

A STUDY ON SELECT FINTECH SEGMENT AS A DISRUPTIVE TECHNOLOGY IN FINANCIAL SERVICES

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ABSTRACT

India has witnessed a remarkable change in diversified financial sector leading to rapid expansion in financial services firms with new entities entering the financial market. The sector comprises of varied services such as banking, insurance, non-banking financial services, equity, mutual funds and pension scheme. Technology has changed the routine business processes in banks and financial institutions. The development has promoted automation and has given authority to consumers, to control, secured and regulate their operations. FinTech aka Financial Technology defines the disrupting technology fuelling innovation in financial services (Landers, 2017), such as fundraising method, wealth management, regulation technology, money transfer and payments across cross borders. Talking about ABCD of FinTech, artificial intelligence, block chain, cloud computing, and deep learning are revolutionizing the way of operations in financial services. The use of various apps for mobile banking, insurance, financing, payments, crypto-currency etc. are making one step towards a sustainable financial world. According to Invest India report, FinTech adoption rate is highest in India for all segments, i.e. in 2021 India's FinTech industry market size was \$50 bn and by 2025 it is estimated at ~\$150 bn. This research paper provides an overview of top FinTech segments in India.

Keywords- *Fintech Segment, Disruptive Technologies, InsurTech, Block chain, WealthTech*

Introduction

The globalization has resulted into cross border shrinkage for business. As finance and financial services are considered as lifeline for businesses. Thus to stimulate innovation and accelerate financial inclusion, Banks, NBFC, Insurance Providers, Investors, Regulators etc. are poised to adopt and implement FinTech solutions. According to Financial Stability Board (FSB) FinTech is

“Technology enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services”. Technology has been changing and focusing on the key functions of financial industry, bringing them to consumers’ phones. As the smart phone users are increasing day by day, the acceptance of automated and digitised processes are preferred. Boom in e-commerce, m-commerce platform had resulted in this revolutionising move. Rapid development and investments in FinTech segments, platforms and services will play a crucial role in achieving financial inclusion by tapping untapped capital inflows. While talking about technological trends in FinTech such as artificial intelligence, block chain, cloud computing, and deep learning are supporting business leaders for exploring market trends, spot new opportunities, engage their cliental and provide more value to customer. The conjunction of financial services and exponential technologies is the key to build a strong digital economy within India and globe. It is making the consumers’ experience of banking and finance more intuitive, smart, customized and empowering. The FinTech ecosystem is predicted to grow with a Compound Annual Growth Rate of 6.3% between the period 2022-2028 (Inc42, 2022).

FinTech is considered as true blessing for everyone as it is armed with new algorithm and analytics capabilities, can be accessed from anywhere in the world, asset light platform and nearly zero processing costs. Another important key parameter of FinTech is it can link multiple bank accounts by using a single interface. FinTech companies focus on providing unique, efficient and error free solutions over traditional financial operations. Customers are benefitted through the FinTech innovations, products such as online payments between individuals, smart phone apps for in-store retail payments, QR codes or barcodes to proceed payment, digital currencies, automated wealth and insurance management services, robo-advisers, decentralized ledger and many more. Development in this category are directed towards improving the speed and efficiency of payments and routine operations, lowering down cost and defining the smart and optimum ways by which people can access financial services and execute transactions.

Literature Review

Anusha Kanagala (2019), discussed that Insurance market is captured by the company’s in financial technology. The paper covered fintech industry segments in detailed. These companies are trying to reach the customers through different software, apps and platforms. The FinTech solutions are flexible rather than the traditional insurers. Insuretech, WealthTech, block chain as upcoming vertical of Fintech which has great flexibility and adaptability as compare to traditional financial sector and are causing disruptive changes.

Dr. C.Vijai (2021), presented overview of Fintech by analysing articles related Fintech Start-up in India, Fintech Industry Structure, Fintech Adoption, Fintech News Network, and Fintech Trends in India. From the paper it can be said that China is leader in Fintech Adoption and it is estimated

that India is amongst the fastest growing FinTech markets in the world. Also Visakhapatnam is being formed as FinTech valley for better functioning in FinTech solutions

Vijith M Nair (2017), FinTech companies come in all shapes, structure, sizes, and face a wide variety of issues in the course of their operations. Paper focused on exploring challenges faced by traditional banks due to existence of FinTech firms by analysing forty-two peer reviewed journal available in Science Direct, EBSCO. Research pointed three division of activities under FinTech such as Service-oriented, Data-oriented and Process-oriented.

Ahmed Taha Al Ajlouni (2018) discussed in the paper about global FinTech landscapes, which is mapped with eight categories like payments, insurance, planning, lending and crowdfunding, trading and investments, Blockchain, data and analytics, and security. Paper highlighted threats and opportunities with respect to impact on consumer sector innovation and impact on banks and banking system. The research covered scope of Alternative Financing FinTech Platforms in detailed such as Equity Crowd Funding, peer-to-peer (P2P) lending. Paper also highlighted the possible influence of Fintech on banks.

Battula (2022), Paper discussed the development of neo banks and its scope, payment and settlement system, Regulation Technology etc. Paper studied various trends of Digitization in India and Fintech Funding Trend.

Objective of the Study

- To study the scope of top three segments in FinTech.
- To understand the role of technology in select financial segment

Methodology

This research is based on secondary data collected from various sources like Google scholars, some websites (Reserve Bank of India, Financial Stability Board, KPMG etc) and Journals. Several websites, Blogs, reports, newspaper articles, and expert comments have been reviewed to map the current segments in FinTech. The selection top three segments are based on the popularity of FinTech innovations across various website. Thus Select top three FinTech segments have been identified for review purpose.

Evolution of Fintech

The term “FinTech” is a contraction of the words “finance” and “technology” (RBI,2018).

Financial technology applies to any innovation that involves financial transactions, whether it for personal use or for business. The revolutionary transition was initiated by the development of credit card during the 1950s and thereafter the ATM in 1960s. Fintech had since been disrupting the Financial services across entire world. Earlier FinTech had focus to the back-office operations of banks and stock trading. Thereafter transition of FinTech 1.0 to 4.0 can be seen. The Internet

and the rise of digital system had pushed Fintech to become a disrupting global revolution. Talking about fourth FinTech revolution, open banking (Neo banks) and block chain will reduce the pricing challenges and complications of traditional banks. Current FinTech Solutions are bringing customers’ trust and delivering more value, by following digital footprints.

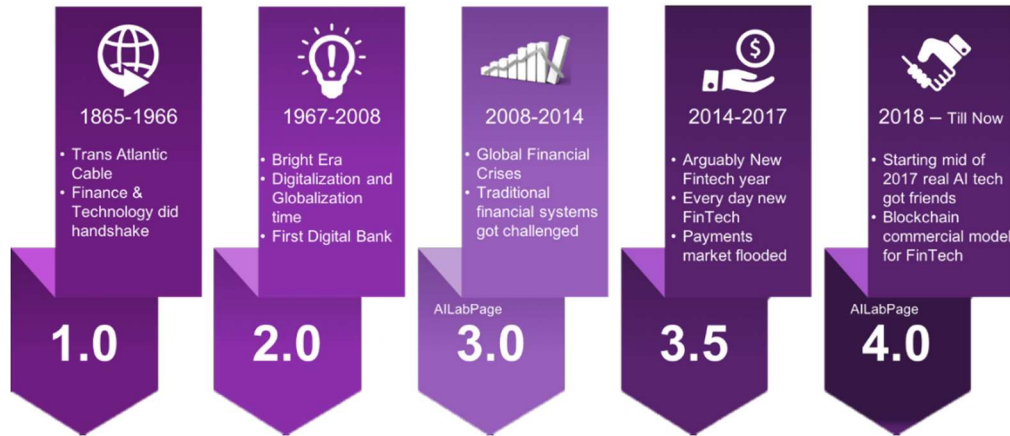


Figure 1, FinTech Evolution

Source: AILabPage

Understanding FinTech:

Fintech has become an essential part of financial ecosystem, commercial firms and enterprises utilise it for improving their working and customer experiences. It is noteworthy that the growth of FinTech has paved the foundation in various segments like Payments, Insurtech, Regtech, Block chain, Wealthtech, Cybersecurity, Peer to Peer Lending Solutions etc. Widespread technology adoption and innovation in financial services has landed to the outcomes such as faster payments, better risk management, customer retention, experience through speed and convenience and overall cost-effectiveness. Reserve Bank of India has done categorization of major innovations in FinTech as follows:

Categorization of major FinTech Innovations				
Payments, Clearing & Settlement	Deposits, Lending & capital raising	Market provisioning	Investment management	Data Analytics & Risk Management
Mobile and web-based payments Digital currencies Distributed ledger	Crowd-funding Peer to peer lending Digital currencies Distributed Ledger	Smart contracts Cloud computing e-Aggregators	Robo advice Smart contracts e-Trading	Big data Artificial Intelligence & Robotics

Table 1

Source: Reserve Bank of India, Mumbai, Report of the Working Group on FinTech and Digital Banking, 2018

The categorization of major FinTech is done for smooth and systematic execution of financial services across various domain. The binding of FinTech solutions with the AI based technology, machine learning (ML), big data, and algorithms helps to identify, detect, predict fraud in online banking channels and activities. Also FinTech solutions such as voice recognition, digital assistant, risk management, secured network access to the banking institutions leads to customer-centric approach having banking service as a top priority. Thus leads to market growth.

Promoting extensive research and development activities by smooth collaboration between education institutions, national regulators and financial institutions. More than 20 FinTech unicorns already exist and also in FY 2021 funding in India had a 3times leap as record. While going through FinTech segments in India, insurance opportunities and innovative WealthTech, InsurTech models are gearing up. Government’s digital moves and innovation in health insurance will be expanding market. Market growth is expected to touch \$1 Tn in throughput and by 2030, revenue \$200 Bn. India is progressively becoming a centre for several Fintech startups, the prominent startup company’s names under the select Fintech segments are Paytm, Pine labs, Acko, PolicyBazaar, Upstox, Zerodha Talentica Software, Brilworks Software etc.

Role of Technology in select FinTech Segment:

InsurTech

Technological Innovation to make the insurance model efficient by reducing operating costs and fraud.

Wealth tech

Digital platform, to transform the investment and asset in order to manage money and trade securities

Block chain

It is a network of decentralized and distributed data to maintains a decentralized and secure record of crypto transactions

Figure 2, Role of Technology in select FinTech Segment

Source: Authors own creation

InsureTech

RBI defines InsurTech as “Using technology to know or to find cost savings and efficiency from the current insurance industry model. InsurTech is a combination of the word’s “insurance” and “technology,” inspired by the term FinTech. i.e. one can use technology to embrace savings and

improve effectiveness in the insurance industry. Tech-transformation with artificial intelligence, IoT, machine and deep learning, and automation has created insurance value chain streamline the inquiry to enrolment process and better Omni channel experiences for customers. AI, big data and analytics will help insurers to present the products at more competitive price at scale. Traditionally, the process of Insurance claim was executed by manually reviewing each claim for compensation. Nonetheless InsurTech acts as guide to insurers as to build workflows for handling the claims process. Insurers can use apps or some software to collect data points, validate claims, evaluate risk, weed out fraud using technology, and complete the claim disbursement process for individual policyholders. It also helps to understand alternatives availability, which enables more rapid modifications to underwriting strategies, and permits underwriters for better prospects. The another benefit of InsurTech is to provide secure customer data by encrypting data and thus preventing it from cybercriminals for money making. The unique solutions offered by InsurTech agencies acts as key drivers for getting favourable ratings and feedback, e.g. Acko (InsurTech) provides coverage for taxi services.

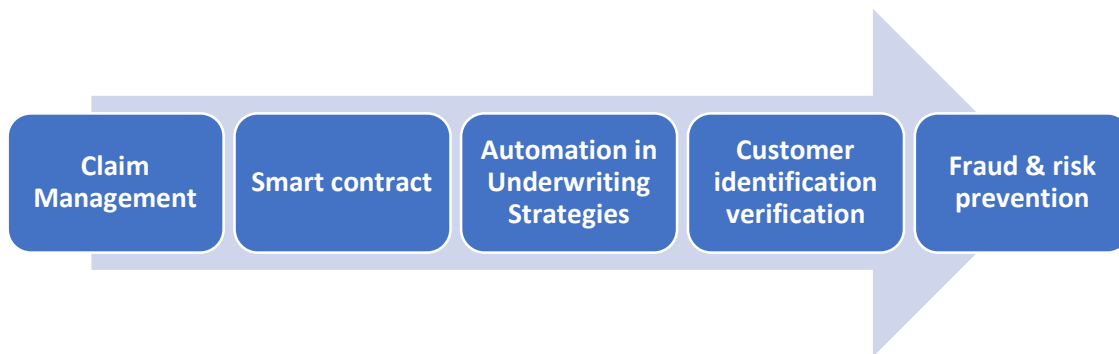


Figure 3, Traditional Insurance Challenges addressed by InsureTech

Source: Authors own creation

The Top companies dealing in InsureTech-

- Oscar health
- Gusto
- Zhongan
- Bright Health
- Paytm
- Pine labs
- Digit Insurance

WealthTech

WealthTech buzz word is driving today’s customer needs, by adopting cutting-edge technologies such as Artificial Intelligence, Big Data, Cloud Computing, Analytics so as to provide a smart

alternative to traditional wealth management. Assistance for personal wealth and asset management has become a nowadays need. The combination of words “wealth and Technology” has given rise to a new generation of financial technology. The term was coined in the early 21st century. WealthTech companies are creating a roadmap for the individuals, companies, businesses in order to manage their finances, present better wealth management scenario and guidance on the retail investment process. GlobeNewswire has said, by 2028 the wealth management technology market, will reach the \$137.44 M. The predicted transition underlines the new investment arena and disrupted ways of exploring the modern finance. The verticals of WealthTech are represented through diagram.

Robo-Advisors: It is an automated service, with little / no human interaction. It uses Machine Learning algorithms for giving financial advice, investment management directions based on their risk preferences and the most apt profitable investment opportunities available in the market. These digital wealth tools increase more client engagement and experience.

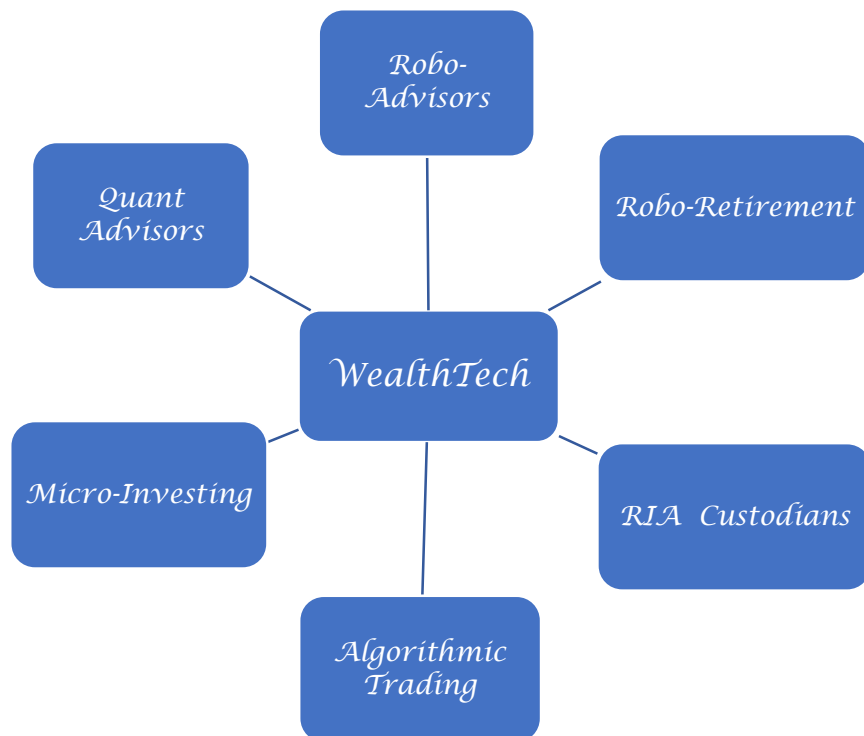


Figure 4, The verticals of WealthTech

Source: Authors own creation

Robo-Retirement: The main guidance provided by Robo-Retirement is to manage consumers' retirement savings. They offer Individual Retirement Accounts (IRAs) that either defer tax to retirement or allow capital gains to be tax-free at retirement. Robo-Retirement services platforms manage assets, create and direct towards retirement portfolios, and recommend plans generated by a AI based system.

RIA Custodians: An RIA custodian is a body that upholds the client assets and holdings of a registered investment advisor (RIA). RIAs give their clients financial advice, which usually include direction on investments, but they do not belong to part of the trades, involved in their plan.

Quant advisors: Quant advisors deal with quantitative investing i.e. with the quantitative strategies. They dig out quantitative data from market research feeds to build mathematical models. The analysis of data is done with the help of a computational model to overcome inefficiencies. When the code identifies a positive trend/ pattern or traces an inefficiency, QA initiates the correct buys and sells.

Algorithmic Trading: It uses complex formulas and mathematical models in context with human oversight. The outcome will be beneficial for deciding about buying or selling financial securities on an exchange. It is suited in variety of situations such as trend trading strategies, order execution.

Micro-Investing: Miro investing platforms helps to save, deposit, and invest little amounts of money with no commission. This platform automates the entire operations, process and portfolio management, based on individual's preferences.

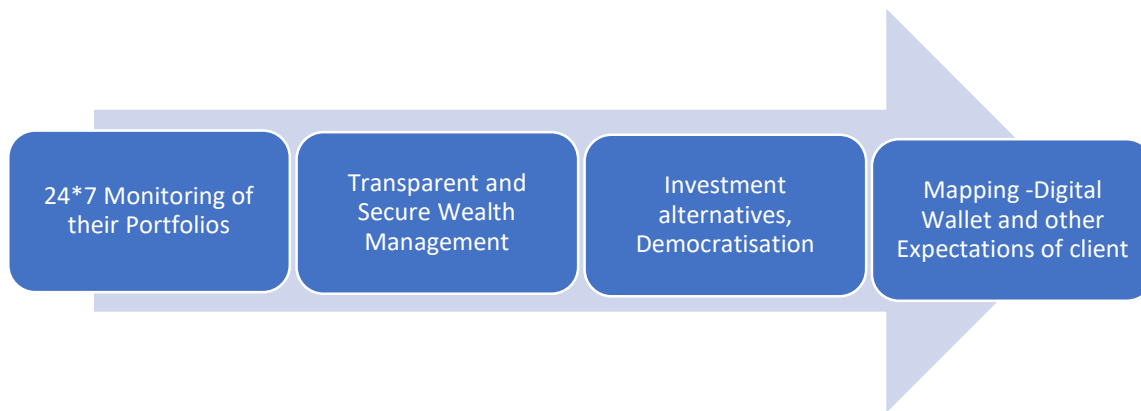


Figure 5, Traditional Wealth Management Challenges addressed by WealthTech

Source: Authors own creation

Prominent ompanies dealing with WealthTech

- Zerodha
- INDWEST
- Upstox
- Groww
- UTI AMC Limited

- Birla Sun Life Asset Management
- Reliance Mutual Fund

Blockchain

The concept of a Blockchain focus on the ledger or distributed database. Mckinsey describes Blockchain as it is a secure database shared across a various participant’s nodes on the network, where real time, up-to-date information is available to all participant nodes at the same time.

As concept of blockchain uses a shared and immutable ledger, accessed by individual who have permission. Hence the control is with network members on the information, each organization or individual may see and use it. It is regarded as top tech trends as it allows permanent, absolute, and secure transparent recording of data and transactions. Three main characteristics of a blockchain are,

- A blockchain database should be cryptographically secure.
- A blockchain is a considered as digital transactions log or database
- It is a database which is shared amongst a private or public network

Blockchain offers following benefits:

- Complete transparency of different events triggered by various participants
- Immutability
- Systematic and automated flow generated because of specific events.
- Private distributed ledger

Thus to access, add or use data on the database, one needs public key and private cryptographic keys. The function of a public key, address in the database, whereas private key (personal key) must be authenticated by the network. Figure 6, presents traditional Challenges addressed by Blockchain to overcome multiple challenges of hacking.

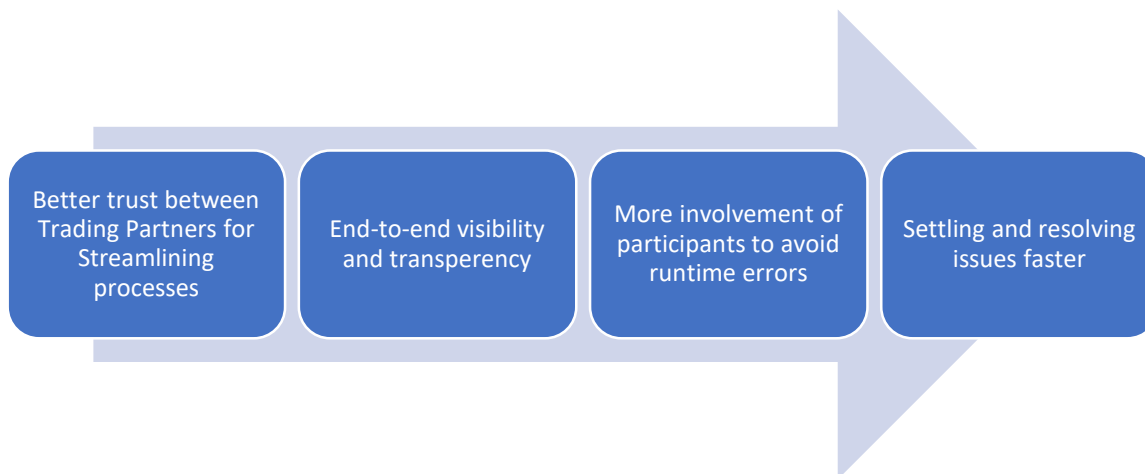


Figure 6, Traditional Challenges addressed by Blockchain

Source: Authors own creation

Prominent Companies dealing with blockchain

- Coinbase global Inc.
- QBurst
- Canaan Inc.
- Galaxy digital holding Ltd
- Kellton Tech
- Infosys
- Indus Net Technology

Conclusion

Advanced technology such as big data, cloud computing, deep learning with artificial intelligence and machine learning algorithms has provided benefits to both consumers, investors and other participants. Fintech has a potential to disrupt and to create new types of opportunities with some risk. Businesses can see following and many more opportunities such as Superior deals, Better collaboration and partnership, inclusion of big business entities, more and more Fintech invest in start-ups. Regulators around the globe are working diligently and thoughtfully to provide consumer protection, safe guard their expectations and to maintain financial stability. Fintech is important for the future financial sector and vertical trajectory of all the segments can experience more inclusive and efficient financial services. Thus Fintech is reshaping of the financial sector by managing the risks. Thus select segments such as InsureTech, WealthTech and Blockchain can pursue long term sustainable cross-border coordination.

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