



Impact of Digital Financial Services on Financial Inclusion in India

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Abstract

Digital finance has transformed the global financial landscape by improving access to financial services through technology-driven platforms such as mobile banking, digital wallets, internet banking, fintech applications, and blockchain-based systems. Financial inclusion refers to providing affordable, accessible, and timely financial services to all sections of society, especially underserved populations. This review paper examines the relationship between digital finance and financial inclusion, focusing on how digital technologies reduce barriers to banking, enhance economic participation, and support inclusive growth. The paper also highlights challenges such as digital illiteracy, cybersecurity risks, inadequate infrastructure, and regulatory concerns. The study concludes that digital finance plays a significant role in promoting financial inclusion, particularly in developing economies like India, where government initiatives and fintech innovations have accelerated digital transformation.

KEY WORDS: Digital Finance, Financial Inclusion, FinTech

1. Introduction

Financial inclusion has become a major policy objective for governments and international organisations across the world. Traditional banking systems often fail to serve rural populations, low-income households, women, and small businesses due to high operational costs and geographical limitations. Digital finance has emerged as an effective solution to bridge this gap.

Digital finance includes digital payment systems, mobile money, online banking, fintech services, digital lending, cryptocurrencies, and electronic financial platforms. The rapid growth of smartphones, internet penetration, and digital infrastructure has enabled millions of unbanked individuals to access financial services conveniently.

In recent years, countries such as India, Kenya, and China have witnessed remarkable progress in digital financial inclusion through mobile payment systems and government-supported digital initiatives.



1.1 Concept of Digital Finance

Digital finance refers to the use of digital technologies for delivering financial services through electronic channels. It enables individuals and businesses to perform financial transactions without physically visiting financial institutions.

Major Components of Digital Finance

Mobile Banking: Banking services are accessed through smartphones and mobile applications.

Digital Payments: Electronic transfer of money using QR codes, cards, UPI, wallets, and online payment gateways.

FinTech Services: Technology-based financial solutions provided by startups and financial institutions.

Internet Banking: Online access to banking services such as fund transfer, account management, and bill payments.

Blockchain and Cryptocurrency: Decentralised digital systems enabling secure and transparent financial transactions.

1.2 Meaning of Financial Inclusion

Financial inclusion refers to ensuring access to useful and affordable financial products and services for all individuals and businesses, particularly vulnerable groups.

These services include:

- Savings accounts
- Credit facilities
- Insurance services
- Pension schemes
- Digital payment systems

The goal of financial inclusion is to reduce poverty, improve economic participation, and promote social equality.

2. Literature Review on Digital Finance and Financial Inclusion

Demirgüç-Kunt et al. (2018) examined global financial inclusion trends using the Global Findex Database. The study found that digital payment systems and mobile banking significantly increased access to financial services among low-income populations. The researchers highlighted that digital financial tools reduced barriers associated with traditional banking systems and improved users' savings behaviour.

Jack and Suri (2014) analysed the impact of mobile money services in Kenya through the M-Pesa platform. The study concluded that mobile money enhanced financial accessibility, reduced transaction costs, and improved household economic stability. It also contributed to poverty reduction by enabling easier money transfers and savings.

Ozili (2020) explored the relationship between digital finance and financial inclusion. The study emphasised that fintech innovations such as mobile wallets, digital lending, and online banking promote inclusive growth by providing financial services to underserved populations. However, cybersecurity risks and digital illiteracy remained significant concerns.



Sharma (2016) investigated the connection between financial inclusion and economic development in India. The study found that digital banking services positively influenced economic growth by encouraging savings, investments, and entrepreneurship among rural populations.

Gabor and Brooks (2017) studied the expansion of digital financial services in developing economies. The researchers argued that digital finance creates opportunities for financial inclusion while also introducing new forms of financial dependency. The study highlighted the growing role of fintech companies in reshaping financial markets.

Sahay et al. (2020) examined the role of fintech in enhancing financial inclusion across emerging economies. The study concluded that digital financial services improve efficiency, increase access to credit, and reduce operational costs for financial institutions. It also emphasized the importance of regulatory frameworks for consumer protection.

The World Bank (2022) reported that digital finance has accelerated global financial inclusion, especially after the COVID-19 pandemic. Increased adoption of digital payments, online banking, and mobile money services helped millions of people access formal financial systems for the first time

Arner et al. (2015) explored the evolution of fintech and its influence on the financial sector. The study highlighted that technological innovation transformed traditional banking systems by improving financial accessibility, transaction efficiency, and customer convenience.

Lee and Shin (2018) analyzed fintech ecosystems and their contribution to financial inclusion. The study revealed that digital finance platforms support small businesses and low-income groups by offering affordable financial services and alternative lending opportunities.

Gupta and Xia (2018) examined how mobile payment systems influence consumer financial behavior in developing countries. The study found that digital payment adoption improved financial participation and encouraged cashless transactions, particularly among younger consumers.

3. Objectives of the Study

1. To understand the concept of digital finance and financial inclusion.
2. To examine the role of digital finance in promoting financial inclusion.
3. To identify the benefits and challenges associated with digital financial services.
4. To analyse government initiatives and fintech innovations supporting inclusive finance.

4. Research Methodology

The study on “Digital Finance and its Impact on Financial Inclusion” is descriptive and analytical in nature. It is primarily based on secondary data collected from research articles, journals, reports of the World Bank, publications of the Reserve Bank of India, government documents, and sources available through Google Scholar.

The research aims to analyze the role of digital finance in promoting financial inclusion, identify its benefits and challenges, and examine government initiatives and fintech innovations. The collected data were analyzed using qualitative content analysis to understand the relationship between digital financial services and inclusive economic growth.

The study is conceptual and review-based, focusing on digital banking, mobile payments, fintech services, and financial accessibility. However, the study is limited to secondary data and does not include primary surveys or statistical analysis.



5. Relationship Between Digital Finance and Financial Inclusion

Digital finance acts as a catalyst for financial inclusion by reducing transaction costs and expanding financial access to remote areas.

5.1 Increased Accessibility: Digital platforms enable people in rural and remote locations to access banking services without visiting bank branches.

5.2 Reduced Transaction Costs: Online transactions are cheaper and faster compared to traditional banking methods.

5.3 Financial Empowerment: Women, small entrepreneurs, and low-income households gain greater control over financial resources.

5.4 Improved Transparency: Digital transactions reduce corruption and increase accountability.

5.5 Economic Growth: Financial inclusion promotes savings, investments, and entrepreneurship, contributing to economic development.

6. Government Initiatives Supporting Digital Financial Inclusion

6.1 Pradhan Mantri Jan Dhan Yojana (PMJDY)

Launched in India to provide universal banking access through zero-balance accounts.

6.2 Unified Payments Interface (UPI)

A real-time payment system enabling instant digital transactions through mobile devices.

6.3 Aadhaar Enabled Payment System (AEPS)

Allows banking transactions using biometric authentication.

6.4 Digital India Programme

Aims to improve digital infrastructure and promote digital literacy.

6.5 Direct Benefit Transfer (DBT)

Government subsidies and welfare benefits are transferred directly to beneficiaries' bank accounts.

7. Role of FinTech in Financial Inclusion

FinTech companies have revolutionised financial services by offering innovative, user-friendly, and low-cost solutions.

Contributions of FinTech

- Digital lending for small businesses
- Mobile wallets and payment apps
- Peer-to-peer lending platforms
- Insurtech and digital insurance services
- AI-based financial advisory services

Popular fintech platforms in India have significantly increased digital payment adoption and financial accessibility.



8. Challenges of Digital Financial Inclusion

Despite its benefits, digital finance faces several challenges:

8.1 Digital Illiteracy

Many individuals lack knowledge of using digital financial tools.

8.2 Poor Internet Connectivity

Rural areas often suffer from inadequate digital infrastructure.

8.3 Cybersecurity Risks

Online fraud, hacking, and data breaches create trust issues.

8.4 Lack of Awareness

People may remain excluded due to limited awareness of financial products.

8.5 Regulatory Challenges

Rapid technological changes require updated financial regulations and consumer protection laws.

9. Benefits of Digital Financial Inclusion

Economic Benefits

- Increased savings and investments
- Higher entrepreneurship opportunities
- Better access to credit

Social Benefits

- Women's empowerment
- Poverty reduction
- Improved living standards

Institutional Benefits

- Reduced cash dependency
- Greater financial transparency
- Efficient subsidy distribution

10. Conclusion

Digital finance has become a powerful instrument for achieving financial inclusion and sustainable economic growth. It has transformed the way financial services are delivered by making them faster, cheaper, and more accessible. Government initiatives, fintech innovations, and technological advancements have played a critical role in bringing millions of people into the formal financial system. However, issues such as digital illiteracy, cybersecurity threats, and infrastructure limitations continue to hinder inclusive growth. Therefore, coordinated efforts from governments, financial institutions, and technology providers are essential to ensure that the benefits of digital finance reach every section of society.



11. Suggestions for Improving Digital Financial Inclusion

1. Improve digital literacy through awareness programs.
2. Expand internet and mobile connectivity in rural areas.
3. Strengthen cybersecurity frameworks and consumer protection.
4. Encourage fintech innovation through supportive policies.
5. Promote affordable smartphones and digital infrastructure.
6. Increase collaboration between banks, fintech firms, and governments.

References

1. Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017*. World Bank.
2. Jack, W., & Suri, T. (2014). Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution. *American Economic Review*.
3. Ozili, P. K. (2020). Theories of Financial Inclusion. *Uncertainty and Challenges in Contemporary Economic Behaviour*.
4. Sharma, D. (2016). Nexus between Financial Inclusion and Economic Growth. *Journal of Financial Economic Policy*.
5. World Bank. (2022). *Digital Financial Inclusion Reports*.
6. Reserve Bank of India Reports on Digital Payments and Financial Inclusion.
7. Government of India. *Digital India Programme Documents*.
8. Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The evolution of fintech: A new post-crisis paradigm. *Georgetown Journal of International Law*, 47(4), 1271–1319.
9. Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. World Bank.
10. Gabor, D., & Brooks, S. (2017). The digital revolution in financial inclusion: International development in the fintech era. *New Political Economy*, 22(4), 423–436. <https://doi.org/10.1080/13563467.2017.1259298>
11. Gupta, S., & Xia, H. (2018). The impact of mobile payments on consumer financial behavior in developing economies. *Journal of Payments Strategy & Systems*, 12(2), 146–160.
12. Jack, W., & Suri, T. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review*, 104(1), 183–223. <https://doi.org/10.1257/aer.104.1.183>
13. Lee, I., & Shin, Y. J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons*, 61(1), 35–46. <https://doi.org/10.1016/j.bushor.2017.09.003>
14. Ozili, P. K. (2020). Theories of financial inclusion. In S. Grima, E. Özen, & I. Boz (Eds.), *Uncertainty and challenges in contemporary economic behaviour* (pp. 89–115). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83867-625-120201006>
15. Sahay, R., von Allmen, U. E., Lahreche, A., Khera, P., Ogawa, S., Bazarbash, M., & Beaton, K. (2020). *The promise of fintech: Financial inclusion in the post COVID-19 era*. International Monetary Fund.
16. Sharma, D. (2016). Nexus between financial inclusion and economic growth: Evidence from the emerging Indian economy. *Journal of Financial Economic Policy*, 8(1), 13–36. <https://doi.org/10.1108/JFEP-01-2015-0004>