



Fintech market in India and abroad: An overview

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Abstract

The term 'FinTech' is a combination of the words 'financial' and 'technology', Fintech, referred to as financial technology, emerged during the financial crisis of 2007-2008 and has since revolutionized the financial services sector through the introduction of new technologies to the marketplace. Technology-based banking forms the dual pillars upon which the foundation of modern banking growth stands. Over the last decade in India, the rapid expansion of mobile networks in previously underserved regions and communities has played a pivotal role in driving this progress. Additionally, the emergence of payment banks has provided an extra alternative to online and mobile banking, resulting in heightened operational efficiency and reduced expenses for servicing customers in rural and semi-urban areas.

Progressed information examination and utilization of FinTech applications such as AI have clear uses in loaning environment and protection, in misrepresentation identification and anticipation, and for better credit appraisal. This presents an opportunity for people who have generally been bolted out because of a need of formal financial records. Additionally, AI can be used for protection and to enhance the conventional endorsing cycle and upgrade controls. The worldwide monetary framework is ready for remarkable development. Fintech can decrease costs and improve access. People need to understand the relationship between monetary system and the positive impact the technology has on financial sector and the economy. By empowering innovations and overseeing hazards, another monetary framework can be created which is more comprehensive and stronger. Against this background, a modest attempt has been made in this paper to present an overview of fintech market in India and abroad.

Keywords: Artificial intelligence, fintech ecosystem, fintech market, insurtech, neo banks

Introduction

The scene of banking and the monetary area has gone through a sensational change since the 2008 Global Financial Crisis (GFC), attributable to monetary innovation firms, prominently known as 'FinTechs'. Both as innovative disruptors and facilitators. FinTechs have added to the cutting-edge banking and monetary area through different channels including cost enhancement. Better client support, and monetary incorporation. FinTechs play had a significant impact in unbundling banking into centre elements of settling installments, performing development change, sharing danger, and distributing capital. The data and broadcast communications insurgency is viewed as the fifth 'Innovative Revolution' driving growth, and FinTech is in charge of this inventive interruption. The extent of tasks of FinTechs has additionally expanded, moving from crypto resources for installments, protection, stocks, bonds, share loan, robo-guides, reg-tech, and sup-tech.

In India, FinTechs and Digital players could work as the fourth portion of the Indian monetary framework, close by huge banks, moderate-sized banks including specialty banks, little money banks, provincial banks, and helpful banks. This fragment can possibly generally change the monetary scene where customers will actually want to look over the more extensive arrangement of choices at serious costs, and monetary organizations could further develop effectiveness through lower costs. India has arisen as the quickest developing FinTech market and the third biggest FinTech environment on the planet. FinTech appears to be possibilities thanks to supporting the evolving Indian economy enjoy the benefits of digital technology and aim to

cut back inequalities between industrialized and developing nations.

According to India's Telecom regulatory agency (TRAI), in April 2109 there had been 1.16 billion mobile users. TRAI additionally expresses that the measure of cell phone clients in India has developed last year huge amounts at a time in India, finishing inside the world's least expensive portable information. The new entry of telecom operator, Reliance Jio, has changed the telecom market dynamics completely. This operator provides telecom services in India which are that the cheapest in the world (The Economic Times, 2018, September 6).

FinTech can possibly generally change the monetary scene, furnish customers with a more prominent assortment of monetary items at cutthroat costs, and assist monetary foundations with becoming effective. The quick and ground-breaking changes welcomed by FinTech should be checked and assessed so controllers and society can stay aware of the hidden innovative and pioneering transition.

History of FinTech

FinTech

FinTech history traces all the way back to the 19th century and even before that. In 1860, a gadget called Pentelegraph was created to confirm marks by banks. Antiquarians acknowledge 1866 as the first substantial FinTech impression. This was the year the transoceanic links were set up prompting a time of making network frameworks and linkages all throughout the planet. The setting up of electronic asset move through Telegraph and Morse code in 1918 by Fedwire prompted the main small step in the digitalization of cash. The two WW additionally saw

another arrangement of coders and codebreakers predominantly for military purposes (however this set up coding and future advanced turn of events). The distribution of the book "The Economic results of Peace" in 1919 is treated as the main suspect on the FinTech-driven future.

For the most part, FinTech students of history miss one significant and life-changing occasion of FinTech 1.0 and that is Diner's Card in 1950. This was the primary genuine attempt to make your installments credit only and keeping in mind that the start was unassuming and restricted to eateries installments, it prepared for the future to create. This was trailed by the presentation of Credit Card by Amex in 1958. With the presentation of Screen-based stock information by Quotron in 1960, the financial market took a gigantic step, one significant fruitful execution of early FinTech thoughts.

FinTech

FinTech 2.0 is considered regardless of the presentation of ATM machines by Barclay's in 1967. Simply the prior year in 1966, Telex had substituted Telegraph for moving data across the world; hence proclaiming a time of associated monetary exchanges and correspondence.

The major FinTech development came in 1971 with the arrangement of NASDAQ as the main Electronic financial exchange. It changed the manner in which offering is done and modernized the IPO interaction essentially. This is viewed as quite possibly the main FinTech advancement ever. This was trailed by the presentation of SWIFT in 1973, another progressive assistance standard. The '80s saw the advancement of electronic exchanges and internet banking frameworks. Trade plus (E-exchange) presented the E-exchange without precedent for 1982 for its clients. This was trailed by NBS/WF offering internet banking to their clients by 1983/1985. Today, we can't envision a world without these two innovation administrations in our day-to-day existence. 1983 was the year when Mobile telephones were dispatched interestingly as well. The improvement of intricate figuring frameworks helped in the starting of fresher and more powerful cycles and items. One significant advancement was the development of E-trade during the mid-'90s which made the dependence on computerized finance considerably huger. 1998 saw the dispatch of PAYPAL, the pioneer of credit-only installments in years to come.

FinTech

The 2008 emergency prompted the accompanying necessities

- Post emergency changes required stricter administrative impulses for conventional banks and it opened up another market for more modest players. This was additionally helped by doubt of public in enormous monetary foundations
- Generally speaking, the focal point of the business was on reducing down functional expense utilizing innovation
- The approach of new innovations like P2P. Wallets. Bitcoins prompted convenience for the overall purchaser

These necessities and advancements prompted another period of financial administrations and FINTECH as far as we might be concerned today. Two significant occasions were the improvement of Bitcoin in 2009 as the primary

digital money and P2P installment frameworks in 2011. The western world has been agitating new turns of events and many new unicorns from that point forward. BaaS, RegTech, Digital Lending. InsurTech, Wallets, and a lot more fragments are seeing development and advancements consistently.

FinTech

The year 2014 onwards saw a non-direct ascent of the two most crowded nations in FinTech, in particular China and India. Without enormous chains of mind-boggling actual financial frameworks, these two nations saw an extremely speedy development in the FinTech area. This alongside FinTech advancements in Africa is considered as the development motor for 2014-2018. This is driven by SaaS advancements like financial programming by Indian IT organizations, m-Pesa in Africa, Payment banks in India, Alipay in China to give some examples.

FinTech

FinTech is forming the fate of monetary administrations, and conventional banks and monetary associations need to adjust rapidly to the changed climate to endure. Different new companies have disturbed the market and have raised the stakes as far as mechanical progression, yet in addition plans of action and all the more critically. Client experience. It is assessed that 59% of clients in North America, 61% in Western Europe and 59% in the Asia-Pacific are utilizing FinTech items. While a few banks have gained ground in reception of new FinTech administrations, numerous investors have not yet understood the extent of progress the monetary administrations industry is going through and think little of the effect FinTech 4.0 is having on clients, who are definitive disruptors. Monetary associations should foster a FinTech 4.0 system to guarantee their proceeded with endurance in the midst of firm contest. 80% clients feel FinTech organizations offer quicker types of assistance than banks.

Global FinTech Market

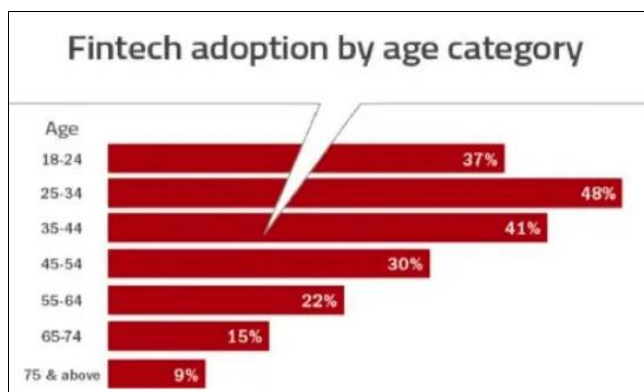
- The worldwide FinTech market was esteemed at INR 11,334.92 Bn in 2019 and is relied upon to arrive at INR 32,107.83 Bn by 2025, growing at a CAGR of 18.12% during the 2020-2025 estimate time frame.
- The market's development can be credited to the flourishing worldwide advancements area, computerized business market what's more, the quickly developing versatile innovation industry:
- The development of framework-based innovation, through application programming interfaces (APIs) would further drive the worldwide FinTech industry during the figure time frame.
- Blockchain is relied upon to disturb the monetary exchange industry across the world, inferable from its worldwide reach and low handling charge.
- Moreover, functional progressions gave by chatbots, mechanical eye mechanism (RPA), and circulated record innovation (DLT) are relied upon to bring more precision and productivity to FinTech applications
- Asia-Pacific is the quickest developing FinTech market, universally, with critical venture openings, and developing business sectors like China and India Financial companies offer mobile-based financial apps to enhance the financial services offered, it also helps to succeed in more customers and increase awareness

about online services. Solution providers are offering financially secure e-commerce platforms with increasing demand for e-commerce apps among users.

Key Drivers of the FinTech Market

- Increasing demand for mobile banking applications and e-commerce platforms among users for a more user-friendly platform to perform financial transactions is anticipated to drive the FinTech market.
- Increasing the adoption of advanced technologies in business operations by banks and insurance companies rather than using legacy operating systems is anticipated to spice up the demand for FinTech among companies.
- Investors are collaborating with wealth management solution companies to consolidate their position within the market and supply advanced solutions in financial technologies, this is often expected to supply significant opportunities to solution providers of FinTech.

In attempting to decide the contrast between FinTech clients and non-clients, EY found practically no curveballs. The age classes that were probably going to be drawn to FinTech arrangements are related to those probably going to utilize computerized gadgets. These buyers are more youthful (matured 25-44).



Source: EY July 2017-The Financial Brand

Fig 1: Consumer FinTech Adoption by Age Category

This is likewise the segment classification of heavier monetary item clients, property holders, and more taught buyers. Lucky for FinTech suppliers, these buyers are likewise probably going to attempt another supplier. Buyers in more seasoned age bunches are more gotten comfortable with their monetary propensities and more faithful to their momentum supplier. (More adverse to switch).

The most sensational difference between FinTech clients and non-clients is the manner in which shoppers like to deal with their lives. As indicated by EY, 64% of FinTech clients lean toward dealing with their lives through computerized channels, contrasted with 38% of non-FinTech clients. FinTech clients are likewise bound to be clients of non-FinTech advanced stages, for example, on-request benefits (computerized taxis, online food, and so forth) and the sharing economy (bicycle and lodging rentals).

Evolution of FinTech in India

1991-2000

The Indian Government started to change the Indian Banking Industry with the presentation of innovatively

insightful banks. Different installment innovation was pushed like MICR, electronic.

2000-2005

Reserves move to support the financial area however the greater part of them was government-driven and needed monetary development. FinTech's started to rule the US and UK scene, they began infiltrating the Indian financial industry by offering different buyer-driven administrations. FinoPay Tech and EKO India were the two significant new businesses that fabricated their model around the financial journalist model (BC Model) which was utilized to expand infiltration in provincial regions at cheaper utilizing essential strategies with the assistance of specialists.

2005-2010

This period saw the development of major FinTech new companies, for example, Oxigen, Paytm, Free charge, Mobikwik in the field of portable wallets-charge installment and versatile re-energize administrations

2010-2014

From 2010, there have been various FinTech new companies that have mushroomed in various sections like loaning (100+), individual budget the board (40+), and speculation the executives (90+) new businesses.

2014-2019

Demonetisation presented in November 2016 is considered as the greatest lift to FinTech in India and the Introduction of India stack (Aadhaar/e-KYC/UPI/e-Sign and so forth) improved just as disturbed Payment, Lending. Insurance and Wealth business. While wallets imploded because of UPI, Lending FinTech's/InsurTech succeeded. Abundance business went through difficulties because of direct plans of Mutual Funds.

2019-till date

India stack proceeds to emphatically affect FinTech's with fresher administrations. Neo Banks have arisen as a section of decisions for financial backers. Neo-Entrants are presenting "FinTech as an assistance line" in their present plans of action by either creating it naturally or purchasing out FinTech's. Loaning new companies is going through the development stage. Complex regions like Trade Finance and B2B new companies are getting support in the new wave.

Evolution of the FinTech Ecosystem in India

The foundation of Indian FinTech lies in the basis is done over the earlier decade in creating key empowering influences. The Indian FinTech industry the way things are today being the consequence of a remarkable mixture of innovative empowering influences, administrative intercessions furthermore, business openings just as certain other qualities remarkable to India.

As the controller of payment system, the Reserve Bank has attempted various measures to guarantee expanded effectiveness and continuous accessibility of secure, open, and reasonable installment frameworks also, to serve sections of the populace that are until now immaculate by the installment frameworks. To accomplish this, Reserve Bank's Vision 2021 imagines four goal lines (4 Cs), i.e., Competition, Cost, Convenience also, Confidence.

India is one of only a handful of exceptional purviews with an explicit Payments and Settlements law to "give for guideline and oversight of installments and settlement frameworks in India and to assign the Save Bank as the expert for the reason and the matters associated therewith or coincidental up until recently". The Reserve Bank manages some FinTechs straightforwardly by allowing them NBFC licenses (like NBFC-P2P), or on the other hand in a roundabout way by directing the banks and NBFCs related to them. National Payments Corporation of India (NPCI) is the umbrella association for working retail installments and settlement frameworks in India, as a driver of the Reserve Bank and the Indian Banks' Association (IBA) under the arrangements of the Payment and Settlement Systems Act, 2007. The mediations in Payment and Settlement System proposed by the Reserve Bank in its different Monetary Strategy Statements over the year.

FinTech in Past

During the last decade of the 18th century, current banking arose in India. The FinTech area has gone through significant progress throughout the most recent twenty years, battling from the provincial and post-autonomy periods and from nationalization and advancement. The Indian economy was battling back in the mid- 90s till the new globalization and advancement strategy became effective in 1993, wherein plenty of worldwide organizations began venturing into the Indian Market. Indian Banking was all the while chipping away at the advanced age paper-based record frameworks. This is when innovation a.k.a. monetary innovation initially began to roll out troublesome improvements with the dispatch of Finacle by Tech Giant Infosys.

Finacle turned into an enormous achievement and was considered as the foundation of center financial frameworks of most of the banks in India and abroad. The banks had the option to diminish the time taken to do different tasks by finished 90%. Each branch has the openness of the client accounts which assist the clients with getting administrations from anyplace. In any case, this wasn't the finish to the quandaries that the purchaser needed to face to make installments for different exercises through Check's the place where the beneficiary needed to visit the bank to store the genuinely take a look at he gathered from the payer. Likewise, the client needs to do each exchange by visiting his own branch.

India's advancement wave may regardless not be of the scale when seen against its overall accomplices, yet it is stacked well, generally. From wallets to protection, the organizations of FinTech have rethought how associations and clients do routine trades. The extending gathering of these examples is arranging India as a charming business area all throughout the world.

Landscape of FinTech: Global Context

North America

Nonetheless, the development of North American FinTech is an extremely reassuring astonishment in the event that we consider the year 2020 difficulties. The US market development made 21% as indicated by the World Bank. Both Canada and the USA are remembered for the rundown of Top 10 FinTech Markets.

The market of Canada takes the ninth situation, with a populace of 37.5 million individuals, and the market center

around Cryptocurrency and Blockchain, Digital Lending, and Insurance administrations.

The FinTech market of the USA is a rating chief with a populace of 329 million alongside a \$9.4 billion FinTech speculation. The market center envelops Payments, Security, and B2B FinTech. Protections controllers in the US might make some forceful implementation; in any case, it can't lessen the allure of interest in the US FinTech area.

Europe

There are a few appraisals of European nations driving in FinTech advancement, yet the vast majority of them incorporate the United Kingdom, Switzerland, the Netherlands, Sweden, Lithuania, and Estonia.

London, as one of the best European FinTech centers, is popular for an incredible number of gas pedals for FinTech new companies (more than 20), raising billion- worth FinTech organizations. The UK's FinTech qualities incorporate Alternative loaning, Blockchain and Cryptocurrencies, Payments, Personal Finance, and Wealth Management.

Switzerland here and there styled as a crypto-valley has a chronicled notoriety as a significant monetary center point and is another European FinTech focus with a populace of 8.6 million and attention on Wealth Management and Crowdfunding notwithstanding Blockchain.

The FinTech of Netherlands is known for Digital Payments, Investment, and Alternative Lending. A populace of 17.1 million individuals has an exceptionally undeniable degree of tech reception.

Swedish FinTech new businesses for the most part are SME banking, Payments, and Neobanks. The populace is 10 million, while the quantity of advanced monetary administrations clients is possibly high due to socio-segment boundaries.

Lithuania is a moderately new individual from such evaluations with a somewhat little populace of 2.8 million individuals. Be that as it may, its major FinTech center point in Vilnius and more than 170 FinTech organizations situated in the nation assist Lithuania with fortifying its positions. The FinTech market center is Lending, Payments, and Banking.

FinTech of Estonian is known for Payments, Alternative Lending, and Personal Finance. A country that is much more modest than Lithuania in the populace (1.3 million) is profoundly intense to turn into a huge FinTech center point with heaps of gas pedals and a great speculation environment.

Asia Pacific

In the Asia Pacific locale, India is named one of the world's quickest developing FinTech showcases by RBSA Advisors. In the second quarter of 2020, India acquired \$647 million in venture shutting 30+ FinTech bargains. For a similar period, China's

FinTech speculation reached \$285 million. With a populace of practically 1.4 billion, no big surprise the country's FinTech industry is developing for the beyond 10 years with an emphasis on Payments, Lending, and Wealth Management.

With respect to Singapore's FinTech market: its key qualities are Insurtech, Payments, and Lending. Like the UK in Europe, Singapore is known in the Asia Pacific for 20+ FinTech gas pedals. The populace is 5.8 million. Critical

government speculation, for example, \$735 million out of 2019, and ideal duty strategy make the country one of the local FinTech pioneers.

FinTech is transforming the world of finance faster than ever before using newer technologies. It has 64% global consumer adoption; 96% of global consumers are aware of digital payment services, 68% of consumers prefer non-banking institutions for financial services and 46% of consumers are willing to share their banking data with the non-banking firm are key findings of 2019 FinTech consumer survey. On the SME segment, 25% is the global adoption rate, 56% use banking payment & FinTech service, and 46% use FinTech financing service (Global FinTech adoption, 2019).

Digital payment has maximum awareness and adoption rate, with India and China is a global leader. It has become the backbone for non-finance industries like insurance (comparison, purchase), transportation (e.g. radio taxi), telecom & utility (recharges, bill payments), travel (bookings, payments, and offers), hospitality (booking, payments). Entertainment (content purchases), FMCG (point of sale), e-commerce, etc. Even, the government in many countries like India is carrying out direct fund transfers for purchases and subsidies to eliminate corruption and reduce the cost of a transaction. Digital payment shall continue as core FinTech services with further innovation.

Banks are driving initiatives to encourage FinTech innovation, they need to address challenges from people, processes, and organizational culture. Neobanks are posing challenges for traditional banks by offering innovative products at a lower cost. Regulatory bodies and central banks are supporting FinTech innovations by setting up sandbox environments and policy changes for licensing and governance. The regulator needs to leverage FinTech innovations for its governance and supervision function and be more proactive using newer technologies.

Blockchain has immense potential to transform businesses, reduce costs, and improve trust and transparency. The potential of tracking any transaction from source to target with trusted intermediaries is a powerful capability of blockchain and has strong use cases, like diamond stone tracking from mining to retail store, organic farming from farmer to market, land records in maintaining a transparent history of ownership and sharing secure medical records of a patient. Newer technologies like cloud computing, blockchain, artificial intelligence, cognitive learning, machine learning, robotics, augmented reality, big data, IoT, and drones are leveraged by FinTech firms.

IMF as a global financial institution believes FinTech can improve cross border payment service, cost of the transaction, and transparency using blockchain distributed ledger technology. Digital insurance, digital invoicing, electronic factoring, electronic leasing, crowd investing and interlinkages of cryptocurrencies other than bitcoin are newer topics where further research can be carried out.

Investment advisory using robots has the potential to disrupt the investment advisory business. These robo-advisors can meet the customer expectation of trust and transparency, at a lower cost, and with better knowledgeable information; however, customers still expect a human interface for investment advisory, which can be addressed by a hybrid model of a human face along with a robo-advisor.

Conclusion

The scene of the banking and the monetary area has gone through an extraordinary change since the 2008 Global Financial Crisis, demonetization, and COVID 19 attributable to monetary innovation firms, prevalently known as 'FinTechs'. According to MEDICI India FinTech Report 2020, India had the second-largest number of new FinTech new companies over the most recent three years, directly behind the US. Likewise, inside FinTech fragments, Digital installments have been at the front line of driving India's FinTech area. Loaning is the second biggest portion in India's FinTech Sector followed by InsurTech, WealthTech, Neo Banks, RegTech, and so on.

In the course of recent years, India has tried a few rules and changes, for example, conceding numerous licenses for separated banking to little back banks, installment banks and acquainted the bound together installment interface with incorporate the unbanked populace of India in the formal monetary administration's envelope. Reinforcing the major FinTech sections like installments and loaning biological system. Drives drove by the public authority and controllers for advanced India like demonetization, Jan Dhan Yojana, Aadhaar, and so forth supported by the developing web and cell phone entrance, have prompted the reception of FinTech.

FinTechs can help introduce more efficient and inclusive business models and expand the pool of suppliers of financial services. The enormous potential of FinTech to create a more inclusive financial system and to stimulate economic growth is also being widely recognized. A study by the McKinsey Global Institute estimates that emerging economies could boost their GDP by \$ 3.7 tn by 2025 by fully embracing digital finance. Several studies have also shown that countries with deeper levels of financial inclusion have stronger GDP growth rates and lower income inequality. Above all, FinTechs have huge potentialities which needs to be exploited.

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