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Implementation of Financial Technology in India and its Challenges

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Abstract

India is the fastest growing FinTech market in the world. The way the government is taking fast steps regarding digitization here, its positive effect will also be seen on the fintech sector. According to an estimate, by 2025 its size will increase 3 times in value to Rs 6.20 lakh crore. It is clear that due to various efforts of the government, the fintech sector is growing rapidly here. India is at the fore in the adoption of FinTech in emerging markets of the world. Let us tell you that the rate of acceptance of fintech in the country was 87 percent as of March 2020, while its global average was only 64 percent. The domestic fintech market was worth Rs 1.92 lakh crore in 2019. It is clear that the future of FinTech market in India is bright.

Keywords: Financial, Technology, Education, Innovation

Introduction

Financial technology (abbreviated fintech) is technology and innovation that aims to compete with traditional financial methods in the delivery of financial services. It is an emerging industry that uses technology to improve activities in finance. The use of smartphones for mobile banking, investment, lending services, and crypto-currencies are examples of technologies aimed at making financial services more accessible to the general public. Fintech companies include startups and established financial institutions and technology companies seeking to replace or enhance the use of financial services provided by existing financial companies.¹

Technical experts point out that the need of the hour is to focus on various aspects related to the progress of Financial Technology in India and its challenges and prospects. India has emerged as the largest market for 'fintech' in Asia, overtaking China in this area. We must be aware that India has witnessed a rapid and widespread development of FinTech i.e. 'Fintech Boom' after emerging as the world's second largest Financial Technology hub (after the US).²

Currently, fintech is one of the most thriving sectors of the economy, both in terms of business growth and job creation. Frankly speaking, financial technology can be helpful in achieving the goals of financial adjustment as well as bringing transparency in the financial system, provided that all the necessary aspects related to it are widely discussed and shared between countries around the world. Developing a general opinion in this regard, proceed further.³

The term 'fintech' frequently used in financial technology is an abbreviation for financial technology. In common parlance, Fintech is the use of technology in financial operations. In other words, it is the implementation of traditional financial services and modern technology in managing the financial aspects in various companies and businesses. Usually, the term 'fintech' is used to refer to new

technologies through which financial services are used, improved and autonomous are attempted. In practical terms, digital payments, digital loans, bank tech, insure tech, reg-tech, crypto-currencies, etc. can be understood as some of the major components of fintech. However, in the current environment, fintech covers many different sectors and industries such as education, retail banking, fund raising and non-profit work, investment management, etc. Crypto currencies and digital cash are also included in the active area of fintech innovation.⁴

In the field of fintech, block-chain technology is used to keep records of transactions on a computer network rather than a central ledger. Whereas, under smart contracts, contracts between buyers and sellers are executed automatically through computer programs, often using the block-chain itself. Whereas, open banking is a system whereby banks provide their 'Application Programming Interface' (API) facilities to third parties to develop new applications and services. Thus, banks operating under open banking are provided an opportunity to partner with financial technology (fintech) rather than compete. At the same time, under Insure Tech, efforts are made to simplify and streamline the insurance industry through the use of technology. At the same time, RegTech, which is an abbreviation for Reg Tech, Regulatory Technology, is used to help businesses comply with industrial sector regulations in an efficient and cost-effective manner. At the same time, the issues of financial technology (fintech) and cyber security are intertwined due to the increase in the cases of cyber attacks in the country and decentralized data under cyber security. Due to all this, the Indian Fintech market is growing very fast.⁵

India is at the top of the digital transactions which has crossed the 25 billion mark of total digital transactions. Access to bank accounts under PradhanMantri Jan-DhanYojana of India DG Locker provides a great ecosystem for development of fintech through UPI. In fact, modern technology is the strongest vehicle for financial inclusion. The government is striving to build a strong and secure technology ecosystem. It is confident that public-private partnerships will increase financial inclusion. Modern financial services will be available to all Indians.⁶

Major components of development of FinTech in India

First, over 1.2 billion enrolments have been done through the widespread identity formalization 'Aadhaar Card'.

Second, through initiatives such as the Jan DhanYojana, banking access was increased and over 1 billion bank accounts were opened.

Third, broader smartphone access was strategically promoted, benefiting more than 1.2 billion smartphone users. Simultaneously, the disposable income in India also increased. For this major efforts were made by the Government of India like UPI and Digital India.

Fourth, the middle class is expanding widely. It is estimated that by 2030, 140 million new households will be added to India's middle-class population and 21 million new households will be added to the high-income population, driving demand and growth in the country's fintech market.

With all these factors, no one should be surprised if India reaches the first rank in the near future.⁷

Possibilities related to fintech

First, comprehensive financial inclusion is imperative. Because even at present, a large population of the country is outside the purview of the formal financial system. Therefore, the challenges associated with financial inclusion in traditional financial and banking models can be overcome through the use of financial technologies.

Secondly, it is also very necessary to provide financial assistance to MSMEs. Because at present, lack of capital remains the biggest threat to the existence of 'Micro, Small and Medium Enterprises' operating in the country. If we look at the report of 'International Finance Corporation' (IFC), we will find that the gap between the required and available capital for the MSME sector is estimated to be around US\$ 397.5 billion. In such a situation, the importance of fintech increases in the MSME sector, which also has the potential to overcome the lack of capital in this sector. However, with the availability of easy and quick loans by many fintech startups, MSMEs will be relieved from the hassle of frequent bank visits or the cumbersome paperwork.

Third, improving the customer experience and transparency is also very important. This is because fintech startups offer key features such as convenience, transparency, personalized and comprehensive access and ease of use, which help empower customers. This is the reason why the fintech industry will develop unique and innovative models for risk assessment. It will help improve access to financial services in the country by leveraging Big Data, Machine Learning, alternative data for credit risk assessment and developing credit scores for customers with limited credit history.

Considering the growing importance of fintech and its potential to fuel economic growth, the government constituted a Steering Committee under the chairmanship of Atanu Chakraborty. This committee was to make recommendations on making fintech related regulations more flexible and to develop entrepreneurship in a relatively strong sector (from other emerging economies).⁸

Importance of financial technologies

- In recent times, financial services are being created using fintech or new technological innovations. This is one of the most important developments in the financial sector. Fintech can play a big role in increasing access to finance and promoting the growth of MSMEs. However, the broader fintech landscape across the globe includes a diversity of financial services driven by technology in day-to-day life.
- Services that traditionally required human capital to provide mobile payments, crypto-currencies, investment advisory, insurance aggregators, peer-to-peer lending and other services are now provided by fintechs.⁹

Recommendations of the committee

The committee submitted its report on 2nd September, 2019 and recommended the following:

Developing a Virtual Banking System

The Department of Financial Services and RBI can check the suitability of the virtual banking system. Permitting virtual banks, costs and benefits have to be calculated.

They can prepare for a possible scenario (future) where banks will not be required to set up branches, yet they can provide full scale banking services like loans, savings accounts, card issuance and more on their app or website. Offering payment services through-

The Monetary Authority of Hong Kong (HKMA) has recently issued guidelines for setting up virtual banks-

1. Access to Payment Infrastructure for Non-Banks: Government and RBI should eliminate discrimination in access to payments infrastructure of non-banks as compared to banks, thereby promoting competition and innovation.

2. *Fintech for Cyber Security*: Fintech should be used for cyber security, fraud control and anti-money laundering, especially by public service enterprises or financial services companies. Also, international fintech firms specializing in this field should be encouraged to set up their businesses in India.
3. *NBFCs in Agriculture*: As NBFCs have made significant strides in leveraging FinTech to expand their reach. Such companies should be encouraged to contribute to the agriculture sector, such as by inclusion in the credit guarantee schemes by the government.
4. *Develop Marketplace Lending Model*: Debt financing in India should be reformed, including improving existing bank platforms for peer-to-peer (P2P) lending among banks, developing marketplace models.
5. *Easing of Exposure Limits*: Restrictions on aggregate and individual exposure limits may be reviewed. Alternatives like providing finance to the SME sector by Mudra Bank and alternative credit delivery channels through P2P (Peer-to-peer) platforms can be considered.
6. *Easier KYC Process*: Various options for document verification such as video-based KYC, providing valid KYC documents through DigiLocker etc. should be considered expeditiously by the service providers with customer consent.
7. *Allow drones to private agencies to assess crops*: Agricultural companies and lenders in the agriculture sector should be encouraged to use drones and remote sensing technology. Self-report of cropping patterns by itself or using the services of fintech companies can be used to assess discrepancies, more efficient delivery of both credit and insurance products, and reduce credit/insurance risks.
8. *Enact a consumer protection law for fintech*: This should be done at the earliest keeping in mind the rise of fintech and digital services and the potential threats to public financial security through digital banking.
9. *Rapid digitization of land records*: The government should undertake digitization of land records 'with primary objectives' and a time frame of three years has also been recommended for this.
10. *Ease of Small Savings Scheme*: Access and transactions should be made easy for the consumers. Should reduce the risk of financial fraud and enable trading in the secondary market. All small savings products, which are neither available online nor in demat form, should be brought in demat form on a common online platform. This will improve the efficiency of small savings scheme and public investment in such schemes that increase household savings.

Challenges of the financial technology (fintech) sector

The first is related to cyber attacks. Because the automation of their processes and digitization of data makes fintech systems vulnerable to hackers. We may be aware that the recent cyber hacking attacks on several debit card companies and banks set an example of how easily hackers can gain access to critical systems and cause irreparable damage to them.

Second, there are concerns about data privacy. Because along with cyber attacks for consumers, misuse of important personal and financial data is also a cause of great concern, which will also have to be found properly.

The third is related to the difficulty in regulation. For example, the regulation of the rapidly emerging fintech sector, especially cryptocurrencies, is also a major problem. Because at present most of the countries of the world do not have any special provision for regulation of FinTech.

Thus, this lack of regulation has given rise to incidents of scams and frauds in this sector. However, due to the variety of services offered by fintechs, it is considered a very difficult task to formulate a single and comprehensive solution to the problems of this sector.¹⁰

Way forward for financial technology (Fintech)

First, protection from cybercriminals should be its priority. At present, India depends almost entirely on imports for both defensive and offensive capabilities against cyber attacks. In such a situation, it is very necessary for India to achieve self-reliance in this field, given the wide increase in the acceptance and access of technology in various fields in the country. The government is also showing readiness in this direction.

Second, consumer awareness is important. If seen, establishing technical security measures, as well as educating and training customers to spread awareness about the benefits of fintech and cyber attack protection, will also help in the democratization of fintech. The government is also making efforts in this direction.

Third, the most important thing is the data protection law. In fact, RBI's decision to set up a fintech sandbox to review the impact of technology in this area is considered a positive step in this direction. However, it is imperative to establish a strong data protection framework in the country. In this context, the 'Personal Data Protection Bill, 2019' has also been passed by the government after extensive deliberations. This has also led to a slight change in this area.

Conclusion

In conclusion, it can be said that as per the requirements of the present times, Fintechs provide suitable solutions to the challenges prevailing in the Indian economic sector. Fintech has the potential to revolutionize financial services like insurance, investment, remittances and other financial services. However, during regulation in this area, special attention should be paid to the fact that any such effort should be helpful and not a hindrance to its development. If the above things are considered, then the development of 'financial technologies' or 'fintech' in India can be helpful in achieving the goal of financial inclusion, otherwise there will be many difficulties in this path.

References

- [1] Schufel, Patrick (2016). Taming the Beast: A Scientific Definition of Fintech. Journal of Innovation Management. pp. 32-54.
- [2] A B Sainikola, Lenny (February 13, 2017). "What is Fintech?" , Huffington Post. Retrieved 20 August 2017.
- [3] Schufel, Patrick (March 9, 2017). "Taming the Beast: A Scientific Definition of Fintech". Journal of Innovation Management. 4(4):32-54.
- [4] Leong, Kelvin.; Sung, Anna (2018). "Fintech (financial technology): what is it and how to use technologies to create business value in the fintech way?" . International Journal of Innovation, Management and Technology. 9(2):74-78.
- [5] "Vietnam Takes Off as Fintech Funding Boom in Singapore". Nikkei Asian Review. 4 December 2019
- [6] Lieber, Ron (April 11, 2014). "Financial Advice for the Aren't Rich". The New York Times.
1. Coughlin, Jeff. "The 11 Biggest Fintech Companies in America 2019". Forbes. February 15, 2019.
2. "Chatbot: The Intelligent Banking Assistant". PwC. March 5, 2021.
3. Xu, Lei; Gao, Runpeng; Zee, Yu; Du, Peng (January 2019). "To Be or Not to Be? Big Data Business Investment Decision-Making in Supply Chain". Stability . 11(8):2298.

4. Process Automation (RPA)". Journal of Information Systems and Technology Management. 16:1-17.