

Financial Technology in Indian Finance Market

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ABSTRACT

The purpose of this paper is to discuss issues such as fintech drivers, shortcomings of traditional financial services, and the role of technological advancement. The paper also addresses issues concerning fintech investment and disruption. It refers to financial technology challenges such as investment management, customer management, and regulation. The paper examines the evolution of fintech in the global market over time.

Keywords– FinTech, Financial Technology, Indian FinTech Market, Banking Tech, Blockchain, Cryptocurrency

I. INTRODUCTION

Fintech, which is an important application of technology in financial services, has grown in popularity in recent years as a result of dramatic technological advances and post-crisis regulatory changes. Along with incumbent financial institutions, the financial services sector has seen a new wave of participants, including Fintech startups, e-commerce and technology firms.

Fintech companies use innovative business models and emerging technologies to enable, improve, and disrupt financial services. This includes both startups and mature companies, as well as non-financial service providers working in the digital finance space.

II. WHAT IS FINTECH?

Fintech is the application of technology to the provision of new and improved financial services. Part of the impetus for the rise of fintech is that, while information technology has reduced the cost and functionality of everything from computers to automobiles, the unit cost of financial intermediation appears to have remained stable for more than a century. Philippon estimates that the unit cost of financial intermediation in the United States has remained constant over the last century at around 2%. As a result, one promise of fintech is the discovery of less expensive methods to overcome financial contracting frictions and lower the cost of financial services in order to improve consumer welfare. Recent evidence suggests that this

promise may be true, as evidenced by evidence that fintech has improved mortgage lending productivity.

Fintech is a component of the evolving financial innovation process, which has been shown in theory to be risky but valuable, with recent evidence indicating that it provides significant value to investors. Fintech is defined by the Financial Stability Board (FSB) as “technologically enabled financial innovation that could result in new business models, applications, processes, or products with a material impact on financial markets and institutions, as well as the provision of financial services.” The Basel Committee on Banking Supervision (BCBS) has also adopted this definition, in part because “this broad definition is considered useful by the BCBS in light of the current fluidity of fintech developments.” Fintech encompasses the following areas: (i) credit, deposits, and capital-raising services; (ii) payments, clearing, and settlement services, including digital currencies; (iii) investment management services (including trading); and (iv) insurance. Blockchain technology is a component of the technological backbone of fintech.

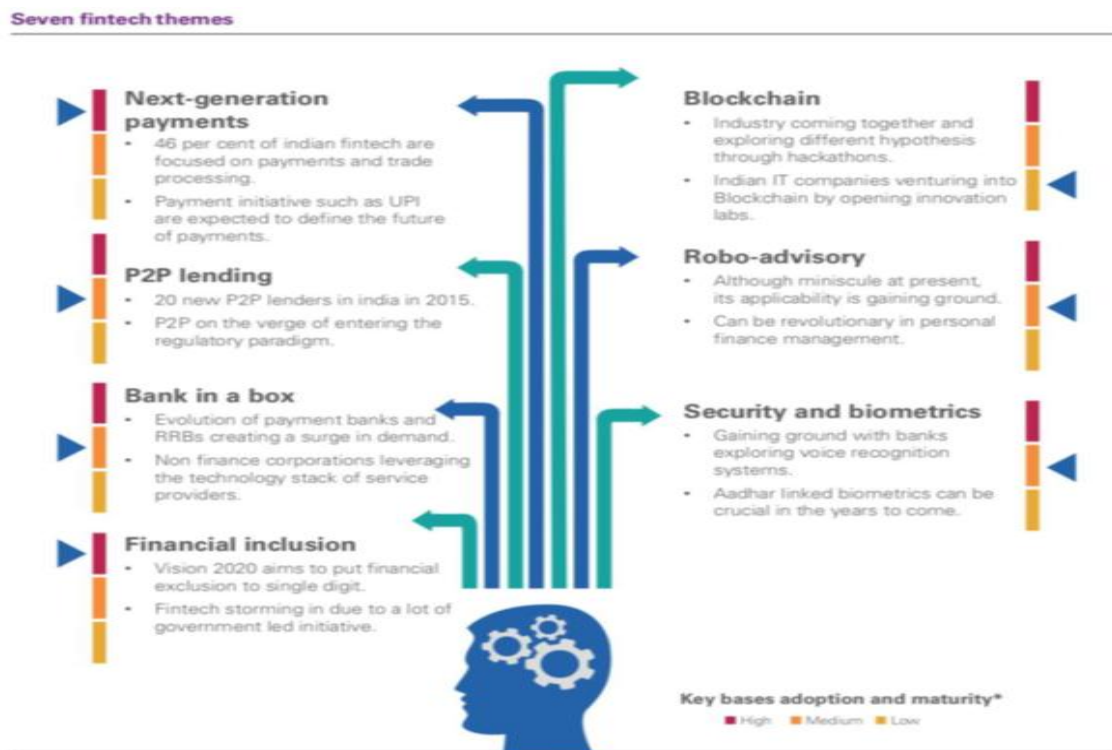
III. CHALLENGES OF FINANCIAL TECHNOLOGY

Fintech in various industries, particularly banking and finance, faces three major challenges that must be addressed as soon as possible.

One of the major concerns of the Fintech industry is cyber security. Many critics are concerned about the confidentiality of the data. Because of the banking and finance sector's digitization, it is vulnerable to cyberattacks. As a result, the government and private sector must work together to ensure that their systems are robust enough to prevent the exposure of sensitive data. Customers must be able to accept and trust the changing systems. Fintech services are expected to supplant traditional banking and financial services, which remain a major challenge for consumers with conservative attitudes. Lack of Human Touch: Chatbots and artificial intelligence (AI) are expected to replace human contact. This could be a major impediment to the growth of various sectors that use fintech technology to serve their customers. As a result, businesses must strive to maintain a human touch

while attempting to meet the needs and satisfaction of their

customers.



Source: KPMG (2016) “Fintech in India: A Global Growth Story”, NASSCOM

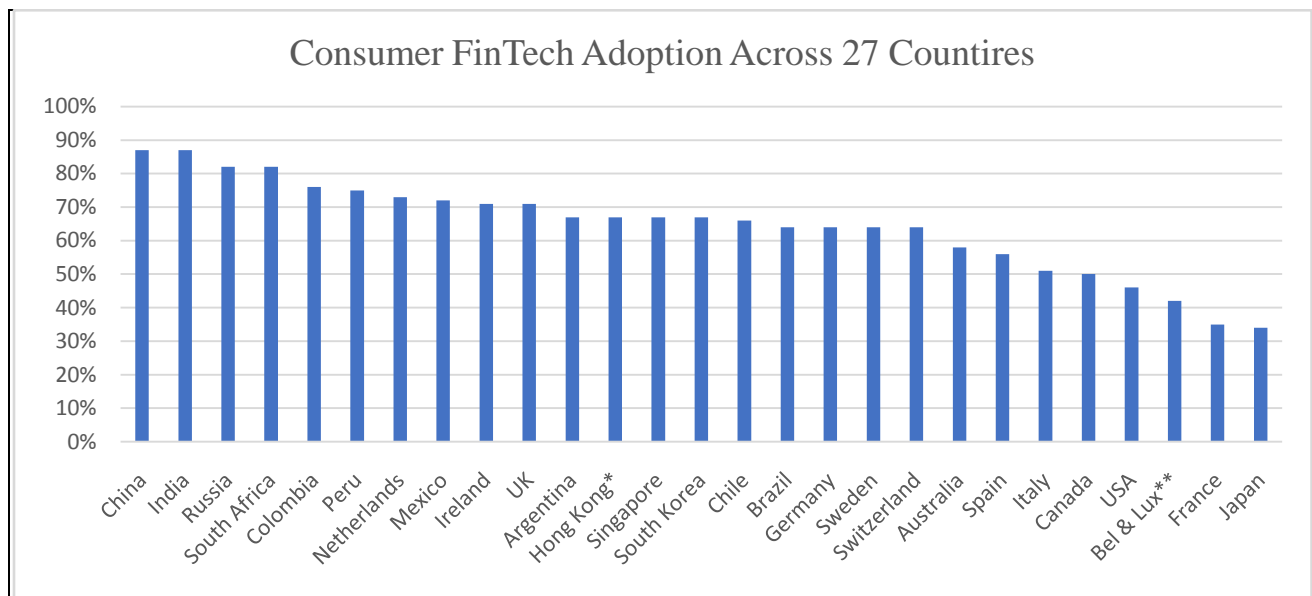
IV. GLOBAL FINTECH ADOPTION

Global FinTech adoption has reached 64% and has become mainstream in all the surveyed markets.

Table 1: FinTech adoption by customers over 27 countries

Countries	Adoption %	Countries	Adoption %
China	87%	Chile	66%
India	87%	Brazil	64%
Russia	82%	Germany	64%
South Africa	82%	Sweden	64%
Colombia	76%	Switzerland	64%
Peru	75%	Australia	58%
Netherlands	73%	Spain	56%
Mexico	72%	Italy	51%
Ireland	71%	Canada	50%
UK	71%	USA	46%
Argentina	67%	Belgium & Luxembourg	42%
Hong Kong SAR of China	67%	France	35%
Singapore	67%	Japan	34%
South Korea	67%		

Source: <https://www.spglobal.com/marketintelligence/en/documents/an-introduction-to-fintech-key-sectors-and-trends.pdf>



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The above picture shows FinTech adopters in digitally active population in each country. Averages are shown on an unweighted basis.

FinTech is an industry that has progressed beyond its infancy to significantly alter customer expectations. FinTech challengers appear to be more like professionally managed companies with broad operational capabilities, a full suite of products, and a global reach. Many of these businesses have gone through multiple rounds of funding, increased their staff, established corporate departments such as human resources, accounting, and legal, and expanded beyond their home markets.

FinTech has taken over the world and has made its way into the mainstream of all markets. Emerging markets are leading the way, with adoption rates of 87 percent in China and India. Russia and South Africa are close behind, both with 82 percent. Among developed countries, the Netherlands, the United Kingdom, and Ireland are at the forefront of adoption, reflecting the evolution of open banking in Europe.

V. REVIEWS OF LITERATURE

The cashless transaction system is expanding day by day, as the market becomes more globalised and the banking sector develops, and more and more people switch from cash to a cashless system. The cashless system is not only necessary, but also necessary in today's world. Efforts to drive financial inclusion in India have yielded mixed results in recent years. Access to bank accounts has grown dramatically as a result of a strong policy and regulatory push. The use of these accounts, as well as the uptake of

formal financial services other than savings accounts, has remained extremely difficult. The government's recent initiatives regarding demonetization and the transition to cashless transactions will further drive innovation and new entrants into the industry. Payment companies have demonstrated the benefits of mobile-led solutions, and traditional banks are now attempting to make inroads into rural India by launching innovative mobile-based banking solutions. Large technology companies, with government support, are utilising new methods of reaching out to the rural masses and educating them about various financial products, ensuring that their hard-earned income is properly invested. (2019) (Vinay Kandpal & Rajat Mehrotra).

The researcher worked in emerging literature on fintech, with a focus on the interaction between fintech and banking. In the article the researcher discussed numerous issues have been examined with respect to P2P lending, crypto currencies, and smart contracts. These issues have been explored in the context with some central questions. How should the theories of financial intermediation be altered to accommodate traditional intermediation, shadow banks and fintech? Offered some thoughts on the shape and form such a theory will need to take, and have emphasized the role that trust will play in distinguishing banks from their new competitors. (Anjan V. Thakor - 2019).

This article discussed on the evolution of Fintech, in the crisis paradigm the interlinkage of finance and technology has a long history and has evolved over three distinct eras. During the periods finance and technology

have evolved together; both in analogue context and with a process of digitalization of finance from the late twentieth century. From the year 2008, a new era of FinTech has emerged in both the developed and developing world. This era is defined not by the financial products or services delivered but by who delivers them and the application of rapidly developing technology at the retail and wholesale levels. Latest evolution of FinTech, led by start-ups, poses challenges for regulators and market participants alike, particularly in balancing the potential benefits of innovation with the possible risks of new approaches. This article discussed the evolution of FinTech over the past 150 years, and on the basis of this analysis, claim against its too early or rigid regulation at this juncture. Douglas W. Arner, János Barberis, Ross P. Buckley (2015)

VI. OBJECTIVES

- To study the areas where the Fintech in Indian market.
- To study about the challenges & growth path in Fintech in Indian market.

VII. RESEARCH METHODOLOGY

Scope of the Study

- Researcher used secondary data for research using, various web sites, research articles, various reports through websites, online journals, news articles, and other internet sources.
- Researcher developed the article based on qualitative method to deliver the Financial Technology and its role in Indian finance industry.

VIII. FINTECH IN BANKING & FINANCE SECTOR

The rise of Fintech has changed every aspect of financial services and banking.

Advances: This has changed the manner in which the banks work and has opened a gigantic new market for market-based loaning. With the section of Fintech organizations, credits and related administrations can be handily benefited by buyers. Elective models are being made to give customers capital, regardless of whether it is a business or a person. These organizations are dedicated to improving client experience, monetary items, and fast endorsement of credits.

Payments Services: Fintech administrations has affected on the installment techniques. Presently, installments are made internet based utilizing web or through cell phones, easing the requirement for vendor

accounts. Cash can be moved straightforwardly to the financial balance, which diminishes the odds of cheats and transaction charges.

Wealth Management: With the ascent of fintech, the manner in which individuals set aside cash, oversee resources, and contribute their capital is evolving. Utilizing the new monetary innovation, these organizations plan to give modified arrangements of dealing with their own wealth and portfolios. Fintech applications additionally helps in contrasting choices all together with make the best venture plans for individual accounting likewise to deal with individuals' portfolio. This is conceivable with present day innovation and inventive frameworks.

Remittance Transfers: For years, banks and individuals have battled with customary settlement benefits that can be costly and confounded. Throughout the long term, fintech organizations have strived to make these inbound and outbound exchanges straightforward and moderate. These exchanges have taken another measurement in the financial world, presently they move and installment leeway are occurring with the brilliant advances.

Insurance Services: Acquiring protection has now become a less mind-boggling strategy. With redid plans, all should be possible on the web. From the application cycle to the installment of expenses occasionally, this paper-broad help has developed with fintech advancements enormously.

IX. OVERVIEW OF INDIAN FINTECH ECOSYSTEM

Fintech has emerged as a new industry with high growth perspective in India due to the availability of the large market size. The fintech market in India was valued at ~INR 1,920.16 billion in 2019 and is expected to reach ~INR 6,207.41 billion by 2025, expanding at a compound annual growth rate (CAGR) of ~22.7% during the 2020-2025 period.

Investments in Indian Fintech market reached \$1.6 billion until Q3 in 2018(source: Fintech Global). Indian Fintech is flourishing due to the increasing demand for digital financial products, increasing smartphone users and support of venture capitalists. According to Cisco's annual "Visual Networking Index" report, there will be 829 million smartphone users in India by 2022 (source: Quartz India).

Fintech industry is collaborating with technology vendors, financial institutions, university and research institutions, incubators, accelerators, and innovation lab. Prospective impact of Fintech and digital finance on Indian economy is substantial. A report from YES bank suggests that the impact on GDP will be a boost of \$700 billion by 2025, new deposits of \$800 billion and \$600 billion of new

credit. Fintech and digital finance in India can create 21 million new jobs every year (source: YES Bank report).

X. PROPORTIONS OFFINTECH IN INDIAN MARKET

The classified as business categories are - wallets & consumer payments, payments, lending, P2P lending, insurance tech, enterprise solutions, credit rating, banking tech, blockchain or cryptocurrency, consumer finance or personal finance management and finally investment tech.

(i) Alternative Lending: Companies in this category offers financial products or loans to consumers and businesses. Some companies focus on supply chain loans for MSMEs to enable financial inclusion such as LendingKart, Aye finance, Capital Float, Incred, and Neo Growth. Some companies focus on financial products and loans for consumers such as BankBazaar, PaisaBazaar, and Fino Paytech.

(ii) P2P Lending: Companies in this category offers a platform to enable lenders and borrowers to meet their respective goals. In this model credit risk is transferred from banks and financial institutions to individual lenders. Some companies in this category are FairCent and i2i Funding.

(iii) Payments: Companies in this category helps merchant to process payments by providing solutions. These solutions may include a mobile payment gateway, point-of-sale systems (pos), electronic payments, etc. This category is mainly focused on payments related to businesses. Some promising companies in this category are mSwipe, Ezetap, Billdesk, Pine Labs and Razorpay.

(iv) Wallets & Consumer Payments: Companies in this category are a bridging force between consumers and merchants. Regulatory initiatives such as UPI, India Stack, etc. has revolutionized the mobile payments and digital payments. These companies enable mobile payments and transaction, digital payment, wallets, and peer to peer (P2P) payment. Paytm, the largest Indian Fintech and a unicorn falls in this category. Some other promising companies in this category are Freecharge, MobiKwik, and PhonePe.

(v) Insurance Tech: Companies in this category provide consumer insurance products. In this category, there are also insurance aggregator and comparison platforms. PolicyBazaar is a unicorn and the largest insurance tech company in India. Some other promising companies in this segment are Coverfox, digit Insurance, Acko General Insurance, and Turtlemint.

(vi) Investment Tech: Companies in this category assist consumers in managing investments, wealth and helping them to grow personal wealth. These companies are using technologies such as artificial intelligence, robo-advisor,

etc. to enable investment strategies. Some of the promising companies in this segment are Zerodha, Scripbox, Fisdcom, FundsIndia and Tauro Wealth.

(vii) Credit Rating: Companies in this category provide credit scores to consumers and help them to improve it. Some companies also focus on providing borrower's credit profiles, credit risk assessment and solutions to lending institutions. Some promising companies in this segment are Credit Sudhaar, Credit Vidya and Credit Mantri.

(viii) Enterprise Solutions: Companies in this category works in the B2B segment and they provide various solutions to businesses such as expense management solutions, debt collection and recovery process support, etc. Some of the promising companies in this segment are Fyle, Finly and Happay.

(ix) Personal Finance: Companies in this category helps consumers to manage their money, tax filing, and expense management. Some promising companies in this category are ClearTax, Walnut, and QwikSilver.

(x) Banking Tech: Companies in this category are providing innovative solutions to banks and financial institutions. Some of these solutions are blockchain solutions, digital onboarding and regulatory processing, compliance, risk, and analytics solutions.

(xi) Cryptocurrency: Companies in this category provide a trading platform for the cryptocurrency, cryptocurrency wallet, and digital asset exchange. This segment is very new and less developed.

XI. FINANCIAL TECHNOLOGY TRENDS

1. Blockchain Technology: This is one of the most extreme financial technology revolutions to hit the world. It is expected to disrupt traditional banking systems. Blockchain is a constantly updating digital-ledger system in which technology is used to create blocks and permanently record transactions without the ability to change the information. Banks are investigating the potential of this technology, which is changing the way money is transferred, transactions are verified, and records are kept. It is expected to transform KYC systems, clearing and settlement systems, loan and credit applications, bookkeeping, and auditing.

2. Digitized Banks: Banks' brick-and-mortar branches have been replaced by digitalization. It has resulted in an increase in the use of internet or mobile applications to conduct financial transactions. The number of people going to the bank for various reasons has decreased as a result of the new trend. With the collaboration of the fintech and banking sectors, bank visits will continue to decline as people continue to use gadgets and the internet for banking procedures.

3. Mobile Banking: Mobile banking is a new trend that has emerged as a result of financial technology. Various applications developed for smartphones using new financial technology allow for on-the-go banking transactions. The convenience and transparency it provides are commendable, with many features such as user-friendliness and simplicity.

4. Artificial Intelligence: The combination of AI and Fintech is expected to be revolutionary. The use of a voice-operated assistant or next-generation chatbot is expected to change the level of customer satisfaction. The use of AI will reduce human error and produce accurate results as expected. It can also aid in the detection of fraudulent behaviour.

5. Biometrics: The advancement of technology raises the possibility of cyber-attacks, hacks, and fraud. Fintech firms are investigating biometric methods in order to avoid the risks associated with this technology. Biometric authentication is a powerful tool for ensuring the highest level of security for customers' accounts and capital.

XII. CONCLUSION

Without a doubt, India possesses all of the ingredients for a world-class fintech scene. As this sector matures, it will be fascinating to see how it advances open banking and innovation efforts. Productive expert collaborations have the potential to accelerate progress and increase the sustainability of innovation. But, in the end, India is a highly distinctive, exciting country that will forge its own path. The next act will undoubtedly be inspiring on both a domestic and international scale.

In a short period of time, India has risen to prominence as a leader in Fintech innovation. Financial technology is transforming the lives of Indian citizens and paving the way for the development of a digital economy. Fintech companies will undoubtedly find numerous opportunities to capitalise in the era of "Digital India." The Government of India recently launched the 'Jan Dhan Yojana' scheme, which aims to open a bank account for every citizen. Furthermore, in an effort to popularise cashless transactions, the government has offered tax breaks to merchants who accept more than half of their payments through an electronic payment system. Bank digitization will make fintech technology the future of India's banking and financial sectors.

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