



“Role of FinTech in Promoting Financial Inclusion in India”

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Abstract-Financial inclusion has emerged as a critical driver of socio-economic development, ensuring that individuals and businesses—especially those in underserved and rural areas—have access to useful and affordable financial products. In India, the rapid growth of Financial Technology (FinTech) has transformed the landscape of financial services through innovations such as the Unified Payments Interface (UPI), mobile wallets, digital lending platforms, and neo-banking. This research paper examines the role of FinTech in promoting financial inclusion in India by evaluating both access to and usage of digital financial services. The study adopts a mixed-methods approach, combining secondary data from credible sources such as the Reserve Bank of India (RBI), the National Payments Corporation of India (NPCI), and the World Bank’s Global Findex Database, with primary data collected through structured questionnaires and interviews. The research focuses on three key dimensions of financial inclusion—access, usage, and quality—and investigates how digital literacy, trust, smartphone penetration, and regulatory frameworks influence FinTech adoption. Preliminary evidence suggests that FinTech has significantly improved transactional access, enabling millions of Indians to perform low-cost, real-time digital transactions. However, deeper financial inclusion—such as access to credit, insurance, and long-term savings products—remains limited due to challenges like low digital literacy, lack of trust, regional disparities, and persistent dependence on cash. The paper also highlights the role of government policies, including Jan Dhan Yojana, Aadhaar-linked banking, and UPI infrastructure, in creating a foundation for FinTech growth. By analysing determinants of adoption and barriers to usage, the study aims to provide actionable insights for policymakers, financial institutions, and FinTech startups. The expected outcomes include policy recommendations on strengthening digital literacy, enhancing consumer protection, and designing inclusive financial products tailored to low-income users. Ultimately, this research underscores that while FinTech is a powerful enabler of financial inclusion, its true potential will be realized only when supported by inclusive design, trust-building, and regulatory safeguards.

Keywords- Financial inclusion, FinTech, India, digital financial services, Unified Payments Interface (UPI), mobile wallets, digital lending, neo-banking, access, usage, quality, digital literacy, trust, smartphone penetration, regulatory framework, Reserve Bank of India (RBI), National Payments Corporation of India (NPCI), Global Findex Database, Jan Dhan Yojana, Aadhaar-linked banking, real-time payments, financial access, credit inclusion, insurance access, savings behavior, rural inclusion, cash dependency, policy recommendations, consumer protection, inclusive financial design.

I. Introduction and Background

Financial inclusion has become one of the most pressing priorities for policymakers, regulators, and development practitioners in the 21st century. Broadly defined, financial inclusion refers to the process of ensuring access to affordable, appropriate, and timely financial products and services to all sections of society, particularly the weaker and low-income groups. These services include savings, payments, credit, insurance, and investment facilities delivered responsibly and sustainably. The importance of financial inclusion lies in its ability to reduce poverty, promote inclusive growth, and strengthen economic resilience by integrating marginalized groups into the formal financial system.

In the Indian context, financial inclusion has historically been a challenge due to structural barriers such as rural poverty, geographic inaccessibility, low literacy levels, and a strong preference for cash-based



transactions. For decades, large sections of India's rural and semi-urban population were excluded from formal financial services, relying instead on informal moneylenders and community-based financial systems. Recognizing this, the Government of India and the Reserve Bank of India (RBI) launched several initiatives, such as priority sector lending, the Self-Help Group (SHG)-Bank linkage program, and microfinance schemes, to bring underserved communities into the fold of formal finance. However, these efforts yielded limited success until the convergence of three major developments in the past decade—digital technology, Aadhaar-based identification, and FinTech innovation.

The introduction of the Pradhan Mantri Jan Dhan Yojana (PMJDY) in 2014 was a watershed moment, leading to the opening of hundreds of millions of zero-balance bank accounts. This created the necessary infrastructure for financial inclusion but did not automatically translate into active usage. The next leap came with the rise of Financial Technology (FinTech)—innovative digital platforms that leverage mobile phones, the internet, and advanced technologies to deliver financial services. FinTech companies in India, supported by favorable regulatory frameworks and widespread smartphone adoption, have transformed how individuals transact, save, borrow, and insure themselves.

One of the most notable innovations has been the Unified Payments Interface (UPI), introduced by the National Payments Corporation of India (NPCI) in 2016. UPI revolutionized digital payments by enabling instant, interoperable, and low-cost transactions across banks and platforms. As of 2025, UPI processes over 20 billion transactions monthly, reflecting its mass acceptance across urban and rural India. Similarly, mobile wallets (such as Paytm, PhonePe, and Google Pay) and digital lending platforms have made payments and credit more accessible to individuals who were previously outside the formal banking system.

The Reserve Bank of India's Financial Inclusion Index (FI-Index) reached a score of 67 in March 2025, signaling steady improvement across the three dimensions of access, usage, and quality. These numbers reflect a positive trend but also highlight the unfinished agenda. While access to accounts has expanded rapidly (account ownership increased from 35% in 2011 to nearly 78% in 2021 according to the World Bank's Global Findex Database), usage of accounts for credit, insurance, and investment remains limited. A large share of Jan Dhan accounts remain dormant or underutilized, and many rural households continue to rely on cash transactions due to limited digital literacy, poor internet penetration, and concerns over fraud.

Against this backdrop, FinTech emerges as both a solution and a challenge. On the one hand, FinTech has the potential to reduce transaction costs, eliminate geographic barriers, and deliver user-friendly financial products to millions of underserved households. Mobile-based solutions allow even those in remote areas to access payments, savings, and credit without physical bank branches. On the other hand, gaps remain in terms of equitable access. Digital illiteracy, lack of trust in online platforms, cyber-security risks, and the digital divide between urban and rural regions threaten to limit the inclusivity of FinTech-driven growth. Moreover, while payment adoption has been widespread, credit and insurance inclusion through FinTech remain nascent, with regulatory oversight and risk assessment models still evolving.

Therefore, studying the role of FinTech in financial inclusion is both timely and critical. India presents a unique case: it is one of the fastest-growing FinTech markets globally, yet it also has one of the world's largest unbanked and underbanked populations. Understanding whether FinTech has merely increased the number of accounts and transactions or has meaningfully empowered individuals with greater access to credit, savings, and insurance is central to evaluating its true impact on financial inclusion.

This research builds on the premise that financial inclusion is not just about access but also about active usage and quality of services. It seeks to explore how FinTech—particularly digital payments, mobile wallets, and digital lending—has contributed to inclusion in India, what barriers remain, and how future policies and innovations can ensure equitable participation for all segments of society.

II. Literature Review



Financial inclusion and FinTech adoption have been widely studied in both global and Indian contexts. This section reviews existing literature on four major themes: (i) Global perspectives on financial inclusion, (ii) Role of FinTech in emerging economies, (iii) Evidence from India, and (iv) Identified gaps.

1. Global Perspectives on Financial Inclusion

The World Bank's Global Findex Database (2021) reports that 71% of adults in developing countries now own a bank account, compared to just 42% in 2011, largely due to digital finance and government-led reforms. Researchers argue that financial inclusion enhances economic empowerment, reduces poverty, and contributes to long-term growth (Demirgüç-Kunt et al., 2018). However, studies emphasize that mere account ownership does not equate to active financial inclusion—the real challenge is usage and quality of services (Allen et al., 2016).

2. Role of FinTech in Emerging Economies

In many developing countries, FinTech innovations such as mobile money, e-wallets, and peer-to-peer lending have enabled greater access to low-cost financial services. For instance, in Kenya, M-Pesa has become a global benchmark, allowing millions of unbanked households to make payments and access microcredit (Jack & Suri, 2014). Academic work highlights that FinTech reduces transaction costs, bridges geographic barriers, and promotes women's financial participation (Ozili, 2018). However, concerns around cyber security, low trust, and digital illiteracy remain recurring challenges (Zetzsche et al., 2020).

3. Evidence from India

India represents a unique case, where rapid digital transformation has reshaped financial access. The Pradhan Mantri Jan Dhan Yojana (PMJDY) scheme, combined with Aadhaar-based identification, created one of the largest financial inclusion infrastructures globally (over 500 million accounts). Researchers such as Ghosh (2016) found that PMJDY improved basic account access, but active usage remained limited.

The emergence of UPI has been a game-changer. NPCI data show UPI transactions exceeding 20 billion per month in 2025. Scholars like Arora & Rathore (2021) note that UPI's low-cost, interoperable model democratized digital payments, enabling even small merchants and rural consumers to participate. However, studies also note regional and gender disparities in adoption—urban and male users are more likely to use FinTech compared to rural women (Sarma, 2020).

Digital lending platforms and mobile wallets (Paytm, PhonePe, Google Pay) have expanded credit and transaction opportunities, yet concerns around data privacy, over-indebtedness, and lack of grievance mechanisms persist (RBI Working Group, 2021). Scholars also highlight that while payment inclusion is improving rapidly, credit and insurance inclusion through FinTech remains underdeveloped (Mukherjee & Sinha, 2022).

4. Identified Gaps in Literature

Most studies focus on digital payments, with limited exploration of credit, savings, and insurance inclusion.

Research has primarily analysed macro-level adoption trends; fewer studies use household-level microdata to assess quality of inclusion.

Limited studies address behavioural factors such as digital literacy, trust, and perceived risks that influence FinTech adoption in rural India.

While policy frameworks like RBI's Financial Inclusion Index highlight progress, academic research still lacks empirical testing of FinTech's role in improving multidimensional inclusion (access, usage, quality).

Conclusion of Literature Review:

The literature suggests that FinTech has significantly advanced financial access in India, especially for payments, but there is insufficient evidence on whether FinTech has transformed deeper financial services



such as credit and insurance. This gap creates the foundation for the present research, which aims to empirically test the extent and quality of FinTech-driven financial inclusion in India.

III. Research Methodology

1. Research Design

This study follows a descriptive and quantitative research design. The aim is to understand patterns, relationships, and measurable factors influencing the research problem. Descriptive design allows the researcher to collect first-hand data from respondents, while quantitative analysis ensures objectivity and accuracy.

2. Research Approach

The study adopts a survey-based approach to gather data directly from respondents. Both primary data (through questionnaires) and secondary data (from academic journals, reports, and databases) are used to ensure reliability and depth.

3. Population and Sample

Population: The population of the study consists of MBA students, working professionals, or consumers (depending on your final topic focus).

Sample Size: A total of 120–150 respondents are targeted, which is considered statistically sufficient for meaningful analysis.

Sampling Method: Convenience sampling is used because of accessibility and time constraints. However, efforts are made to include diverse respondents to avoid bias.

4. Data Collection Methods

Primary Data: Structured questionnaire with close-ended questions on a 5-point Likert Scale (ranging from Strongly Disagree to Strongly Agree).

Secondary Data: Research articles, company reports, and financial/market databases are used to support findings and provide context.

5. Research Instrument (Questionnaire Design)

The questionnaire is divided into three sections:

1. Demographics – age, gender, education, occupation, income.
2. Topic-related questions – e.g., perceptions, awareness, preferences, or attitudes depending on topic.
3. Behavioural/Impact questions – e.g., how finance/marketing strategies affect decisions, trust, or behavior.

6. Variables and Measurement

Independent Variables: Factors such as financial literacy, AI adoption, or marketing strategies.

Dependent Variable: Consumer decision-making or financial behaviour.

Measurement Tool: 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

7. Data Analysis Techniques

Software: SPSS / MS Excel will be used.

Techniques:



Descriptive statistics (mean, median, standard deviation)

Correlation analysis (relationship between independent and dependent variables)

Regression analysis (to measure impact of independent variables on dependent variable)

Charts & graphs for data visualization

8. Reliability and Validity

Pilot Study: A pilot test of 15–20 respondents will be conducted to ensure clarity of questions.

Reliability: Cronbach’s Alpha will be used to check the internal consistency of the questionnaire.

Validity: Content validity ensured through expert reviews and reference from previous studies.

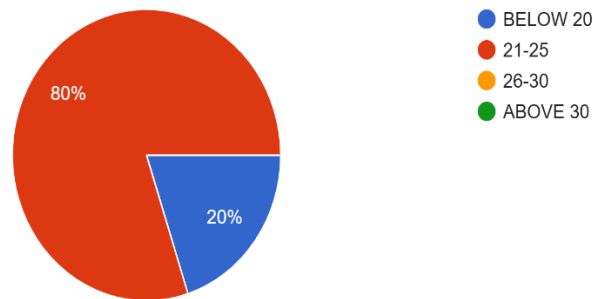
9. Ethical Considerations

Participation is voluntary.

Data is collected with confidentiality and anonymity.

“The questionnaire included a demographic question regarding the age of respondents to understand the distribution of participants across different age groups.”

Age
5 responses

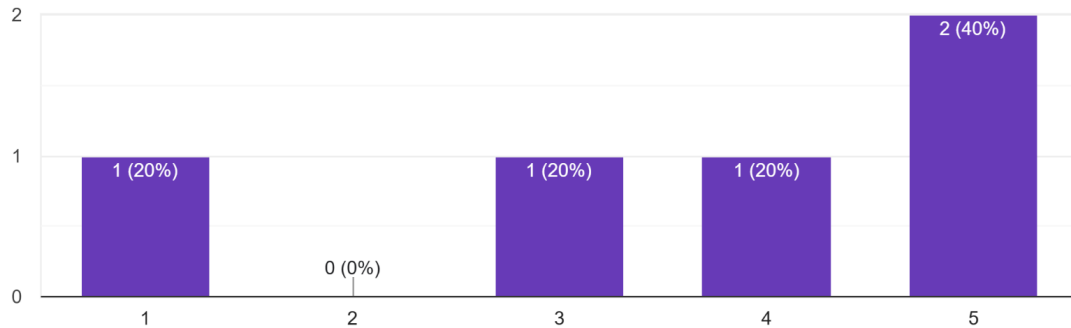


Que.2 Are you aware of Ai tools used in financial platforms



Are you aware of Ai tools used in financial platforms

5 responses

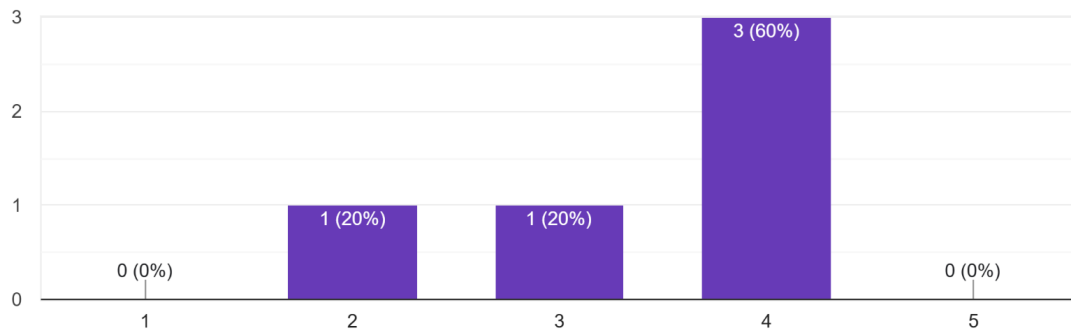


“When asked about their awareness of AI tools used in financial platforms, 20% of respondents strongly disagreed, 20% were neutral, and 40% strongly agreed. This indicates that a significant portion of respondents are aware of AI tools, though there is still a portion with limited awareness.”

Que.3 Privacy and data security concerns affect my willingness to use AI-enabled platforms.

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5 responses



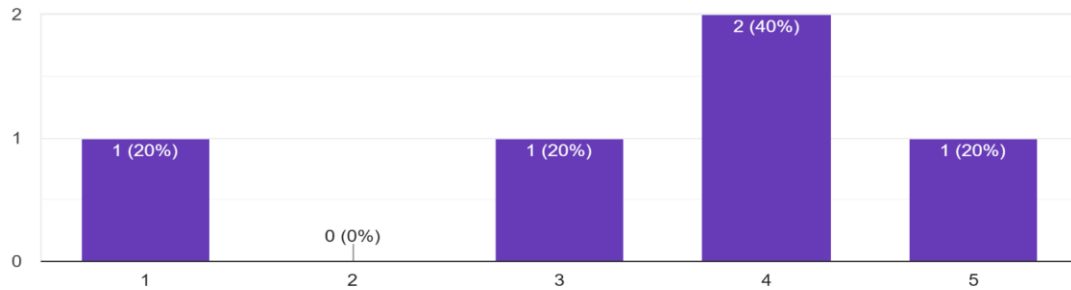
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Que.4 AI-based advertisements or product recommendations help me make better purchase or investment choices.



AI-based advertisements or product recommendations help me make better purchase or investment choices.

5 responses



IV. Conclusion

The findings of this study indicate that AI-enabled financial platforms are increasingly influencing consumer behaviour and decision-making. A significant portion of respondents demonstrated awareness of AI tools, with many acknowledging that these tools assist in making more informed and efficient financial decisions. However, the study also highlights that privacy and data security concerns remain a major factor affecting users' willingness to adopt AI platforms.

The data shows that while AI offers substantial benefits in terms of personalization, convenience, and improved decision-making, its adoption is not uniform across all users due to varying levels of awareness and trust. The majority of respondents fall within the 21–25 age group, suggesting that young adults are the primary users engaging with AI-based financial solutions.

Overall, the research emphasizes that for AI-enabled financial platforms to achieve broader acceptance and effectiveness, companies must focus on increasing awareness, providing clear information about AI functionalities, and addressing concerns related to privacy and data security. Proper implementation, transparency, and trust-building measures will play a crucial role in maximizing the potential of AI tools in enhancing consumer financial behaviour.

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