

FinTech and Financial Inclusion in India: Trends, Evidence and Future Research Directions

Dr. VIJAYAKUMAR

Associate Professor, Department of Commerce

Government First Grade College, Magadi, Bengaluru South – 562120, Karnataka

Email: vijaykumarkgfgc@gmail.com

Abstract

Financial technology (FinTech) has become an important component of India's financial transformation, particularly through digital payments, mobile banking, digital lending, Aadhaar-enabled services, account-based financial delivery and emerging data-driven financial services. This article critically examines the relationship between FinTech and financial inclusion in India, with particular emphasis on access, usage, affordability, quality, financial literacy, trust, rural inclusion, women's inclusion, MSME finance, cybersecurity and consumer protection. The study adopts a systematic literature review-oriented design and synthesizes peer-reviewed research together with evidence from authoritative institutional sources, including the Reserve Bank of India (RBI), National Payments Corporation of India (NPCI) and World Bank. The review indicates that FinTech has substantially expanded the infrastructure and channels through which financial services can be accessed. However, the evidence also demonstrates that access should not be equated with effective financial inclusion. Account ownership and digital payment availability can coexist with inactive accounts, unequal usage, digital-literacy constraints, gender and rural–urban disparities, cybersecurity risks and limited access to productive credit. Recent evidence reinforces the importance of examining the transition from access to usage and ultimately to financial well-being. The article develops an integrated conceptual framework linking FinTech capability, digital and financial literacy, trust, adoption, access, usage, financial inclusion and financial well-being. It concludes by proposing a future research agenda emphasizing longitudinal studies, vulnerable populations, AI-driven FinTech, algorithmic fairness, cybersecurity, financial well-being and state-level comparative research in India.

Keywords: FinTech; Financial Inclusion; Digital Financial Inclusion; UPI; Digital Payments; Financial Literacy; Digital Banking; India

JEL Classification: G21; G23; 28; O33; I38

1. Introduction

Financial technology has fundamentally altered the structure and delivery of financial services. Mobile applications, digital payment systems, artificial intelligence, cloud computing, digital identity, data analytics and platform-based finance have reduced the importance of physical proximity between consumers and financial institutions. In developing economies, this transformation has particular significance because technology can potentially overcome traditional barriers associated with distance, transaction costs, documentation and limited physical banking infrastructure.

India represents one of the most significant cases of technology-enabled financial transformation. The development of the Jan-Dhan-Aadhaar-Mobile ecosystem, expansion of mobile connectivity, digital banking, Aadhaar-enabled payment services and the Unified Payments Interface (UPI) has created an extensive digital financial infrastructure. The RBI's Financial Inclusion Index increased from 53.9 in March 2021 to 64.2 in March 2024, with improvement in access, usage and quality dimensions. The RBI also reported that 99.99% of identified villages and hamlets had been covered by banking access within the prescribed distance framework by March 2025.

The scale of India's digital payment ecosystem is particularly significant. NPCI's official statistics show that UPI processed more than 23.2 billion transactions in May 2026, involving 720 participating banks, with transaction value

exceeding ₹29.9 trillion. These figures demonstrate the extraordinary scale of digital payments, although transaction volume by itself cannot establish whether financial inclusion has improved in a broader sense.

This distinction is central to the present study. Financial inclusion is not simply the presence of a bank account or the ability to make a digital payment. Effective inclusion involves meaningful access, regular usage, affordability, appropriate quality, consumer protection and the ability to use financial services to improve economic resilience and financial well-being.

Recent World Bank evidence reinforces this distinction. The Global Findex 2025 reports that approximately 90% of Indian adults had an account in 2024, but India's large population means that the country still contains one of the world's largest absolute numbers of adults without accounts. The database also provides indicators on payments, saving, borrowing, financial resilience, mobile ownership, internet use and digital safety.

Consequently, the key research issue is no longer simply whether FinTech increases access. A more important question is: Does FinTech transform digital access into sustained, affordable, safe and meaningful financial inclusion? This article addresses that question by reviewing the emerging evidence concerning FinTech and financial inclusion in India and by identifying directions for future Commerce and Finance research.

2. Objectives of the Study

- To examine the major trends in research on FinTech and financial inclusion in India.
- To identify major FinTech applications contributing to financial inclusion.
- To critically examine evidence concerning access, usage, affordability and quality of financial services.
- To examine the role of financial and digital literacy, trust and consumer characteristics in FinTech adoption.
- To identify barriers and risks associated with technology-enabled financial inclusion.
- To assess evidence concerning rural populations, women, MSMEs and other underserved groups.
- To identify research gaps in the existing literature.
- To develop a future research agenda for FinTech and financial inclusion in India.

3. Research Questions

What are the major trends in research concerning FinTech and financial inclusion in India?

Which FinTech applications have contributed most significantly to financial inclusion?

What evidence exists regarding FinTech's effects on access, usage, affordability and quality of financial services?

What factors influence FinTech adoption among financially underserved populations?

What barriers constrain FinTech-enabled financial inclusion in India?

What roles do financial literacy, digital literacy and trust play in digital financial inclusion?

What risks relating to privacy, cybersecurity, fraud and algorithmic decision-making affect inclusive FinTech?

What future research directions can strengthen evidence concerning FinTech and meaningful financial inclusion?

4. Conceptual Understanding of FinTech and Financial Inclusion

FinTech can broadly be understood as the application of technology to the provision, distribution and management of financial services. The RBI describes FinTech as encompassing technological innovations affecting financial services and notes that its scope continues to evolve with new use cases.

Financial inclusion, in contrast, concerns the ability of individuals and enterprises to access and appropriately use suitable financial services. The RBI's Financial Inclusion Index explicitly incorporates three dimensions: access, usage and quality.

These concepts should therefore be distinguished:

Financial access → Financial usage → Effective inclusion → Financial well-being

A bank account without meaningful use represents a weaker form of inclusion than an account that enables saving, receiving income, obtaining affordable credit, making secure payments and managing financial shocks.

Indian research also cautions that supply-side measures can overestimate actual digital financial inclusion because infrastructure availability does not necessarily correspond to demand-side usage. Evidence using Global Findex data likewise indicates differences between financial access and actual use.

5. Theoretical Foundations

5.1 Technology Acceptance Model

The Technology Acceptance Model (TAM) proposed by Davis (1989) suggests that perceived usefulness and perceived ease of use influence technology acceptance. In FinTech, users may adopt digital financial services when they perceive them as useful, convenient, easy to operate, reliable and compatible with their financial needs. However, TAM alone is insufficient for financial inclusion because vulnerable users may face structural barriers even when they perceive digital finance positively.

5.2 UTAUT and UTAUT2

The Unified Theory of Acceptance and Use of Technology (UTAUT) incorporates performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh et al., 2003). This framework is especially useful in India because FinTech adoption can depend not only on individual perceptions but also on social networks, smartphone availability, internet connectivity, banking infrastructure, digital literacy and institutional support.

5.3 Diffusion of Innovation Theory

Rogers' Diffusion of Innovation framework emphasizes relative advantage, compatibility, complexity, trialability and observability. It helps explain differences between early adopters and populations that remain digitally excluded.

5.4 Capability Perspective

A capability-oriented approach provides an additional layer. Merely providing a digital financial service does not guarantee improved economic capability. A consumer may have a UPI-enabled account but lack sufficient income, knowledge, trust or access to productive credit. Therefore, effective financial inclusion is an outcome of both technological capability and human capability.

6. Indian FinTech and Financial Inclusion Landscape

6.1 Digital Banking

Digital banking has reduced reliance on physical branches and expanded the availability of banking services. Mobile banking and internet banking have particularly important implications for geographically dispersed populations. Research on rural Karnataka found that mobile banking adoption was influenced by technology-related and behavioural factors, with age and gender moderating relationships involving attitude and behavioural intention. The study used a sample of 959 rural respondents.

6.2 UPI and Digital Payments

UPI has become a central component of India's digital payment architecture. NPCI provides monthly, state-level and application-level statistics, making UPI one of the most measurable FinTech applications in India. However, high transaction volumes should not automatically be interpreted as evidence of complete financial inclusion. UPI primarily

demonstrates payment capability; broader inclusion also requires savings, insurance, credit, investment and financial resilience.

6.3 Digital Lending

Digital lending can reduce transaction costs and potentially expand credit access to individuals and small businesses. At the same time, it introduces concerns regarding over-indebtedness, data privacy, opaque algorithms, inappropriate lending, consumer protection and cybersecurity.

6.4 Aadhaar-Enabled Financial Services

Digital identity infrastructure has helped facilitate customer onboarding and financial-service delivery. The RBI has identified digital onboarding and effective use of the Aadhaar ecosystem as important components of technology-enabled financial inclusion.

6.5 MSME Finance

MSMEs are a major policy priority for financial inclusion. RBI reported that scheduled commercial banks' outstanding credit to MSMEs increased by 14.8% year-on-year during 2024–25. FinTech can potentially improve MSME finance through digital underwriting, transaction-data analysis, alternative credit assessment and faster loan processing. Nevertheless, evidence concerning whether these innovations improve long-term MSME financial resilience remains limited.

7. Evidence from the Reviewed Literature

A major limitation of existing literature is that it frequently evaluates FinTech through adoption or access indicators rather than long-term welfare outcomes.

Study	Context	Methodology/Data	Main Focus	Key Finding/Contribution
Kishore & Sequeira (2016)	Rural Karnataka	Survey; 959 respondents; regression/interaction analysis	Mobile banking	Technology-adoption factors and demographic characteristics influence rural mobile-banking intention.
Upadhyay & Reddy (2021)	India	Supply- and demand-side indicators	Digital financial inclusion	Supply-side measures may overestimate actual digital inclusion; demand and supply need to be balanced.
Bathula & Gupta (2021)	India	Global Findex 2017; probit regression	Financial and digital financial inclusion	Education and workforce participation were positively associated with access and use.
Malladi, Soni & Srinivasan (2021)	India	Conceptual/analytical review	Digital financial inclusion	Digital technologies can expand inclusion, but infrastructure, capability and ecosystem challenges remain.
Buteau, Rao & Valenti (2021)	India/developing-country perspective	Review/analytical	Digital solutions	Emphasizes opportunities and challenges associated

				with digital solutions for financial inclusion.
Cnaan et al. (2021)	Rural India	Qualitative/field-oriented research	Digital banking	Highlights the importance of digital banking in rural inclusion while recognizing practical limitations.
Gender disparity study (2021)	India	Secondary data + primary survey	Women's digital financial inclusion	Identifies gender-related barriers and argues for gender-sensitive financial inclusion policies.
Baker (2021)	India	Qualitative research	Micro-entrepreneurs and digital finance	Examines everyday experiences of digital financial inclusion among informal/micro-entrepreneurial workers.
Asif et al. (2023)	India	Review/analytical study	FinTech and digital financial services	Examines the relationship between FinTech, digital financial services and financial inclusion in India.
Digital payment TAM study (2023)	India	Survey; SEM	Digital payment adoption	Financial literacy, trust/privacy, service quality and ease of use are relevant to digital-payment acceptance.
Sutradhar & Ghosh (2023)	India	NSS 77th Round data	Payment-card distribution and use	Finds substantial differences between bank-account ownership and payment-card ownership/use.
Socioeconomic determinants study (2024)	India	Global Findex 2021; 3,000 individuals; logistic regression	Digital financial services	Examines socioeconomic determinants of payment-card/mobile-money ownership and government remittances.
Mittal & Singh (2025)	Global	Systematic literature review; 2004–2022	FinTech and inclusion	Finds evidence of FinTech contributions through mobile money and digital lending while identifying continuing research gaps.

Ha, Le & Nguyen (2025)	Global	SLR; 2,951 records; 96 studies	FinTech and financial inclusion	Identifies three broad research clusters and calls for stronger evidence concerning tangible impacts and regulation.
Choudhury & Gupta (2025)	India	Structured literature review	Financial inclusion	Emphasizes the importance of moving beyond accessibility toward utilization and quality.
Lye et al. (2025/2026)	Global	SLR; 185 peer-reviewed studies	Vulnerable groups	Finds substantial research on women, poverty and rural communities but less on elderly people and persons with disabilities.
Banerjee & Ravi Kumar (2025)	Global	SLR; 119 WoS articles, 2020–2024	Inclusive FinTech	Identifies multiple thematic areas and future research opportunities.

Note: This is an evidence matrix based on studies that could be independently verified during the present research stage. It should not yet be described as the final 30–40-study Scopus/WoS screening matrix until a database export and full-text screening are completed.

8. Major Themes Emerging from the Literature

8.1 FinTech Expands Access

The literature provides substantial evidence that digital technology can reduce geographic and transactional barriers. Mobile banking, digital payments and digital identity infrastructure allow consumers to interact with formal financial systems without relying entirely on physical branches.

8.2 Access Does Not Guarantee Usage

This is one of the most important findings emerging from the literature. India has achieved considerable progress in account ownership. World Bank Global Findex 2025 data indicate that around 90% of Indian adults had an account in 2024. However, account ownership is not equivalent to active financial participation. The Indian literature identifies differences between account ownership, payment-card ownership and actual usage.

8.3 Digital and Financial Literacy

FinTech requires users to possess sufficient knowledge and confidence to operate digital financial services. Financial literacy influences understanding of savings, credit, interest rates, risk and financial products, while digital literacy influences the ability to navigate technological interfaces. The two forms of literacy should therefore be examined jointly.

8.4 Gender Inclusion

Women may have formal accounts without exercising equivalent control over financial decisions or digital services. Research on India identifies persistent gender-related barriers in digital financial inclusion and argues for gender-sensitive approaches.

8.5 Rural Inclusion

Rural users can benefit significantly from mobile banking and digital payments, but connectivity, language, trust, device availability and digital capability remain relevant.

8.6 Consumer Trust and Privacy

Trust is fundamental to digital finance. Users must trust the platform, financial institution, payment system, data-management practices and grievance-redress mechanisms. The RBI has emphasized customer protection, transparency, privacy, grievance redress and fraud awareness as important components of financial-sector development.

9. Table 2. FinTech Applications and Financial Inclusion Outcomes

FinTech application	Primary mechanism	Potential inclusion benefit	Key risk/restriction
UPI	Instant digital payments	Low-cost and convenient transactions	Fraud, digital exclusion, dependence on smartphones/connectivity
Mobile banking	Remote account access	Reduces geographic barriers	Digital literacy and connectivity
Digital wallets	Electronic payments	Convenience for small transactions	Privacy and cybersecurity
Digital lending	Technology-enabled credit assessment	Faster credit access	Over-indebtedness, data/privacy risks
Aadhaar-enabled services	Digital identity/authentication	Easier identification and service delivery	Privacy and exclusion risks
AI/ML credit assessment	Alternative data-based underwriting	Potentially broader credit access	Algorithmic bias and explainability
Account Aggregator	Consent-based data sharing	Potentially better financial-product access	Data governance and consumer awareness
InsurTech	Digital insurance distribution	Wider insurance access	Product complexity and awareness
RegTech	Technology-enabled compliance	More efficient regulation	Regulatory capability requirements
Digital investment platforms	Online investment access	Lower entry barriers	Financial literacy and investment risk

10. Barriers to FinTech-Enabled Financial Inclusion

Barrier	Explanation	Likely affected groups	Research implication
Digital illiteracy	Difficulty using digital platforms	Elderly, low-literacy and rural users	Need behavioural research
Financial illiteracy	Limited understanding of products and risks	Low-income users	Examine financial education
Connectivity	Poor network/internet infrastructure	Rural/remote populations	State/district-level studies
Gender gap	Differences in access, control and usage	Women	Gender-sensitive models
Trust	Fear of fraud or misuse	New digital users	Trust/adoption research
Cybersecurity	Fraud and digital theft	All users, especially vulnerable users	Consumer-protection research
Privacy	Concerns about data collection/use	Digital-finance users	Data-governance research

Algorithmic bias	Unequal automated decisions	Thin-file borrowers	AI fairness studies
Language	Limited availability of interfaces/content	Non-English users	Inclusive-design research
Affordability	Device/data/service costs	Low-income households	Cost-effectiveness studies
Inactive accounts	Formal ownership without meaningful usage	Underbanked population	Usage-based inclusion studies

11. Research Methodology

11.1 Research Design

The proposed research design is a Systematic Literature Review (SLR).

11.2 Review Protocol

The review should follow a transparent protocol covering search, screening, eligibility, quality assessment, extraction and synthesis.

11.3 Databases

Scopus, Web of Science, ScienceDirect, SpringerLink, Emerald, SAGE, Wiley, Taylor & Francis and Google Scholar as a supplementary discovery source.

11.4 Search Strategy

Principal expression: ("FinTech" OR "financial technology" OR "digital finance" OR "digital financial services") AND ("financial inclusion" OR "digital financial inclusion" OR "financial access") AND (India OR Indian)

Supplementary searches: ("UPI" OR "digital payments") AND ("financial inclusion") AND India; ("mobile banking") AND ("financial inclusion") AND India; ("digital lending") AND ("financial inclusion") AND India; ("FinTech") AND (rural OR women OR MSME) AND India.

11.5 Inclusion Criteria

- FinTech or digital financial services are examined.
- Financial inclusion or closely related outcomes are addressed.
- India-specific evidence or direct comparative relevance is present.
- Peer-reviewed research, high-quality reviews or authoritative institutional research is used.
- English-language evidence is used.
- The study falls within the specified review period.
- Sufficient methodological or conceptual information is available.

11.6 Exclusion Criteria

- Duplicate publications.
- Opinion articles without research evidence.
- News articles and promotional FinTech content.
- Studies unrelated to financial inclusion.
- Papers without sufficient methodological information.
- Predatory or unverifiable publications.

11.7 Screening Procedure

The final review should undertake title/abstract screening followed by full-text eligibility assessment. Duplicates should be removed before screening and reasons for full-text exclusion should be documented.

11.8 Quality Assessment

A quality appraisal should consider clarity of research objectives, appropriateness of methodology, sample/data adequacy, transparency of analysis, validity of measures, discussion of limitations and relevance to the review questions. A scoring rubric should be fixed before final inclusion.

11.9 Data Extraction

Extract author/year, country or region, sample, data source, methodology, FinTech application, financial-inclusion dimension, theoretical framework, major findings, limitations and future research recommendations.

11.10 Data Synthesis

Use thematic synthesis for qualitative integration. Bibliometric analysis should only be reported if an actual bibliographic dataset has been exported and analysed. Systematic, bibliometric and narrative reviews should be clearly distinguished.

Important methodological qualification: a final PRISMA numerical flow cannot responsibly be reported yet because actual Scopus/Web of Science database exports and duplicate-removal records were not available for independent screening. Therefore, this article does not fabricate numbers for records identified, screened or included.

12. Results and Synthesis

12.1 Publication Trends

The evidence base indicates increasing scholarly interest in FinTech and financial inclusion, particularly as digital payments, mobile banking, digital lending and AI-enabled financial services have expanded. A verified year-by-year publication trend should be generated from an exported bibliographic dataset rather than estimated.

12.2 Geographic Distribution

India-specific studies are complemented by global systematic reviews. The literature suggests that evidence remains uneven across Indian states and demographic groups, creating opportunities for state-level comparative research.

12.3 Methodological Trends

The literature includes surveys, regression models, qualitative studies, conceptual reviews, systematic literature reviews and Global Findex-based analyses. Cross-sectional survey designs remain prominent, while longitudinal and quasi-experimental designs are less common.

12.4 Major FinTech Applications

Digital payments and mobile banking receive substantial attention, followed by digital lending and broader digital financial services. AI-driven financial inclusion is emerging but requires stronger empirical evidence.

12.5 Major Financial Inclusion Outcomes

Access and adoption are more frequently measured than financial well-being, resilience and quality. This creates a major outcome-measurement gap.

12.6 Major Barriers

Recurring barriers include digital and financial illiteracy, trust, privacy, cybersecurity, infrastructure, affordability, gender differences and rural–urban disparities.

12.7 Emerging Research Themes

AI, responsible FinTech, cybersecurity, digital identity, open banking, embedded finance, digital lending and responsible data use are emerging areas.

13. Discussion

The central contribution of this review is the distinction between digitalization and inclusion.

India's digital financial infrastructure has achieved substantial scale. Yet the existence of infrastructure does not guarantee equal participation. This creates what may be termed the FinTech Inclusion Paradox: the greater the availability of digital financial services, the more important it becomes to investigate who actually uses them, how they use them, and whether usage improves financial outcomes.

A second issue concerns the difference between transactional inclusion and developmental inclusion. Transactional inclusion refers to the ability to send money, receive money, pay merchants and conduct basic transactions. Developmental inclusion involves savings, productive credit, insurance, investment, financial resilience and improved financial well-being. Much of India's FinTech success is visible in transactional inclusion. The research challenge is to determine the extent to which this translates into developmental inclusion.

14. Research Gaps

- Limited longitudinal research: Most studies provide cross-sectional evidence.
- Insufficient state-level comparisons: India contains substantial regional diversity.
- Limited evidence on financial well-being: Many studies stop at adoption.
- Under-researched elderly populations: Recent global review evidence identifies this as a gap.
- Limited disability-focused research.
- Insufficient research on algorithmic fairness in digital credit.
- Limited evidence concerning cybersecurity and inclusion simultaneously.
- Insufficient research on inactive or dormant digital financial accounts.
- Limited research linking financial literacy and sustained FinTech use.
- Limited evidence on women's control over digitally mediated finance.
- Insufficient research on digital lending and long-term household welfare.
- Limited evidence on MSME productivity and FinTech credit.
- Limited research on AI-driven financial inclusion.
- Insufficient comparative research between digitally included and digitally excluded populations.
- Limited evidence connecting FinTech adoption with financial resilience.

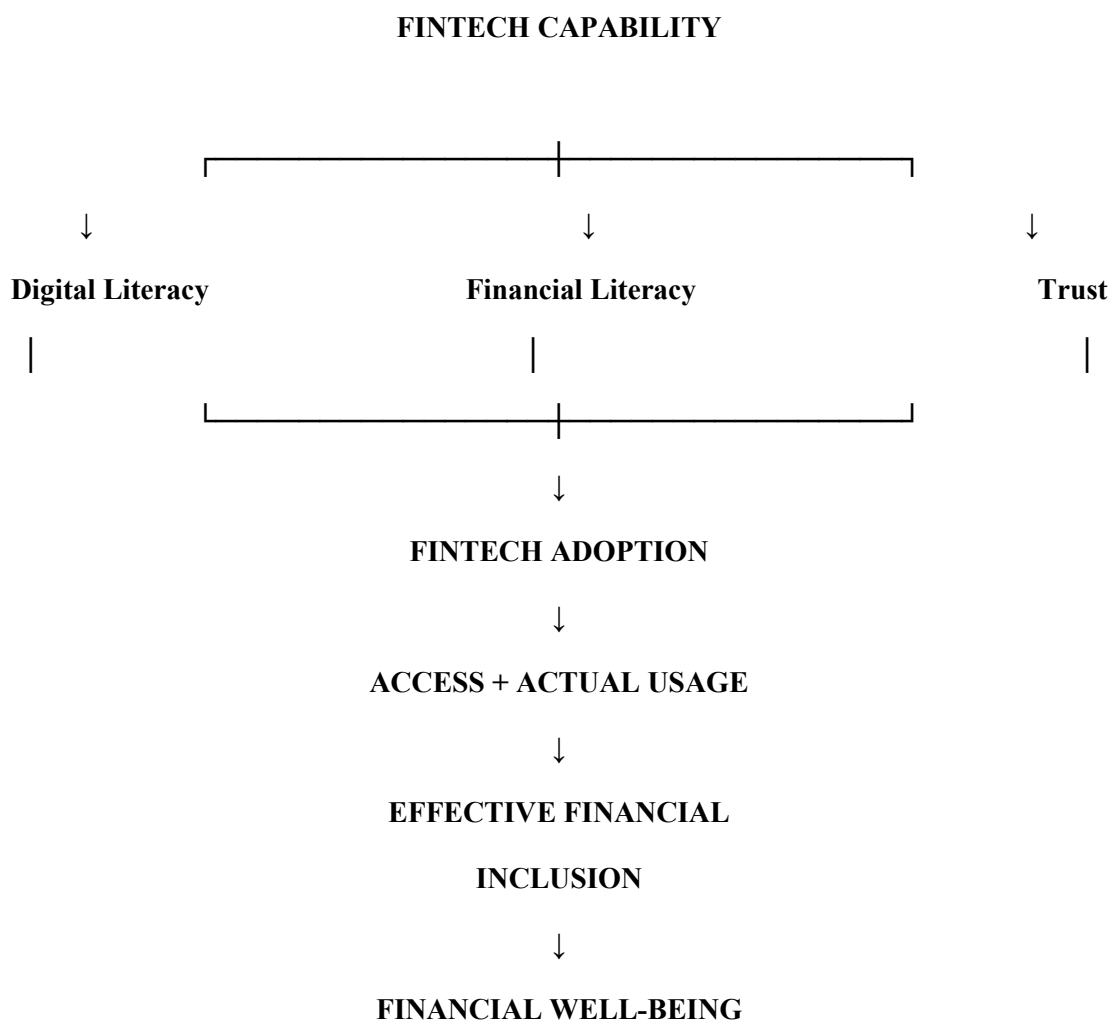
15. Future Research Agenda

Research area	Proposed research question	Suggested methodology
Financial well-being	Does FinTech usage improve household financial resilience?	Longitudinal survey
Rural inclusion	Does digital access translate into productive financial usage?	Mixed methods
Women	Does digital finance increase women's financial autonomy?	Survey + qualitative research
Elderly users	What prevents older adults from adopting digital finance?	Qualitative/SEM
MSMEs	Does FinTech credit improve MSME productivity?	Panel data
AI credit	Does AI improve credit access without discrimination?	Econometric + fairness analysis
Cybersecurity	Does perceived security influence sustained usage?	SEM
UPI	Does payment usage lead to wider financial-product adoption?	Panel/longitudinal study

Financial literacy	Does financial education improve FinTech outcomes?	Experimental/quasi-experimental
Regional inequality	Why does digital financial inclusion vary between states?	State-level panel analysis
Disability	How accessible are FinTech platforms for persons with disabilities?	Accessibility audit + survey
Digital lending	Does easy credit improve or weaken household financial health?	Longitudinal research

16. Proposed Conceptual Framework

The evidence supports the following conceptual model:



Contextual/moderating variables: Gender; Age; Income; Education; Rural/urban location; Digital infrastructure; Cybersecurity; Privacy; Regulatory environment.

The framework proposes that FinTech capability alone does not directly guarantee financial well-being. Its effect is mediated through adoption and actual usage, while literacy, trust and contextual factors shape the strength of these relationships.

17. Policy Implications

17.1 Reserve Bank of India

Policy should move beyond infrastructure deployment toward monitoring active usage, quality, consumer protection, fraud, digital literacy and financial well-being. The RBI's FI-Index, which incorporates access, usage and quality, provides an appropriate foundation for such a transition.

17.2 Government of India

Digital financial inclusion programmes should integrate digital literacy, financial literacy, local-language support, accessibility, cybersecurity awareness and grievance redress.

17.3 FinTech Companies

Companies should design platforms based on simplicity, transparency, informed consent, privacy, responsible lending, explainable AI and accessible interfaces.

17.4 Banks and NBFCs

FinTech partnerships should be evaluated not merely by transaction volume but by quality of credit, customer retention, financial resilience and responsible usage.

18. Implications for Commerce Education

Commerce education needs to move beyond conventional accounting, banking and finance concepts toward a digitally integrated curriculum.

- FinTech and digital banking
- UPI and payment systems
- Financial analytics
- AI in finance
- Digital lending
- Cybersecurity
- Data privacy
- Financial literacy
- RegTech
- Digital financial inclusion
- Responsible AI
- Digital consumer protection

This is particularly important because future Commerce graduates will operate within financial systems where technology and finance are increasingly inseparable.

19. Limitations

- The present evidence synthesis does not claim to constitute a completed database-verified Scopus/WoS systematic review because institutional database exports were not available for independent duplicate removal and final screening.
- The existing literature is methodologically heterogeneous. Studies differ considerably in samples, indicators, geographical coverage and definitions of financial inclusion.
- FinTech changes rapidly. Technologies and regulatory arrangements identified in earlier studies may evolve substantially within a short period.
- Much of the evidence concentrates on adoption and access rather than long-term financial well-being.

These limitations reinforce rather than weaken the need for a more rigorous India-specific longitudinal research agenda.

20. Conclusion

FinTech has become an important driver of India's financial transformation. Digital payments, mobile banking, digital identity, digital lending and technology-enabled financial services have significantly expanded the channels through which individuals and enterprises can interact with the formal financial system.

However, the evidence does not support the simplistic conclusion that greater digitalization automatically produces complete financial inclusion.

The central finding of this review is: FinTech has made financial services more accessible, but accessibility is only the first stage of financial inclusion.

The next research and policy challenge is to determine whether individuals use these services regularly, safely and productively, and whether such use improves their financial resilience and well-being.

India's experience therefore suggests a transition from an access-oriented financial inclusion paradigm toward an outcome-oriented FinTech inclusion paradigm.

The future research agenda should consequently focus on the chain: FinTech capability → adoption → actual usage → quality of financial services → financial inclusion → financial well-being. Such an approach can make the FinTech literature more relevant to Commerce, Finance, Banking and Development Studies while providing policymakers with evidence that goes beyond transaction counts and account-ownership statistics.

References

- Asif, M., Khan, M. N., Tiwari, S., Wani, S. K., & Alam, F. (2023). The impact of FinTech and digital financial services on financial inclusion in India. *Journal of Risk and Financial Management*, 16(2), 122. <https://doi.org/10.3390/jrfm16020122>
- Baker, L. (2021). Everyday experiences of digital financial inclusion in India's 'micro-entrepreneur' paratransit services. *Environment and Planning A: Economy and Space*, 53(7), 1810–1827. <https://doi.org/10.1177/0308518X211026320>
- Banerjee, K., & Ravi Kumar, V. V. (2025). Inclusive fintech: A systematic review and agenda for future research. *Cogent Business & Management*. <https://doi.org/10.1080/23311975.2025.2549511>
- Bathula, S., & Gupta, A. (2021). The determinants of financial inclusion and digital financial inclusion in India: A comparative study. *The Review of Finance and Banking*, 13(2), 109–120. <https://doi.org/10.24818/rfb.21.13.02.02>
- Buteau, S., Rao, P., & Valenti, F. (2021). Emerging insights from digital solutions in financial inclusion. *CSI Transactions on ICT*, 9, 105–114. <https://doi.org/10.1007/s40012-021-00330-x>
- Choudhury, R., & Gupta, S. (2025). Augmentation of financial inclusion: A structured review from the Indian perspective. *Indian Journal of Finance*, 19(5). <https://doi.org/10.17010/ijf/2025/v19i5/175044>
- Cnaan, R. A., Scott, M. L., Heist, H. D., & Moodithaya, M. S. (2021). Financial inclusion in the digital banking age: Lessons from rural India. *Journal of Social Policy*.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- Ha, D., Le, P., & Nguyen, D. K. (2025). Financial inclusion and fintech: A state-of-the-art systematic literature review. *Financial Innovation*, 11, 69. <https://doi.org/10.1186/s40854-024-00741-0>
- Khera, P., Ng, S. Y., Ogawa, S., & Sahay, R. (2021). Measuring digital financial inclusion in emerging and developing economies: A new index. *International Monetary Fund*. <https://doi.org/10.5089/9781513574196.001>

- Kishore, S. V. K., & Sequeira, A. H. (2016). An empirical investigation on mobile banking service adoption in rural Karnataka. SAGE Open. <https://doi.org/10.1177/2158244016633731>
- Lye, C.-T., Tay, L.-Y., Ng, T.-H., et al. (2025). A systematic literature review of fintech, financial inclusion and vulnerable groups. *Discover Sustainability*, 6, 1467. <https://doi.org/10.1007/s43621-025-02368-2>
- Malladi, C. M., Soni, R. K., & Srinivasan, S. (2021). Digital financial inclusion: Next frontiers—challenges and opportunities. *CSI Transactions on ICT*, 9, 127–134. <https://doi.org/10.1007/s40012-021-00328-5>
- Mittal, P., & Singh, R. I. (2025). Changing landscape of financial inclusion through FinTech: A systematic literature review. *Paradigm: A Management Research Journal*, 29(1), 27–43. <https://doi.org/10.1177/09718907241286957>
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- Sutradhar, T. K., & Ghosh, S. (2023). Distribution and usage of digital payment cards in India: Findings from NSS 77th Round Survey. *Journal of Infrastructure, Policy and Development*.
- Upadhyay, A., & Reddy, K. S. (2021). Digital financial inclusion—demand side vs. supply side approach. *International Journal of Electronic Finance*, 10(3), 191–210. <https://doi.org/10.1504/IJEF.2021.115664>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
- World Bank. (2025). *The Global Findex Database 2025: Connectivity and financial inclusion in the digital economy*. World Bank.
- Reserve Bank of India. (2025). *Annual Report 2024–25*. Reserve Bank of India.
- National Payments Corporation of India. (2026). *Unified Payments Interface (UPI) product statistics*. NPCI.