



## RESEARCH ARTICLE

### FINTECH AND ITS IMPACT ON VARIOUS SECTORS -AN OVERVIEW

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#### Abstract

The global revolution in financial technologies (FinTech) is in full swing. The purpose of the current article is to provide an overview of fintech, and the significance of it, and how it has altered the landscape of conventional financial institutions. With the help of secondary data, the effects of fintech on the banking, insurance, and payment sectors have been discussed. One of the world's Fintech markets with the quickest growth rates is India. The market for Indian fintech is expected to be worth \$50 billion in 2021 and \$150 billion by 2025. The total addressable market for the Indian fintech sector is projected to be \$ 1.3 trillion by 2025, with assets under management and revenue reaching \$ 1 trillion and \$ 200 billion, respectively, by 2030.

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#### Introduction:-

##### Definition of Fintech and its importance

The word "fintech" is used to characterize the nexus between finance and technology. It alludes to the application of cutting-edge technology to enhance and automate financial services. Startups that use technology to challenge established financial institutions and provide cutting-edge financial goods and services are known as fintech companies. Fintech is significant because it can revolutionize how we access and manage our finances. Fintech advances have increased the accessibility, affordability, and convenience of financial services for consumers all around the world. The financial environment has changed as a result of the introduction of new and creative financial products by fintech companies, such as mobile payments, online loans, crowdfunding, robo-advisors, and digital currencies. By giving underserved and unbanked populations, particularly in developing nations, access to financial services, fintech has also encouraged financial inclusion. Businesses can now access new funding sources and streamline their financial processes thanks to fintech. As fintech develops further, it has the potential to transform the financial sector and result in significant adjustments to how we spend, save, and invest our money.

#### Data And Methodology:-

Data has been gathered from a number of websites that offer insights into the Indian FinTech market. These websites include the Reserve Bank of India's website, the India Brand Equity Foundation website, Bain & Company's website, the International Association of Insurance Supervisors website, the Bank for International Settlements website, the FinTech Magazine website, the McKinsey website, the Press Information Bureau website, the PhonePe website, the World Bank website, the BCG website, the IndiaAI website, the International Comparative Legal Guides website, and the Fintech News website. According to studies, India's FinTech market is expanding quickly and has a huge potential for future expansion. The BCG analysis projects that by 2026, digital payments in

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India would total \$10 trillion. The McKinsey paper addresses the impact of artificial intelligence on the future of insurance and forecasts significant changes in the business by 2030.

The PhonePe and BCG analysis provide insights into the Indian payments business and forecast that it will grow significantly in the future. The PwC research looks ahead to 2025 and provides insights into the trends that will shape the sector. According to the Stanford Fintech research, the AI-powered Fintech business is one of the most important investment focus areas, with tremendous growth potential. The IAIS paper covers FinTech advances in the insurance market and predicts substantial changes in this sector in the future.

The IBEF paper highlights FinTech opportunities in the Indian insurance market, emphasizing the sector's growth potential. The RBI research gives insights into the existing health of the Indian financial system as well as the potential for growth in the FinTech industry. The websites also provide information about India's legal and regulatory framework for FinTech. The ICLG research delves into India's FinTech legislation and regulations, whilst the IndiaAI paper examines the drivers of digital India.

In conclusion, the data gathered from these websites indicates that the FinTech business in India is quickly expanding, with enormous potential for future expansion. The publications emphasize the impact of AI on the industry's future, the enormous development potential in the payments and insurance sectors, and the legal and regulatory framework in India.

### **Analysis Of The Data**

The Impact of Fintech on Different Industries. Fintech and its global impact on the banking industry. Fintech has had a huge impact on the global banking industry, upending established banking models and providing new and innovative financial products and services. Here are some examples of how fintech has influenced the banking industry:

#### **Increased competition:**

In order to compete with traditional banks and raise the level of industry competitiveness, fintech firms have launched fresh and cutting-edge financial goods and services.

#### **Customer experience:**

With the introduction of digital banking systems, fintech has improved customer experience and made it simpler for users to obtain financial services from any location at any time.

#### **Financial inclusion:**

Millions of formerly unbanked people now have access to financial services because to fintech, which has facilitated financial inclusion.

#### **Automation:**

Automation brought about by fintech has reduced the need for manual procedures and increased efficiency in the banking sector.

#### **Risk management:**

Banks are now better able to manage risk and avoid fraud thanks to new risk management tools and approaches brought by fintech.

#### **Collaborative partnerships:**

Traditional banks and fintech companies have collaborated to develop new and creative financial products and services that banks may now provide to their consumers.

### **Review of Literature:-**

Total global alternative credit, or credit obtained through FinTechs and BigTechs, was anticipated by the BIS to be USD 795 billion in 2019, with a share of USD 223 billion and USD 572 billion, respectively, for FinTechs and BigTechs. The biggest markets for FinTech credit are in China, the US, and the UK. BigTech has had tremendous expansion in several nations in Africa and Latin America as well as Asia (China, Japan, Korea, and Southeast Asia). China is the biggest market for both FinTech and BigTech credit, albeit recently it has begun to exhibit symptoms of

shrinkage as a result of certain market and regulatory changes. Despite being the second-largest market for FinTech credit, the USA only accounts for a minor portion of BigTech credit. With USD 23.5 billion in financing in 2019, Japan is the second-largest market for BigTech credit. The expected UK FinTech credit volume for 2019 is USD 11.5 billion, up from USD 9.3 billion in 2018. According to the BIS research, FinTech credit volumes are increasing moderately in the European Union, Australia, and New Zealand while they are stagnant in the United States and the United Kingdom and declining in China. FinTech lenders are becoming economically significant in some market segments, including as small and medium-sized firms, in several rising market and developing nations.

#### Fintech and its impact on the insurance industry

##### Scheduled Commercial Banks (Individual data for 28 banks)

| Total amount disbursed through digital channels (Rs. in crore) |         |         |         |                    | Total number of loans disbursed through digital channels |         |         |         |                    |
|--|---------|---------|---------|--------------------|--|---------|---------|---------|--------------------|
| FY 2017  | FY 2018 | FY 2019 | FY 2020 | As on Dec 31, 2020 | FY 2017  | FY 2018 | FY 2019 | FY 2020 | As on Dec 31, 2020 |
| 288  | 3       | 120     | 134     | 29                 | 1373   | 32      | 359     | 774     | 238                |
| -  | 1175    | 7713    | 16453   | 17789              | -  | 55603   | 299226  | 694265  | 758421             |
| -  | -       | 1594    | 2972    | 1621               | -  | -       | 5998    | 13504   | 105150             |
| -  | -       | -       | -       | 3                  | -  | -       | -       | -       | 861                |
| 32   | 683     | 2638    | 2111    | 1549               | 606  | 4108    | 16410   | 19568   | 10585              |
| 193  | 211     | 694     | 1739    | 5351               | 29008  | 40230   | 91799   | 249317  | 685948             |
| -  | -       | -       | -       | 19                 | -  | -       | -       | 23      | 2287               |
| -  | -       | 77      | 153     | 111                | -  | 3       | 8846    | 19119   | 14846              |
| -  | -       | -       | -       | 11                 | -  | -       | -       | -       | 10376              |
| 66   | 230     | 602     | 1,332   | 1,619              | 4387   | 20940   | 36726   | 90914   | 145295             |
| 10074  | 22184   | 29428   | 38624   | 38,206             | 941537   | 1476016 | 2159075 | 2722959 | 2582300            |
| -  | -       | -       | 569     | 1241               | -  | -       | -       | 721228  | 1309069            |
| -  | -       | -       | -       | 15                 | -  | -       | -       | -       | 94                 |
| 81   | 491     | 669     | 926     | 475                | 3260   | 22901   | 33691   | 50705   | 17829              |
| -  | -       | 1835    | 2846    | 1,720              | -  | -       | 39635   | 57317   | 35896              |
| -  | 442     | 1559    | 1,522   | 1,025              | -  | 15486   | 41513   | 33728   | 20911              |
| -  | -       | -       | 128     | 696                | -  | -       | -       | 1117    | 5360               |
| 84   | 474     | 851     | 953     | 835                | 4929   | 30934   | 69024   | 82993   | 75748              |
| -  | -       | 1035    | 4880    | 12151              | -  | -       | 8438    | 31763   | 2250060            |
| -  | -       | 410     | 524     | 610                | -  | -       | 410     | 524     | 610                |
| -  | -       | -       | -       | 2                  | -  | -       | -       | -       | 191                |
| -  | 5       | 33      | 94      | 110                | -  | 390     | 1832    | 4436    | 5118               |
| -  | -       | -       | -       | 1,065              | -  | -       | -       | -       | 18421              |
| 15   | 123     | 398     | 495     | 481                | 99   | 2689    | 8887    | 11715   | 11645              |
| -  | 12      | 4137    | 10054   | 16467              | -  | 2482    | 327346  | 787775  | 1152497            |
| -  | -       | -       | -       | 1                  | -  | -       | -       | -       | 170                |
| 96   | 314     | 5488    | 12283   | 9108               | 3984   | 11412   | 192959  | 487972  | 164402             |
| -  | -       | -       | -       | 48                 | -  | -       | -       | -       | 5521               |

#### Payment Sector

By 2030, the Indian payments market is anticipated to generate \$50 billion in revenue and 100 trillion transactions. India's market for digital loans had a value of \$ 270 billion in 2022 and is projected to grow to \$ 350 billion by 2023. India is anticipated to increase by 15X to reach \$ 88.4 Bn by 2030, making it the second-largest Insurtech industry in the Asia-Pacific region. India is also expected to rank among the world's fastest-growing insurance markets. An increasing pool of retail investors is predicted to drive the Indian WealthTech market's growth to \$237 billion by 2030.

#### Digital Payments

Between January 2017 (4.5 Mn) and January 2023 (10 Bn), the volume of UPI transactions surged by 2009, while the value climbed by a factor of 600. In April 2023, UPI recorded 8.8 Bn transactions, the most ever. By 2025, daily transactions on the UPI platform might reach 1 billion. Digital Payments saw a 76% rise in transactions and a 91% increase in value by 2022. 42% of respondents in a 90,000-person poll on digital payments in all of India reported using them. The number of contact points accepting digital payment infrastructure has increased by 53%, from 170 million to 260 million.

Several actions are being made by various regulators to support the FinTech ecosystem's expansion in India in a controlled and orderly manner:

a) Reserve Bank of India (RBI)

- Creation of a regulatory sandbox, which was based on the suggestions of the Financial Stability and Development Council - Sub Committee (FSDC-SC) Working Group on FinTech and Digital Banking. The qualifying entities can live test their cutting-edge goods or services in the sandbox's supervised setting. The RBI Sandbox is built on the concept of theme cohorts; the first cohort focused on retail payments, the second on cross-border payments, and the third, which the RBI just recently launched, on MSME Lending.
- By establishing an eco-system that makes it easier to access financial services and products, the Innovation Hub was established with the goal of fostering innovation within the financial industry. The Innovation Hub is anticipated to work with organizations in the financial sector, the technology sector, and academic institutions to coordinate efforts for idea exchange and prototype development related to financial innovations. It is also anticipated that the Innovation Hub will create infrastructure to support FinTech research and facilitate engagement with innovators and start-ups.
- 'Smarter Digital Payments' is the focus of the international hackathon HARBINGER 2021-Innovation for Transformation. The hackathon challenges participants to find and create solutions that could increase user experience and payment convenience for underserved populations, while also enhancing security and customer protection for digital payments.

b) Securities Exchange Board of India (SEBI)

- The purpose of the Regulatory Sandbox, which SEBI launched, is to provide certain facilities and flexibilities to the organizations it regulates, allowing them to test out FinTech solutions on a small number of actual users for a short period of time in a live setting.
- The Innovation Sandbox, availability of an environment where innovators can test their innovations away from the live market and be used for offline testing of the applicant's proposed solution is made possible by Enabling Organizations such as Stock Exchanges, Depositories, Qualified Registrars, and Share Transfer Agents.

c) Insurance Regulatory and Development Authority of India (IRDAI)

- The IRDAI founded the Regulatory Sandbox with the goal of utilizing creative thinking to promote growth and quicken the pace of the most creative businesses, while also putting a strong emphasis on policyholder protection. The IRDAI recently added an additional two years to the validity of its sandbox regulations.

### Digital Payments

Between January 2017 (4.5 Mn) and January 2023 (10 Bn), the volume of UPI transactions surged by 200%, while the value climbed by a factor of 600. In April 2023, UPI recorded 8.8 Bn transactions, the most ever. By 2025, daily transactions on the UPI platform might reach 1 billion. Digital Payments saw a 76% rise in transactions and a 91% increase in value by 2022. 42% of respondents in a 90,000-person poll on digital payments in all of India reported using them. The number of contact points accepting digital payment infrastructure has increased by 53%, from 170 million to 260 million.

### Regulatory landscape

Governments, companies, entrepreneurs, and developers can use the India Stack, a collection of APIs, to access a distinctive digital infrastructure. One of the most significant worldwide digital projects sought to establish a public digital infrastructure built on open APIs to support both private and public digital initiatives. 'Indiastack.global' is a website that acts as a central hub for all significant projects on India Stack.

### JAM Trinity

Jan Dhan Yojana: The "Jan Dhan Yojna," the world's largest financial inclusion initiative, has assisted in the enrollment of nearly 480 million individuals in new bank accounts.

### Aadhaar:

The world's largest biometric identity system (1.3 billion Aadhaar cards have been issued thus far).

Mobile connectivity: India has the second-highest number of smartphone users in the world.

The cross-border integration of India's quick payment systems (UPI & RuPay network - QR code & P2M based payments) with other nations is assisting in expanding the country's global presence.

**Financial Inclusion:**

From 2014 to 2021, India's financial inclusion increased dramatically, with the adult population having bank accounts increasing from 53% to 78%.

**Financial Literacy:**

The National Center for Financial Education has been established by the RBI, and it seeks to extend the reach of the Centers for Financial Literacy (CFLs) to every neighborhood in the country. All segments of the population in India are to be encouraged to pursue financial education through these actions.

UPI Lite and UPI123Pay are introduced: enables low value transactions in offline mode through the on-device wallet and provides access to UPI to more than 400 million feature phone subscribers.

**RBI Payments Vision 2025:**

The RBI aims to accomplish a variety of goals, including a three-fold growth in digital payment transactions, a 50% CAGR increase in registered customers for mobile-based transactions, a 150% increase in PPI transactions, and a 25 Mn by 2025 expansion in acceptance infrastructure.

**Account Aggregator Framework (AA):**

Financial Information Users (FIUs) and Financial Information Providers (FIPs) can share consent-based financial information using the advanced framework known as AA. More than 1.1 billion bank accounts are eligible to share data on the AA framework because 23 Banks have signed up for it. On the AA framework, 3.3 million users have connected their accounts and shared data. Additionally, the RBI has announced GSTN as a FIP, which will enable digital invoice financing and give the MSME sector much-needed credit.

The following data includes some stats that apply to fintech businesses:

**Home to more than 7,000 fintech start-ups and the highest number of unicorns in the region, India has emerged as the front runner in the fintech landscape in Asia**

**Total funding received\* (\$B)**



\*Cumulative funding as of Aug'22 (since 2000)

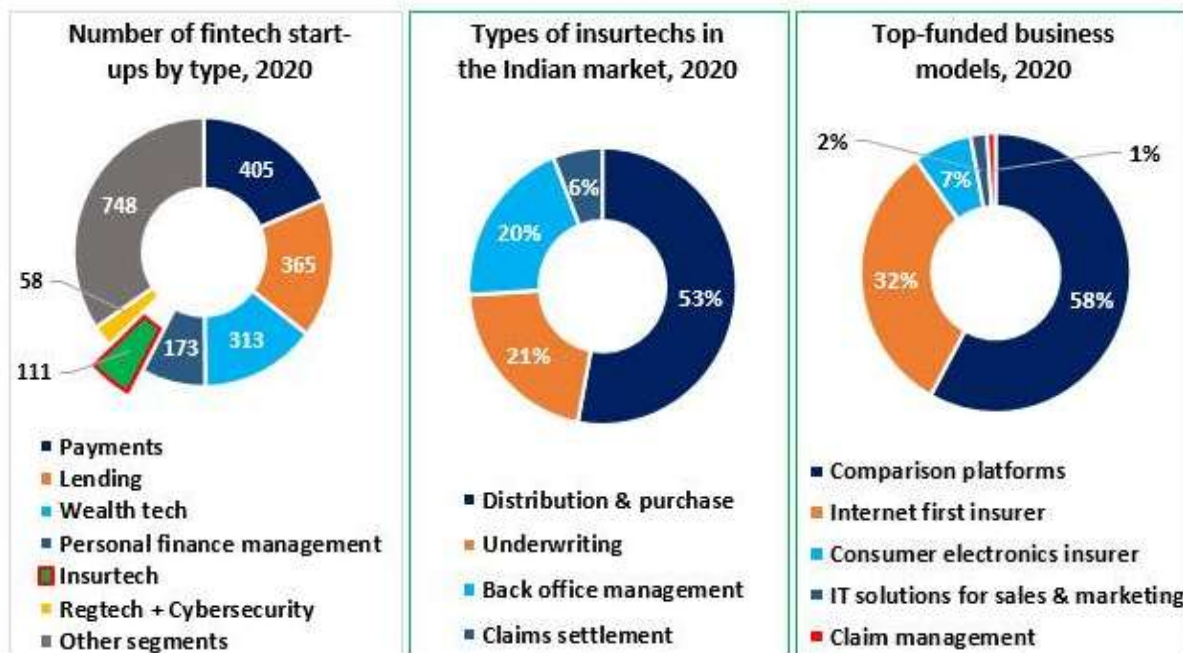
Sources: Tracxn, Crunchbase, World Bank, UN's World Population Prospects 2022 report, CB Insights, S&P Capital IQ, Bain analysis

(Source: Tracxn, Crunchbase; World Bank; UN's World Population Prospects 2022 report, CB Insights; S&P Capital IQ; Bain Analysis)

### Fintech and its impact on the insurance industry

The number of fintech businesses is increasing as India moves toward digitisation and services become more user centric rather than adhering to the traditional strategy of "one size fits all." Fintech investments totaling US\$ 2.7 billion were made in India in 2020 in a number of subsegments, including payments, loans, wealth tech, and insurtech. India's low insurance penetration rate of about 4% makes it an intriguing subsegment for prospective start-ups to introduce fintech services, despite the country's massive population, rising affluence, and rapid urbanization.

Insurtechs – Startups in the insurance industry focused on technology have become a top draw for investors. Indian insurtechs raised over \$1 billion in funding between 2015 and 2020 and gave rise to the unicorn start-ups Digit Insurance and PolicyBazaar. Several insurtechs, including Turtlemint (US\$ 46 million), RenewBuy (US\$ 45 million), and Digit Insurance (US\$ 18 million), received funding from mid-sized venture capital companies in the first half of 2021.



<https://www.ibef.org/blogs/opportunity-for-fintech-in-the-indian-insurance-industry>

### Fintech and its impact on the payments industry

#### Digital Payments:

Digital payment systems including mobile wallets, peer-to-peer payment apps, and contactless payments have grown in popularity as a result of fintech. These payment options outperform more conventional ones in terms of speed, use, and security.

#### Increased Competition:

By providing cutting-edge payment solutions that compete with those provided by established banks and payment processors, fintech firms have upended the payments sector. For consumers and businesses alike, this has increased competition and reduced costs.

#### Payment Processing:

Payment processors can now operate more profitably and efficiently thanks to fintech. The ability of payment processors to execute transactions more quickly and cheaply today helps both consumers and businesses.

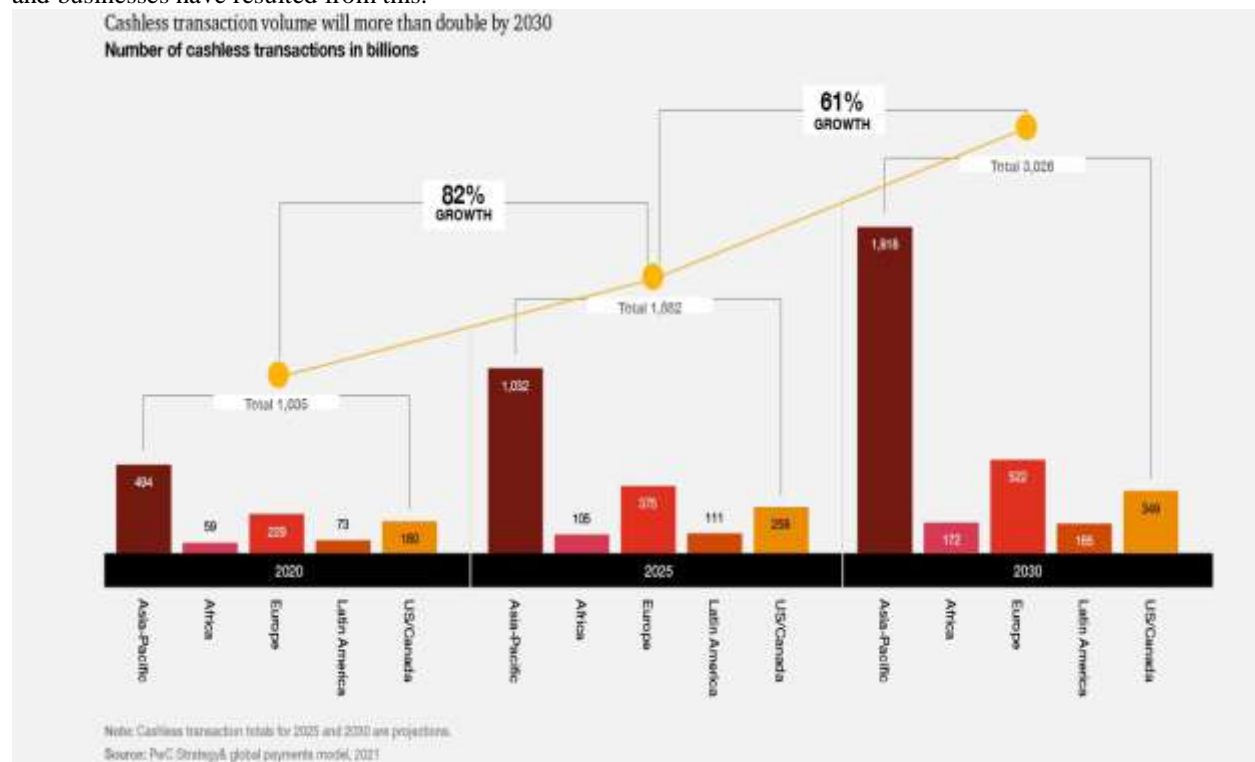
#### Security:

With the help of new security measures made possible by fintech, consumers and organizations are now better protected against fraud and cyberattacks. These techniques include biometric authentication, tokenization, and encryption.

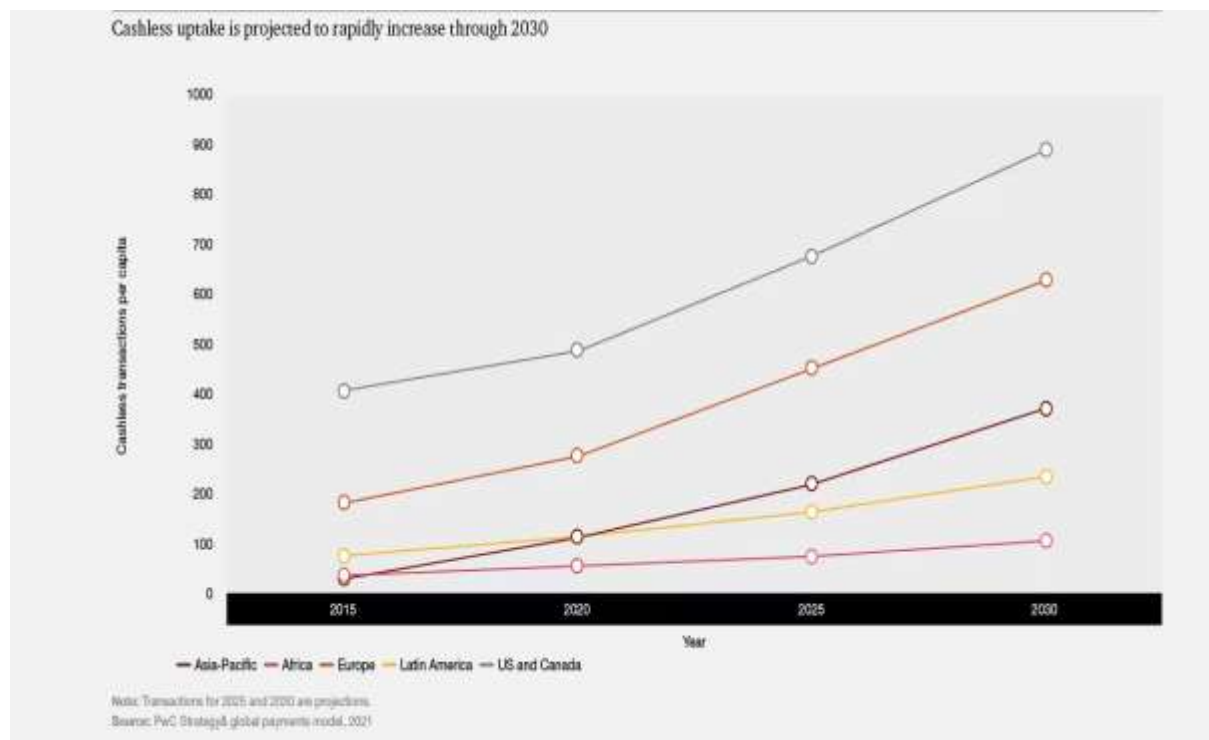


### Open Banking:

The idea of open banking, which enables outside companies to access banking data and develop new services and products, was also made possible by fintech. Innovative payment options that are advantageous to both consumers and businesses have resulted from this.



(Source: PwC Strategy & global payments model,2021)



(Source: PwC Strategy & global payments model,2021)

### Fintech and Big Tech as Major Drivers of UPI Adoption



Source: RBI data, NPCI, BCG Analysis.

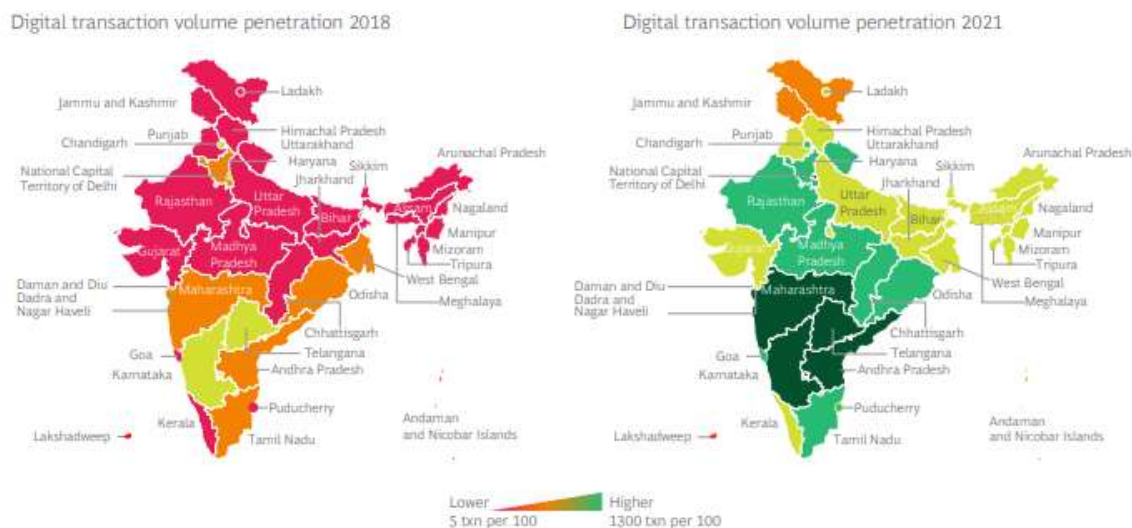
<sup>1</sup> Non-cash transactions do not include cash transactions at branches

<sup>2</sup> Internet transactions include RTGS, AePS, ABPS, NETC, and IMPS financial transactions. ATM transactions include financial transactions only

Note: Total may not sum to 100 because of differences due to rounding off

(Source: PwC Strategy & global payments model,2021)

### Digital Transaction Penetration has Grown Unevenly Across States; Higher Penetration in Southern and Western India



Source: PhonePe Pulse, BCG analysis.

Note: Heat map basis volumes of transaction per adult population per month (15-65 yrs age), Q4 numbers taken across years

(Source: PwC Strategy & global payments model,2021).

### Fintech and its impact on the investment industry

Financial technology, or fintech, has been changing the investment business in a number of ways.



### The following are a few ways that fintech is influencing investment:

#### Accessibility:

A wider group of investors now have easier access to investing because to fintech. Investors can now access investing products and services without a significant investment or specialized knowledge thanks to robo-advisors and other online investment platforms.

#### Automation:

Numerous investing procedures, including portfolio management, risk analysis, and trade execution, have been automated thanks to fintech. Investments are now more efficient and economical as a result.

#### Personalization:

Investment managers can now create more individualized investment solutions because to fintech. Investment providers can now give tailored investment advice and portfolio management depending on an investor's goals and risk tolerance thanks to data analytics and machine learning.

#### Crowdfunding:

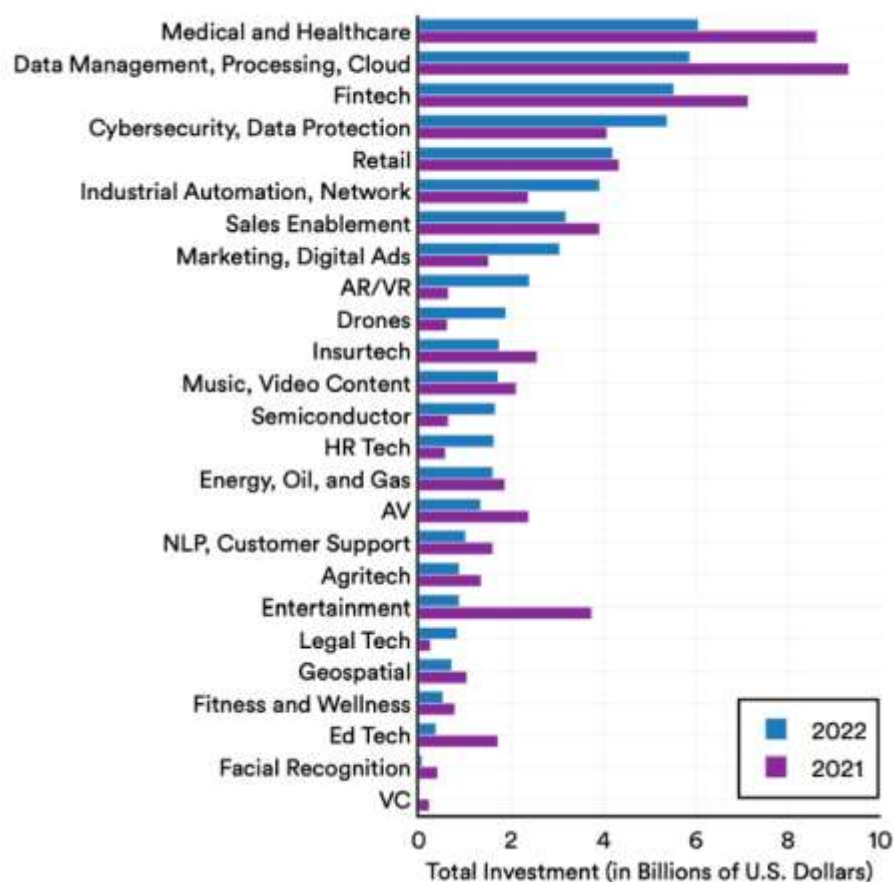
Platforms for crowdfunding have also been developed by the fintech industry, enabling both firms and individuals to raise money from many different investors. This has given startups and small businesses a different source of capital.

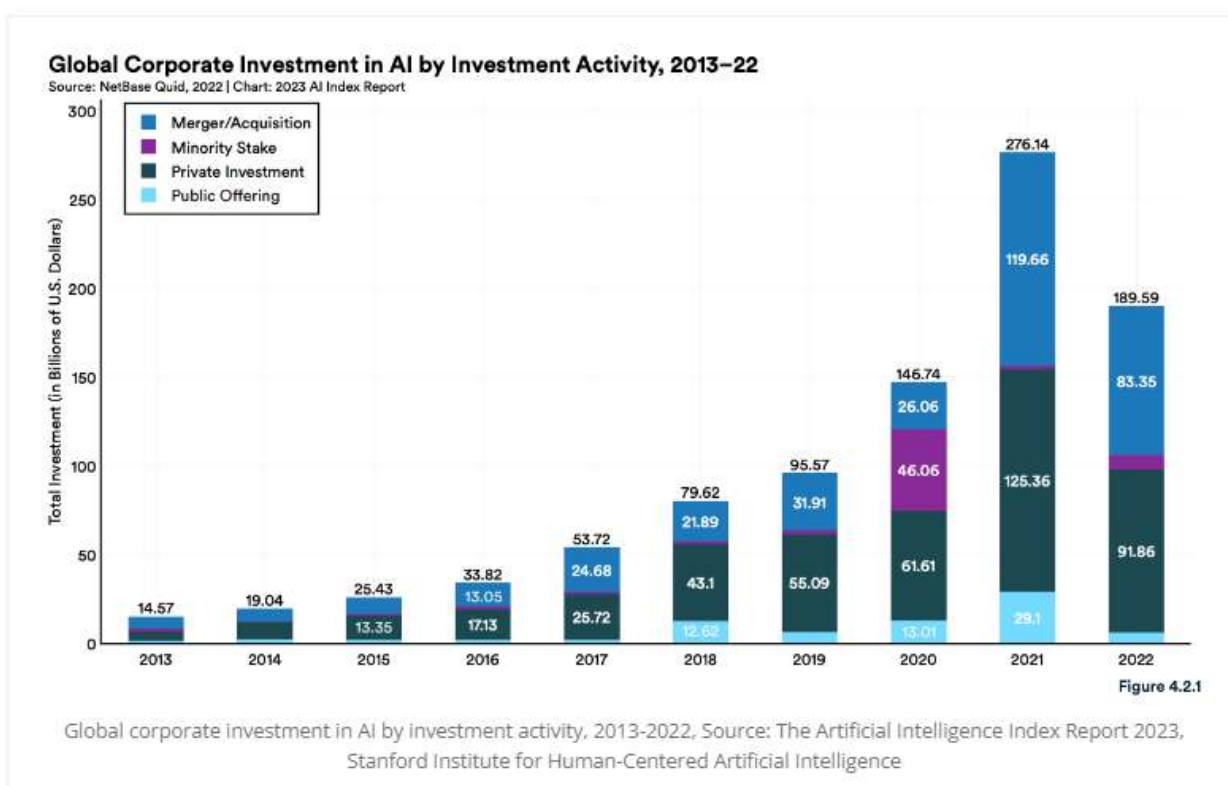
#### Cryptocurrency:

Cryptocurrencies like Bitcoin were established thanks to fintech, which has given investors new investment alternatives. Despite being quite dangerous and volatile, cryptocurrency investments have drawn an increasing number of investors due to the possibility of large profits.

### Private Investment in AI by Focus Area, 2021 Vs. 2022

Source: NetBase Quid, 2022 | Chart: 2023 AI Index Report





### Conclusion:-

Because it is changing how consumers, companies, and governments access and use financial services, the fintech revolution is significant. By lowering prices, enhancing accessibility, and stimulating innovation in the financial sector, it is enhancing the efficacy and efficiency of financial transactions. Financial inclusion, job creation, and accelerated economic growth are just a few of the social and economic advantages that fintech has the ability to bring about. Additionally, it is helping to address some of the major issues the banking sector is currently facing, including consumer satisfaction, cybersecurity, and fraud.

Fintech will continue to change the financial industry as it evolves and matures, and its impact will be felt across a variety of industries, including banking, insurance, payments, and investing. Those that embrace fintech and adapt to its changes will fare better in the new financial landscape. To summarize, the fintech revolution is a substantial and continuing shift that has the potential to bring about significant beneficial change in the financial industry and beyond. Its continuing expansion and development are critical for establishing a more efficient, accessible, and innovative financial ecosystem.

### References:-

1. [https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=1189#AN\\_C](https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=1189#AN_C)
2. <https://www.ibef.org/blogs/opportunity-for-fintech-in-the-indian-insurance-industry>
3. <https://www.bain.com/insights/india-fintech-report-2022-sailing-through-turbulent-tides/>
4. <https://www.iaisweb.org/uploads/2022/12/IAIS-Report-on-FinTech-developments-in-the-insurance-sector.pdf>
5. <https://www.bis.org/fsi/fsisummaries/fintech.htm>
6. <https://fintechmagazine.com/financial-services-finserv/how-fintech-taking-insurance-industry-new-levels>
7. <https://www.mckinsey.com/industries/financial-services/our-insights/insurance-2030-the-impact-of-ai-on-the-future-of-insurance>
8. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1759602>
9. [https://www.phonepe.com/pulsestatic/pulse/static/83bc2c9e9038369af2eb9eb7d62cb49f/PhonePe\\_Pulse\\_BCG\\_report.pdf](https://www.phonepe.com/pulsestatic/pulse/static/83bc2c9e9038369af2eb9eb7d62cb49f/PhonePe_Pulse_BCG_report.pdf)

10. <https://www.pwc.com/gx/en/industries/financial-services/publications/financial-services-in-2025/payments-in-2025.html>
11. <https://www.worldbank.org/en/publication/fintech-and-the-future-of-finance>
12. <https://www.bcg.com/press/2june2022-digital-payments-in-india-projected-to-reach-10-trillion-by-2026>
13. <https://indiaai.gov.in/article/ai-powered-fintech-the-drivers-of-digital-india>
14. <https://iclg.com/practice-areas/fintech-laws-and-regulations/india>
15. <https://fintechnews.ch/aifintech/stanford-fintech-maintains-position-as-third-biggest-ai-investment-focus-area/59671/>