FinTech Industry Primer

FINANCE AND INVESTMENT CELL
SHRI RAM COLLEGE OF COMMERCE

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This report examines the Fintech industry as a transformative force reshaping the global and Indian financial ecosystem. Fintech, or financial technology, refers to the use of digital tools and platforms to deliver financial services such as payments, lending, wealth management, insurance, and regulatory compliance in faster, more accessible, and cost-efficient ways. By combining technology with traditional banking functions, fintech bridges long standing gaps in financial access, operational efficiency, and customer experience. The report primarily focuses on the Indian fintech landscape while also drawing insights from global market trends. It highlights the rapid expansion of digital payments, lending, wealthtech, insurtech, regtech, and blockchain driven solutions, supported by strong digital public infrastructure and growing consumer adoption. Key findings indicate high growth potential driven by innovation, financial inclusion, and technological advancements such as artificial intelligence and biometrics. At the same time, the industry faces challenges related to regulation, cybersecurity, data protection, and funding constraints. The report concludes that fintech is significantly disrupting traditional finance and accelerating financial inclusion, but its long term success will depend on building trust, ensuring regulatory compliance, and maintaining sustainable growth.

INTRODUCTION

FinTech, which is a shorthand term for "financial technology", generally refers to the use of digital technologies to deliver, enhance, or change the way financial services are handled. In simple words, it could be the customer innovations like mobile banking, digital wallets, peer-to-peer (P2P) payments, digital lending marketplaces, robo-advisors, and cryptocurrencies. At the same time, it could be the business tools such as RegTech (regulatory compliance), AI-powered risk engines, open-banking APIs, and cloud-native banking platforms. According to the perception of the multilateral institutions like the World Bank and the International Monetary Fund (IMF), FinTech is synonymous with the technological improvements that have the potential to change the way financial services are given all over the world, thus leading to the emergence of new business models, products, and delivery mechanisms.

Evolution

ERA 1

The first period of FinTech spanned from the mid-1860s to 1966, a time when a transatlantic transmission cable was used durig the initial phase of financial globalisation, alongside telegraph and Morse code.

ERA 2

After that, FinTech 2.0 was introduced, which covered the years between 1967 and 2008, when financial services firms were rapidly digitizing their processes. The first ATM was installed by Barclays, and in the 1970s, the very first digital stock exchange, along with SWIFT (Society for Worldwide Interbank Financial Telecommunications), came into existence.

Talking about the Indian context, NSE was established in 1992. The 1990s were the period when digital banking started to show signs of progress. In 1998, PayPal was introduced, which was a pointer to the new payment systems that would prevail as the world went online progressively.

ERA 3

The 2008 crisis led the way for a new revolution, with everyday customer confidence in traditional lending going down, and it acted as a fuel to the emerging fire of what we now call BITCOIN. The Unified Payments Interface (UPI) was introduced by the National Payments Corporation of India (NPCI) in 2016 and has become the most popular digital payment method in India since then. UPI has amazing capabilities for the digital payments system, and it is handling a tremendous volume of transactions, surpassing 640 million per day.

Global Market Size and CAGR

The global FinTech market has changed a lot and is expected to grow further at a strong pace, thus reflecting this dynamism. The industry forecast, first, puts the market value at around USD 320.8 billion in 2025 and at about USD 652.8 billion by 2030. This means that the market is expected to grow at a compound annual growth rate (CAGR) of ~ 15.3% during the period.

The Global Market

Another report, with a slightly different scope, estimates the worldwide market to be worth USD 828.4 billion by 2033, up from USD 218.8 billion in 2024 (CAGR ~ 15.8%). Moreover, there are other sources that - depending on the FinTech definitions and assumptions - suggest even higher figures (close to USD 1 trillion) in the next ten years. What most of the forecasts have in common is that the global FinTech sector is still one of the fastest-growing segments of the overall financial ecosystem and that it is likely to have a CAGR in the high to mid-teens over the next 5-10 years.

Sub Sectors

Within FinTech, several sub-sectors have become dominant by their usage, revenues, or strategic impact. These are, among others, payments (digital wallets, real-time rails, merchant acquiring, cross-border remittances, Buy-Now-Pay-Later, etc.), digital lending, wealthtech / robo-advisory / micro-investing, insurtech (digital insurance distribution and risk-pricing), regtech (regulatory compliance, KYC/AML automation), and blockchain / Web3 / digital-assets technologies (crypto exchanges, tokenization, decentralized finance). Each of these entities performs a different function: payments are the means for everyday transactions, lending allows the increase of credit access, wealthtech makes investing available to everyone, insurtech and regtech bring the modernization of risk and compliance, while blockchain/Web3 are the technologies that facilitate new rails and forms of value.

Strategic Importance for Financial Inclusion

The strategic significance of FinTech is situated on several layers. Initially, it makes financial inclusion possible by minimizing entry barriers for banking and payments, lowering service costs, and going after the underprivileged or previously unbanked segments of the population. Such a democratization of access can be the way formal banking and financial services can be brought to those who were dependent on cash or informal finance. Next, FinTech helps financial institutions to improve their operations and cut down on costs. Automations, real-time processing, and digital onboarding are examples of methods that are able to shorten processing times, reduce overhead, and eliminate friction.

In the third place, it enables the creation of new products and services: innovative financial products (microloans, instant remittances, embedded finance, dynamic credit scoring), tailored services (personalized investing, insurance), and more agile, data-driven business models. On top of that, by the process of competition and disruption, FinTech is also forcing traditional incumbents to change their ways, thus benefiting consumers. The World Bank and other similar institutions express that while the opportunities are huge, it is still very important to have appropriate regulations and financial stability frameworks to be able to handle the risks that come along.

Headwinds, Tailwinds, and Recent Trends

Headwinds

Macroeconomic conditions:
Overall, Macroeconomic conditions have been very challenging and are expected to remain even more uncertain due to risks from oil volatility, the ongoing Russia-Ukraine and Israel-Iran conflict, and subdued valuations. There have been dips in funding both domestically and globally due to economic and political turmoil.

Competition:
Competition in the industry remains intense as payments-led super-apps expand into lending, insurance, and wealth management, and as specialist challengers find small but valuable niches in premium credit, gig worker finance, and cross-border payments.

Regulatory and Compliance Issues:
The Reserve Bank of India (RBI) has implemented severe rules regarding KYC standards, hostile to tax evasion (AML) guidelines, and information confinement necessities, which frequently present obstacles for fintech organisations. With India's new data security rules now in effect, fintech associations ought to adopt advanced data encryption and online protection measures to secure customer information.

The expense of maintaining these stringent security standards can be unaffordable, especially for smaller fintech firms.

Tailwinds

Easing Inflation:
Longer-term projections suggest that inflation will stabilise at 3.8% in 2026 and 4% in 2027, supported by domestic demand, monetary easing, and anticipated rate cuts to 5.25% which will significantly favour the industry. Risks associated with oil volatility are mitigated by reserves and diversification, keeping pressures in check.

Government Backing:
India’s digital public infrastructure, scaled at a national level, has fueled new opportunities for Fintechs, especially with the push of projects like UPI, CBDC (e-rupee), Digilocker, AEPS(Aadhaar-enabled payment system), GSTIN, E-KYC, ONDC, and OECN(Open Credit Enablement Network).

Favouring Regulatory Actions:
The Regulator's actions have been overall positive for the industry by enabling an increase in consumer trust in the Fintech ecosystem.

Rising Market:
Rising participation from Tier II and Tier III cities signals a structural broadening of growth opportunities across customer segments and geographies.

PESTLE Analysis

Factor	Key trends	Examples	Sectoral impact	Implications
Political	-Rise of CBDC (Central Bank Digital Currencies)- major economies like the UK, EU, and India are rolling out government-backed digital cash to consumers. -Government initiatives pushing UPI interoperability for cross-border payments targeting NRIs - In the Middle East, jurisdictions like the UAE are proactively creating rules to become hubs for digital assets.	-Digital Rupee, digital pound or euro pilots -Europe's MiCA law: A regulation in European Union (EU) law which is intended to help streamline the adoption of blockchain and distributed ledger technology (DLT)	-Rural fintech stacks and skilling incentives are expanding to tier 2 and tier 3 cities, increasing the market for the sector, but it is facing the issue of rising costs to keep up with cumbersome rules and strict compliance policies.	-Governments are creating a resilient ecosystem, prioritizing sustainability over hypergrowth. -Firms that will be awarded in this environment will be those with infrastructural moats and better policy alignments -Serving Bharat requires a "Phy-gital" model with Fintechs leveraging FoS(Feet on Street) distribution.
Economic	-Rapid growth in digital payments, driven by UPI -The sector has been receiving continuous funding since 2017 in the hyper-personalised products segment	-India's digital economy is expected to witness exponential growth to $800 billion by 2030 -Fundings received by the Neobanking sector(hyper-personalized products)	-The new economic trends are significantly transforming India's fintech sector by expanding market reach, improving efficiency, and enabling innovation, while also introducing regulatory and profitability challenges.	-All these recent economic developments have led to economic formalisation which is the transfer of most of the jobs from the informal sector to the formal and registered sector, and the push to financial inclusion has increased access to credit for all sections of the economy.
Social	-Increased adoption of technology and innovation -Financial inclusion and education are two of the driving factors for financial services	-Jan Dhan-Aadhaar-Mobile (JAM) Trinity -UPI and Digital Payments -The Digital India initiative of the government promotes digital	-Digitalization and the increased presence of FinTech can fulfill the aim of reaching the underserved population and provide financial services.	-All these initiatives by the government and the private sector have been quite successful in their motive of increasing financial literacy and building a digital

Factor	Key trends	Examples	Sectoral impact	Implications
Technological	- Promotion of the digital public infrastructure by the government -Development of UPI -InsurTech fundraising has been brisk across Asia in recent years	-AI and Machine Learning -Facial Recognition and Biometrics -Blockchain and DeFi(Decentralized Finance)	-The Indian InsurTech space has grown considerably over the past few years, with steep funding. -The technological environment is accelerating innovation, enhancing security, and disrupting traditional models.	-New technologies are reshaping the fintech environment by boosting security, efficiency, and accessibility while introducing new risks.
Environmental	-ESG and green fintech are now board-level priorities, with platforms offering carbon footprint tracking green bonds, and ESG investing	-AI-driven ESG analytics -Use of blockchain for accountability -Green loans and sustainable finance	-Startups are building composable ESG platforms and tokenized green assets to align profitability with environmental goals.	-Just meeting regulatory compliance and making good profits is not enough; the firms also have to comply with the terms of the Sustainable Development Goals to sustain their business and get benefits from the government and other organizations.
Legal	-Global regulators are continuing to tighten expectations around AML, KYC, and data protection. -Regulators are demanding real-time monitoring and stronger auditability	-DPDP Act -Digital lending guidelines issued by RBI -RBI has mandated tokenization of card data - SEBI has issued guidelines for entities using artificial intelligence, which include Model Governance and Accountability.	Fintechs, especially startups, face higher operational costs due to the need for robust KYC, AML, data protection, and AI governance frameworks.	Fintech companies must integrate regulatory compliance features directly into their technology platforms from the design and development stage, rather than working on them later.

Recent Trends

Financial Inclusion

According to Dr C. Rangarajan (Chairman, Committee on Financial Inclusion, Reserve Bank of India), Financial Inclusion is the process of ensuring access to financial services and timely, adequate credit for vulnerable groups such as weaker sections and low-income groups at an affordable cost.
India stands in the second position in the global FinTech adoption index, having over 1,300 FinTech start-ups and investments worth USD 5.72 billion in FinTech from 2014 to 2018. In the past few years, financial inclusion in India has undergone significant improvements.
Financial inclusion is helping the country achieve its Sustainable Development Goals(SDGs) as it has a multiplier effect on the economy and strengthens its status. FinTechs are contributing to the Viksit Bharat mission by simplifying access to financial services and empowering underserved segments of society, addressing key challenges such as unemployment, credit gaps, financial literacy, and access to technology, which are the primary aims of this recent trend.

SRO-FT'S

- What is an SRO?

A Self-Regulatory Organization (SRO) for the fintech sector is an industry-led body that acts as a bridge between fintech companies and regulators, establishing and enforcing regulatory standards, promoting ethical conduct, and fostering transparency within the fintech ecosystem, operating under the oversight of the Reserve Bank of India (RBI).

- Why are they required?

They are required to improve self-governance, ensure compliance and market integrity, resolve disputes, and maintain accountability. They are also needed to safeguard consumers against risks such as fraud, data breaches, and predatory practices.

The establishment of Self-Regulatory Organisations for the FinTech sector (SRO-FT) in India has emerged as a significant recent trend, marking a pivotal shift towards industry-led oversight. The guidelines for Self-Regulatory Organisations (SROs) emerge as India's fintech sector experiences rapid growth, driven by increasing demand for digital payments and loans, but lacks regulatory standards.

DPDP Act

THE DIGITAL PERSONAL DATA PROTECTION ACT, 2023, is an act implemented by the Ministry of Electronics and Information Technology, which sets rules for how companies and the government can use people's digital personal data. It aims to protect people's right to keep their personal information safe and to have their data used only when there is a valid, legal reason.

This Act is designed to give individuals control over their personal information and establish rigorous standards for the handling of data. DPDPA is expected to have a major impact on financial services because the sector is already seeing heavy regulatory change, new kinds of players, and rapid digitalization.

The Act serves as the guiding framework for managing digital personal data, striking a delicate balance between preserving individual rights and meeting the necessary data processing requirements.

AI, ML, and Blockchain

As the industry continues to mature, innovations are likely to focus on blockchain, artificial intelligence, machine learning and deeper financial inclusion.
These technologies are increasingly used for customer service, fraud detection, and providing personalized financial advice.
Blockchain is enhancing secure payments, providing tamper-proof identity verification, and enabling decentralized financial services, including peer-to-peer lending without the need for traditional banks.

Facial Recognition and Biometrics

Facial recognition is streamlining the process by enabling fast, remote identity verification, allowing fintech companies to reach a broader audience while maintaining a high level of security and accuracy.
Biometrics will continue to innovate, offering safer and more reliable security for fintech systems, but this will only work if they are backed by strong oversight and careful governance.

Sustainability

- Becoming a key focus for the fintech industry.
- Green fintech solutions are helping companies make environmentally responsible financial decisions.
- Another important initiative is reducing carbon footprints- many fintech companies are optimising operations to minimise energy use and environmental impact.

Value Chain Analysis

The FinTech industry operates through a multi-stage value chain that transforms technological capabilities into financial services that are faster, cheaper, and more accessible than those of traditional institutions. At the foundational stage of the value chain lies infrastructure development, which includes digital identity systems, cloud computing, API architectures, payment rails, cybersecurity frameworks, and data analytics tools. These elements support all major FinTech subsectors and form the base upon which firms build customer-facing products. Following the infrastructure, the value chain extends into customer acquisition, service delivery, risk management, compliance, and long-term customer engagement. When analyzed through the lens of six major FinTech subsectors - payments, lending, wealthtech, insurtech, regtech, and blockchain. Each reveals unique methods of creating and capturing value, yet all share a common reliance on data, automation, and digital interfaces.

Payments

The value chain begins with the integration of digital payment processing infrastructure such as card networks, UPI systems, and merchant acquiring platforms. Value is created through the ability to move money quickly and securely using technologies like tokenisation, biometric authentication, and real-time settlement. Firms then add layers of value through fraud detection, user-friendly mobile applications, and merchant tools like dashboards and reconciliation services. The value is ultimately captured through transaction fees, subscription models, or float income. Payments firms rely heavily on partnerships with banks, and regulators, making regulatory compliance key factors throughout the value chain.

Lending

Lending subsector adopts a value chain that begins with data acquisition from alternative sources such as bank statements, cash-flow patterns, credit bureau data, and behavioural indicators. Automated credit scoring models and AI-driven underwriting convert this data into risk-based lending decisions at lower operational costs than traditional institutions. Once the loan is disbursed, value moves through loan servicing, collections management, and customer retention. Digital lenders capture value by reducing the cost of credit assessment and expanding credit access to previously underserved segments. Technology reduces friction in every stage of the lending value chain, from onboarding to repayment, making speed and accuracy key competitive levers.

Wealthtech

In the wealthtech subsector, the value chain is anchored in data aggregation, market analysis tools, and algorithmic decision-making systems that enable digital wealth creation and management services. Robo-advisors use automated portfolio construction models that evaluate risk preferences, market conditions, and asset allocations. These models allow wealthtech firms to provide low-cost investment advisory and portfolio management traditionally reserved for high-net-worth clients. The value chain includes customer onboarding, risk profiling, portfolio execution, and continuous rebalancing. Firms monetize their value through advisory fees, management fees, and premium service tiers. As information asymmetry reduces due to digital platforms, wealthtech companies compete by offering transparency, personalization, and data-driven advisory at scale.

Insurtech

The insurtech subsector transforms the traditional insurance value chain by digitizing product design, underwriting, policy issuance, claims processing, and customer support. Insurtech firms leverage data from telematics, health wearables, IoT devices, and behavioural analytics to assess risk more precisely and create usage-based or personalized insurance products. Claims processing, historically slow and manual, becomes automated through AI-driven document analysis, automated verification, and fraud detection. This reduces operational costs and enhances customer experience. Insurtech firms create value by enhancing the accuracy of underwriting, accelerating claims resolution, and reducing administrative overhead, while capturing value through premium income, commissions, and risk-sharing partnerships with insurers.

Regtech

In the regtech subsector, the value chain consists of identifying regulatory requirements, collecting compliance-relevant data, automating reporting, monitoring transactions, and detecting anomalies related to money laundering, fraud, and operational risk. Regtech solutions allow financial institutions to remain compliant with complex frameworks at lower costs by replacing manual workflows with automated ones. Technologies like machine learning, natural language processing, and rule-based engines strengthen the efficiency of KYC, AML monitoring, and regulatory reporting. The value created lies in reducing compliance costs, limiting regulatory penalties, and improving operational transparency. The captured value typically comes from subscription-based software models or enterprise licensing.

Blockchain

Finally, the blockchain subsector reshapes the value chain by decentralizing data storage, record-keeping, and transaction verification. Blockchain-based systems distribute trust across a network rather than relying on a central authority, enabling transparent and tamper-resistant financial interactions. Value is created through secure digital ledgers, smart contracts that automate financial agreements, tokenization platforms, and decentralized financial services (DeFi). These capabilities reduce the cost of reconciliation, settlement, and data verification across the financial ecosystem. Value capture occurs through transaction fees, platform usage fees, token issuance, or enterprise blockchain solutions offered to institutions.

Across all subsectors, the FinTech value chain is increasingly characterized by interdependence among technology providers, financial institutions, regulators, and customers. Data flows act as the backbone of the entire chain, enabling real-time decision-making, scalable operations, and personalized financial solutions. The emphasis on automation reduces operational costs, enhances customer convenience, and expands access to financial services. Meanwhile, regulatory compliance, trust, and data security form critical components that influence the sustainability of value creation. As FinTech continues to evolve, future value chains will likely become more integrated, with embedded finance and AI-driven decision-making reshaping how financial products are developed, delivered, and consumed.

Key Drivers in the Fintech Industry

Demand Side Drivers

Evolving consumer preferences:

India is experiencing a rise in its per capita income, as reflected by the growth in its gross national disposable income (which includes net primary income and other transfers received from the rest of the world), which is expected to expand by 8.9% in FY24.2 Along with this, there is an increase in consumerism, encouraging companies to innovate and capture a greater share of wallet of consumers.

Along with this, there is an increase in consumerism, encouraging companies to innovate and capture a greater share of wallet of consumers. Additionally, with internet penetration in India reaching nearly 820 million users in 2024,3 the increasing digitisation of day-to-day activities is transforming consumer preferences and thereby increasing the demand for digital products that offer enhanced convenience and accessibility, Combined with a large young millennial population has helped create a consumer base that is willing to adopt mobile-first products and services. Indian consumers have also leapfrogged products like cards and wire transfers which are prevalent in developed economies. For a very large percentage of Indians, their first banking experiences are in the smartphone era.

Fintech penetration has succeeded where traditional banks proved uncompetitive, unwilling to serve, or unwilling to go. Examples include BNPL firms serving lower-income segments neglected by banks, challenger banks targeting digitally native users.

Combined with a large young millennial population has helped create a consumer base that is willing to adopt mobile-first products and services. Indian consumers have also leapfrogged products like cards and wire transfers which are prevalent in developed economies. For a very large percentage of Indians, their first banking experiences are in the smartphone era.

With the advancement of technology, customers' requirements for the financial services provided by the traditional banking system have changed. Customers have become more autonomous for basic transactions and more demanding of banks' role for sophisticated ones. As some banks worldwide still offer old-fashioned, costly, and cumbersome financial services, fintech firms are taking the opportunity to provide several critical functions of traditional banks, while depending on technology and innovation as a source of competitive advantage. Technology by itself is not disruptive, but instead, shifting customer behaviour and demand is the real disruptor.

Businesses still face many pain points in payments, accounting, and treasury management areas where AI can automate. Indian MSMEs are facing challenges in terms of limited access to credit as reflected by the credit gap of USD 530 billion faced by them as of FY24.4 The lack of credit history, inconsistent salaries and lower credit scores is affecting not only MSMEs but also a few other segments of the society including blue- collar workers, migrants and labourers. In addition to this, digital payment solutions are increasingly being adopted by consumers from all backgrounds.

Broadly, fintechs have won where banks have been:

- **Uncompetitive.** Vertical SaaS solutions have addressed gaps in merchant needs (e.g., restaurants, retailers), while modern acquirers have simplified omnichannel payments.
- **Unwilling to Serve.** Many fintechs in particular, challenger banks and BNPL/ POS lenders—have found success by focusing on the needs of lower-income consumers. Due to lower unit economics and greater regulatory scrutiny, incumbent banks have struggled to serve this cohort profitably, effectively abdicating the competitive ground.
- **Unwilling to Go.** Fintechs have thrived by targeting opportunities where either regulatory risk or strategic constraints limit banks from competing. For example, regulations have made crypto off-limits for banks. Banks have also been unable to make headway in digital wallets, given that the model requires a third party to aggregate different payment methods from various providers.

Digital and financial literacy of users

The digital and financial literacy of users factor completes the top three key drivers of growth (13% very supportive and 57% supportive), suggesting that customers are becoming more familiar with digital financial services.

As consumers grow more familiar with digital payments, app-based banking and online credit products, their ability to navigate financial tools increases overall usage and trust. Rising smartphone penetration, government-led initiatives like Digital Saksharta Abhiyan, and the widespread use of UPI have created an ecosystem where even first-time users are comfortable transacting digitally Customers in metros, tier 2 and tier 3 cities and other parts of the country are becoming more cognisant of the availability of a diverse range of fintech products.

Operational Efficiency:

Reducing operational costs and inefficiencies have always been a major goal for companies worldwide, irrespective of the industry/domain. With the growing advancements in technology, companies are increasingly demanding digital solutions that utilise AI/ML, data analytics and automation, which can help them in optimising workflows and support them in their decision making. These solutions can also help companies in cost.

Supply Side Drivers

Capital and Funding constraints:

The investment climate in India's fintech sector continues to evolve, influenced by a complex mix of global economic challenges and geopolitical factors. This has led investors to exercise greater caution, placing increased importance on the ability of startups to operate efficiently and generate sustainable cash flows without relying heavily on continuous capital injections.

Fintechs are navigating tighter compliance around data privacy, risk and customer protection, raising governance demands. These requirements drive significant costs across corporate governance, domain-specific regulations and maintaining secure technology standards, especially in payment infrastructure.While capital remains accessible, the current funding slowdown reflects a more selective approach, favouring ideas with clearer profitability trajectories. Investors are becoming more selective, prioritizing viable business models over high-growth expansion plans.

This shift stems from multiple pressures converging across markets. Limited exit opportunities are tempering enthusiasm for late-stage bets. Portfolio corrections from previous overvaluations are prompting a sharper focus on fundamentals.

- Enhancing cash efficiency: Focused efforts on improving cost efficiency through streamlined marketing strategies and revised vendor agreements
- Driving revenue growth: Emphasis on enhancing customer value.
- Optimising cash flow: Startups are shaping clear pathways to breakeven and sustainable cash flows, with attention to unit economics and governance.
- Securing bridge round: Many firms are securing bridge rounds from existing investors to support short-term growth needs.

Partnership:

Most fintech companies view establishing partnerships as a critical approach to enhancing market competitiveness and driving technological innovation. Most fintech firms operate with smaller teams and limited resources, making external partnerships critical for scaling and long-

term growth. Recognising its role in strengthening competitiveness and survival.

Partnerships help reduce R&D costs, accelerate market entry, enhance innovation, and share operational risks while supplementing internal expertise and technology. Collaborating with established players also enables easier expansion into new markets by leveraging their regulatory knowledge and local market familiarity.

HDFC Bank, one of India's largest private banks, partnered with fintech companies Zeta and Mintoak to launch the PayzApp and Vyapaar platforms. Zeta specializes in payment technology, while Mintoak provides small business banking solutions. These platforms simplify loans, payments, and SME banking operations through technological solutions.

These collaborations enabled fintech companies to quickly access HDFC Bank's customer base, leveraging its brand reputation and regulatory compliance to enhance market trust and reduce market entry barriers.

Technological advancements:

The rapid development of hardware, software, and the growing convergence of information and communication technologies in the last two decades are crucial for the emergence of fintech companies.

These developments enable new business models and organisational forms to emerge and disrupt several industries, from travel and entertainment to financial services.

Emerging digital technologies, from 5G, the Internet of Things, blockchain, artificial intelligence, big data, and substantial developments in data storage and management, are opening up new possibilities to alter the way in which the financial sector is operating. Transformations across the value chain in the BFSI industry are potentially being driven by the breakthroughs in technologies such as AI/ML, intelligent automation, blockchain and quantum computing.

These technologies are enabling FinTechs and other FS providers to develop new products and services.

The technological infrastructure has a decisive effect on the expansion of fintech, which is consistent with the fact that financial products and services offered by fintech ventures are almost exclusively based on information and telecommunication technologies and provided via online platforms.

The number of secure internet servers, however, appears to be the most crucial factor aiding the development of fintech, which tends to be more vulnerable to cybersecurity threats. Accordingly, countries with more developed technological infrastructure and greater capacity for digitization have faster-growing fintech. Many scaled fintechs are just beginning to move from GenAI pilots to production-scale deployment. The next leap, agentic AI has the potential to be as transformative as the internet or mobile. Its immediate impact will be felt most in software development particularly for earlier-stage fintech's, which are using these tools to dramatically improve delivery speed and cost.

Digital public infrastructure and regulatory initiatives:

These collaborations enabled fintech companies to quickly access HDFC Bank's customer base, leveraging its brand reputation and regulatory compliance to enhance market trust and reduce market entry barriers.

Initiatives such as The JAM trinity have been a focus of the Indian Government to improve financial inclusion. From the time of its implementation,

These collaborations enabled fintech companies to quickly access HDFC Bank's customer base, leveraging its brand reputation and regulatory compliance to enhance market trust Aadhaar has been instrumental in helping companies with over 118 billion digital authentications. Furthermore, the RBI is working towards creating a regulatory environment that fosters innovation while focusing on consumer protection through initiatives such as the RBI and regulatory sandbox.

Thus, in times of increasing complexity of financial transactions and rising cybersecurity attacks, innovation in risk management, compliance and security practices will act as key growth drivers for FinTechs.

Access to skilled talent:

Access to skilled talent is often a barrier for firms engaging in innovative industries. As technology and market demands evolve at an accelerated pace.

Ecosystem Development

India's fintech sector has advanced beyond the maturity of digital payments, entering a new phase marked by innovation across verticals, such as digital lending, regtech, cross-border finance, insurtech, embedded finance and wealth tech.

The increasing popularity of open banking, platformisation and ecosystem integration is leading to the transformation of traditional business in finance. APIs are leading the creation of new opportunities for innovation and creation via partnerships.

- Digital Lending in India is growing, with fintechs onboarding underbanked and first-time borrowers using alternative data and e-KYC. The demand from millennials and Gen-Z is pushing seamless, digital-first credit journeys, especially BNPL, projected to witness 43% CAGR from 2021-2026. Moreover, other specialized products such as invoice financing and micro-loans are targeted at business lending needs.
- Regtech is becoming essential as financial institutions are facing ever-increasing compliance complexity under RBI, SEBI, and IRDAI. AI-driven automation reduces manual effort in the KYC, AML, and data privacy workflows, improving accuracy. Fraud analytics, behavioral biometrics, blockchain, and cloud-based real-time monitoring are fastening digital security and reducing compliance risks.
- Cross-border finance is evolving through digital channels offering instant remittances and embedded trade finance.
- MSMEs contribute ~46% of India's exports and use automated FX hedging, liquidity tools, and faster settlements. With the Indian remittance market growing 14% in FY25, AI-led KYC and AML monitoring enable secure, low-cost, and efficient global money movement.
- Insurtech are targeting gig workers and youth, along with rural consumers, with

- flexible, bite-sized, and group-based digital insurance products.
- Mobile first platforms and embedded insurance partnerships are scaling coverage with e-commerce firms and NBFCs. AI/ML-driven claims processing enhances fraud detection, speeds up settlements, and builds seamless digital claim experiences.

Conclusion

The FinTech ecosystem in India is still recovering from the impact of the COVID-19 pandemic, it is expected to bounce back and grow with the help of continued innovation, collaboration and regulatory support to drive sustained growth and transformation in the financial services industry

The FinTech industry is evolving and its transformation is driven mainly by technological innovations, changing consumer behaviour and regulatory reforms. While the global FinTech market is projected to grow, challenges such as compliance burdens and cybersecurity threats persist, pushing for more interoperable standardised platforms and enhanced collaboration.

In India, increased digitalisation and government initiatives that promote financial inclusion fuel the FinTech sector's growth. Despite challenges like low financial literacy levels and an evolving regulatory landscape, notable startups in WealthTech, FinTech Infra and LendingTech are attracting funding, albeit at a slower pace compared to previous years, pointing towards a promising future for the sector.

Despite moderate customer acquisition rates, fintechs are demonstrating strong revenue and profitability gains, indicating solid business fundamentals and continued relevance in the broader financial services landscape. At the same time, a sharper focus on underserved populations, particularly in emerging markets, reinforces fintechs' central role in expanding global financial inclusion. Looking ahead, priorities such as AI adoption and regional interoperability, along with growing collaborations with incumbent institutions, improved regulatory sentiment and a stabilising funding environment, all signal a more integrated and resilient financial future. Supporting this evolution will require ongoing, data-driven research to track emerging trends and equip decision-makers to respond effectively.

REFERENCES

1. Feyen, E., Natarajan, H., Saal, M., & The World Bank Group. (2023). Fintech and the future of finance. The World Bank. https://doi.org/10.1596/978-1-4648-1914-8

2. Intellect Markets. (n.d.). Global fintech technologies market: Size, overview, trends, and forecast (2025–2030). https://www.intellectmarkets.com/report/fintech-technologies-market

3. Lux, M., & Greene, R. (n.d.). What's behind the non-bank mortgage boom? Social Science Research Network. https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID5066779_code7207861.pdf?abstractid=5066779&mirid=1&type=2

4. Boston Consulting Group. (2025a). Fintechs: Scaled winners and emerging disruptors. https://www.bcg.com/publications/2025/fintechs-scaled-winners-emerging-disruptors

5. Chandiok, V. C. (n.d.). How will the DPDP Act impact financial services? Grant Thornton Bharat. https://www.grantthornton.in/insights/articles/how-will-the-dpdp-act-impact-financial-services/

6. PwC India. (n.d.). Powering India's USD 5 trillion economy by fostering innovations. https://www.pwc.in/assets/pdfs/industries/powering-indias-usd-5-trillion-economy-by-fostering-innovations.pdf

7. Boston Consulting Group. (2025b). Global fintech report. https://web-assets.bcg.com/04/4f/160d4f9d4d7e98ab417609b553d4/globalfintechreport-june2025.pdf

8. Ministry of Electronics and Information Technology. (2024). Digital India initiatives. Government of India. https://www.meity.gov.in/static/uploads/2024/06/2bf1f0e9f04e6fb4f8fef35e82c42aa5.pdf

9. Mordor Intelligence. (n.d.). Global fintech market: Growth, trends, and forecast to 2030. https://www.mordorintelligence.com/industry-reports/global-fintech-market

10. IMARC Group. (n.d.). Fintech market size, share, growth & forecast to 2033. https://www.imarcgroup.com/fintech-market

11. Spherical Insights LLP. (2024, June 22). Global fintech market size to worth USD 1009.10 billion by 2033 | CAGR of 14.01%. GlobeNewswire. https://www.globenewswire.com/news-release/2024/06/22/2902576/0/en/Global-Fintech-Market-Size-To-Worth-USD-1009-10-Billion-By-2033-CAGR-Of-14-01.html

12. World Bank. (n.d.). Fintech. https://www.worldbank.org/en/topic/fintech

13. ET BFSI. (2023, May 1). How has UPI unleashed financial inclusion in India since inception? https://bfsi.economictimes.indiatimes.com/news/fintech/how-has-upi-unleashed-financial-inclusion-in-india-since-inception/99812093

14. Mordor Intelligence. (2025). India fintech market size, share & 2030 trends report. https://www.mordorintelligence.com/industry-reports/india-fintech-market

PricewaterhouseCoopers. (n.d.). The 15. FinTech route to greater financial inclusion in India. https://www.pwc.in/industries/financial-services/fintech/fintech-insights/the-fintech-route-to-greater-financial-inclusion-in-india.html

16. Credgenics. (2024, July 15). The rise of fintech SROs: Balancing innovation & regulation in India. https://blog.credgenics.com/the-rise-of-fintech-sros/

17. Editorial Staff. (2024, September 23). The future of biometric authentication in fintech. Brilliance Security Magazine. https://brilliancesecuritymagazine.com/cybersecurity/the-future-of-biometric-authentication-in-fintech/

18. EY India. (2025, July 24). The role of fintech in building Viksit Bharat. https://www.ey.com/en_in/insights/financial-services/the-role-of-fintech-in-building-viksit-bharat

19. European Investment Bank. (2025). EIB report. https://institute.eib.org/wp-content/uploads/2019/03/LSE_EIF_Capstone_2019_fv.pdf

20. Parliament of India. (2023). The Digital Personal Data Protection Act, 2023. https://prsindia.org/files/bills_acts/bills_parliament/2023/Digital_Personal_Data_Protection_Act,_2023.pdf

21. Kumar, A., & Team, S. K. (2026, January 6). Latest fintech industry trends in 2026. SG Analytics. https://www.sganalytics.com/blog/fintech-industry-trends/

22. EY India. (2025a, July 17). Seven key trends shaping the future of the fintech industry. https://www.ey.com/en_in/insights/consulting/seven-key-trends-shaping-the-future-of-fintech-industry

23. Djurdjevic, N. (2025, December 25). Five controversial trends shaping financial services in 2026. Vega IT. https://www.vegaitglobal.com/media-center/business-insights/5-controversial-trends-shaping-financial-services-in-2026

24. KPMG. (2025). India's fintech evolution: From growth to resilience.
Lee, D., Lai, W., Asia FinTech Alliance, & KPMG. (2024). Riding the wave: Exploring the fintech frontier. https://assets.kpmg.com/content/dam/kpmg/tw/pdf/2024/11/riding-the-wave-exploring-the-fintech-frontier-en.pdf

25. Surya, N., Naker, N., & EY India. (2021). The winds of change. https://www.paymentscouncil.in/pci-pdf/EY_FCC_Winds_of_Change.pdf

26. PwC, Belgavi, V., & Gandhi, M. (n.d.). Mapping the fintech innovation landscape in India. https://www.fintechcouncil.in/images/Mapping%20the%20FinTech%20Innovation%20Landscape%20in%20India%20and%20comparing%20it%20with%20global%20trends.pdf

27. Elsaid, H. (2023, April 21). Five factors driving the rise of fintech in the financial services industry. Trade Finance Global. https://www.tradefinanceglobal.com/posts/5-factors-driving-rise-fintech-financial-services-industry/

28. Propson, D., Zhang, B., World Economic Forum, & Cambridge Centre for Alternative Finance. (2025). The future of global fintech: From rapid expansion to sustainable growth (2nd ed.). https://reports.weforum.org/docs/WEF_Future_of_Global_Fintech_Second_Edition_2025.pdf

29. Finextra Research. (2025, July 31). Financial inclusion through innovation: Scaling digital payments in India. https://www.finextra.com/blogposting/29029/financial-inclusion-through-innovation-scaling-digital-payments-in-india

30. Blockchain Council. (2023, March 10). What is fintech? https://www.blockchain-council.org/blockchain/what-is-fintech/

31. Editorial Staff. (2024, September 23). The future of biometric authentication in fintech. Brilliance Security Magazine. https://brilliancesecuritymagazine.com/cybersecurity/the-future-of-biometric-authentication-in-fintech/

CONTRIBUTORS

Research and Design Team

Anant Jogani
Madhav Gupta
Shaurya Singh
Shubh Gupta
Sukrit Sahni

Directors

Shaurya Dalan
Manan Thareja