech solutions.

**Observations:** The digital and technological revolution transformed business operations across all industries, and the financial and banking sector is no exception. What is heartening is that the Indian government and regulatory institutions have in effect promoted an entrepreneurial rather than obstructive climate for Fintech in India. However, policies and governance will need to match the speed of innovation in this sector, particularly to ensure secure and transparent growth.

**Conclusion:** Normally customer's confidence and trust in traditional banking system will make customers less likely to adopt new technologies. New technologies will not be successful until customers are satisfied with privacy and security aspects. It also requires some time to earn confidence among the customers even it is easier and cheaper than the traditional methods.

### *References*

- Agarwal, Parul (2014), "Financial Inclusion in India: a Review and Initiatives and Achievements", IOSR Journal of Business and Management, Volume 16, Issue 6, June.
- Chakrabarty K.C. (2011), Keynote address on Financial Inclusion, Mumbai, September.
- Chakrabarty, K.C. (2012), "Financial Inclusion: Issues in Measurement and Analysis", Keynote address, BIS-BNM Workshop on Financial Inclusion Indicators, Kuala Lumpur, November.
- CRISIL (2013), "Inclusix Financial Inclusion Index", June.
- Euromonitor International (2010), "Emerging Focus: Emerging market economies drive global growth in mobile connectivity", November.
- Gupta, Sanjeev Kumar (2011), "Financial Inclusion – IT as an enabler", RBI Occasional Paper, Volume 32, No. 2.
- Government of India (2008), "Committee on Financial Inclusion" (Chairman: Dr. C. Rangarajan).
- India Post (2012), "Book of Information".
- India Post (2013), "Annual Report".
- Joshi, Deepali P. (2014), "Strategy Adopted For Financial Inclusion", Speech, Workshop of Government of Madhya Pradesh, New Delhi, January.



- K., Divya (2014), "A Study On Impact Of Financial Inclusion With Reference To Daily Wage Earners", *Journal of Business Management & Social Sciences Research*, Volume 2, No. 6, June.
- Kamath, Rajalaxmi (2008) "Ramanagaram Financial Diaries: Loan repayments and cash patterns of the urban slums", IIMB Working paper 268.
- Ministry of Consumer Affairs, Food and Public Distribution (2011), "Number of Ration Shops in the country", June.
- Planning Commission (2009), "Report on Financial Sector Reforms" (Chairman: Dr. Raghuram G. Rajan).
- Radcliffe, Dan (2012), "A Digital Pathway to Financial Inclusion", Bill & Melinda Gates Foundation.
- RBI (2005), "Report on Rural Credit and microfinance" (Chairman: H.R. Khan).
- RBI (2013), "How the poor manage their finances; A study of the portfolio choices of poor households in Ernakulam district, Kerala", Development Research Project, Mumbai and Centre for Socio-Economic and Environmental Studies, Kochi.
- RBI (2014), "Annual Report".
- RBI (2014) "Quarterly Report", June.
- RBI (2014a), "Report on comprehensive financial services for small businesses and low-income households" (Chairman: Dr. N. Mor).
- RBI (2014b), "Report of the Technical Committee on Mobile Banking" (Chairman: Mr. B Sambamurthy).
- Srikanth, R. (2013), "A Study on - Financial Inclusion - Role of Indian Banks in Reaching Out to the Unbanked and Backward Areas", *International Journal of Applied Research and Studies*, Volume 2, Issue 9, September.
- Subbiah, Nalini (2014), "Role of Banks in Financial Inclusion", *Research Journal of Commerce and Behavioural Science*, Volume 1, No. 4.
- Telecom Regulatory Authority of India (2014), "Highlights on Telecom Subscription Data", New Delhi, May.