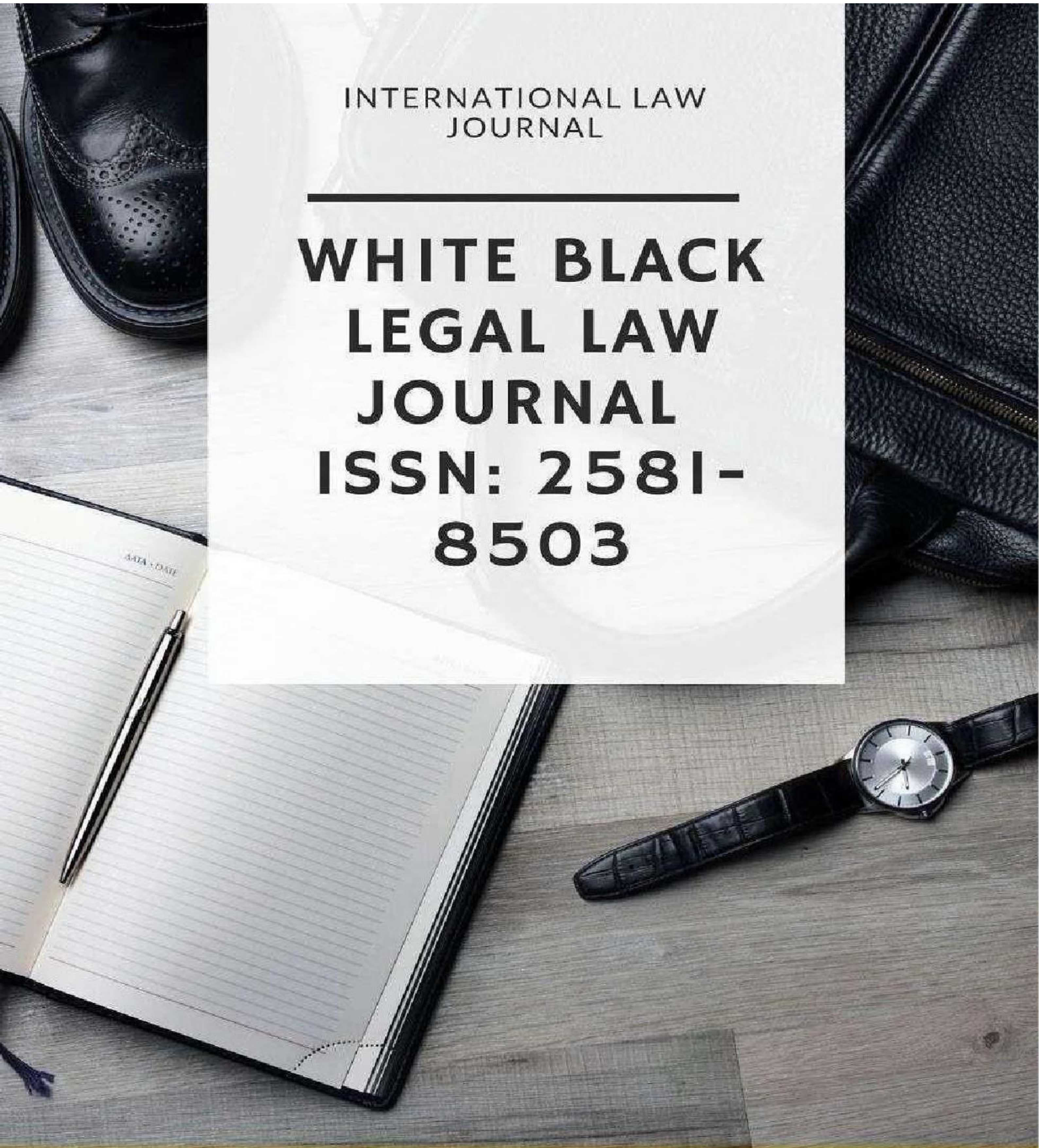


INTERNATIONAL LAW JOURNAL

# WHITE BLACK LEGAL LAW JOURNAL

ISSN: 2581-8503

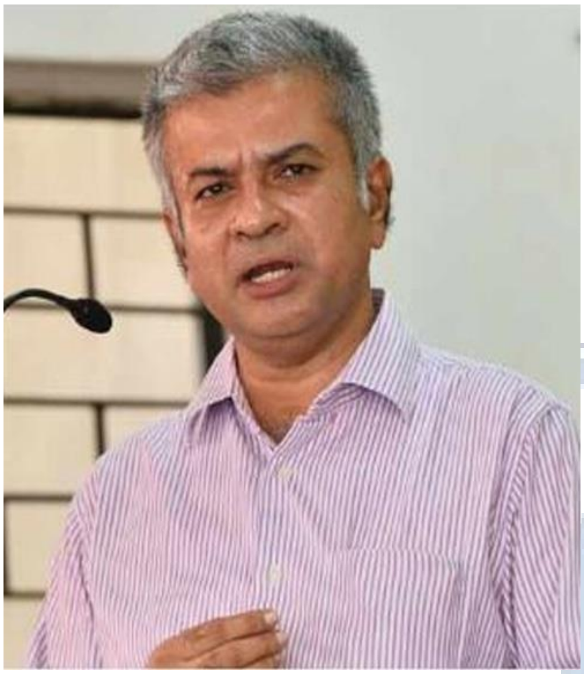
## Peer - Reviewed & Refereed Journal

The Law Journal strives to provide a platform for discussion of International as well as National Developments in the Field of Law.

**DISCLAIMER**

# EDITORIAL TEAM

## Raju Narayana Swamy (IAS ) Indian Administrative Service officer



Dr. Raju Narayana Swamy popularly known as Kerala's Anti Corruption Crusader is the All India Topper of the 1991 batch of the IAS and is currently posted as Principal Secretary to the Government of Kerala . He has earned many accolades as he hit against the political-bureaucrat corruption nexus in India. Dr Swamy holds a B.Tech in Computer Science and Engineering from the IIT Madras and a Ph. D. in Cyber Law from Gujarat National Law University . He also has an LLM (Pro) ( with specialization in IPR) as well as three PG Diplomas from the National Law University, Delhi- one in Urban Environmental Management and Law, another in Environmental Law and Policy and a third one in Tourism and Environmental Law. He also holds a post-graduate diploma in IPR from the National Law School, Bengaluru and a professional diploma in Public Procurement from the World Bank.

## Dr. R. K. Upadhyay

Dr. R. K. Upadhyay is Registrar, University of Kota (Raj.), Dr Upadhyay obtained LLB , LLM degrees from Banaras Hindu University & Phd from university of Kota.He has succesfully completed UGC sponsored M.R.P for the work in the ares of the various prisoners reforms in the state of the Rajasthan.

# Senior Editor

## Dr. Neha Mishra

Dr. Neha Mishra is Associate Professor & Associate Dean (Scholarships) in Jindal Global Law School, OP Jindal Global University. She was awarded both her PhD degree and Associate Professor & Associate Dean M.A.; LL.B. (University of Delhi); LL.M.; Ph.D. (NLSIU, Bangalore) LLM from National Law School of India University, Bengaluru; she did her LL.B. from Faculty of Law, Delhi University as well as M.A. and B.A. from Hindu College and DCAC from DU respectively. Neha has been a Visiting Fellow, School of Social Work, Michigan State University, 2016 and invited speaker Panelist at Global Conference, Whitney R. Harris World Law Institute, Washington University in St.Louis, 2015.

## Ms. Sumiti Ahuja

Ms. Sumiti Ahuja, Assistant Professor, Faculty of Law, University of Delhi, Ms. Sumiti Ahuja completed her LL.M. from the Indian Law Institute with specialization in Criminal Law and Corporate Law, and has over nine years of teaching experience. She has done her LL.B. from the Faculty of Law, University of Delhi. She is currently pursuing Ph.D. in the area of Forensics and Law. Prior to joining the teaching profession, she has worked as Research Assistant for projects funded by different agencies of Govt. of India. She has developed various audio-video teaching modules under UGC e-PG Pathshala programme in the area of Criminology, under the aegis of an MHRD Project. Her areas of interest are Criminal Law, Law of Evidence, Interpretation of Statutes, and Clinical Legal Education.

## Dr. Navtika Singh Nautiyal

Dr. Navtika Singh Nautiyal presently working as an Assistant Professor in School of law, Forensic Justice and Policy studies at National Forensic Sciences University, Gandhinagar, Gujarat. She has 9 years of Teaching and Research Experience. She has completed her Philosophy of Doctorate in 'Intercountry adoption laws from Uttranchal University, Dehradun' and LLM from Indian Law Institute, New Delhi.

## Dr. Rinu Saraswat

Associate Professor at School of Law, Apex University, Jaipur,
M.A, LL.M, Ph.D,

Dr. Rinu have 5 yrs of teaching experience in renowned institutions like Jagannath University and Apex University. Participated in more than 20 national and international seminars and conferences and 5 workshops and training programmes.

## Dr. Nitesh Saraswat

E.MBA, LL.M, Ph.D, PGDSAPM
Currently working as Assistant Professor at Law Centre II, Faculty of Law, University of Delhi. Dr. Nitesh have 14 years of Teaching, Administrative and research experience in Renowned Institutions like Amity University, Tata Institute of Social Sciences, Jai Narain Vyas University Jodhpur, Jagannath University and Nirma University.
More than 25 Publications in renowned National and International Journals and has authored a Text book on Cr.P.C and Juvenile Delinquency law.



## Subhrajit Chanda

BBA. LL.B. (Hons.) (Amity University, Rajasthan); LL. M. (UPES, Dehradun) (Nottingham Trent University, UK); Ph.D. Candidate (G.D. Goenka University)

Subhrajit did his LL.M. in Sports Law, from Nottingham Trent University of United Kingdoms, with international scholarship provided by university; he has also completed another LL.M. in Energy Law from University of Petroleum and Energy Studies, India. He did his B.B.A.LL.B. (Hons.) focussing on International Trade Law.

## *ABOUT US*

WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal providededicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

# "LAWS SURROUNDING FINTECH COMPANIES AND ITS IMPACT IN THE CHANGING ECONOMICAL AND LEGAL SYSTEM OF INDIA"

AUTHORED BY - ARYAN AHUJA
A032134719056 B.A. LL.B (2019-2024)
AMITY LAW SCHOOL, NOIDA

## CHAPTER 1
## INTRODUCTION

GENERAL OVERVIEW

We are at the age of new tech beginnings and the ever changing economical systems from getting those candies because the shopkeeper doesn't have change and we believed him to scanning QRs pasted in auto rikshaws we havecome a long way in managing our finances and spending through channels wenever imagined. The abundance of Indian IT sector led to a new age of companies dealing with finances and creating technology which handles thosefinance deals in the most immaculate manner. Now the government to understand and incorporate such tech for the betterment of the economic conditions in the country brought in laws which would effectively regulate thefinances at both Micro and Macro level changing overall legal and economicalinfrastructure of the country. However, the stage of growth gave an opportunity to create ransomware attacks at a larger scale than ever. To protectthis RBI brought in stringent regulations such as the Digital Lending Guidelines to tackle the grievances at the banking and the application based level to minimise such intrusion and protect the financial interest of the citizens.

A complicated regulatory environment that includes more than 100 laws, several regulators, tribunals, enforcement agencies, pooled investment programs, and intermediaries governs the fintech industry in India. The mainregulatory body for financial institutions engaged in banking, lending, deposits, and withdrawals is the Reserve Bank of India (RBI). The Competition Commission of India (CCI), the Securities and Exchange Board of India (SEBI), and the Insurance Regulatory and Development Authority ofIndia (IRDA) are a few more regulators.

A number of policies have been adopted by the RBI to address the issues withfintech lending. For example, the RBI has ordered banks and non-banking financial organizations (NBFCs) to raise the percentage of their risk weightagethat they place on these loans from 100% to 125%.

In order to facilitate live or virtual testing of innovative goods and services ina safe testing environment, the RBI has also established a regulatory sandbox.

The Indian government has launched a number of programs to encourage theuse of fintech throughout the nation. Among these is the launch of the UnifiedPayments Interface (UPI), a digital payment system that has completely changed how business is done in India. The government has also introduced the Digital Rupee, a central bank digital currency (CBDC) with the goal of lowering transaction costs and advancing financial inclusion.

To achieve sustained growth and financial inclusion, the fintech industry in India must work together to overcome obstacles related to funding andregulation.

To guarantee a fair approach to cryptocurrency regulation, the government and regulatory bodies must address these issues. This entails assessing the hazards associated with the use of fintech and leveraging it to make financialplatforms more accessible.

In summary, India's fintech laws and regulations are intricate and constantly changing. To address the issues surrounding fintech lending and advance financial inclusion, the RBI and other regulators are acting. Additionally, the Indian government is making steps to encourage the adoption of fintech in thenation. To guarantee the security of user data and financial information, a balanced approach to cryptocurrency regulation is necessary.

## India – Becoming A Global FinTech Superpower

India has one of the fastest growing Fintech markets in the whole world. Indian FinTech industry's market size was of $50 Billion in 2021 and is estimated to reach at ~$150 Bn by end of 2025.

Major segments under Fintech include Payments, Digital Lending, Digital Insurance Tech, Wealth management Tech

The Payments landscape is growing rapidly in India with an expectation to reach $100 Tn in transaction volume by 2030.

The digital lending market in India is projected to grow from $270 billion in 2022 to $350 billion in 2023.

India is anticipated to become one of the fastest-growing insurance markets globally, with a projected growth of almost 15X to reach $88.4 billion by 2030, making it the second-largest Insurtech market in Asia-Pacific.

Due in large part to the expansion of the retail investor base, the Indian WealthTech market is projected to reach $237 billion by 2030.

**Industry Scenario: Fintech Investment and Assessment**

About 14% of all capital directed towards the fintech industry globally has gone towards the Fintech segment as a whole in India. In terms of overall deal volume for fintech transactions, India is now ranked #2. By 2030, the FintechMarket Opportunity is projected to reach $2.1 trillion. In 2022, Indian fintechsranked as the country's second most funded startup industry. In 2022, fintechstartups in India raised $5.65 billion. Between 2021 and 2022, the overall number of unique institutional investors in Indian fintech increased from 535to 1019, nearly doubling.

Electronic Fund Transfers

UPI has surpassed the historic 10 billion transactions since 2016, when therewere only 1 million transactions.

In August 2023, UPI recorded the largest number of transactions ever, totaling

10.58 billion.

By 2025, daily transactions on the UPI platform might reach $1 billion.

The value and volume of digital payments climbed by 91% and 76%,respectively, by 2022.

According to a 90,000-person pan-Indian digital payments survey, 42% ofparticipants have utilized digital payments.

The number of contact points that accept digital payment infrastructure hasgrown from 170 million to 260 million, representing a 53% rise.

## CHAPTER 2 TYPES OF COMPANIES

Companies dealing financial transactions fall into the ambit of Fintech Companies. The government has further categorised the companies into Non-Banking Finance Companies. That the companies do not have the functioningsuch as a bank however deal in financial transactions of a consumer from storing the customers finances within the bank to carry forward bank to banktransactions, bank to NSE transactions and further more.



### THE DIGITIAL INVESTING MARKET

As the name implies, a digital investment platform combines automated platforms with financial services to offer users a full range of tools for managing, tracking, and investing in stocks on an internet platform with just one click.

Over the past few years, India has seen an exponential expansion in the number of Digital Investment Platforms due to a number of factors includingstrong client demand, the Digital India initiative, increased digital awareness, expanding investment platforms, favorable demographics, and supportive government legislation.

The exponential influence of the shift towards digitalization in the investmentsector is evidenced by the growth of Digital Investment Platform.

India's investing industry has advanced significantly over the years, from thedays when equities were brought to the floor to the present trend of buying and selling shares via mobile applications.

The Covid-19 pandemic gave the investment tech sector the much-needed boost it needed, and by 2025, it's expected to reach a $14.3 billion market size.

In the past, hefty brokerage fees were required for hefty Net Worth Individuals(HNIs) and Ultra High Net Worth Individuals (UHNIs) to transact in the stock market. However, brokerage fees have risen to a far more convenient level since the advent of Digital Investment Platforms, which make it easier to access the stock market.

Since it can be challenging for an investor to trade securities directly on a stockexchange, a "stock broker" is regarded as a financial market representative with the authority to trade equities on behalf of investors on a stock exchange.Consequently, in order to invest in the Indian stock market, market participants rely on the qualifications, experience, and up-to-date knowledge of these stock brokers.

The purpose of the Digital Investment Platform is to give investors the abilityto manage, track, and invest in shares in a more convenient, safe, quick, and effective way. To offer investors these services, Digital Investment Platformsmust register as stock brokers, or intermediaries, with the SEBI, whichoversees the securities market.

Different kinds of stock brokers

1. Comprehensive assistance Stockbrokers:

This group comprises stockbrokers who offer a variety of services, such as trading and advisory services, to their clients. Because these brokers are well-established in their careers and have offices all throughout India to better servetheir clients, they are able to charge greater commissions for their services.

2. Discount Stockbrokers:

These brokers mainly conduct business online, offering trading servicesexclusively in lieu of more comprehensive offerings like research or advice. They also charge a low commission percentage. Presently, Digital InvestmentPlatforms in India are offering their services under this model.

THE STRUCTURE

1. Open a Stock Broker account

According to Section 12 of the Securities and Exchange Board of India Act, 1992 ("The Act, 1992"), digital investment platforms that were founded with the intention of facilitating investors in making stock investments must beregistered as stock brokers.

The following are the steps involved in registering as a stock broker:

Step 1: In order to be admitted as a member, the Digital Investment Platformsmust submit an application in "Form A" of Schedule I.

Step 2: After receiving the application, the stock exchange has 30 days to sendit to the SEBI.

Step 3: After carefully reviewing the application, the Board issues a registration certificate and notifies the stock exchange if it finds that the applicant satisfies all of the requirements outlined in the Securities Laws (Amendment) Act, 1995 ("Regulation"). Form D, the registration certificate, will be provided.

Step 4: Within 30 days of the denial date, the applicant and the stock exchangemust be informed if the Board is not pleased with the application's submission. As long as the candidate is given the opportunity to be heard.

Step 5: If an applicant's application is rejected, they can resubmit it and theBoard will review it for approval within 30 days of learning of the rejection.

Fees:

INR 5000 must be paid in fees if the yearly turnover does not surpass INR 1crore in any given fiscal year. Additionally, in order for the registration certificate to remain valid for five years, an INR 5000/- deposit must be madewith the SEBI to maintain the certificate.

Signing up as an Intermediary

It is a requirement that the Digital Investment Platform must register as an intermediary under Section 3 of the Securities and Exchange Board of India (Intermediaries) Regulations, 2008 (referred to as "The Regulation 2008"), after becoming a registered stock broker with the SEBI.

The following are the steps involved in becoming an intermediary:

Step 1: In order to get the registration certificate, the Digital Investment Platforms must submit an application in "Form A" of Schedule I along with the necessary additional information and the fees listed above.

Step 2: The Digital Investment Platform has 30 days to submit the applicationto the desired stock market.

Step 3: The application must be sent to the SEBI within 30 days of the applicable Stock Exchange receiving it, once the qualifying requirements havebeen confirmed.

Step 4: The registration certificate will be issued and the stock exchange willbe notified after a comprehensive evaluation of the application by SEBI, provided that all requirements outlined in have been met.

Requirements

To apply for a registration certificate, the applicant or its associates must not have previously been turned down by SEBI. Additionally, there must be no currently ongoing litigation related to the securities market on the applicant, its directors, partners, trustees, or principal officer that could negatively impact the applicant's business or the development of the securities markets. Finally, the applicant must satisfy the following requirements.

Investor onboarding

To guarantee their eligibility to invest and prevent fraudulent actions, anyoneinterested in investing in the stock market through the Digital Investment Platforms have to register themselves through proper procedure. This secure framework ensures the safety of investors.

Requirements for onboarding: Know Your Customer ("KYC") is an effectivesystem that enables companies to quickly confirm and authenticate a customer's identity. For businesses offering financial services, or FinTech, theusage of KYC is essential.

In India, FinTech companies are required by RBI regulations to validate theirconsumers using KYC to prevent any unlawful or fraudulent activity in the stock market.

The KYC procedure in India is governed by the RBI's Master Direction - Know Your Customer (KYC) Direction, 2016 ("KYC Direction"), dated February 25, 2016.

To prevent any illegal or fraudulent activity, Digital Investment Platforms that were established with the intention of helping investors invest in stocks onlinemust conduct KYC to verify the customers' proof of identity and proof of address. This ensures that the customers are real and have valid credentials.

Online KYC Onboarding Process: Problems and Difficulties

Low Financial Literacy: India has a literacy rate of roughly 74% and is hometo more than 17% of the world's population. But the percentage of people whoare financially literate is only about 25%.

This underlines how important it is to teach people how to save and invest sothat they may grow their wealth. Education about financial commodities is necessary, but it presents challenges for digital investment platforms. To makethings easier for its customers, Zerodha introduced Varsity, a free online-onlylearning platform, in 2014. YouTube has also been a major forum for the dissemination of legal literacy in recent years.

Lack of Technical Knowledge - Investment tech platforms have had a difficult time onboarding and catering to the people. Because of this, India's enormous population frequently misses the core of financial intermediation and prosperity, and in spite of the market's tremendous potential, companies are unable to lift off.



Dangers to online safety People are reluctant to make online investments dueto the unusual increase in cybercrime. People began to fear and feel anxious that they would fall victim to a cybercrime as a result. Hackers regularly try to take advantage of system security holes in order to steal identities and even money. Some of the security hazards connected to online trading include the following:

Personal data breaches, identity theft, phishing, malware, and viruses

In order to combat these cyber security risks, digital investment firms need setup extremely secure service platforms.

## CHAPTER 3

### Fintechs Impact on MSME'S

As India's frugality continues to evolve, the part of fintechs in empowering MSMEs can not be Negated. These innovative fiscal results are reshaping howMSMEs access fiscal services, manage deals, and foster growth. With a burgeoning ecosystem of startups and established players, from digital lendingplatforms streamlining credit access to innovative payment results enhancingeffectiveness, the adaption of Fintech results is reshaping MSME paradigms.In this composition, we claw into the dynamic geography of fintech trends for MSMEs in India and aim to give perceptivity into their transformative impact,pressing openings and challenges in navigating this fleetly evolving geography in India. The Fintech dislocation Fintech results have revolutionised the fiscal services sector in India by addressing long- standingchallenges and unleashing openings for growth. originally, these results have democratised access to finance, prostrating traditional walls. using indispensable data sources like digital deals, GST forms, and mileage bills, fintech platforms assess creditworthiness which allows for a further inclusiveand data- driven approach to lending, enabling MSMEs to secure backing more efficiently. The wide relinquishment of mobile holdalls and payments like UPI and digital payment platforms has changed the geography of deals. India has surfaced as the world leader in digital paymentstructure, with UPI deals growing to 8,375 Cr with a CAGR of 147 in terms of volume. These inventions streamline payment processes, icing briskly agreements, reducing reliance on cash, and simplifying record-keeping. This,in turn, lowers sale costs and enhances liquidity operation for MSMEs, enabling businesses to accept payments securely through mobile bias, thereby also enhancing convenience and expanding client reach. likewise, fintech reaches underserved parts of the MSME sector, particularly in pastoral areas,where traditional banking services may be limited, enabling them to share more laboriously in the formal frugality and access a wider range of fiscal services. By using data analytics, fintech companies design fiscal products thatfeed to the specific requirements of businesses. This bridging of gaps, working in tandem with established fiscal institutions and governments, by fintech hasbeen the disruptor in the finance geography unveiling the eventuality, in particular, of the MSME member. MSME Growth With Fintech inventions The MSME sector is a critical part of the Indian frugality. These small enterprises contribute significantly to the country's GDP and exports and employ over 113 Mn people. The sector has been agonized by colorful complex problems, like attainability of credit, nonsupervisory issues, low scalability, labour problems, and the absence of standardised programs. Yet, MSMEs reckoned for a43.59 share in overall Indian exports in FY23, contributing over 30 share of the frugality's GDP. prostrating hurdles for the MSME sector will be crucial to achieving the Indian aspiration of$ 7 Tn by 2030. To harness the sector's eventuality, fintech companies have introduceda wide range of specialised fiscal services acclimatized to the requirements ofMSMEs. These services include insurance products, force chain backing, trade finance results, account software, tab backing, force operation results, digital invoicing, and customised investment options. pall- grounded account

& operation tools are now accessible through smartphones, simplifying fiscaloperations and saving time and coffers. Some platforms indeed offer AI- powered tools for fiscal planning, budgeting, and soothsaying, empowering MSMEs to make data- driven opinions and optimise their fiscal performance.There are also tools now that help businesses in compliance with fiscal regulations by automating nonsupervisory reporting, covering deals for suspicious conditioning, and icing adherence to Know Your client( KYC) conditions. In this age of the internet, MSMEs have primarily lagged in beingsuitable to go digital, because of a plethora of misgivings, lack of knowledge,and security enterprises. fintech platforms have eased MSMEs ’ access to broader requests, both domestically and internationally, by furnishing robust security measures against cyber pitfalls and fiscal fraud. Through flawless online deals and robotization of processes similar as purchase order backing, force backing, supplier payments, and access to real- time fiscal data and analytics, MSMEs have been suitable to start expanding their client base withlittle to no hassle. The wide relinquishment of digital account software, forceoperation systems, and online deals platforms has led to better resource utilisation and cost optimisation. Above all, the stimulant handed to MSMEs to embrace technology to streamline operations, ameliorate effectiveness, andenhance competitiveness is driving the growth of the sector with FinTech inventions. In Conclusion Despite the significant benefactions of MSMEs to India’s frugality, challenges similar as lack of credit vacuity, nonsupervisory hurdles, and scalability constraints persist. As we navigate this dynamic geography, it’s pivotal to honor the openings presented by trends in fiscal technology. The transformative impact of fintech inventions on India’s MSME sector is inarguable. From broadening access to finance to furnishingspecialised fiscal services, these platforms not only empower MSMEs to thrive but also drive the sector towards a more effective, competitive, and digitally inclusive future. As technology continues to evolve, embracing it'll be essential for MSMEs to navigate the fleetly changing geography. As India moves towards achieving ambitious profitable pretensions, employing the eventuality of the MSME sector will need collaboration among fiscal institutions, government bodies, private sector companies, and otherstakeholders on creating probative programs, perfecting access to credit and fiscal services, promoting digital knowledge, and investing in technology structure, fostering hookups between FinTech enterprises, traditional fiscal institutions, and MSMEs.

## DATA PROTECTION

It is imperative to denote the importance of Data Protection with the advancement of society and technology. The further the technology goes it needs stronger protection from malware and scrumptious companies and groups which misuse the data.

Standards for Processing Data:

The Fintech companies start with collecting data and then process the huge amounts of personal and financial data to offer personalized financial solutions to the user. Data Protection Act impose set standards for processingof data, emphasizing on principles such as the consent of the user, accountability, and purpose limitation. The Fintech firms have to ensure that their data practices are aligning with the said principles to ultimately maintain consumer trust and comply with all the regulatory requirements specified within the Act and any other necessary compliances.

Fintech companies have a high dependence on the collection of user data to provide highly personalized services and further modernize the process of financial transactions. However, in accordance of the Data Protection Act, such companies are facing the challenges of harmonising innovation with such stringent data privacy regulations. Callibrating the implications of the Data Protection Act is absolutely important for fintech firms to build a trustworthyapproach, ensure complete compliances with the provisions, and further fostersustainable growth in the digital financial landscape of the country.

The Data Protection Act provides that a Data protection system should be established in companies where data is collected or used in any format. A grievence redressal system further creates an ensurance for the consumer/userto make sure that the data given is safe and if there is any breach it will be addressed and fixed by the company and it will not escape from such responsibility.

Boosting Cybersecurity Measures: Fintech organizations are major targets forcyber threats and data breaches since they handle sensitive financial data. Sophisticated cybersecurity measures, like as encryption, access limits, and frequent security audits, are essential for compliance with the Data ProtectionAct. Fintech companies may reduce the likelihood of data breaches and maintain their dedication to safeguarding client information by placing a highpriority on data security.

Function of Data Protection Authority: The creation of India's Data ProtectionAuthority (DPA) demonstrates the government's will to uphold regulatory compliance and enforce data protection regulations. Fintech businesses need to cooperate with the DPA's investigations into data breaches and privacy violations, as well as proactively communicate with the agency and follow itsrules. Fintech companies' dedication to ethical data practices and regulatory alignment is strengthened by establishing a cooperative connection with the DPA.

Consent Methods:

Consent is the fundamental principle that supports data protection in Fintech business operations. Fintech companies need individuals' express consent before processing their data, whether they are collecting customer data for credit scoring or enabling peer-to-peer transactions. Strong consent procedures provide openness and provide consumers the power to decide for themselves how their data is used.

Data Localization Requirements:

The information that the Fintech platforms usually handle is sensitive financialinformation of the user, this raises concerns about the jurisdictional control and data security. The Data Protection Act mandates the localizing the specificcategories of personal data within the borders of India, aiming to enhance datasecurity and maintain the sovereignty of the state. Fintech companies must navigate these requirements while leveraging such data for innovative and secure financial services.

## REMEDIES

Both legal and regulatory frameworks are used in India's data breach redressalmechanism to remedy breaches and safeguard individuals' data rights. Important elements of the redressal mechanism are as follows: a. Data Protection Authority (DPA): The Data Protection Act of India created the DPA, which is in charge of upholding data protection regulations, looking intodata breaches, and fining noncompliant parties. Fintech businesses are required to notify the DPA of any data breaches and assist with its inquiries.

1. Grievance Redressal systems: In order to promptly handle consumer complaints and concerns regarding data breaches, fintech companies must

have strong grievance redressal systems in place. These defenses could consist of clear communication protocols, complaint escalation protocols, and specialized customer care channels.

2. Legal Recourse: People who have been impacted by data breaches in fintech companies are entitled to pursue civil or criminal legal action. Theycan seek damages for the breach and file complaints with the appropriate authorities, such as consumer protection organizations or the DPA.
3. Regulatory Penalties: Failure to notify data breaches or put in placesufficient security measures, among other non-compliance with data protection rules, may result in regulatory penalties, which may include fines, sanctions, and license revocation. Fintech businesses that violate datasecurity regulations risk severe consequences.
4. Fintech enterprises are recommended to comply with industry best practices and data security requirements, which include cybersecurity frameworks, ISO 27001 certification, and periodic security audits. Strong security measures can be put in place to lessen the impact that data breacheshave on stakeholders and customers.

FinTech innovations can be complex in nature, as a single solution may consistof multiple interconnected hardware and software components with complex mathematical algorithms, some of which may execute on a backend server and others on the consumer device. Depending on the type of technology and invention involved, many IPRs may coexist in the same solution.

1. Software/Source Code:



The source code may be protected as a trade secret if it meets specific legal standards, such as maintaining its confidentiality by all required methods. Among the methods taken to maintain confidentiality are limiting public access to the code and executing confidentiality agreements with any parties who may have access to the code, such as employees, developers, and other third parties. Trade secret protection occurs naturally and without the requirement for registration. It should be highlighted that if the owner fails to take proper efforts to protect the source code's confidentiality, he or she may lose this valuable legal privilege.

Though India lacks specific legislation to protect trade secrets, it has been afforded adequate protection through different judicial rulings, recognizing their importance. Disclosing, acquiring, or utilizing source code protected by a trade secret without the owner's permission may constitute a trade secret violation, resulting in both civil and criminal penalties. The creator of copyright in software also has the "commercial rental right". After reviewing the arrangements under Section 51 in accordance with Section 14(a), it is clear that any unauthorized storage, propagation, distribution of duplicates, or adaption of copyrighted software constitutes a copyright infringement in a FinTech program.

2. The algorithm

A specific section of software that has a process or set of guidelines for resolving a certain issue is referred to as an algorithm. As part of the "secret sauce" that underpins FinTech solutions, it is typical for an algorithm to include mathematical formulas and, on occasion, artificial intelligence (AI). An algorithm's owner may be entitled to trade secret protection, which gives them the ability to pursue legal remedies (based on the jurisdiction) against disclosure and certain unfair business actions by staff members and other parties.

3. Innovation Core

Perhaps the most valuable protection for an innovation is the protection of anyexisting invention that underpins financial technology. An inventionrepresents a technical solution that tackles an existing technical problem or obstacle. In FinTech innovations, inventions are mostly concerned with computer-implemented processes, which center around the technical operations performed by a computer, as well as related systems and equipment designed to conduct the computer-implemented processes.

While copyright protection prevents the computer code from being copied orreproduced, it does not protect the original technical concept or process connected with FinTech invention. This is especially crucial when the value of FinTech innovation is based on a new revolutionary technical approach. A patent prevents a third party from using the patented innovation (in the form of a device or a process), regardless of whether the software code was createdindependently or differently. Patent protection is necessary to safeguard the core innovation of a FinTech solution. A patent typically provides broad protection that goes much beyond the precise language of the computer instructions or software code itself.

4. Visual design and graphic user interface (GUI).

Industrial designs are another type of intellectual property that can be used toprotect the visual elements of tangible goods and products including paymentcards, equipment, and accessories, as well as graphical user interfaces for computer or mobile applications. To provide protection, an industrial design must be registered.

Given how quickly the FinTech industry is developing and how important it is that IP rights related to this sector be protected, tech companies and financial institutions should establish appropriate policies for intellectual propertyrights within their own organizations, make sure that appropriate IP agreements are executed with their consultants, employees, and business partners, and put in place appropriate mechanisms to ensure that IP rights related to their innovation projects are fully protected. Finally, they should prepare for any potential IP disputes by properly protecting intellectual property rights and putting in place strong contractual provisions that should be carefully planned. FinTech-related IP disputes can arise in a number of settings, such as disagreements over IP infringement, ownership, and contractsrelated to the creation, licensing, and marketing of FinTech products. FinTech-related IP disputes are typically complex in nature since they encompass both a variety of related IPRs and technical features of the technology itself. It is crucial that parties involved in the development and commercialization of FinTech solutions take precautionary measures to protect the financial technology and to provide clarity around IPR ownershipand commercialization rights and obligations with all parties involved. This will help to minimize the risks of IP disputes or a successful outcome in the event that they do arise. In addition, parties should include appropriate disputeresolution mechanisms in their contracts.

**The regulatory environment**

India Stack: A collection of APIs that provide access to a distinctive digital infrastructure for use by corporations, governments, startups, and developers.Establishing a public digital infrastructure built on open APIs to support bothpublic and private digital efforts is one of the most significant worldwide digital endeavors. Every significant project on India Stack is housed in one location, which is the website "Indiastack.global."

- JAM Trinity: Jan Dhan Yojana: Over 508.9 million beneficiaries have benefited from the world's largest financial inclusion program, "Jan DhanYojna," by enrolling in new bank accounts.
- The expansion of the worldwide footprint is being facilitated by cross- border links between India's quick payment systems (UPI & RuPay network, which enable QR code and P2M based payments) and other nations.
- The largest biometric identifying system in the world, Aadhaar has createdmore than 1.3 billion Aadhaars to far.
- Financial Inclusion: With a rise in adult bank account holders from 53% to78% between 2014 and 2021, India's financial inclusion has improved dramatically.
- Financial Literacy: To increase the reach of Centers for Financial Literacy(CFLs) to every block of the country, the RBI established the National Centre for Financial Education. These actions are intended to encourage financial literacy across all Indian populations.
- The launch of UPI and UPI Lite gives more than 400 million feature phoneusers access to UPI and makes low-value offline transactions easier with an on-device wallet.
- RBI Payments Vision 2025: By 2025, the RBI hopes to accomplish a number of goals, including a threefold increase in digital payment transactions, a 50% CAGR increase in the registered customer base for mobile-based transactions, a 150% increase in PPI transactions, and a 25%increase in ard acceptance infrastructure.

Framework for Account Aggregators (AA): Financial Information Providers (FIPs) and Financial Information Users (FIUs) can share consent-based financial information using the advanced framework known as AA. Over billion bank accounts can share data on the AA framework thanks to the onboarding of 23 banks. 3.3 million people have connected their AA framework accounts and exchanged data. Additionally, the RBI has designated GSTN as FIP, enabling digital invoice financing and giving the MSME sector much-needed finance.

## DIGITAL LENDING

In the new age with increasing financial knowledge of the people and their need to invest smartly and handle their finances in a proper manner. Thereforethere is a recent rise in financial borrowing, leading to increase demand of lowinterest and faster lending. The companies which bridge this gap by providinga speedy process and at ease fall into the category of Digital Lending applications. These applications come with their own set off problems such asrecovery of money in case of default, guarantees against the loans and correctassessment of the capacity of individuals to borrow such amount of monies.

The Reserve Bank of India ("RBI") made the decision to investigate how digital lending apps and websites operated because of worries about unethicalbusiness practices (such as recovery agents abusing their power to harass customers), data privacy violations, misuse of collected data, hidden costs, andillegitimate operations. In January 2021, the RBI Working Group was established. The Working Group published its recommendations in November 2021 after identifying three main issues: charges, technology, and conduct.

August 2022 saw the release of the RBI Implementation of the Recommendations, and September 2, 2022 saw the release of the RBI DigitalLending Guidelines.

The Reserve Bank of India Act of 1934, the National Housing Bank Act of 1987, the Factoring Regulation Act of 2011, the Credit Information Companies (Regulation) Act of 2005, and the Banking Regulation Act of 1949 have all authorized the Guidelines. Following this, on February 15, 2023, theRBI released Frequently Asked Questions to the Guidelines.

The Guidelines apply to digital lending services provided by non-banking companies (such as housing financing businesses) and banks (collectively, "Regulated Entities"). It is made clear that lending activities involving a physical interaction with the borrowers, such as customer acquisition, credit assessment, loan approval, disbursement, recovery, and related customersupport, are under the purview of digital lending.

Lending service providers and digital lending apps have been included in theguidelines. Digital lending applications, such as a bank's mobile banking appthat allows a user to apply for a loan via their smartphone, are internet-based and mobile applications with a user interface that facilitate digital lending services. A Regulated Entity may run a digital lending app directly, or a lending service provider may do so. Lending Service Providers act as a middleman between the borrower and the Regulated Entities. Lending Service Providers are organizations that represent the Regulated Entities in their capacity as agents and perform a variety of the Regulated Entities' duties, including acquiring new clients, supporting underwriting and pricing, servicing, monitoring, and recovering individual loans or loan portfolios.

The standards restate that the Regulated Entities' obligations to adhere to the current RBI standards on outsourcing remain unaffected by any outsourcing they may perform to Digital Lending Apps or Lending Service Providers. Furthermore, it is imperative for Regulated Entities to guarantee that LendingService Providers and Digital Lending Apps adhere to the Guidelines.

The Guidelines were implemented for new loans to both current and prospective clients beginning on September 2, 2022. Regulated Entities weregranted until November 30, 2022, to put in place suitable systems and procedures to guarantee compliance with the Guidelines for digital loans thatwere already in existence, that is, loans that had been approved as of September 2, 2022.

"Buy Now, Pay Later" Apps

The RBI circular on credit lines and prepaid payment instruments ("PPIs"), which was published in June 2022, prohibited the loading of non-bank PPIs, such as prepaid cards and wallets, onto credit lines prior to the Guidelines. Within the pre-approved borrowing limit, credit lines—pre-approved borrowing amounts given by banks or non-bank financial institutions (lenders)—allow people and businesses to access credit at any time without requiring additional approval. PPIs, like e-wallets, can only be loaded and reloaded with cash, debits from bank accounts, credit cards, and debit cards, in accordance with the RBI's Master Direction on PPIs. This means that creditlines cannot be used to load PPIs.

A number of "Buy Now Pay Later" (BNPL) platform providers were impactedby this credit line restriction since their consumers were able to access credit through non-bank issued PPIs that were loaded using pre-approved credit lines. Because the credit lines were pre-approved and the borrower didn't needadditional approval to use the BNPL service, loans were provided to borrowers in real time or within minutes of their request prior to the restriction.

Due to RBI restrictions on credit lines, BNPL enterprises have switched to a paradigm where each loan transaction made by a borrower on the platform receives a new loan sanction. According to the new approach, every time a loan is disbursed, it must first be approved and then loaded into the PPI.

In addition, the Guidelines mandated that BNPL platforms make adjustmentsto guarantee that loan disbursement or repayment did not cross through to the

BNPL platform account or any other intermediate account. The Guidelines and the credit lines circular combined have made it nearly difficult for BNPLenterprises to continue operating in their previous capacity. Due of this, a number of these fintech businesses have had to make significant changes or, in some circumstances, shut down.

## REGTECH

The field of regulatory technology, or "RegTech," has significantly changed the regulatory finance landscape in India and brought about a paradigm shift.

By offering FinTech companies, the financial industry, technologically advanced solutions to meet their increasing compliance obligations, RegTechhas the potential to upend the regulatory landscape. Because of the intricacy of products, variety, a dynamic regulatory environment, and the ongoing needto maintain a competitive advantage, effective technical solutions are imperative.

Regulations governing many banks and financial institutions are alwayschanging with the express intention of safeguarding the financial space and allof its stakeholders. This is now an essential component of the financial systemof today.

The current regulatory framework is not keeping up with the rapid evolution of technology in the financial sector due to the need for improved and increasingly complicated technologies. RegTech thus strikes a compromise between the requirements of the regulator and the advancement of technology.

THE IDEA

The UK's Financial Conduct Authority (FCA) coined the term "regtech" anddescribed it as

"A subset of fintech that concentrates on technologies that could make it easierand more efficient to deliver regulatory requirements than they currently can."

It refers to any technology that helps businesses comply with legal requirements. RegTech is a category of technology that, while remaining affordable and safe, helps companies to swiftly adapt to the demands of expanding regulatory duties.

Enabling FinTech companies to use this technology to automate the process of monitoring data and reporting to regulatory bodies.

RegTech fills the current gap in the financial sector by bringing technology toaddress the question raised on regulatory difficulties. This is because many organisations' current regulatory practices are based on antiquated and manualprocesses that are no longer practical given the expanding array of regulatoryduties. All reporting can be done in real time thanks to data analytics.



The goal of RegTech is to support regulators in the financial industry by helping them to use appropriate technology products to maintain certain checks and balances on enterprises' compliance with current legislation.

For example, a RegTech can help a bank, credit union, or other financial organisation by utilising blockchain, artificial intelligence, data mining, and other technology breakthroughs.

Regulatory organisations are also actively observing the entire business due to the growing number of fines levied against large corporations and the growing awareness of the frauds plaguing respectable institutions.

As a result, reporting requirements and compliance with transparency have gained attention. Well-established businesses should have a plan in place to automate these tasks in order to prevent fines for non-compliance with regulations, as they are being closely examined for their regulatory actions.

Hence, to put it simply, RegTech is the application of cutting-edge technologyto effectively and efficiently address regulatory and compliance needs.

The role of Regtech in breaking through barriers in the traditional financial sector

India's financial sector is undergoing a change thanks to the Fintech sector, which is also expected to become the world's financial hub. But this is not without its share of difficulties, many of which are dynamic in and of itself.

Financial institutions are well-aware of the problems that they face, which include government laws, non-standardized procedures, and high production and deployment costs.

To overcome these obstacles, these institutions require the right direction andassistance. RegTech can help businesses, financial institutions, and regulatorsby offering the following:

- Adhering to all applicable regulations;

- streamlining data management and reporting;

- Reporting in real time;

- Novel and customised inventions;

- Supporting decision-making and data analytics; and

- Risk and Fraud Management

Artificial intelligence, big data, cloud computing, data mining and analytics, API, virtualization, machine learning, computer vision, blockchain, and big data are just a few of the many features that RegTechs use to do all of this.

## INDIA'S REG-TECH SPACE

It was anticipated that the Indian financial services industry would grow. Butthe fairy tale run was cut short when it was discovered that a multibillion- dollar swindle had collapsed the markets. As a result, there was an urgent needto regulate these practices, and different steps were taken in response.

Financial institutions under RBI regulation and banks started using video- based client identification systems (Video-KYC). Additionally, RegTech can support the Account Information Service Provision ("AISP"), which enables consumers to authorise banks to release account information to the AISP. Thisinformation can be utilised to enhance product offers, for credit scoring, or ina bank's loan decision-making process.

Consequently, the bank may enhance loan disbursements and weed out fraudulent applicants by making better-informed selections.

Standard, thorough reports can be produced by a RegTech system using a variety of data sources. This becomes completely time and cost-efficient as itremoves the issues brought about by disparate data sources, systems, and errors from manual inspection.

RegTech can digitise paperwork, which will save a significant amount of money and help India get closer to its environmental targets. RegTech solutions also give Indian companies the scalability and flexibility they need to adapt to new international regulations.

Due of its Import Data Processing and Monitoring System (IDPMS), which facilitates effective import transaction monitoring and efficient data processing, the RBI is quickly implementing RegTech. The platform that integrates the systems of Indian banks and the RBI is another intriguing one. The Export Data Processing and Monitoring System (EDPMS) is what it is called.

Furthermore, the RBI has an online complaints and compliance managementsystem in addition to an Integrated Compliance Management and Tracking System (ICMTS) that enables automated inspections. It also acts as a central repository for various reports.

A dissemination platform, a centralised data analytics platform, an updated data warehouse and data lake, and the ability to efficiently gather data from regulated enterprises are all included in RBI’s Centralised Information

Management System (CIMS). Notably, the RBI is replacing its antiquated systems with AI and ML-run systems that safely retrieve particular data sets straight from financial institutions' source systems.

India's market is currently flourishing, with everyday increases in acquisitions and investments. It is becoming more and more crucial for the businesses to closely abide by the regulatory standards that have been put in place in the system in light of these developments.

India is destined to become the world's financial hub, but this vision is beinghampered by the inability to hold noncompliant parties accountable and determine their criminal liabilities. Financial crime, identity theft, data breaches, cyberattacks, and other forms of fraud rise as a result of ineffectivelyenforcing existing regulatory standards.

Therefore, fraud prevention and compliance should be the main priorities forRegTech going forward.

The financial sector is becoming more focused on digital payments, cryptocurrencies, cashless economies, etc., hence it is imperative that regtechadvance to support new ideas like algorithm oversight and data sovereignty.



RegTech will also need to operate in compliance with international and national data protection laws. The capacity to generate and process enormousamounts of data will need to be developed.

Therefore, it will now be necessary to embrace the Know Your Data strategyrather than the regulators' old "Know Your Customer" approach. Resolve issues, streamline procedures, and control risks to ensure regulatory compliance.

## INSURTECH

According to a recent research by PGA Labs, funding for Indian insurtechs increased at a compound annual growth rate (CAGR) of 34% from FY17–20,taking off in 2021. Indian insurtech firms secured $801 million in equity capital in 2021. This exceeds the total funding amounts for 2019 (US$380 million) and 2020 (US$290 million).

The report, which tracked the state of the insurtech ecosystem, also noted that,during that same period, worldwide insurtech fundraises saw a CAGR of 37%,with 2021 proving to be a turning point.

Legacy insurers have become major funders and have begun to pay much greater attention to new entrants. They've realized, for whatever reason, that working with digital companies can really improve things.

Over the last three years, more than 20 insurtech unicorns have appeared worldwide. Among the unicorns operating globally are Root, Wefox, Hippo, Next insurance, Lemonade, Waterdrop, and Unqork.

Other unicorns from India on the list are Acko, PolicyBazaar (which is publicly traded), and Digit Insurance (which is scheduled to go public in 2023). According to Tracxn, there are presently around 142 insurtech startupsfunctioning within the nation.

According to a report by S&P Global Market Intelligence, while InsurTech financing has accelerated throughout Asia in recent years, innovators in Chinaand India seem to be going beyond a supporting role and taking on the region'sindustry incumbents. Although product development is beginning to gather pace, sales and distribution actors have received the majority of funding in thecase of Indian insurtechs.

Although the insurtech was an "underdog" in the industry a few years ago, it is now making a big splash thanks to the backing of established companies aswell as the enthusiasm of emerging ones.

B2C business strategies with increased revenues

According to a PGA Labs analysis, B2C company models have a stronger perceived proximity to customers and higher operating leverage, which makesthem more valuable to investors in terms of revenue generation.

In recent years, the revenue generated by well-established B2C markets has surpassed that of marketplaces based on agents.

Leading InsurTechs in terms of financing and growth: During FY17–21, PolicyBazaar received the most funding, followed by GoDigit and Acko. The largest capital inflow occurred in 2021, when Acko and Digit raised $225 million and $200 million, respectively, to rank among the year's top fundraising deals.

The survey also stated that GoDigit had the highest CAGR in terms of growthrate, followed by Navi and Acko.

It also showed that, for the fiscal year 2017–21, InsuranceDekho has the fastest growth rate, while Turtlemint has the most funding among B2B2C marketplaces.

A sizeable portion of the Indian insurance business is being targeted by PaytmInsurance, ENSUREDIT, Onsurity, Plum, Riskcovry, and RenewBuy, among other prominent insurtech firms.

Relevance within the Indian FinTech industry

Growing at a 31% CAGR, the Indian fintech sector is expected to reach $1.3 trillion by 2025, making it one of the fastest-growing in the world.

The increasing use of women-specific insurance products, increased SME participation, and increased insurance knowledge in Tier 2 cities and beyond are the main growth drivers of insurtech firms in India.

It went on to list additional important aspects, including consumer preference, enhanced reach and technological integration, and the rise of the national health stack, which has aided in better penetration into the insurance industry.

According to a new analysis by the Boston Consulting Group and the India Insurtech Association, the industry is expected to develop even more in the future due to encouraging initiatives and growing demand among new consumer categories.



CHAPTER 4

## Payment Evolution through Applications

Unified Payments Interface (UPI)

The country may now accept more digital payments thanks to the Unified Payments Interface (UPI), a ground-breaking, user-friendly, real-timepayment technology that makes interbank transactions easier. With over a billion transactions per month, UPI—which was created and introduced by the National Payments Corporation of India in 2016—has emerged as one of the most popular payment options in India.

Enabling simple and safe money transfers across bank accounts is UPI's primary purpose. This is accomplished by combining several bank accounts into a single mobile application, facilitating easy money transfers and single-point merchant payments. Peer to peer and peer to merchant collection requests are also made possible by it; they can be planned and paid for as needed.

E-RUPI

The digital payment solution e-RUPI, a cashless and contactless method of making digital payments, was introduced by Honorable Prime Minister Shri Narendra Modi on August 2, 2021. According to him, e-RUPI is a representation of how India is developing by integrating technology into people's daily life. The goal of the person-and purpose-specific cashless e- voucher known as e-RUPI is to ensure that the value of the money stored is received by the intended recipient and is only utilized for that purpose. The goal is to develop a low-tech, leak-proof distribution system for a variety of federal Direct Benefit Transfer (DBT) initiatives across the nation. Organizations who want to employ e-RUPI in place of cash to fund social programs can also use the digital e-voucher platform.



PAYMENT GATEWAYS AND AGGREGATORS

These are the most important part of the entire financial circle in India. Theseapplications act as intermediaries between the consumers and banks as well as consumer to other companies such as internet companies, internet service providers, hotel booking applications and various other such applications andcompanies who are digitally registered and carry online transactions.

Payment Aggregators: Who Are They?

The third parties that enable retailers and e-commerce websites to receive payments from various instruments are known as payment aggregators. It is to fulfill the payment responsibilities without requiring merchants to build their own independent payment integration system. In the process of connecting merchants with acquires, the PAs collect payments from consumers, aggregate them, and then release them to the merchants after a certain period of time.

The RBI will have direct authority over the businesses that are authorized to operate as payment aggregators. So, a payment getaway license is highlightedin the RBI guidelines, which were published in March 2020. Payment Aggregators mandate that they give merchants access to a digital payment acceptance solution. These Aggregators are further have to comply with regulations ensuring protection of the transactions enabling the consumer to have a seamless experience.

A Payment Gateway License: What Is It?

Software used for payment processing that transfers funds from consumers toretailers is known as a payment gateway. In essence, it is software that takes payments from clients using a variety of methods, including online wallets, UPI, debit cards, credit cards, and net banking. It also generates a secure linkso that businesses may accept payments without being concerned about danger. The RBI must grant an authorized license in order to establish a payment gateway.

Further, we will divuldge into the essential differences between Payment Gateways and Aggregators to understand their importance and requirement in the modern economic infrastructure.

The authorization

The main distinction between the two is the middleman's function in handling funds. Payment aggregators fall into two categories: bank and non-bank PAs.Since the banks can access PA services as part of their regular banking, they do not require a special RBI payment gateway license authorization. However,non-bank PAs must obtain authorization under the Payment and Settlement Systems Act of 2007 (PSSA).

The Payment Gateways are classified as "outsourcing partners" or "technology providers" for banks and NBFCs. When using a bank payment gateway, one must follow the guidelines set forth by the Reserve Bank of India.

Capital Requirements

The current existing Payment Aggregators must have a total net worth of ₹15crores by March 31, 2021, and a net worth of ₹25 crores by the end of their third financial year i.e 1 April to 31$^{st}$ March. The net worth of ₹25 crore shallbe maintained at all times thereafter.



Due to recent amendments, the upcoming payment aggregators must have a minimum net worth of ₹15 crore at the time of filing the application for the authorisation to be a payment aggregator. Further, they also must attain a totalnet worth of ₹25 crore by the end of their third financial year from the date of grant of authorisation. Similarly, the net worth is the same as for existing Payment Aggregator’s.

Governance

The promoters of Payment Aggregators have to satisfy the proper criteria prescribed by the Reserve Bank of India. The directors of the company must also submit a declaration in the given format. Once the RBI verifies the ‘fit and proper’ status of the applicant, the license will be issued. If the eligibilityis not met by the Company or the information provided by it is incomplete or/and not in the prescribed format, then the license cannot be issued.

Avoidance of Money Laundering

The Department of Regulations was founded by the RBI and is responsible forissuing master directives related to KYC, money laundering prevention, and countering the funding of terrorism. The guidelines regularly incorporate measures from the 2002 Prevention of Money Laundering Legislation.

Security and Compliance

In compliance with the Payment Settlement System Act of 2007, the RBI approves and authorizes Payment Gateways. However, in addition to their Payment Aggregator license, the RBI mandates that the Payment Aggregatorshold a Payment Gateway license.

With the release of numerous new features, the National Payments Corporation of India (NPCI) may be able to achieve NPCI CEO Dilip Asbe's goal of 100 billion transactions per month on his real-time payments platform,UPI.

The recently introduced functionalities encompass a credit line through UPI, the voice-activated "Hello UPI" payment mode, BillPay Connect, which enables bill payments through conversational chat, UPI Tap & Pay, which leverages near-field communication technology, and UPI Lite X, an on-devicewallet feature. Additionally, NPCI showed how users might use UPI to withdraw cash from ATMs without using cards.

Infosys Chairman and Aadhaar creator Nandan Nilekani referred to NPCI as the "crown jewel" of India's technology industry due to the organization's rapid innovation on the UPI platform.

With the government's and the Reserve Bank of India's (RBI) assistance, UPIhas advanced significantly; in August, the platform recorded more than 10 billion monthly transactions for the first time.

How is it done by NPCI?

Since NPCI was established under the central bank's guidance, its innovationsare simple for the regulator to accept because they were developed on top of already-existing platforms like e-RUPI, BBPS, Rupay, FASTag, NACH,AePS, and NFS.

"Use case clearances can be expedited due to Dipe Asbe's vision and close tiesto the government and regulators. A senior executive who works with a majorUPI payments company states, "The open architecture allows all of theecosystem players to innovate using application programming interfaces

(APIs) on top of UPI." Using an API, two distinct pieces of software can interact.

The fact that NPCI is exempt from the requirement to integrate its products with banks, unlike other startups, is also beneficial. Because they are launching several products, banks and start-ups frequently take months to incorporate new items.

"The organization's concentration is essential to obtaining such outcomes. They don't have to promote direct business, which is another benefit.

Within the organization, they also have a lot of potential, and many of them are just graduated young people with excellent training. According to a former lender that has collaborated closely with NPCI on UPI, "NPCI used to accountfor the majority of our hiring for the UPI division."

The architecture of the organization's technology stack permits indefinite scalability. The capacity to consider the network effect of innovations aids NPCI in introducing features that its partners and customers find most desirable.

"While some of the products have been in development for some time, NPCIdeserves all the credit." Senior executive of Bank of Baroda Akhil Handa states, "They do have a great product team and technology team that supportsbanks in implementing these features."



Profit Centre

NPCI's monopolistic power contributes to its significant profit margin relative to other payment processors. For the fiscal year that ended in March 2022, the non-profit organization recorded profits of Rs 773 crore, an increase of more than 84% over the previous fiscal year.

NPCI Finance

With revenue of Rs. 1,629 crore for FY22, the company's margin is more than47%, whereas the majority of payment fintechs operating in the ecosystem continue to lose money. Ninety-one percent of NPCI's operating revenue camefrom payment services.

Even if certain payment gateway businesses are profitable, their combined earnings will still be less than NPCI's. This led Sameer Nigam, the co-founderof PhonePe, to state that NPCI continues to have the largest payment profit pool. However, earning money in this industry is challenging, with theexception of a few B2B players. "NPCI's profit pool was actually the highest last year," Nigam stated a few months ago at the Moneycontrol Startup Conclave.

The payment sector has long demanded that the MDR, or commission, that isimposed on those that facilitate payments, be reinstated. In an effort to speed up digital payments nationwide, the government withdrew the MDR, which has in fact assisted many small retailers in accepting UPI payments. The majority of ecosystem participants, including banks, have suffered as a result,though, as they no longer have a way to profit from a division that needs significant funding to operate and add all the new features that NPCI is alwayscoming up with.

Since NPCI is a non-profit organization and is owned by banks and other payment corporations, it is likely using all of its income to expand its productline and add new features. Recently, the company has been concentrating on internationalizing UPI in addition to broadening the reach and allure of Rupaycredit cards via partnerships and offers.

## THE NPCI'S PAYMENT TENTACLES

UPI continues to be the most popular product platform offered by NPCI, andit is predicted to overtake Mastercard's 440 million daily transaction volume.Every day, UPI processes about 340 million transactions. Every day, Visa, thebiggest card network in the world, handles 750 million transactions on average.

These companies have been in business for more than 60 years and operate inmore than 200 countries, many of which are significantly wealthier than India. Conversely, UPI has accomplished this level of growth in fewer than eight years.

UPI's forerunner, NPCI Hydra IMPS, is still extensively used for interbank money transactions. Even though it goes unnoticed, IMPS is quite significant. Every day, the platform processes transactions with a value equal to one-thirdof UPIs.

Initiated in 2016 by the RBI and NPCI, the Bharat Bill Payment System is currently managed as an independent subsidiary, serving over 20,000 billers on the network, including telecom, energy, and school fee businesses. Prior tothe establishment of BBPS, just twenty percent of bill payments were made online. Over 70% of bill payments are made online these days.

More than 7.5 crore tags have been issued so far by FASTag, another NPCI platform that oversees electronic toll collection on the majority of the nation'sroadways. Throughout this year, it collected Rs 5,000 crore per month.

With over 80% of the market in debit cards issued, Rupay is the most successful debit card platform; but, in credit cards, where spending is significantly larger, it lags behind Visa and Mastercard. But now that Rupay credit cards are connected to UPI, the platform controls a quarter of the nation's newly issued credit card market.

The diamond in the crown

With its range of offerings, NPCI has not only digitally transformed and revolutionized India's payments industry, but it has also produced multibillion-dollar private businesses and an ecosystem that allows fintech companies to sell products on top of the platform.

As a gesture of goodwill, the government is also working to assist poorer nations in setting up comparable domestic instant mobile and card payment systems. In the long run, this could replace the Society for Worldwide Interbank Financial Telecommunications (SWIFT), which managesinternational bank transfers, and assist the Indian government in integrating these systems with Indian systems like UPI for international payments and transfers.

Every nation has realized that having a backup domestic payment system is essential for survival in light of the recent ban of Russian payment systems from utilizing American networks like Visa and Mastercard.

With a payment technology infrastructure that is more advanced than that of other countries, India can resist any kind of financial blockade thanks to the National Payments Corporation of India (NPCI). NPCI has unquestionably merited the status of crown jewel.

# CHAPTER 5

# **RECENT CHANGES**

## PAYTM PAYMENTS BANKS' IMPACT

A notice from the Reserve Bank of India on actions against Paytm Payments Bank on January 31, 2024, all but destroyed one of the nation's most well- known firms. Not only did the notice, which effectively prohibited PPB fromoperating, come as a harsh shock to Paytm, but the worries are now spreadingthroughout the fintech sector in India.

But Paytm managed to get things under control by moving its nodal account to Axis Bank. The RBI made it clear in the comprehensive FAQs released onFebruary 16 that Paytm QR codes, soundboxes, and card machines will only stay functional after the extended March 15 deadline (formerly set on February29) if the merchants switch to other banks.

The Paytm Payments Bank, led by Vijay Shekhar Sharma, has undoubtedly had a turbulent 20 days. It's important to remember, too, that this is not the first time the RBI has rattled the Indian fintech industry.

More recently, the central bank ordered an anonymous card network toimmediately stop accepting card payments for business purposes from any organizations that do not accept card payments through payment intermediaries.

Numerous companies have been negatively impacted by the RBI's rules for the last two years, and this has caused a discussion within the industry. The compliance load is causing some people to wonder if it is worth it, especiallysince it diverts so much attention from managing the firm.

The RBI's regulatory action against Paytm is being questioned by founders and investors, leaving other fintech companies in the dark as to whether they should modify their business practises. The grounds of proportionality are notjustified by the heavy hand. It is believed by some that a number of regulatoryactions taken by the RBI (enumerated below) may have hindered digital transactions valued at INR 2 Lakh Cr (a conservative estimate), caused the closure of dozens of fintech businesses, and resulted in millions of end users losing their money.

The creator of the news site MediaNama and a specialist in tech policy, NikhilPahwa, said, "Startups are inherently designed to exploit grey areas to scale rapidly." Their ability to grow is significantly hampered by excessive conformity. Certain RBI rules have made the operations of fintech companies unfeasible or intolerable from an investor standpoint, resulting in the sad lossof a large percentage of the capital invested into these companies to drive rapidexpansion and market capture."

One of the signatories to an open letter requesting an explanation from the RBI and a revocation of the prohibition on the Paytm Payments Bank was Pahwa, along with other prominent investors and startup founders.

Following major setbacks caused by RBI restrictions for hundreds of fintech businesses, they provided input to the regulator.

Following notifications from the RBI, a number of firms, including Coinome,Throughbit, Koinex, and Muvin, were forced to shut down; other startups, likeSlice, Jupiter, PayU, and Instamojo, experienced business slowdowns for various reasons.

Fintech, Paytm, and the RBI

For instance, the RBI forbade banks from offering services to cryptocurrency- based organizations in April 2018, citing concerns about the possible detrimental effects of cryptocurrencies on end consumers and the Indian Rupee. In less than a year, over 12 cryptocurrency firms were shut down as aresult of this circular.

On the basis of proportionality, the Supreme Court reversed this circular twoyears later. A number of entrepreneurs also contended in the ensuing circularsthat the RBI frequently treats fintech businesses in a disproportionate manner.

Another example occurred on June 20, 2022, when the RBI ordered all non- bank issuers of prepaid payment instruments (PPIs) to stop using credit lines to load their payment instruments.

This decision was made because to worries that a large number of non-bank PPI issuers were using credit cards as a means of competition without adheringto credit card compliance regulations. The RBI is alleged to have been keepingan eye on this for almost eighteen months, but many users were left in the darkwhen the final notice appeared out of nowhere.

Although the RBI's arguments may have some validity, the fintech creator, who wished to remain unnamed, stated that the RBI's unilateral attitude is what bothers the fintech industry. Regarding the previous moves by the centralbank, the founder stated, "There were numerous ways the RBI could have acted without causing harm to many startups."

It makes sense that there would be anxiety when discussing regulations sinceit would raise unwelcome inquiries about whether a firm is breaking any laws.

It is thought that the RBI may have permitted existing players to have limitedcredit lines while forbidding new players from obtaining them in the context of the PPI verdict.

The credit lines might have then been progressively lowered. According to thefounder, this strategy would have allowed them to investigate alternative product choices without being unduly impacted by currently available items.

Paytm Row Openness Is Deficient

To be honest, everyone agrees that regulations are necessary and that fintech businesses need to follow them. This was one of the main points of agreementamong the over a dozen fintech innovators, investors, and tech policy experts.

"I have always maintained that there is no grey area in compliance, especiallyin fintechs," stated Sanjay Swamy of early-stage venture capital firm Prime Venture Partners. "So the focus on compliance will be a lot more strict from now on; it's simply non-negotiable."

Many have questioned Paytm's KYC methods, the payments bank's relationship with Paytm, related party transactions, and the transparency of wallet ownership. However, few have emphasized that the RBI did not halt these before they became such a significant problem. For example, as a subsidiary or associate of One97 Communications (Paytm), Sucheta Dalal, a journalist who revealed the Harshad Mehta scam in the 1990s, stated that theannual report of Paytm Payments Bank is not available separately.

Investors are reconsidering their short- or medium-term fintech investment strategy as a result of the occurrence, which has had a significant impact on the industry.

The pioneers of fintech emphasized that a major problem is the lack of openness. The founder of a payments business stated, "We are not questioningwhy the RBI took these measures, but how and for what exactly."

Additionally, if a specific bank misses the deadline for compliance. In additionto numerous other corrective steps, the RBI must initially intervene with othertools, such as changing the directors and designating a new director to ensure the bank complies. The creator questioned, "Why should the end consumers always bear the brunt of the RBI's regulatory inefficiencies?"

In addition to issuing the circular, the RBI has refrained from delving deeply into the subject. "Paytm Bank received an abundance of time. In our instance,after first obtaining a PA license, it was then revoked without providing us enough time to locate substitutes," added the founder of another payments business.

Interestingly, the RBI has used "Material Supervisory Concerns" to justify itsactions in a number of instances, including SBM India, Paytm Bank, and numerous others.

The RBI also stated in the most recent Paytm row that the bank's ongoing substantial supervisory concerns and chronic non-compliance were disclosedby the external auditors' compliance validation report and Comprehensive System Audit report, which called for additional supervisory action.

However, it did not show the extent of noncompliance that necessitated this level of supervisory action to establish the fundamental foundation of proportionality. This does not help entrepreneurs, who want to comply but frequently appear bewildered and scared when asked about regulatory challenges and how they intend to address them, according to an industry stakeholder.

Even Paytm founder and CEO Sharma was unable to go into the specific issueon analyst calls, claiming that the bank has been prevented from releasing more information with One97.

Everything is a little perplexing right now, even for the corporation that has been impacted the worst.



Is Fintech a viable investment opportunity?

Investors are concerned about the implications in the short to medium term.

What's happening in fintech is that after SaaS, this was the big bet for VCs interms of trying to create a new industry and grow the market that now with a large number of companies faltering, and within ecosystem becoming very, very restrictive, because of RBI regulation, and especially with the scare that'shappening."

Others stated that venture capitalists would be much more hesitant about investing in heavily regulated regions. It sends a signal to entrepreneurs that fintech has an entry hurdle, and it warns investors that exits and returns will not be as anticipated.

The other concern is that this suggests that regulators will be extremely strictacross sectors.

Despite the government's assertions, many believe India has not fully embraced ease of doing business.These occurrences call for a rethinking of investment tactics, with a stronger emphasis on due diligence and risk management. While regulatory barriers may require changes in investment size and sector concentration, fintech's fundamental potential remains enticing.

Smart investors will look for possibilities in companies that exhibit a commitment to compliance and resilience in the face of such regulatory hurdles. As a result, VCs may change their investment sizes or refine their sector thesis.

A regulator's primary responsibility is to defend the interests of consumers byestablishing rules that foster innovation without endangering the people they are meant to protect.

This knowledge has been crucial to our investment strategy, particularly in the fintech industry where quick expansion frequently straddles the border between regulatory compliance. However, recent events serve as a reminder of how difficult it can be to navigate the financial industry. These incidents demonstrate how important it is to interact with regulatory agencies in order to create an atmosphere that allows innovation to occur while adhering to thelaw.

Despite these sobering anecdotes, Swamy maintains that early-stage fintech investments won't decline because of their greater flexibility and agility.

Is the RBI even equipped to regulate fintech?

The fintech industry has seen growth in lending and financial inclusion through wallets and UPI. He says that most of this is happening despite the RBI rather than because of it.

Consumer protection sometimes appear to be at odds with supporting financial innovation. Regulators must continuously change their approach to reflect these many concerns and changing markets.



The central bank is designed to be a regulator, and it prefers to regulate institutions and enterprises over which it has strict authority. Banks face a large level of compliance.

As a result, Paytm Payments Bank should have met the RBI's compliance standards, but fintech companies are not always subject to the central bank's supervision.

The RBI does not want to regulate too many entities, such as thousands of fintech companies. "They'd rather regulate a few banks, say 50-100, so they can maintain tight control over this space. They lack the capacity and inclination to truly explore or allow for experimentation in this setting. But itis their basic character. If companies struggle to obtain licenses and comply with regulations, starting a fintech business becomes prohibitively expensive.

No one disputes the importance of the RBI's focus on regulating the flow of money or anti-money laundering, but stakeholders argue that a middle groundand some proportionality are required.

"To streamline their business processes, fintech companies are encouraged touse cutting-edge technology such as cloud computing and data analytics." Startup founders prioritize balancing consumer protection and systemic risk mitigation to gain a competitive advantage in the market.

The RBI has recently shifted its approach to one that emphasizes licensing and more oversight, directing fintech products through traditional regulatory channels. Startups will find a way to innovate inside this sandbox if this is thenew normal.

However, sudden and unexpected moves are what frighten fintech startups. And for this reason, a lot of people would think that in order to decide how fintech develops in the future, the RBI and modern regulators should have equal power.

REPOSITORY

The Reserve Bank of India (RBI) has announced intentions to construct a fintech repository and a new cloud facility for financial services enterprises as part of its most recent developmental and regulatory policy measures.

Reserve Bank of India

RBI proposes a new fintech repository and cloud facility. According to the central bank, the repository would collect "essential information about fintechs" for regulators and stakeholders.

Indian fintechs would be encouraged, but not obliged, to deposit data about their activities, products, technology stack, and financial information.

The RBI claims the aggregated data would "aid in designing appropriate policy approaches" and hopes to have the repository operational by April 2024, overseen by its Innovation Hub.

Similarly, it intends to construct a new cloud facility for the country's banks and financial institutions, indicating a purposeful shift away from reliance onthe multiple public and private cloud facilities already in use.

The RBI expects this cloud facility to "enhance the security, integrity, and privacy of financial sector data" and "facilitate scalability and business continuity" - a reasonable goal for a sector with "an ever-increasing volume of data." It has delegated the duty of establishing and operating the facility toits wholly-owned subsidiary, Indian Financial Technology and Allied Services (IFTAS), with plans to transfer the operation to a distinct sector- owned business in due course. The RBI has not specified a target launch date for the cloud facility and has only stated that it will be "rolled out in acalibrated fashion in the medium term".

Limits on transactions, electronic mandates, and loan structures

The fintech repository and cloud facility are set to launch simultaneously witha series of regulatory changes that are also included in the new actions announced by the RBI.

Proposals for recurring online payments, with transactions up to ₹1 lakh in certain categories slated to be excluded from additional factor authentication (AFA), are particularly relevant to payment systems and the fintech industry.

To promote the use of the Unified Payments Interface (UPI) system for medical and educational services, the National Payments Corporation of India(NPCI) has decided to raise the caps on payments to hospitals and educationalinstitutions from ₹1 lakh to ₹5 lakh per transaction.

Furthermore, the measures address what the bank refers to as "moral hazard issues" in lending, with an emphasis on pricing and credit management. It aimsto develop a consistent regulatory framework for linked lending, in which a borrower may influence the lender's decision-making, for all of its regulated businesses.

The RBI is now bringing web-aggregators of loan products (WALPs), commonly known as online loan comparison platforms, under a "comprehensive regulatory framework" that it claims will encourage operational transparency, customer centricity, and more informed consumer decision-making.

It has continued this theme of unity by submitting a final proposal for its frameworks for the hedging of foreign exchange (FX) risks, three years after starting an initial study. This shift will unify all transaction types conducted inits FX markets, including over-the-counter (OTC) and exchange traded, underwhat it defines as "a single master direction". The new structure intends to improve operational efficiency and risk management while also providing easier access to FX derivatives, particularly for small-exposure customers.

In summary, the RBI's actions announced this week appear to demonstrate itscontinuous efforts to better connect all aspects of the financial system by promoting data exchange, transparency, and ease of collaboration.

## APTER 6

## Challenges faced by Fintech Industry

Fintech companies have issues with security and privacy. The financialservices industry manages sensitive data about persons and businesses. With the rise of fintech, more data has become available in digital formats, makingit easier to evaluate and generate insights, but also making the data more vulnerable to security breaches. According to PwC's Global FinTech Survey 2016,4, about 56% of respondents regarded information security and privacyas threats to the growth of fintech. As more services come online, data ubiquity, and thus data security, are proving to be a key concern for fintech.

As the use of online and phone banking services grows, businesses are able tocollect massive amounts of data about customers and visitors, which is then analyzed to generate insights into client purchasing patterns and acquisition and retention strategies. Some of this data includes personally identifying information, as well as financial and health information. The industry faces adifficulty in protecting this data and making it available to customers and third parties when needed. collaborations between established financial institutions and modern firms have helped consumers receive better products at lower rates while also improving access to existing products and services—seamlessdata sharing is the foundation of such collaborations. Organisations will need to adopt better methods for obtaining customer consent for data sharing and reuse, as well as technologies and practices for data life cycle management, toguarantee that data is not misused or exploited in the grey market.

Furthermore, the difficulty of determining data ownership must be addressed using a combination of technical and legal means. Companies should mitigatethe risk of lawsuit (over data leaks or misuse) by implementing processes thatsecurely dispose of client data whenever he or she unsubscribes from fintech services. Furthermore, managing client access to products and services becomes more complex. Cyber security principles such as data tagging, selective data sharing, and identity-aware data sharing may hold potential solutions to this challenge. Fintech companies face a significant difficulty in managing the digital identities of individuals and enterprises. Their goal is to offer an integrated omnichannel experience to users by seamlessly extending a range of banking, wealth management, and payment services. Authentication and authorization services are increasingly being provided bygadgets like cell phones with biometric sensors.



The use of code-generating apps (like Google Authenticator), biometrics, andone-time passwords (OTPs) on mobile phones has made it less necessary to rely on traditional authentication methods like PINs and passwords. Given how widely used digital identities are in the developing financial industry, copying these identities can increase hazards even though they have gotten safer overall.

Adaptive authentication, also known as risk-based authentication, which analyzes user behavior before giving access, could be a countermeasure to reduce the danger of digital identity misuse. Interfacing systems using application programming interfaces (APIs) that communicate with numerousenterprise programs has enabled seamless data sharing, but it has also openedopportunities for malware spread. Cross-platform malware contamination is agrowing threat as systems in the financial services sector become moreintegrated. As previous proof-of-concept viruses have demonstrated5, it is conceivable to construct malware that can infect and spread from one platformto another. Combating such a danger demands not just the use of cutting-edgetechnology, but also a rethinking of traditional security structures.

One approach to ensuring the development of secure technology is to incorporate security into the original design phase by identifying business usecases and building threat models and accompanying controls. This is significant given the start-up nature of the finance industry, and hence the potential of insecure coding methods being adopted in pockets.

Going digital for payments might be difficult in an economy like India, whichis dominated by micro, small, and medium-sized firms (MSMEs) that cannotafford the expenditures. Fintech adoption is lopsided in India, however due tolower transaction margins, larger payment gateways target mainly a few largeretailers. MSMEs contribute for only around 5% of the $12-14 billion spend.

One of the issues is developing long-term business strategies that do not burden customers with additional fees.

E-money is also a significant regulatory hurdle in India's fintech business. E-money is money that is held on a digital device or in a digital wallet and can be used to purchase products and services. The Reserve Bank of India (RBI) has released the Payment and Settlement Systems Act (PSSA) to govern the usage and issuing of e-money for payment, interchange, and settlement by institutions.

Fintech organizations that wish to grow their client base must first understandthe desires and preferences of their target audience. Fintech things differ fromother items in advertisements because they provide tailored administrations that match specific wants. Long-term success depends on acquiring and retaining customers by providing exceptional benefits and making themhappy.

It is challenging for Indian financial companies to expand operations while maintaining quality. The challenges of rapid expansion include inefficient features in operations and asset allocation. Extensive planning and executionare required for successfully expanding and branching out into underutilized areas.

To stand out in a competitive business, fintech companies must have a strongbrand presence and implement effective marketing strategies. New firms havelittle resources, therefore they must devise innovative marketing strategies to reach their target market. You may strengthen your brand message and attractmore customers by leveraging social media and content marketing.



The RBI also oversees digital currency, which is defined as any type of money issued electronically but has no physical existence. This covers virtual money such as Bitcoin and other cryptocurrencies. The RBI has established particularcriteria for enterprises that provide digital currency services, including AML and KYC regulations.

The existing suite of financial products and services is tailored to the top 40 million Indians, and does not serve the great bulk of the population due to thelow level of native digital and financial literacy. Approximately 400 million Indians Earn between US$3,000 and US$15,000 annually, and their necessities are still unmet. Fintech startups in India and established companieshave a chance to take advantage of this and reinvent what are the needs of thegeneral public.

Further, creating vertical products that are exclusive to India and are segment-specific requires a great deal of innovation.

A few examples of it have already been observed in India: pay-per-day insurance, microinvestment products, immediate point-of-sale credit, prepaid plans for individual medical procedures, small-ticket unsecured loans, and others. As of right now, companies haven't taken the time to fully comprehendthe market and develop workable, reasonably priced, and lucrative solutions.

For example, there haven't been any significant changes to solutions like crowdsourcing, social finance, and credit programmes targeted at female entrepreneurs.

Startups may have a rare chance to benefit from the sizable Indian Fintech market if they tackle these issues by developing disruptive solutions inaddition to expanding on the innovations already started by Indian Fintech companies.

## FINTECH'S IMPACT ON THE BANKING SECTOR

It has altered the way banks operate and created a sizable new market for loansdepending on the market. Credits and associated services are now easily profitable for buyers thanks to the emergence of Fintech companies. Elective models are being developed to provide consumers with finance, whether theyare individuals or businesses. These companies are dedicated to enhancing the customer experience, financial products, and quick credit approval.

### Settlement Services

The way that installments are made has been impacted by fintech services. These days, payments are performed online via the internet or mobile devices,which reduces the need for dealer accounts. It is possible to transfer cash directly to the bank account, reducing the possibility of counterfeit goods andexchange fees.

### Wealth Management

With the rise of fintech, the way people save money, manage resources, and contribute to capital is shifting. Using recent monetary innovation, these organizations intend to provide updated arrangements for managing their ownwealth and enterprises. Fintech programming also aids in comparing optionsand developing the best investment strategies for particular budgets.

Remittance transfers

For a long time, banks and individuals have struggled with traditional settlement benefits, which can be expensive and confusing. Over time, fintechcompanies have worked to make these incoming and outbound transactions simple and straightforward.

Insurance Services

Obtaining protection has become a less complex method. With modified plans, everything should be doable over the internet. This paper-based help has evolved significantly with fintech improvements, from application interaction to intermittent charge payment.

Equity-Funding

These technologies enable new project ventures and businesses to raise fundsin the form of equity from a huge number of people.

6.3 Why should fintech companies and banks collaborate?

FinTech has the potential to be both beneficial and detrimental to banks. However, if banks properly exploit the power of FinTech services, it benefitsboth parties.

Increased efficiency

FinTech in the banking business allows them to harness each other's capabilities to expedite processes, automate operations, and increase overall operational efficiency.

- FinTech can help banks gain access to cutting-edge technologies.
- Banks can provide FinTech startups with the regulatory expertise and clientbase they need to grow their operations.
- Access to innovative technologies.
- Collaboration between FinTech and banks enables both sides to access andimplement cutting-edge technology.
- Banks can profit from FinTech's innovation and flexibility.
- FinTech companies can exploit traditional banks' resources and infrastructure to broaden their reach and influence.
- Cost reduction

Banks and FinTech companies can reduce the costs of developing and implementing new technology by forming strategic collaborations. Followingcost-cutting, these savings can be passed on to customers in the form of cheaper fees and more competitive product choices.



For example, a credit union partnered with a FinTech to provide cloud-basedbanking fintech software. By moving their operations to the cloud, the credit union eliminates the need for expensive on-premises infrastructure and lowersmaintenance costs.

- Improved security

FinTech organizations frequently stress security and data protection since financial transactions are sensitive.

Banks that collaborate with FinTech can improve their security measures, reduce the risk of cyber threats, and secure their clients' sensitive information.

- Enhanced client experience.

Fintech startups have revolutionized the financial services market by taking an innovative approach to client experience.

They have a reputation for being faster, cheaper, more efficient, and safer thantraditional banks. Many fintech companies have earned their consumers' trust by providing great service and acquiring clients through referrals.

Banks can follow FinTech's customer-centric strategy. This can result in greater service for consumers, increasing their trust and loyalty to the bank.

More transparency

FinTech businesses are frequently commended for their dedication to openness. This may have a favorable impact on the financial sector.

Banks can implement more transparent procedures, like easily accessible account information, transparent charge structures, and interest computations, by working with FinTech companies. In the end, this increases the clients' trust.

- Increased Accessibility

FinTech, especially in emerging nations, can reach underserved and unbankedcommunities to expand financial services.

Banks may expand their customer base, promote financial inclusion, and aid in the general economic growth of nations by collaborating with FinTech companies.

- Better branding.

The impact of fintech on banking can be beneficial to their brand image.

Banks can position themselves as modern, forward-thinking, and customer- centric financial institutions by encouraging innovation and demonstrating their dedication to technology improvements. This allows banks to recruit a new generation of technologically savvy customers.

# CHAPTER 7

## FINTECH AND TAX

Under the Companies Act of 2013, any fintech company needs to register asa company. If so, corporate income tax applies to the institution. Companies may register under section 2(22A) of the ITA as domestic companies or undersection 2(23A) of the ITA as foreign businesses, depending on where they arebased.

Because domestic corporations are required to pay tax on all forms of income,this distinction is crucial for taxes once more. On the other hand, overseas businesses are only required to pay taxes on earnings made within the bordersof India. Domestic businesses who don't make any allowance claims are required to pay 22% in taxes, whereas other businesses must pay 30%. In addition, there is a 7% or 12% surcharge if the total revenue is less than or more than Rs. 10 crores.

Certain enterprises are only required to pay the Minimum Alternate Tax (MAT) when the tax amount is less than 15% of their total book income. Fintech businesses based abroad pay 40% in taxes. There is also a 2% or 5% surcharge.

Equalization levies are additionally imposed on fintech companies for moneycollected by non-resident service providers. It is fixed at two percent of the amount owed. Fintech businesses are exempt from paying this charge if theirgross receipts for the prior year were less than Rs. 2 crore.

GST in the Context of ePayments

Businesses that have registered for GST are required to pay the GST taxes thatthey receive from their clients at the point of supply. To claim input tax credits,they must also provide invoices and supporting documentation.

To comply with GST, all financial transactions must be kept up to date and well documented.

On the other hand, there are numerous participants in the ePayment ecosystem,each with a unique payment mechanism. The ePayment platform in this instance is not possessed by anyone. The supplier is required by GST law to collect GST and submit the tax to the government. The definition of a supplier gets murky in the context of the ePayment ecosystem.

Together, all members of the ePayment ecosystem provide financial servicesto the client. They do not, however, have a definitive supply transaction or agency. So, how will the participants in the ePayment ecosystem be impactedby the GST?

The Honourable Tribunal stated during its discussion of the Service Tax system that an activity will not be classified as information technologyservices if it does not entail the development, adoption, or adaption of IT software. Therefore, as long as they just permit one more user to use their software or platform, fintech companies don't have to worry about the ramifications of GST.

Fintech companies facilitate transactions; therefore, the services they providemight be classified as supply transactions. Regarding exchanging consumer information, purchasing patterns, and other data analytics, the tax authorities could have differing views. When fintech is engaged, it can be difficult to pinpoint the precise service provider because several fintech companies collaborate.

Merchants can deposit money to the fintech companies for MpoS terminals located on the premises.

Whether these transactions qualify for GST is another issue that has to be addressed. Fintech businesses are unable to claim the Input Tax Credit on certain purchases.

Fintech Tax Issues

Fintech businesses and online businesses contest several facets of GST compliance. Since the GST laws are still in their infancy, caution must be usedwhen handling these matters.

- Location of Provision

NFBCs are frequently registered as centralized entities and have pan-India operations to provide services across the country. NBFCs must, however, geta unique registration under GST for every operational state, with varying compliance obligations. Furthermore, NBFCs established in one isolated areawould offer services in another, raising the issue of the source of supply.

- Payment Aggregator Exemption from GST

When the settlement amount for in-card transactions is less than Rs. 2000, theacquiring bank is free from GST. It's unclear, nevertheless, if the payment aggregator meets the requirements to function as an acquiring bank. Paymentaggregator fees are often subtracted from the amount that is settled in merchant accounts. These can be viewed under GST as an advance collectionof fees, and GST might have to be paid at the time the deduction is made. There may occasionally be discrepancies between the settlement and invoice dates as well as pauses in the GST payment.

- PoS Device GST

The fintech industry requests a reduction in the 18% GST fee on proof-of-saledevices. The 2023–24 budget should prioritize addressing the 5% GST decrease for PoS devices.

- Fintech International Business

India's fintech entrepreneurs can depend on foreign businesses to operate. It is difficult to establish GST while utilizing software owned by foreign firms.Even if the CGST Act does not define it as a supply transaction, it can nevertheless be regarded as one.

Numerous financial professionals contend that in order to handle particular fintech concerns, the GST regulations need to be revised for the fintech industry. The taxes sector is facing a multitude of new issues as banking and financial operations become more digitally oriented.

The RBI can only go forward by being willing to alter its policies, and the Indian government must do the same in order for the fintech industry to be able to apply the GST.



## CHAPTER 8

## **RURAL FINTECH**

India's rural areas being transformed

Many people living in India's rural and semi-urban areas do not have access to official banking services. Fintech innovators, though, are transforming that.They are enabling small businesses and making life easier for small firms and merchants by offering online banking and financial services like investment, Aeps, digital ledger apps, and digital payments to underserved areas. Througharticles and videos about investments and financial planning, these fintech businesses also educate the public about money matters. Fintech companies are bridging the gap between underserved areas and established banking infrastructure via the use of technology and innovation. This is boosting financial inclusion and enabling people to construct better futures for themselves.

The following unique Fintech companies are closing the financial gaps and empowering people in rural India:

- BharatPe (Digital Payment): Bharatpe is a financial start-up that offers digital payment options to retailers and small businesses. The company operates in over 100 Indian cities and offers a few services, such as credit and debit card payments, UPI payments, and QR code payments. BharatPealso offers loans to small businesses and retailers to support their expansion. Little paperwork is required, and loans are disbursed rapidly—often in less than 24 hours.

The social commerce fintech platform BankSathi provides clients in Tier 2, Tier 3, and rural places across India's 18000 PIN codes with recommendations for appropriate financial products through its network of 1.5 million financialadvisors.

The business offers product suggestions for bank accounts, credit cards, loans, demat accounts, insurance policies, and other financial categories. By utilising technology, BankSathi aims to give its consumers a smooth and easy experience, giving rural clients access to financial services that were previously unattainable. The organisation has relationships with over sixty financial institutions, including Bank of Baroda, Axis Bank, Kotak MahindraBank, and HDFC Bank. BankSathi's insurance licence was recently obtainedby the IRDAI, enabling the company to provide a wide range of financial products, including the most reasonably priced insurance choices for customers in tier 2 and less developed areas.

- Aye Finance: Aye Finance is an NBFC whose goal is to address the difficulties in providing MSMEs with capital and facilitating their integration into the economy. Aye Finance sets itself apart by using a technologically advanced procedure that uses a range of accessible business and behavioural data to provide credit insights. This efficient credit evaluation, along with the application of contemporary workflow automation and a small but dedicated staff, is assisting in closing the gap that exists between MSMEs and structured lending. The cloud computing architecture makes it possible to provide client service with flexibility andaffordability. Additionally, the corporation provides funding for its nonprofit programme, which coaches MSMEs in bookkeeping, operations,and market expertise.

- KhataBook (Digital Ledger): Designed to help small business owners manage their expenses and transactions, KhataBook is an app that serves as a digital ledger. Users may easily manage their accounts with the app thanks to its multilingual availability and simple user interface. With morethan 700 sites across India, KhataBook wants to provide small businesses with access to technology in order to digitalize the informal economy. With the help of the app, small businesses can generate invoices, maintain adigital ledger, and remind customers to pay.

- Propelld (Education Financing): Propelld is a FinTech startup with headquarters in Bangalore that specialises in lending for education. The primary goal of the brand is to increase India's gross enrolment ratio (GER)and democratise access to education by utilising tailored financial productsto remove financial barriers to the proper kind of education. In order to support the overall educational infrastructure, the company offers customised loan packages that are determined by the borrower's profile andthe course's intended purpose. The goal of their 100% digital, hassle-free method is to help tier 2 and tier 3 students and their families fulfil their aspirations for an education. Propelld, in contrast to traditional lenders, hasa special underwriting process that considers the student's future potentialin addition to their credit score.

By using customized financial products to reduce financial barriers to the right sort of education, the company hopes to boost India's gross enrollment ratio (GER) and democratize access to education. The organization provides tailored loan packages based on the borrower's profile and the course objectives in order to support the overall educational infrastructure. Their hassle-free, all-digital approach aims to assist tier 2 and tier 3 students and their families in realizing their educational dreams. Unlike traditional lenders, Propelld uses a unique underwriting procedure that takes the student's future potential into account in addition to their credit score.



- PayVeda: Technocrats and businesspeople founded PayVEDA, a FinTechcompany for rural payments, with the goal of closing the financial gap in

India’s underprivileged areas. Through its retail network, PayVEDA hopes to bring banking and non-banking services to even the most remote areas of the nation. PayVEDA is a platform that offers both non-financial and financial services in one location.

- SarvaGram: SarvaGram is a financial services provider that helps rural people by providing financial and capacity-building goods. Currently, it offers loan and insurance services in the states of Telangana, Gujarat, Rajasthan, Karnataka, and Maharashtra. It provides loans for farms, businesses, homes, consumer durable goods, individuals, and gold.

International compliances

India’s economy has transformed from being heavily dependent on cash to being increasingly digitalized thanks to the rapid growth of the BFSI industry.Today, fintech has become widely accepted, with an emphasis on lowering risk and boosting profitability. With the rapid growth of technology, the fintech ecosystem is expected to rise six times from $245 billion to $1.5 trillion by 2030. By 2030, the Asia-Pacific area is predicted to surpass the USand rise to the top of the global fintech sector.



Given these growth estimates and the recent RBI crackdown on PaytmPayments Bank, fintech companies are paying closer attention to complianceregulations.

Prior to this, Union Minister Rajeev Chandrasekhar said that fintech companies are now aware of how crucial it is to abide by the law as a result ofthe RBI’s regulatory action. Accordingly, the impact of global compliance standards on fintech operations in India, including GDPR and AML (Anti- Money Laundering) directives.

Records of every transaction, including cash transactions over Rs 10 lakh, must also be kept for a minimum of five years. Furthermore, if many cash transactions occur in the same month and their total value surpasses Rs 10 lakh, records of all these transactions, even if they are individually valued lessthan Rs 10 lakh and are inextricably linked, must be kept. For a period of fiveyears, foreign transactions above Rs five lakh that have India as their origin ordestination must also be maintained.

These service providers, who will be in charge of providing information to thegovernment's designated officer, must select Principal Officers. Deploying aninternal method to identify suspicious transactions is also necessary.

After these transactions are fulfilled, they have to be reported as questionablewithin seven days.

Businesses are required to register as reporting entities with the FIU-IND andadhere to the act's requirements, which include reporting suspicious transactions, according to KYC guidelines, and maintaining records. They are required to keep account files, business correspondence pertaining to their clients, and KYC details, or records of documentation proving the identities of their clients and beneficial owners. They also have an obligation to notify the FIU-IND of any suspicious activities.

Additionally, fintechs must file statements of financial transactions (SFT) in accordance with the Income Tax Act. In addition to other information, businesses must provide information from the three prior fiscal years' annual returns, balance sheets, profit and loss statements, and GST returns that weresubmitted to the Ministry of Corporate Affairs.

# CHAPTER 9

## COUNTARY COMPARISON

India has just lately been a significant player in the Fintech industry, with theUS, Hong Kong, Singapore, and the UK emerging as major worldwide hubs.Nonetheless, India has a lot of promise since it offers the ideal combination ofbusiness environment, government assistance, technical expertise, and legal framework for entrepreneurs to succeed. For instance, UPI in India is not likeanything that can be found in the US or the UK.

The following are some of the main features of the Indian market that attract Fintech companies and make it exciting: • India is the only Fintech centre thatoffers plenty of potential to target a sizable unbanked population. India is becoming a desirable location for Fintech companies due to its young population, who are open to new technologies.

The challenging task of getting customers to adopt Fintech solutions is alreadyunder way.

• The extensive technical education system in India offers a robust talent poolof relatively inexpensive and easily hireable tech workers. When it comes to deal volume and size, India's startup ecosystem is the second largest in Asia Pacific, after only China's.

India is a country that is steadily climbing the Fintech ladder and offers manychances for Fintech companies to access the diverse market and succeed as long as they have a solid go-to-market strategy and a careful match between their solution and their customers. Payments and lending are the two industries in India where Fintech is most prevalent. Approximately 40% of the over 600

Fintech businesses already operating in India are in the payments and loans space.

INDIA AND AFRICA

Since the global financial crisis of 2008, India's banking and financial sector has seen significant changes, largely due to the emergence of fintech startups.Among other things, fintech has made it possible to optimize costs and enhance consumer engagement and transaction simplicity. Fintech has been instrumental in the unbundling of banking services from a centralised system, payment setting, maturity transformation, risk sharing, and capital allocation since 2010. With the exception of major and mid-size banks, small finance banks, regional, rural, and cooperative banks, fintech companies constitute thefourth section of the Indian financial system. India raised US$ 2 billion through 121 agreements in 2020, maintaining its position as the leader in the Asia Pacific area for fintech investments. Over the course of three deals, PhonePe raised $788 million. The sector had exponential expansion in fundingthe next year, with approximately US$ 8 billion invested at different levels. Although India generated 16 fintech unicorns by June 2021, it outperformed the National Association of Software and Service Companies (NASSCOM) 2020 report, which had forecast that the country will have 50 tech unicorns (ofall kinds) by the end of 2021. There are 187 fintech unicorns worldwide, with18 of them based in India. The majority of them, like the rapidly expanding mobile wallets, are enhancing rather than displacing the current financial service providers. The diversity of India's fintech base demonstrates the industry's strength. Over 90 percent of India's investment flows a few years ago were from the payment and alternative finance sectors; by 2020, SaaS fintech received $145 million in funding, while insurance fintech received
$215 million. The majority of the new players started raising money through

open rounds as soon as they weren't even given seed money. To monetize thedata and user base, they have re-bundled a number of financial services underone roof. Many offer both goods and services simultaneously. For instance, Pine Labs, a company that specialized in point-of-sale and payment gateways,has expanded its offerings to include value-added services for retailers, such as merchant lending, neo banking, rewards and loyalty programs, and consumer finance. Lending to micro, small, and medium-sized businesses (MSMEs) as well as retail customers is the primary emphasis of fintech companies in India. The ecosystem encompasses a range of novel services such as instantaneous payments, expedited loan disbursement, investment counseling, insurance distribution and advice, and peer-to-peer lending, whichwas previously dependent on human resources.

AFRICA

There are more than 500 fintech companies in Africa, with the highestconcentration in South Africa, Nigeria, Kenya, and Tanzania. Fintech platforms provide a range of services on a single platform, just like in India.

With an average population density of 45 people per square kilometer as opposed to India's 460, Africa has a considerably more geographically dispersed population. The most effective way to efficiently reach remote consumers is through technology-based financial solutions, as physical infrastructure is inadequate. Additionally, African low- and middle-income economies provide an excellent testing ground for innovative bottom-of-the-pyramid fintech solutions.

Fintech companies in Africa receive the majority of their capital (91 percent)from Nigeria, South Africa, Kenya, and Egypt. Just US$ 109 million has beengiven to those in the other 50 nations since 2000.

Due to the talent base in those four nations, financing is growing. Additionally, more businesses are moving their headquarters to these nations.

Since 2000, equity funding for digital financial services in Africa has totaled US$ billion. (Funding is anticipated to expand even further as a result of the COVID-19 pandemic-related spike in the use of online services, particularly e-commerce.) Of the funds, US$ 823 million have been used to construct infrastructure and payment solution providers.

## CONCLUSION

In the rapidly changing environment of fintech innovation, data privacy has emerged as a vital priority for both industry players and regulators. Fintech companies that embrace the principles of the Data Protection Act can not onlyprotect consumer trust and privacy, but also foster long-term growth and innovation. Fintech companies can manage regulatory difficulties, boost cybersecurity defenses, and protect the integrity of India's financial ecosystemby using proactive compliance measures. As custodians of financial data, fintech companies have a unique opportunity to set an example and define a future in which innovation thrives within a framework of strong data securityand consumer empowerment.

Data breaches pose serious dangers to fintech organizations and their clients,emphasizing the significance of taking proactive steps to avoid and handle security issues.

Fintech companies may enhance confidence, reduce risks, and preserve the integrity of India's financial ecosystem by adhering to regulatory standards, putting robust data protection measures in place, and encouraging openness and accountability. To properly handle data breaches and protect individuals'data rights, cooperation between industry players, regulators, and law enforcement organizations is also essential.

The 2020 Covid-19 pandemic had a detrimental effect on a number ofbusinesses. To remain operational and competitive, digitization was a must forall businesses. Regarding Digital Investment Platforms, the same might be stated.The requirement for individuals to stay at home and the increase in digitalization during COVID-19 gave investment tech platforms a much- needed boost.

According to the SEBI, in actuality, about 738 lacs demat accounts were opened in 2021–22 (up until October 31, 2021).

In the current situation, the stock exchange's digital lending platforms are essential to its operation. Given that it's a new industry to most of the nation, the quick changes and digitization have also brought forth tremendous obstacles in addition to tremendous advancement.

Understanding and adhering to the regulations and compliances that SEBI hasrepeatedly issued is essential for the seamless operation of these platforms and, ultimately, for the FinTech sector in India to reach its intended development goals.

The fintech sector in India is expanding quickly, and an increasing number ofbusinesses are providing cutting-edge fintech services and solutions. To the extent that new products and services may realize their full potential, however, this rise also presents a number of regulatory obstacles.

In order to safeguard consumers and guarantee legal compliance, regulators have issued directives and regulations in response to the shifting regulatory environment. Companies must simultaneously make sure that they have the required safeguards in place and are aware of all applicable laws and regulations.

Fintech companies have a lot of potential in growing economies like India, where millennials are rapidly using digital platforms to pay for their homes and utilities, despite certain hurdles. Fintech might send a positive message tothe upcoming generation of fintech companies, encouraging them to join the market and offer fresh financial services to underserved areas of the nation. Fintech would soon win the trust and attention of the economically excluded population if there were well-defined regulations and appropriate due diligence procedures in place.

India is a bank-based economy, and citizens rely on government-backed commercial banks rather than virtual institutions such as neo-banks. However,in an expanding country like India, fintech is one option for meeting the goalof delivering financial services to the unbanked. Proper knowledge of technology accessibility, safety operations, and prompt grievance redressal may attract the attention of millions of people to fintech platforms in the approaching days of the financial era.