

Emerging Role of Fintech and RegTech Market and its Challenges and Opportunities in India

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ABSTRACT

New Digital Technologies have been playing a crucial role in transforming economy of India since 21st Century through inclusions across the globe. “Financial Inclusions” coined first time in the Central Bank’s annual policy statement by then RBI Governor Y. N. Reddy in the year 2005. Since then, government of India efforts toward promoting the Financial Inclusions, both the Centre and State Governments leveraged Financial Technology (Fintech), aided by concurrent growth in internet services as well as smartphones penetration. Present government’s demonetization step showed the way to ‘Cashless Economy’ that provided a boost as well in online monetary transactions. The Fintech, The Regulatory Technology (RegTech) come into force to regulate Monetary transactions, reporting, compliances, to enhance transparency as well as consistency and to standardize regulatory processes to provide high level of quality at lowcost and thus benefiting the financial Industry.

Keywords: *Fintech and RegTech; InsureTech; Fintech Services; Emerging trends in Fintech (payments, FP, Savings & Investments, Lending and Insurance); Challenges in Fintech adoption in India; Sandbox*

INTRODUCTION

The financial services/industry is built on trust and confidence of people to honor the liability they undertake, being the guardian of finances since the human civilization. The financial industry developed into banking over the centuries and derived room for wealth management and insurance industry. The basic principle behind these services was to pool money from its interest percentage to them. In this competitive world, financial services transformed its face into digitalization after the emergence of technology. The emergence of technology startups in the financial domain that started with complete trust and confidence and transparency in operation etc.

Fintech emerged in India as a relatively new industry in providing financial services that comprising the companies that use technology to offer services relating to finance, they operate in insurance, asset management, payment and other numerous industries. Fintech is young in India but is growing rapidly, fueled by a large market base, technology startups and with the help of friendly government policies and regulations. In the year 2018, National Association of software and services companies (NASSCOM) reported that nearly 400 companies operating in India on financial services by Fintech, they also estimated, Fintech market to grow 1.7 times by 2020, making it worth \$8 billion.

In the form of complimentary to Fintech, the Regulatory Technology (RegTech) was emerged. The term RegTech was first coined by UK’s Financial Conduct Authority in 2015 stated RegTech as a subset of Fintech that focuses on technologies that would facilitate the delivery of regulatory requirements more efficiently and effectively that existing capabilities.

1. OBJECTIVES OF THE STUDY

- ❖ To know the emerging trends in Fintech Market
- ❖ To understand the Fintech segments/services and Fintech and RegTech progress in Indian Financial Market

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- ❖ To evaluate the challenges and opportunities in Fintech adoption in India

2. METHODOLOGY

The study is based on secondary sources of information collected from Journals, Articles, and financial websites in order to make the study more effective.

3. EVOLUTION OF FINTECH

The Fintech was boomed up in India after the release of the Central Bank’s annual policy in the year 2005, that states about the ‘Financial Inclusions’, the new startups with the help of Centre and State Governments friendly policies and regulations to develop and to accelerate the financial technology in India. Vishakhapatnam (Vizag) is being developed as Fintech valley and the local government of local A.P. opened Fintech valley to promote investments in this area.

To safeguard financial stability, the RBI is gradually realigning the liquidity infusion and other assistance policies implemented during the pandemic’s initial wave. In the first half of FY22, liquidity of about 2% of GDP came to an end. In order to foster growth, the RBI has implemented measures like scale-based regulation of NBFCs. Additionally announced are revised standards for securitization and credit default swaps.

Fig-1: Evolution of Fintech Ecosystem in India



(Source: Deloitte Analysis-NASSCOM)

4. SEGMENTATION OF FINANCIAL SERVICES

FINTECH: Fintech segmented as 34% in payments processing, 32% in banking and 12% in trading, public and private markets as in its services. The skewing of Financial Inclusions to match up the global competence in short period was very challenging task in the economy like India that dominated by Micro, Small and Medium Enterprise (MSMEs) while adopting digitalization of payments and some other financial transactions. Fintech companies are targeting MSMEs to adopt digitalization of transactions that probably more likely to have less margin of returns per transaction.

Table-1: SEGMENTATION OF FINANCIAL SERVICES

Areas / Fields of operations	Fintech Segments
Credit	P2P Lending Crowd Funding Market Place for Loans Online Lenders – NBFCs using own capital Credit Scoring Platform
Payments	M – Wallets and PPIs Merchant Payments and PoS Services International Remittance Crypto Currencies
Investment Management	Robo Advisory Discount Brokers Online Financial Advisors
Personal Finance Management	Tax Filing and Processing Spend Management and Financial Planning Credit Services
BankTech	Big Data, Block chain Customer On boarding Platforms
InsureTech	Insurance Aggregator IOT, Wearables and Kinematics

An annual payment on online purchase in India is approximately \$12 – 14 billion in which MSMEs account for only 5%. This makes Fintech companies to work much harder to cater the sustainable business models for MSMEs.

Table-2: DIGITALLY ACTIVE CONSUMERS IN FINTECH

Area / Field of Operation	Global Adoption	India
Money Transfer and Payments	50%	72%
Financial Planning	10%	20%
Savings and Investments	20%	39%
Borrowings	10%	20%
Insurance	24%	47%

Regulatory uncertainty is the other major challenge, it needs to support in formulation of policies that foster the benefits of Fintech and mitigates the potential risk and this would be the modification and adaptation of certain regulatory models to contain risks of arbitrage, and regulations should remain proportionate to the risks while its recognition. However, the policies and governance supporting in accelerate to match the speed of innovation in the Fintech in the country, particularly in securing the payment gateways and transparent growth.

REGTECH: RegTech means to the levels of technologies built on cloud computing, block chain, big data and artificial intelligence that facilitates companies to cope-up with regulations affecting the business operations. RegTech is often seen as a sub-set of Fintech as it helps in regulate with new technologies relating to Financial Inclusions that facilitates in mitigating risk. Some RegTech startups also deals in or working on bio-metrics and

machine learning which ensures risk free compliances for companies.

After the great recession of 2008, according to the reports, the annual spending on compliances by financial institutions is estimated at \$ 70 billion and the global demand for regulatory, compliances and governance software is expected to reach \$ 118.7 billion annually by 2020. RegTech solutions will often emerge as a software application, technology-enabled process that can be seen as a completely new and disruptive business models.

According to the report published by Deloitte on “RegTech Universe” in 2017, the companies that deals in RegTech areas are 289 in total all over the world, that is categorized as according to their services i.e., 31 RegTech companies dealing in Regulatory Reporting, 43 dealing in Risk Management, 74 in Identity Management and control 115 in compliances and 26 RegTechs serving in Transaction Monitoring. These RegTech companies are involving in the areas such as KYC, fraud prevention, customer credit sourcing, AML screening, transaction monitoring, trade data tracking, compliances, risk analysis and many more fields that involving mundane compliances prone to human errors have been benefited by RegTech automation.

APPLICATION OF REGTECH

- ❖ Legislation / regulation gap analysis tools.
- ❖ Health checks tools.
- ❖ Compliances universe tools.
- ❖ Regulatory reporting tools.
- ❖ Identity verification.
- ❖ Management information tools.
- ❖ Activity monitoring tools.
- ❖ Training tools.
- ❖ Risk data warehouses case management tools.
- ❖ Horizon scanning.
- ❖ Transaction monitoring.

INSURETECH: The term InsureTech is inspired by Fintech that is a portmanteau of Insurance and Technology. InsureTech refers to the use of innovative design and technology to extract savings and efficiency from the current insurance industry model. It came into force to explore the avenues like customized policies, social insurance and enabling devices to dynamically price premiums according to the observed behavior using innovative technology.

Since 1999, when the Insurance Regulatory and Development Authority of India (IRDAI) formed, insurance in India sold through two entities that are life insurance Corporation (LIC) of India and General Insurance Corporation (GIC) of India. Today there are nearly 24 life insurance companies and 33 non-life insurance companies regulating in India. According to the survey conducted by various CEOs of insurance companies across the world revealed that almost 90% of them are in the fear of losing out their business to InsureTech startups that are nimbler and tech savvy.

IRDAI Adopting the InsureTech sandbox model to foster innovation in Indian market that follow suit with several Asian neighbors such as Malaysia, Singapore and Thailand that are also dealing with sandbox for financial innovation. The giants of insurance still rely on paper work and focus more on their employees instead of focusing on their customers where InsureTech companies are more responsive to their customer needs and queries that results in changing customer buying habits. In recent preceding years, many insurance startups and insurance intermediaries adopted technological innovations in their products and services and aggressively ramp up their product portfolio with strategic product launches. Apart from the well-established insurance companies such as oriental, new India assurance, LIC of India, IFFCO TOKIO and ICICI Prudential., there are several startups showing their presence such as Cover fox, ET Insure, Acko, InsureFirst, etc.

SANDBOX: The Sandbox is a testing tool that separates the codes that are not been tested and experiment it wholly from the repository. It protects the on-time server responses and their data, collection of codes, vetted sources, data/content and regulates it that simply difficult to revert. Sandbox enables the minimal functionality that needed to accurate testing of programs/codes under development. Sandbox is often called as Test Server, Development Server or Working Directory built as revision control software (CVS and SVN).

6. EMERGING TRENDS IN FINTECH

According to National Association of software and services companies (NASSCOM), the Indian Fintech market is expected to rise at a Compound Annual Growth Rate (CAGR) of 22% in coming 5 years. (Report – 2018)

Fintech itself acting as an emerging sector in financial service as it emerged several financial areas such as Regulatory environment, open banking system, use of artificial intelligence in curbing the threat of risk of fraudulent, data security and user privacy etc., are listed below in detail under several heads with the help of table:

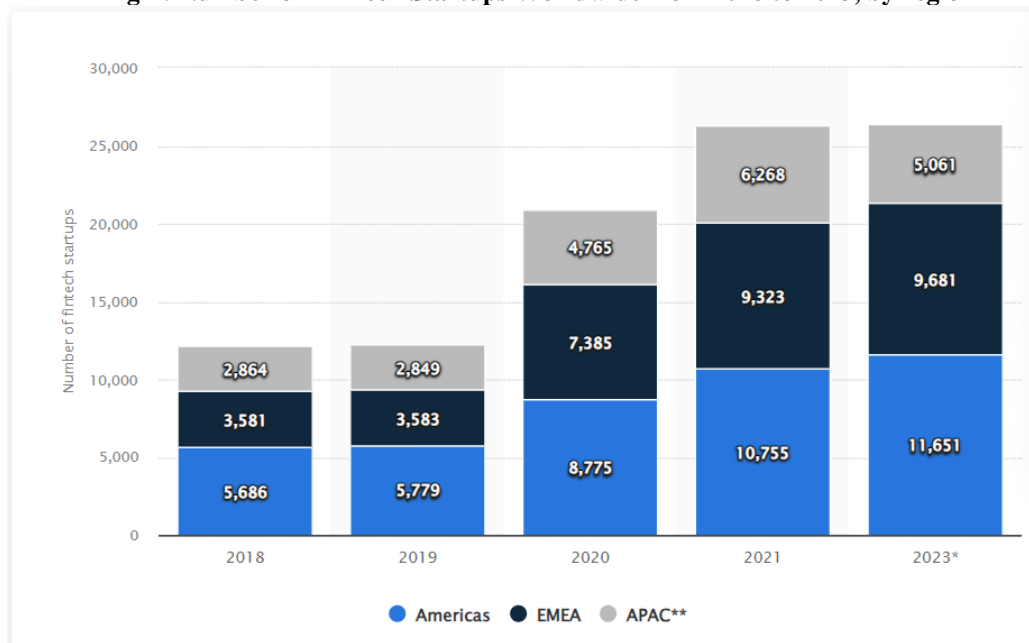
Table-3: EMERGING TRENDS IN FINTECH

Areas / Field of Operations	Emerging Trends
Money Transfer and Payments	Minimalist user experience payment Interoperable and real-time payment Value-Add services in payment UPI, BHIM, BBP, Bharat QR & AEPS
Financial Planning	Robo Advisors and the mass affluent Big data and AI for personalization Integrated account view Marriage between physical and digital models Retirement and Tax planning and filing Goal based investing and insurance planning Expense management and account aggregation Digital storage of documents and interactive dashboards
Savings and Investments	Customer Authentication Integrated savings and investments plans Financial marketplace Gamification API banking
Borrowings	Digital Consumer proposition Underwriting Algo-development and scoring Lean IT infrastructure Loan management system Partnership for usage of digital credit
Insurance	InsureTech drivers Leveraging IoT and Wearables Use of iCareU and CarlQ cloud platform Use of GOQii digitally enabled health insurance.

7. WORLDWIDE FINTECH ADOPTION REPORT

Fintech investment increased significantly during the previous ten years, with worldwide investment value hitting an all-time high in 2021. However, investment activity significantly decreased in 2022, with the Americas experiencing a particularly significant decline in investment value. The economic downturn was probably to blame for the drop in investment value.

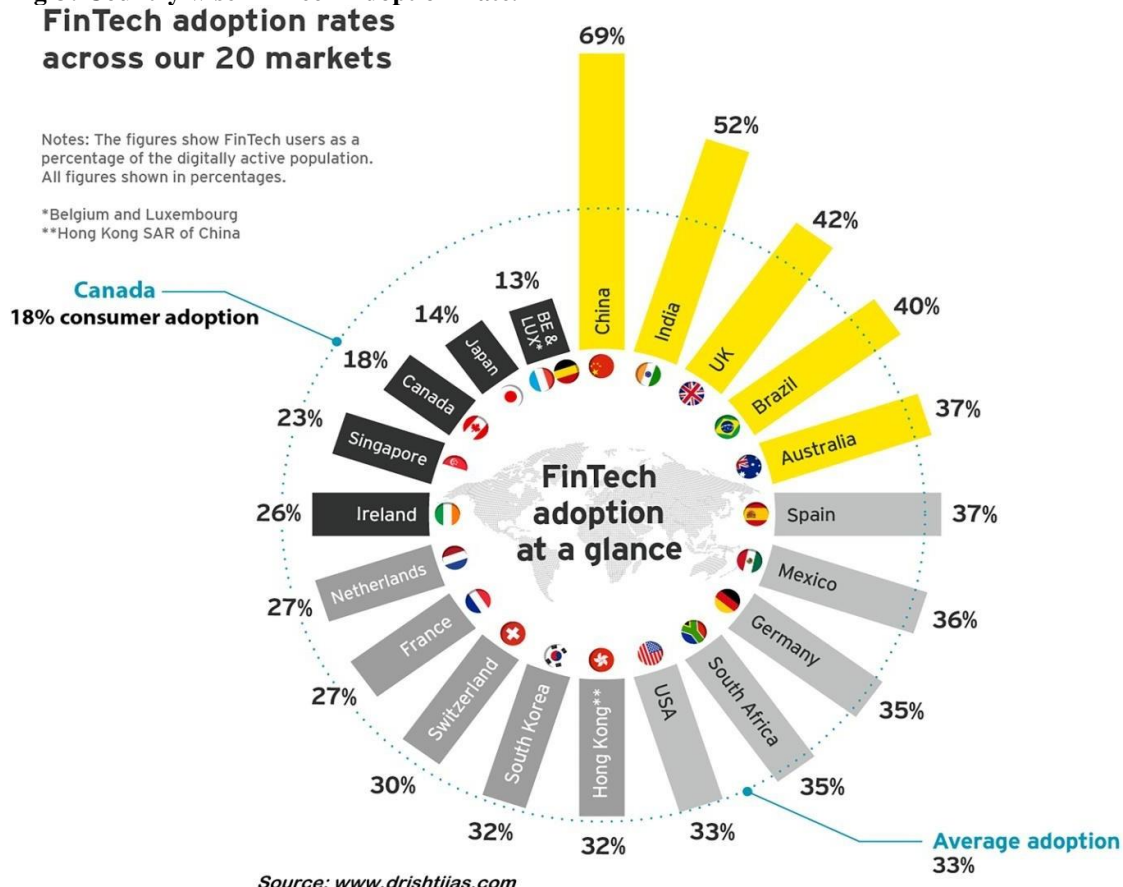
Fig-2: Number of FinTech Startups Worldwide from 2018 to 2023, by region



(Source: Statista.com)

The Americas were the region with the most fintech startups globally as of the end of May 2023 with 11,651 fintech (financial technology) startups. Comparatively, there were 5,061 fintech startups in the Asia Pacific region and 9,681 in the EMEA (Europe, the Middle East, and Africa) region. In terms of the number of unicorn fintech companies globally in 2023, the United States placed first, with almost five times as many of these firms as the United Kingdom, which came in second (Statista Research Department, 2023).

Fig-3: Country wise FinTech Adoption Rate.



With more fintech companies forming every year, services offered by them have recently become a part of daily life. Seven of the top 10 largest fintech businesses in the world are located in China, India, and the UK, where the majority of fintech companies are based.

8. FINTECH SERVICES IN INDIAN MARKET

- **Peer-to-Peer (P2) Lending Services:** The alternative credit models and data sources to provide faster and easier access to capital. P2P lending allows online services to directly match lenders and borrowers that may be individuals or businesses.
Ex: Lend box, faircent, i2i Funding, Gyandhan, Market Finance and Shiksha Financial.
- **Personal Finances / Retail Investment Services:** Fintech companies growing around providing customized financial information and services to individual needs, that is, how to save, manage and invest one's personal finances.
Ex: Fundsindia.com, Scrip box, Policy bazaar and Bank bazaar.
- **Remittance Services:** This bridges the gaps in remittance transactions (both inbound and outbound) as the current process is cumbersome and expensive.
Ex: Instarem, FX Western Union, Money Gram and Remitly
- **Payment Services:** Companies allow both private individuals and businesses to accept payments over the web and on mobile without needing merchant accounts.
Ex: Mobikwik, Paytm, Phonepe, Oxigen wallet, Hike wallet etc.
- **Equity Funding Services:** It includes crowd funding platform that enable the finding of a project or business venture by raising funds from a large number of people.
Ex: Ketto, Wish berry and Start51
- **Miscellaneous Software Services:** The companies are offering the cloud computing and technology solutions that improve access to financial products and in turn increase efficiency in day-to-day business operations.
Ex: Catalyst lab in agriculture sector, Air time up, Profit books, Store key and humming bill.
- **Crypto-Currency:** India being a more conservative market where cash transactions still dominate over the usage of digital currency like 'Bitcoins'. There are only a few bitcoin exchange startups presently dealing in India that are Unocoin, Coinsecure and Zedpay.

9. CHALLENGES AND IN FINTECH ADOPTION IN INDIA

The Fintech firms are reaching new heights in the finance sector with their innovative and dynamic adoptions with respect to the use of technology in the lending process. Fintech adoption will increase as consumer awareness increases, worries decrease, and switching between providers becomes less expensive. Around 100 Traditional banks and 1100 NBFCs in India are using technology to simplify the process to calculate credit scores and Fintech ventures are using Machine Learning Algorithms and some other data points like social media footprints, shopping histories, call records and payments to service providers to increase efficiency and provide greater access to credit.

Since Fintech comes as a fast-moving technology in India, it came with challenges such as:

- ❖ Digital payments adoption can be complicated in an Indian economy because the market is mostly dominated by MSMEs as they cannot bear the costs.
- ❖ Adoption of Fintech is skewed because of the lower margin per transaction and again it depends on the MSMEs' response, whose contribution is only 5% of the \$12-14 billion spent that is dealing largely and corresponding to larger payment gateways.
- ❖ With sustainable business models, it cannot overload consumers with extra charges per transaction.
- ❖ Regulatory Uncertainty is also a challenge to overcome that is complicating both the Fintech service providers and the consumers.
- ❖ Lack of clarity, transparency and legality among Fintech companies about KYC policy is also a major challenge.
- ❖ Knowledge of digital payment gateways and of certain platforms is restricted within the cities of India, where rural India is still struggling to make its way through.
- ❖ Cyber security threats, lack of regulatory mechanisms and lack of transparency in Fintech services are also a major problem in the expansion of its wings.
- ❖ RBI recently allowed small banks and payment banks to regulate the Fintech services, but a lot of impediments still remain with its regulations that are not giving the path to innovative Fintech players.
- ❖ Underdeveloped payment systems, lack of customer credit data, obligations under legal enforcement mechanisms for payment, weak internet coverage etc. are relatively showing the weak infrastructure to operate is also a drawback.
- ❖ Lack of digital literacy, cash dominance in transactions, informal credit and saving system is also a hindrance.

in operations.

10. OPPORTUNITIES IN FINTECH IN INDIA

The role of RBI, Government Schemes and Fintech Startups is proved as a right combination of regulations, policies and incentives in promoting the opportunities in Fintech in India. (Melissa Cyrill – 2018)

- **The Reserve Bank of India (RBI)** already promoted Unified Payments Interface (UPIs) and Bharat Bill Payment System (BBPS), digital payments, P2P lending and use of automated algorithms to offer financial assistance. Moreover, the RBI has granted licenses to more than 11 Fintech entities to establish payment banks that provide savings, deposit, and remittance services.
- **Government Schemes** such as Jan Dhan Yojana, Digital India Program, and National Payments Council of India (NPCI) have provided platforms for technology innovators. Government took initiatives to remove surcharges on electronic transactions, businesses using e-payments and tax benefits for consumers and changes in authentication requirements benefiting in faster expansion of Fintech.
- **Fintech Startups** probably the right empowering incentive in expansion of Fintech ventures in India. It was reported that more than 125 Fintech startups launched in 2018 alone. It is also observed that several national and international banks and investors coming front to invest in India's Fintech startups and funding in Fintech solutions.

11. FINDINGS

- It is found that according to EY's Fintech Adoption Index 2017, India is on the second place in Fintech adoption rate in the world after China.
- It is found that the contribution of MSME in Fintech adoption is very less in current scenario i.e., accordingly an annual payment on online purchase in India is approximately \$12 – 14 billion in which MSMEs account for only 5%.
- According to the reports, the annual spending on compliances by financial institutions is estimated at \$ 70 billion in 2008 and the global demand for regulatory, compliances and governance software is expected to reach \$ 118.7 billion annually by 2020.
- It is also found that according to (NASSCOM), the Indian Fintech market is expected to rise at a Compound Annual Growth Rate (CAGR) of 22% in coming 5 years. (Report – 2018).
- It was reported that more than 125 Fintech startups launched in 2018 alone.
- Around 100 Traditional banks and 1100 NBFCs in India using technology to simplify the process to calculate credit scores and Fintech Ventures using Machine Learning Algorithms and some other data points like social media footprints, shopping histories, call records and payments to service providers to increase efficiency and provide greater access to credit.
- According to the report published by Deloitte on "RegTech Universe" in 2017, the companies that deal in RegTech areas are 289 in total all over the world.
- According to the survey conducted by various CEOs of insurance companies across the world revealed that almost 90% of them are in the fear of losing out their business to InsureTech startups that are nimbler and tech savvy.
- The Sandbox is a testing tool that separates the codes that are not been tested and experiment it wholly from the repository. It protects the on-time server responses and their data, collection of codes, vetted sources, data/content and regulates it that simply difficult to revert.

12. CONCLUSIONS:

The Fintech companies are rapidly growing in India and reflecting its virtue in top Fintech adopted countries. The study concludes that the regulations regarding to the Fintech services are still facing problems in growth, such that the Regulatory Technology facilitating and helping the Fintech companies to promote their financial services and practicing of Fintech services simplified. Insurance companies are also making its room to develop their business by adopting InsureTech simplified services like customized policies, social insurance and enabling devices to dynamically price premiums according to the observed behavior using innovative technology.

The study suggests that the research and development on Fintech and RegTech need to rise and there is still a gap to be filled in this area which can ease in the adoption and using of its facilities among MSME's in the country. MSME's in India covering the large market area and fearing in adopting the Fintech services, such that it is in need of applications and equipment's to adopt Fintech which will boost the growth of financial services with no compliances.

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