



# Impact Of Fin Tech On Financial Inclusion In India During the Digital Economy Era.

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**Abstract-** In recent years, there have been major improvements in financial inclusion in India, marked by rising account holders. At the same time, financial technology has started to revolutionize the banking sector by introducing more efficient and easier to use models of service delivery. This has helped to transform the way financial services are used by the emergence of digital consumers. Consumers are now using mobile applications for doing transactions such as payments, money transfer, loans, crowdfunding and investments. This has contributed to the expansion of digital markets, new types of services and jobs. Fintech is also being embraced by banks to remain relevant. In the Indian scenario, the growth of fintech and financial inclusion is important for economic growth as they improve efficiency and reduce structural bottlenecks. Increasing access to financial services is also in line with the government's welfare agenda, particularly that of reaching out to economically disadvantaged groups. Fintech-based services are, in general, important for inclusive development through better access to formal financial services. The study seeks to explore the effect of financial technology and digital financial services on financial inclusion in India.

**Keywords:** Fin tech, Financial inclusion, Digital economy.

## I. INTRODUCTION

Financial technology (fintech) refers to the use of innovative digital technologies and systems to enhance financial services. It covers a wide range of advances such as crowdfunding platforms, insurance tech, personal finance apps, blockchain, e-payments, money transfer apps, roaming advisors and trading bots. This helps to reduce costs, risk and raise financial service access for the population, which has been previously excluded from formal financial services. This is made possible by digital finance, which enables financial services to be accessible to the underserved population, particularly in regions with low physical banking presence. It allows users to be more effective and responsive in accessing the service through digital channels, especially the mobile channels. But digital finance depends on the availability of technologies and the users' access to digital platforms. In recent decades, policy initiatives in many countries have been geared towards increasing financial inclusion. A range of measures has been put in place to improve the financial inclusion of

certain groups. In this context, financial inclusion is about access and use of financial services (for example, insurance, credit, savings, remittances, and payment systems) by individuals, households and firms at an affordable cost. India, being a developing country and home to a large number of financially excluded people, has taken various measures since independence, such as priority sector lending and, more recently, the Pradhan Mantri Jan Dhan Yojana (PMJDY), to promote financial inclusion.

## II. REVIEW OF LITERATURE

Ravikumar (2019) used data from various sources, including the World Bank, the Reserve Bank of India, the National Payments Corporation of India and the United Nations, to assess the role of digital banking and financial technologies in ensuring financial stability in India. Md. Morshadul Hassan et al. (2020) have analyzed the impact of digital financial amenities on financial inclusion in China and the financial sector. The paper highlights the potential opportunity that exists in the growth of digital



financial inclusion and shows how China has led the world in the digital financial revolution, which has implications for global financial inclusion. The study by Vyas and Jain (2021) explored the connection between the digital economy, technology adoption, and financial inclusion, suggesting three dimensions of the conceptual framework. The paper integrates behavioral intention as per the extended technology acceptance model and offers empirical evidence applicable to users and service providers. In his analytical review of the current situation in fintech in India, Dr. Sanjeev C. Shirpurkar (2023) pointed out that the success of fintech in enhancing transparency and efficiency in the economy heavily relies on the degree of digital literacy and technological competency among citizens. Urvashi Sharma (2023) explored the effects of the digital finance on financial inclusion in India, highlighting how digital technologies can be used to increase access to financial services. The paper also examines the connection between digital finance and financial inclusion through econometric models including the Augmented Dickey-Fuller test, co-integration analysis and error correction modeling to determine trends in financial accessibility and usage. Mohammad Asif et al. (2023) analyzed the relationship between fintech-based services and financial inclusion in India using secondary data and regression and correlation analyses. The results indicate that fintech companies have significantly enhanced access to finance, especially among middle-income groups. Suman Chandolia (2024) has explored the digital revolution in financial inclusion in India. The study tries to examine the trend of indicators of digital financial. The article also highlighted the trend of top five digital payment methods in total payments in India for the period 2003-04 to 2022-23. The study concludes that over the years in India there is more usage of the digital mode of payments by the people. In his empirical study, Dr. Ramesh Kumar (2026) explored how financial technology can contribute to the development of financial inclusion in India by analyzing the factors that influence it. The research suggests that effective government policies and friendly market environment enhance the effect of fintech by enhancing financial capacity and encouraging economic development especially in situations where inequality is lower, hence facilitating a smoother financial transformation.

### III. OBJECTIVE OF THE STUDY

- To examine the role of financial technology in advancing financial inclusion in India.
- To analyze the role of fin tech in India's digital economy.

- To evaluate the progress of financial technology and the extent to which digital infrastructure has been adopted in India.

### IV. RESEARCH METHODOLOGY

The study is based entirely on secondary data. It applies comparative, observational, and historical approaches to examine the relevant information. In addition, articles from Google Scholar and various academic journals have been consulted as required.

### V. FINANCIAL INCLUSION

Financial inclusion, also known as inclusive finance, refers to efforts aimed at delivering affordable and suitable financial services such as transportation, payments, savings, credit, and insurance to all individuals and businesses, regardless of their income level or size. The primary objective of financial inclusion is to ensure that financial services are available and accessible to every segment of society, particularly those who are marginalized or underserved.

### VI. TECHNOLOGY FOR FINANCIAL INCLUSION IN INDIA

In India, financial inclusion has improved in measurable terms over the past few years, especially in rural regions, as a 10.5% increase in the Financial Inclusion Index between 2017 and 2021, reported by the Reserve Bank of India, indicates. This progress has been greatly facilitated by the PMJDY, under which more than 44 crore bank accounts have been opened and deposits have surpassed 1.5 lakh crore in just seven years. Globally, approximately 76 percent of the world today has access to financial accounts, either through banks or mobile-based services, and in India, some 80 percent of adults are bank account holders. This progress has been further propelled by fintech companies, which have been providing financial services to underserved segments of society, including payments, credit, and insurance. Industry estimates also place the fintech market in India at close to 200 billion in revenue by 2030.



### VII. Fin tech solutions for Financial Inclusion in India

**1. Digital Payments:** Digital or electronic payments are completed without handling physical cash. The different digital payment methods available in India are –

- Banking cards
- Mobile Banking
- Aadhaar Enabled Payment System (AEPS)
- Internet Banking
- Unstructured Supplementary Service Data (USSD)
- PoS Terminals
- Mobile Wallets
- Unified Payments Interface (UPI)

With technological advancements, some fintech platforms have emerged to facilitate financial inclusion in India. Digital payment applications have made transactions easier and more accessible, and applications like Google Pay, Paytm, PhonePe, and others have become popular.

**2. Microfinance Platforms:** Fin tech has also helped improve the delivery of microfinance by facilitating digital lending and other forms of credit assessment, and thus people with no formal credit history are able to get financial assistance.

**3. peer-to-peer (P2P) lending platforms:** P2P lending sites provide direct access to borrowers and lenders via the internet, eliminating the need for traditional intermediaries and providing flexible credit to individuals and small businesses.

**4. Insurtech Solutions:** Technological progress in the insurance industry has enhanced efficiency and the customer experience through artificial intelligence, data

analytics, and connected technologies, streamlining operations and risk management.

### VIII. THE ROLE OF FIN TECH IN INDIA’S DIGITAL ECONOMY

The digital economy is a major contributor to economic development, and in India, fintech is at the heart of this change. Fintech has greatly enhanced payment systems and reduced reliance on cash by facilitating quicker, safer payments. It has also increased access to credit, especially for small businesses that have difficulty accessing conventional bank funding. Innovative lending products have facilitated business expansion and helped create jobs. Also, with fintech, the number of people investing in financial markets has risen because it enables people to invest in financial products, including mutual funds, equities, and exchange-traded funds, and it is a sign of a move toward more diversified financial behaviors.

### IX. INDIA’S PROGRESS TOWARDS DIGITAL ECONOMY

The growth of the Indian digital economy (2014 to 2019) was around 2.4 times more than that of the general economy, and it generated almost 62.4 million jobs. The same period saw its value rise drastically by approximately 107.7 to 222.5 billion. It is estimated that emerging digitally enabled sectors, including agriculture, education, energy, financial services, healthcare, logistics, retail, and public services and labor markets, will create more economic value, worth between \$10 billion and \$150 billion by 2025. This expansion is supported by the use of digital technologies that increase productivity, lower the cost and time of operations, decrease fraud and elevate the match between demand and supply.





(Source: Govt.of India,Ministry of Electronics and Information Technology)

## X. DIGITAL INFRASTRUCTURE GROWTH INITIATIVES FOR INDIA FRAMEWORK (DiGi FRAMEWORK)

India's ICT ecosystem is being strengthened under the DiGi framework through the expansion of open RAN, 5G, optical fiber networks, submarine cable infrastructure, data centers, e-commerce, smart cities, quantum technologies, and artificial intelligence. It is an initiative by the Indian private sector and foreign collaborators, including the United States, Japan, and South Korea, to improve connectivity, digital infrastructure, and technological innovation. It also represents a larger effort to drive digital advancement and support sustainable growth in the wider Indo-Pacific region and India.

## XI. SIGNIFICANCE

- **Financial Inclusion:** With the launch of UPI, digital payments have changed significantly because they enable quick, inexpensive, and easy transactions, making financial inclusion accessible to even those outside the mainstream banking sector
- **Efficient Governance and Service Delivery:** Aadhaar-based digital identity verification has facilitated the provision of government services by reducing duplication and fraud and improving the efficiency of mechanisms such as direct benefit transfers.
- **Economic Growth and Innovation:** Digital Public Infrastructure (DPI) has stimulated innovation by providing open access to fintech, health tech, and other digital services, enabling the private sector to develop new solutions and contribute to overall economic growth.
- **Data Empowerment and Privacy:** DEPA (Data Empowerment and Protection Architecture) allows individuals to share their data in a secure, content-based manner, strengthening data sovereignty. It gives users greater control over their data and lets them benefit from it while maintaining privacy safeguards.

## XII. CONCLUSION

Financial technology has grown to be an important pillar of India economic system. Financial inclusion is an urgent concern in the country with a high population, high income

inequalities, employment strains, changing global dynamics, and growing reliance on digital infrastructure and cybersecurity. The growth of the digital economy has served as one of the key agents of change by contributing to GDP growth, enhancing the efficiency of the services, and expanding access to finance. Fintech, in this case, is at the center of economic development and coincides with national priorities in India.

The methodology is strengthened through respondent-level survey data, percentage analysis and simple association measures to examine awareness, usage, trust and barriers related to digital financial services.

The analysis is supported by recent computational and fuzzy-decision perspectives on business problem solving [10]-[13]. This literature strengthens the paper because fintech, digital inclusion and business analytics depend on data quality, model transparency and decision support. The discussion also aligns with recent institutional reports on digital payments and financial inclusion [14]-[16].

The study indicates that digital commerce and fintech initiatives can improve access, efficiency and financial participation, but their benefits depend on digital literacy, trust, affordability and regulatory safeguards. Further research can include primary data and comparative institutional analysis to measure user-level outcomes more precisely.

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