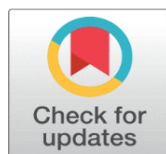


FINTECH IN INDIA: EMERGENCE, GROWTH AND PATH AHEAD

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ABSTRACT

Fintech is the newest buzzword in the financial industry. Financial institutions in the past have been transformed, thanks to fintech. FinTech is a phrase that is used to describe the expanding technological advancements in the financial industry. The wide range of Fintech services, including peer-to-peer lending, robo-advisors, wealth management, Insurtech, and blockchain-based solutions have completely transformed the financial sector. Along with improving accessibility, these services have raised the efficiency and openness of the financial sector. Indian fintech service sector is one of the fastest-growing one in the world. The shape of finance sector of India will change as a result of the growth fintech services. India has the potential to provide opportunities to the Fintech start-ups to grow as unicorn companies. Fintech in India is aiming at entering into new markets in India and outside India, as well. The historically cash-based economy of India has responded positively to the Fintech opportunities, primarily due to a spike in e-commerce and a high smartphone density. The present paper examines the significant transformations that Fintech has brought about in the traditional banking and financial industries, placing a special focus on financial inclusion, innovation, consumer satisfaction and economic growth. It also looks into the difficulties and risks of adopting fintech, such as worries about data security, legal compliance, client uptake, and the effect on conventional financial institutions. It also covers the function of AI and machine learning in Fintech innovation and how they might further transform the sector. In order to identify the difficulties and consider the prospects for Fintech in India, the present study adopts an exploratory method based on a thorough literature analysis. The study provides some recommendations for the policymakers, regulators, business stakeholders, and researchers to support the expansion and development of fintech in India.



Keywords: Fintech, India, Growth

1. INTRODUCTION

In today's financial industry, Fintech has become a buzzword. The words finance and technology are combined to form the term fintech. This two-way communication is what has changed the way traditional banking, investing, and trading have been conducted. Fintech refers to the technology used in delivering financial services to the customers faster and better. One of the most well-known fintech companies in the world, PayPal, situated in San Jose, California was established in 1998. PayPal is an online payment system that makes sending and receiving money easy and secure to buy things online. India has one of the most dynamic and exciting fintech industries in the world, with companies constantly pushing the boundaries of what is possible with financial technology. The Indian fintech industry has been expanding at an unprecedented rate, with its value increasing from Rs. 2.30 trillion in 2020 to an estimated Rs. 8.35 trillion by 2026, at a compound AGR of 25% (Times of India, January 28, 2023). This makes India one of the fastest growing Fintech markets in the world. The Fintech ecosystem in India, which is estimated to touch USD 1.3 Tn by 2025

and develop at a CAGR of 31% between 2021 and 2025, is the third largest in the world and has the highest adoption rate of 87% (www.statista.com).

2. HISTORY AND EVOLUTION OF FINTECH IN INDIA

However, the term Fintech came to light in the 21st century, but its origin can be traced back in the late 19th century, when telegrams and morse code were used in banking transactions. Following globalization, both developed and developing nations saw a technology boom. Because of the technology boom, nations have transitioned from Internet banking to mobile banking to digital banking. The banking industry is more competitive now than it was before the technology boom. The use of mobile devices and other technology has undergone a revolution.

On the basis of various sources and research the following is the time line of Fintech history:

FINTECH 1.0 (1950 ONWARDS)

Following independence, many banks were nationalized as the country's economy soared and people started availing financial services.

FINTECH 2.0 (1980-2008)

- Internet banking started in the 1980s; and in next decade, it became more appealing to the customers.
- ICICI Bank was the country's first online bank, however its services were very limited.
- In Mumbai, India, HSBC opened ATM in 1987. The first credit card in India was issued by the Central Bank of India in 1980.
- Following the emergence and rise of internet, there was advancement and modernization of banking operations in 1990 onwards.

FINTECH 3.0 (2008 -2014)

- The world-wide financial crisis in 2008 paved the way for the growth of fintech sector.
- Google Wallet, Apple Pay, and Bitcoin v0.1 were introduced during this period.
- The demonetization of some currency notes in 2016 significantly and positively impacted the growth of Fintech. Because of traditional banks' struggle in connecting operations with the SWIFT system, it gave rise to Fintech.
- Numerous companies e.g. Paytm, Phonepe, Mobikwik, and Freecharge, started functioning as a result of the quick adoption of fintech.

Fintech 3.5(2014-2017)

- M-Pesa was first launched in Kenya by Vodafone for Safaricom in 2007.
- Alibaba began operations on its e-commerce platform in 2010.
- In 2015, India announced the establishment of 11 new payment banks. Two new Chinese private banks, MyBank and WeBank, were also established in 2015.

FINTECH 4.0 (2017- AT PRESENT)

- COVID - 19 pandemic played its role in the rise of fintech services. Specially, the development and use of Artificial Intelligence in delivery of financial services is playing an important role in making the Fintech available to the wide range of users. Kumar et al. (2018) demonstrated the significance of operation management and information systems in processes like AI, blockchain and Fintech. In order to ensure the financial inclusion of large number of customers including low to mid income groups, women, youth and small business, Fintech companies are making use of AI in its their operations.

3. RANGE OF FINTECH PRODUCTS

1) Credit

It consists of Peer-to-Peer Lending, Crowdfunding, loan marketplace, Online Lenders - NBFCs' on-book lending, Platforms for Credit Scoring, Companies involved in alternative underwriting systems and marketplace lending. By 2023, the Indian industry for digital loans is anticipated to be worth USD 350 billion (<https://www.investindia.gov.in>).

2) Payments

It includes services like PPIs and M-wallets, PoS and Merchant Payment Services, Worldwide Remittances and Digital currency. Fintech technologies include software for subscription billing, card development, and payment processing. Digital Payments increased by 76% in terms of transactions and 91% in terms of value by 2022. The most popular payment interface was UPI. By 2030, the Indian payments market is estimated to generate \$50 billion in revenue and 100 trillion transactions (<https://www.investindia.gov.in>).

3) Investment Management

It consists of Discount Brokers, Robo Advisors and Online Financial Advisors Referring to platforms and analytics solutions for investment and wealth management. By 2030, the Indian WealthTech industry is projected to touch \$ 237 billion because of increasing number of regular investors (<https://www.investindia.gov.in>)

4) Bank tech

It involves Big Data, Blockchain and Platforms for Customer Onboarding. This gives a substitute for conventional underwriting techniques, which are ineffective for handling cases involving people with scant credit data. Unstructured data has a great deal of value. Due to the difficulties in interpreting unstructured data, it is challenging to extract value from it. To extract value from huge data collections, a number of new techniques are being developed. Blockchain technology is being used for financial services by investment firms. By 2023, the market for blockchain technology in Fintech is anticipated to reach \$6.23 billion. (<https://www.investindia.gov.in>)

5) InsurTech

It involves Aggregator of Insurance, IOT, wearables, and kinematics, Insurance for small businesses and Insurance based on usage. India is predicted to grow by 15X to reach \$ 88.4 Bn by 2030, making it the second-largest Insurtech industry of Asia-Pacific. India is positioned to become insurance markets with the fastest growth rate. (<https://economictimes.indiatimes.com/>)

4. GROWTH OF FINTECH IN INDIA

In India, the availability of credit has dramatically increased in the period from 2014 to 2017. In 2017, 80% of adults had an bank account, where as the number was 53% in 2014 (Global Findex report, 2017). This substantial increase in access is mostly the result of government initiatives to advance India's digital financial system and economy. AFI (2018) estimates that 35 million people have access to bank accounts thanks to the digital infrastructure known as India Stack. The growth of fintech in India has been greatly promoted by the government of India and the regulators. The implementation of the GST, PMJDY, and the creation of digital infrastructure are a few of the notable measures for Fintech development. The GOI has made digital infrastructure a top focus. With the help of the Digital India program, NPCI's launch of the Unified Payment Interface (UPI), and the widespread distribution of smartphones and high-speed internet, the government is creating a solid digital infrastructure. The government is actively focusing on and encouraging the adoption of fintechs by the public through initiatives like demonetization, DBT, UPI products like BHIM, Bharat QR Code, AEPS, CTS, Rupay Debit cards, and NACH (Ravikumar, 2019). All these digital initiatives have created a number of innovative fintech solutions that have been successful. Fintech companies and banks both make use of these goods or interfaces.

By 2030, the market of fintech is anticipate to touch USD 2.1 Tn. In 2022, fintech ranked as the country's second-most-funded startup industry. In 2022, fintech startups in India raised \$5.65 billion. During the period from 2021 to 2022, the number of unique institutional investors in Indian fintech became almost twofold, from 535 to 1019 (startuptalky.com).

5. INDIA'S FINTECH STARTUP

Our economy and the way we make payments have both undergone considerable transformation as a result of fintech businesses. The way we all conduct business has changed as a result of the payment system. Here are a few FinTech companies that are dominating the financial news and tapping into a variety of markets with their innovative financial products. According to a study published in July by Medici, there are 405 firms in the payments sector, 365 in lending, 313 in wealthtech, 173 in personal finance management, 111 in insurtech, and 58 in regtech and cybersecurity. Bengaluru (447) and Mumbai (437), which together account for 40.6% of India's fintech companies, are home to the majority of these startups. (<https://fintechnews.sg,2020>)

6. FUTURE PROSPECTS

The future prospects of the fintech industry in India are very bright. Some of the factors that will be helpful in the growth of fintech industry in India are as follows

- **Large and growing market:** India's population, having a large number of unbanked or underbanked people makes it a huge market for the Fintech industry. Fintech companies are well-positioned to provide these people with access to financial services that are affordable and convenient.
- **Government support:** The fintech industry is supported by the Indian government. It has taken a number of steps to support its growth. For example, the government has launched several initiatives to promote digital payments and financial inclusion.
- **Quick technical developments:** Fintech companies are using cutting-edge technology like blockchain, artificial intelligence, and machine learning to create innovative services. These technologies are expected to have a major impact on the future of the fintech industry.
- **Growing popularity of digital payments:** Digital payments are becoming more popular in India as customers become more used to making payments online and using mobile devices. Fintech companies are developing innovative digital payment solutions to meet the growing demand.
- **Development of new Products:** Companies are creating innovative and new products to satisfy the needs of different client segments. For example, fintech companies are offering new types of loans, insurance products and investment possibilities.
- **Neobanks' growth:** Neobanks is a bank that solely operates online. 6

These banks offer financial services and products via internet and mobile platforms. Neobanks are expected to continue to gain traction in India in the years to come since they offer more user-friendly experience than traditional banks

7. CHALLENGES TO FINTECH IN INDIA

Regulatory uncertainty: Businesses and investors may experience uncertainty as the Indian government continues to establish its regulatory environment for fintech companies. For instance, it might be challenging for companies to adhere to rules as there is no precise definition of what qualifies as a fintech company. Competition from conventional financial institutions: By making significant investments in mobile wallets and digital banking, conventional banks are currently catching up to fintech firms. As a result, traditional financial institutions with substantial resources and a sizable clientele are increasingly competing with fintech startups.

Lack of awareness and trust: Lack of awareness and trust among the people in India can make it difficult for fintech industry to enter new markets. Moreover, some people in India may be hesitant to share their financial data to fintech companies.

Cybersecurity and data privacy threats: Fintech companies handle sensitive financial data, which increases the risk of cyberattacks and data breaches. This can negatively affect the image of the company.

Poor infrastructure: India still has a poor internet connectivity. This makes it difficult for fintech companies to connect to their desired customers.

8. CONCLUSION

Financial institutions in the recent past have completely changed because of growth in fintech. The wide variety of Fintech services, including peer-to-peer lending, robo-advisors, wealth management, Insurtech etc. have completely changed the financial sector. Fintech is entering into new markets in India and foreign markets, as well. The historically cash-based economy of India has responded positively to the Fintech technologies, mainly due to a rise in e-commerce and a high mobile density. Overall, the future prospects of the fintech industry in India are very bright. Despite the challenges, it can be expected that the fintech will grow rapidly in the future, driven by a number of factors, including growing market size, government's support, and rapid technological advancements. No doubt, some challenges are there, but, Fintech companies will overcome these challenges with the help of supportive role of the government and will be well-positioned to succeed in this dynamic and growing market.

CONFLICT OF INTERESTS

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REFERENCES

- Priya, P. Krishna and K. Anusha (2109), Fintech Issues and Challenges in India, International Journal of Recent Technology and Engineering, Vol. 8, Issue 3, pp. 904-908.
- Sreekala, S. P.; S. Revathy; S. Rajeshwari and M. Raja Lakshmi (2023), Fintech Issues and Challenges in India, Journal of Survey in Fisheries Sciences, Vol. 10, No. 1S, Special Issue 1, pp. 4774-4785
- Painoli, Girish Kumar; D.Paul Dhinakaran; C. Vijai (2021), Impact of Fintech on the Profitability of Public and Private Banks in India, Annals of the Romanian Society for Cell Biology, Vol. 25 No. 6, pp. 5419-5431.
- India's fintech industry: A snapshot of the future (Invest India), January 28, 2023, by Musharraf Hussain in Voices, Business, TOI
- Ravikumar, T. (2019) "Digital Financial Inclusion: A Payoff of Financial Technology and Digital Finance Uprising in India", International Journal Of Scientific & Technology Research, Vol. 8, Issue 11, pp. 3434-3438.
- <http://www.pwc.com/>
- <https://doi.org/10.48001/jbmis.2022.0902004>.
- <https://economictimes.indiatimes.com/tech/startups/india-is-second-largest-insurtech-market-in-asia-pacific-sp-global-says/articleshow/82735254.cms?from=mdr>
- <https://fintechnews.sg,2020>
- <https://microdata.worldbank.org/index.php/catalog/3238>
- <https://startuptalky.com/fintech-industries-in-india/>
- <https://timesofindia.indiatimes.com/blogs/voices/the-challenges-faced-by-fintech-companies-in-the-current-economic-climate/>
- <https://www.ibef.org/blogs/a-public-digital-infrastructure-india-stack>
- <https://www.investindia.gov.in/sector/bfsi-fintech-financial-services>
- <https://www.statista.com/statistics/1130150/biggest-fintech-companies-value-usa/>
- <https://www2.deloitte.com/in/en/pages/about-deloitte/articles/about-deloitte.html>