### Fintech Issues and Challenges in India

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#### **Abstract**

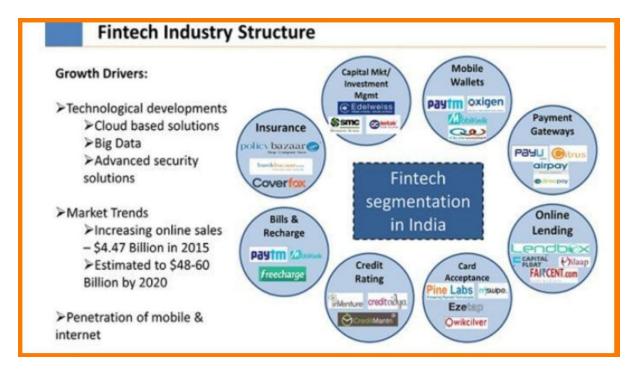
New finance technologies (FinTech) have erupted around the arena. Consequently, there was a good-sized increase in educational literature on FinTech over the last five years. Research tends to be scantily connected without a coherent research schedule. Significant research gaps and important questions continue to be. There is an awful lot of painting to be done before this area becomes a long-time educational discipline. This paper offers coherent studies on subject matters formulated via attention organization meetings with policymakers and teachers and is also based totally on a crucial evaluation of the literature. We outline seven key research gaps with questions that might shape the idea of an educational look. If these are addressed it would assist this location to grow to be a long-time educational area.

Key Words: Financial Technology, Fintech, Financial Services, Indian Financial System, Business Finance.

#### INTRODUCTION

Fintech, the abbreviation for economic technology refers to an area made by corporations' that supply monetary offerings efficiently by using technology. In the twenty-first century, it is a rising type of carrier. Implementing era in the economic sectors for cell bills, loans, cash transfers, or even asset control, new start-up companies are trying to replace the

traditional transaction machine with modern, green techniques. Peer-to-peer lending, peer-to-peer fee technology, digital wallets, blockchain, and mobile banking is a additional example of the way technology is being used in financial transactions. These are searching for to amplify the advantages and obtain excessive monetary transaction efficiency. Additionally, they assist in reducing consumer charges.



#### **OBJECTIVES OF THE STUDY**

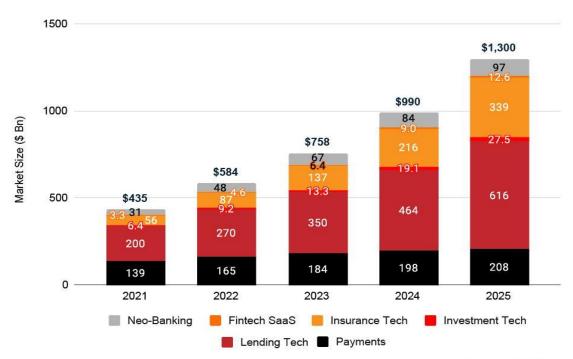
- To know about the current status of fintech industry in India
- To identify the major issues in fintech industry in India.
- To make suggestions based on the study

#### FINTECH IN INDIA

With an ever-increasing reliance on data generation, the phrase "fintech" is used to characterize new technological breakthroughs inside the financial services enterprise. Originally used to describe the backend technology employed by way of most important monetary establishments, the phrase has come to refer to all technological improvements inside the financial industry, inclusive of those in financial literacy and education, retail banking, investing, and many others. One of the most sizeable developments anticipated to have an instantaneous effect on the worldwide financial quarter is technological innovation. The business fashions and techniques of monetary establishments are challenged with the aid of improvements in payments, lending, asset control, and insurance, but these innovations also gift opportunities for each marketplace gamers inexperienced persons. Innovation can also boom risks specific for monetary institutions, clients these establishments, and the whole monetary Despite its children, India's device. FinTech enterprise is increasing fast because to a widespread marketplace, a startup ecosystem that values innovation, and benevolent authorities policies and rules. This younger and vibrant industry is populated via some of startups, but nonbanking financial enterprises (NBFCs) and institutions traditional banking catching up. There had been severa outcomes of this latest disruption inside the banking and economic offerings enterprise.

# India To Reach A Trillion-Dollar Fintech Market By 2025

The country's fintech market is estimated to grow at a CAGR of 31% during 2021-2025



Source: Inc42 Plus, Other Secondary Sources



FinTech in India has the potential to provide sensible solutions to troubles confronted by conventional financial establishments, which include penetration, a dearth of credit score records, and a transaction financial system based on cash. The Indian banking and economic offerings enterprise may want to undergo full-size alternate if regulators, marketplace individuals, and buyers can paintings together. Currently, FinTech carriers provider are altering companies and consumers deal on a ordinary foundation. Since it picked up steam following the introduction of net offerings in the country the FinTech region has skilled large growth in India during the

beyond ten years. India is one of the fastest growing fintech marketplaces in the international, with FinTech adoption fee of 87% as compared to the global average of 64. In India, there were greater than 6,636 fintech agencies, which ended in a \$50 billion market in 2021; through 2025, it is expected to grow to \$one hundred fifty billion.

### THE EVOLUTION OF THE FINTECH INDUSTRY

The fintech industry as we know it today did not exist before the late 1990s and early 2000s. Nonetheless, fintech's origins can be traced back to the advent of

computer systems and the growth of electronic banking in the financial services industry in the 1970s and 1980s. These early innovations set the stage for fintech's expansion and development in the latter half of the 20th century and beyond.

The evolution of the fintech industry has been rapid and dynamic, with significant changes taking place year after year.

### The timeline of the evolution of the fintech industry





#### 1.0 (1886-1967) is about infrastructure

This is an era when we can first start speaking about financial globalization. It started with technologies such as the telegraph as well as railroads and steamships that allowed for the firsttime rapid transmission of financial information across borders. The key events on this timeline include first transatlantic **cable** (1866) and **Fedwire** in the USA (1918), the first electronic fund transfer system, which relied on now-archaic technologies such as the telegraph and Morse code. The 1950s brought us credit cards to ease the burden of carrying cash. First,

Diner's Club introduced theirs in 1950, American Express Company followed with their own credit card in 1958.

#### Fintech 2.0 (1967-2008) is about banks

This period marks the shift from analog to digital and is led by traditional financial institutions. It was the launch of the first handheld calculator and the first ATM installed by Barclays bank that marked the beginning of the modern period of fintech in 1967.

There were various significant trends that took shape in the early 1970s, such as the establishment of NASDAQ, the

world's 1st digital stock exchange, which marked the beginning of how the financial markets operate today. In 1973, SWIFT (Society For Worldwide Interbank Financial Telecommunications) was established and is to this day the first and the most commonly used communication protocol between financial institutions facilitating the large volume of cross border payments.

The 1980s saw the rise of bank mainframe computers and the world is introduced to online banking, which flourished in 1990s with the Internet and **e-commerce business** models. Online banking brought about a major shift in how people perceived money & their relationship with financial institutions. By the beginning of the 21st century, banks' internal processes, interactions with outsiders and retail customers had become fully digitized. This era ends with the Global Financial Crisis in 2008.

### Fintech 3.0 (2008-2014) is about startups

As the origins of the Global Financial Crisis that soon morphed into a general economic crisis become more widely understood, the general public developed a **distrust of the traditional banking system**. This and the fact that many financial professionals were out of work, led to a **shift in mindset** and paved a way to a new industry, Fintech 3.0. So, this era is marked by the **emergence of new players**, particularly fintech startups, alongside the already existing ones (such as banks).

The release of Bitcoin v0.1 in 2009 is another event that has had a major impact on the financial world and was soon followed by the boom of different cryptocurrencies (which, in turn, was followed by the great crypto crash in 2018).

Another important factor that shaped the face of fintech is the mass-market penetration of smartphones that has enabled internet access for millions of people across the globe. **Smartphone** has also become the primary means by which people access the internet and use different financial services. 2011 saw the introduction of **Google Wallet**, followed by **Apple pay** in 2014.

## Fintech 3.5 (2014-2017) is about globalisation

Fintech 3.5 signals a move away from the western dominated financial world and contemplates the **expansion in digital banking around the globe,** with improvements in fintech technology.

It puts the focus on consumer behaviour and how they access the internet in the developing world. For example, in China and India, markets that never had time to develop Western levels of physical banking infrastructure and so were open to new solutions more quickly.

This era is marked by an increasing number of **new entrants** and their **last mover advantages.** 

# Fintech 4.0 (2018-today) is about disruptive technologies

Blockchain technologies and open banking are continuing to drive the innovation of the future of financial

services. The game changers here are **neo banks** that challenge the pricing and complexity of traditional banks, while earning customers' trust through simplified, digital-only experiences and low-to-no fees.

Machine Learning, on its part, is transforming the way people interact with banks and insurance companies, receiving bespoke offers and support. Germany's N26, for example, relaunched its premium account in 2019 to cater to the specific needs and tastes of its subscribers, such as discounts in coworking spaces and in online travel booking sites.

ML also has security applications: British Revoluta, for example, unveiled a new AI solution in 2018 to combat card fraud and money laundering, developing deep insights predictions around customer and behaviour to dynamically identify new card fraud patterns without human intervention. Another major event in this period is the new wave of integrated payment providers, with platforms that can offer payments as an additional strand to an already comprehensive business management system. lately, mainstream use cases for NFTs, like creators strengthening their power with digital earning representations of their contents, or artists ensuring royalty distributions, or NFTs as tickets or membership cards.

#### FINTECH TODAY

As technology is becoming ever more central in the finance industry, we tend to consider banks and fintech startups as opposing forces fighting for their share of the market. The reality is that both sides need each other just as much as they need to compete with each other. On the one hand, fintech startups have taken funding from banks and often rely on banking, insurance, and back-office partners to deliver their core products. Banks, on the other hand, have acquired fintech startups or invested in them to leverage new technology and ways of thinking to upgrade their existing operations and offerings. Hopefully, this retrospective look into the evolution of fintech will help to sum up the long way we have come until today and put into

One thing is certain: Fintech is growing, and fast. And innovation in fintech is reaching more and more areas of the digital economy. The increasing number of **unicorns** (privately held startup businesses with a value of over \$1 billion) is an indicator of this.

perspective the busy times ahead of us.

### KEY PLAYERS IN THE GLOBAL FINTECH MARKET

The report presents a detailed analysis of the following key players in the global fintech market, looking into their capacity, market shares, and latest developments like capacity expansions, plant turnarounds, and mergers and acquisitions:

- PayPal Holdings, Inc.
- Ant Group
- Stripe, Inc.
- Intuit Inc.
- Adyen Group
- Coinbase
- Square Capital, LLC
- Avant, LLC.
- Klarna Bank AB
- Nu Pagamentos S.A

#### Others

The comprehensive report investigates the macro and micro aspects of the industry. The EMR report gives an in-depth insight into the market by providing a SWOT analysis as well as an analysis of Porter's Five Forces model.

#### FINTECH INDUSTRY GROWING

- The global fintech market is expected to grow at a CAGR of 23.58% from 2021 to 2025. (Research and Markets, 2020)
- Artificial intelligence is one of the leading technologies in the fintech market, with a market share of 38.25% in 2019. (Research and Markets, 2020)
- Blockchain and regulatory technology (regtech) are the fastest-growing segments of the fintech industry. (Grand View Research, 2019) (Transparency Market Research, 2018)
- Blockchain is worth \$70 to \$75 million in 2018, with a CAGR of 50% in the next six years. (IndustryArc)
- This puts Blockchain technology on track for a \$20 billion worth by 2024. (Transparency Market Research, 2018)
- Blockchain can cut regtech costs by as much as \$4.6 billion annually. (Quinland and Associates, 2016)
- Regtech is estimated to be worth \$120 billion in 2020 with a CAGR of 52.8% (Grand View Research, 2019)

- Peer-to-peer (P2P) or digital lending, another segment of fintech, is worth \$43.16 billion in 2018 and expected to rise to \$567.3 billion in 2026 with a CAGR of 26.6%. (Reports and Data, 2019)
- In a survey, 56% of participants said that they recognize the importance of blockchain technologies. (PwC, 2020)
- Even if they recognized its importance, 57% of participants said they are unsure about how to respond to blockchain technologies. (PwC, 2020)

# THE CHALLENGES FACED BY FINTECH COMPANIES IN THE CURRENT ECONOMIC CLIMATE

#### The Challenges

Fintech corporations, which use modernday, progressive generation to enhance and automate economic services, have faced several challenges within the modern financial weather.

#### The pandemic effects

One of the number one demanding situation is the uncertainty due to the Covid-19 pandemic. In addition, the unexpected and severe monetary downturn has brought about a decline in purchaser spending and improved uncertainty for companies, making it difficult for fintech companies to are expecting and plan for destiny growth and ventures.

#### Regulatory challenges

Another undertaking for fintech businesses is the multiplied regulatory scrutiny. As those corporations become more

mainstream and disrupt traditional monetary establishments, regulators have begun to take a better observe their operations to make sure they comply with legal guidelines and rules. These stringent regulation and compliance requirements can cause brought charges and delays for fintech corporations, making it hard to with established compete economic institutions.

#### **Market Saturation**

Fintech businesses additionally face excessive competition from traditional monetary establishments, which have launched into a similar route by adopting comparable technologies and commercial enterprise fashions to stay aggressive. As a end result, it's far making it hard for fintech groups to distinguish themselves within the crowded fintech marketplace to attract and accumulate clients.

#### **Cyber Security**

Additionally, Fintech companies also face challenges related to cybersecurity and data privateness. As they accumulate and save sensitive financial statistics, they're at a higher chance of cyber-attacks and information breaches. Such adversaries can result in reputational damage, legal liabilities, and financial losses in the event that they fail to protect their clients' Despite statistics. these demanding situations, many fintech companies were capable of adapt and continue to grow. Some have taken gain of the elevated demand for digital financial services for the duration of the pandemic, whilst others have shifted their attention to digital bills and lending. However, for fintech groups to be triumphant within the current monetary weather, they will want so that you can navigate those challenges and discover methods to live aggressive.

financial climate The modern has presented several challenges for fintech corporations, together with uncertainty because of the pandemic, multiplied regulatory scrutiny, opposition conventional financial establishments, and cybersecurity issues. Yet, despite those challenges, fintech businesses have the potential to thrive by using being capable of navigate these challenges and find methods to live competitive in the marketplace and grow.

## CHALLENGES TO FINTECH INDUSTRY IN INDIA

India, domestic to extra than 23 fintech unicorns, has speedy emerge as a powerful global fintech hub. However, the industry has skilled some of the risks and regularity issues due to the fintech area's fast growth. The federal monetary regulatory authority's pinnacle worries are the upward thrust in privateness violations. cyberattacks, and go-border legal and regulatory problems added on by the economic services industry's rapid digitization. Other considerable problems the fintech sector faces consist of information confidentiality and purchaser protection. Following are the primary challenges to Fintech in India.

#### **Emotional attachment to cash**

In a country where human beings adore cash, the fintech area is operating to establish a cashless economy. In India, using cash is related to faith, way of life, and emotional attachment. The first mission the fintech region is attempting to triumph over is that this dependency to coins. Here, the problem is in gaining

popularity over cash. Credibility is a challenge for any innovation in its early ranges, and the fintech enterprise is not any exception. The truth that our fintech business area is in transition and we have now not absolutely embraced digital solutions for our economic needs or absolutely rejected the traditional banking gadget is every other huge contributing to those boundaries. Since we are dealing with cash, most people are still hesitant to completely consider fintech. Therefore, it's going to require effort and time to win humans over and earn their believe in a nonetheless-new product. One of the important thing solutions to the credibility issue for fintech companies is teaching the purchaser approximately the and services. products With demonetization programme and the Digital India Campaign, the Indian government is helping India in shifting beyond the use of currency.

#### **Banking regulations**

The banking industry is very regulated, has giant operational and transaction expenses, and uses very steady commercial Indian enterprise fashions. fintech businesses require complete regulatory frameworks that could manage risks. Policies should be created so as to lessen ability dangers. Numerous guidelines unavoidably maintain down the increase of Fintech startups inside the economic quarter. In addition to being difficult to conform with, those rules additionally make it hard for Fintech corporations to join the Indian markets. The new Fintech corporations sometimes faced with sizeable obstacles due to uncertain and restrictive felony frameworks. Due to their state-of-the-art working fashions, fintech businesses can

also appear to be constrained by the strict regulatory requirements.

#### Problems with the net

Fast internet is the basis of finance. Indian net service companies are nonetheless vying for clients by way of supplying better bandwidth and quicker speeds for secure and relaxed information delivery. India's different topography, extensive populace, and stark division among the metropolis and the village are all very important concerns. The nation should cope with the problems if it's miles to assemble a compelling fintech narrative and come to be a virtual superpower. The infrastructural problems skilled with the aid of the fintech companies in India must be lessened with the aid of some of authority's digitization projects, which includes the Digital India campaign and the setup of optical fibres at some stage in Indian communities.

#### Cybersecurity

Traditional economic institutions now offer better services and products thanks to fintech. The hidden risks of cybersecurity, incorporate which in general breaches. third-celebration protection threats, malware risk, application security risk, cloud-primarily based protection threats, in addition to virtual identification dangers, are the enterprise's middle trouble. A properly-balanced innovation is required to deal with the cyber chance, prevent hackers before they can access crucial statistics, and decrease the hidden dangers associated with monetary services.

#### **CONCLUSION**

Some of the principal forces influencing the Fintech revolution in India are supplied aspect enablers like exponentially developing computing strength, giant net penetration, and elevated net velocity and coverage, mixed with demand side stimulants like the want for inclusive monetary offerings, client expectations, and the enterprise need to lessen charges at the same time as providing faster, more secure, and greater dependable offerings. We can make contributions to improvement of a new financial system this is greater inclusive, fee-powerful, and sturdy by way of allowing improvements and controlling dangers. In India, there are greater than 2100 Fintech companies, and greater than 67 percentage of these had been founded within the remaining 5 years. In 2021, investments of greater than \$8 billion have been made at numerous phases of the Fintech zone in India, which has additionally skilled exponential growth in finance.

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