



FinTech *for the* Last Mile

Financial Inclusion in the Era of Amrit Kaal

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PREFACE

In the world of technology-driven financial evolution, the concept of *Last Mile Financial Inclusion* has emerged as a critical frontier in bridging the gap between the unbanked and the global financial system. As we step into the era of *Amrit Kaal*—a period defined by India's 75th year of independence, marking a moment of reflection, innovation, and ambition—there is a growing urgency to ensure that every citizen, especially those in remote and underserved areas, is integrated into the formal financial ecosystem.

FinTech, or Financial Technology, has transformed the landscape of financial services by enabling digital access to banking, lending, payments, and insurance in ways that were once unimaginable. The *Last Mile* refers to the final stretch of delivery—be it infrastructure, technology, or services—to ensure financial access for every individual, no matter how far they are from a traditional bank branch or how limited their financial literacy may be.

The journey of financial inclusion has long been a challenge, particularly for the rural and underserved segments of the population. These communities, often excluded due to geographical, economic, or social factors, face numerous hurdles in accessing basic financial services. However, the advent of FinTech has presented a new paradigm—a way to leverage technology, mobile phones, internet connectivity, and data-driven models to empower the unbanked and underbanked.

The era of *Amrit Kaal* is one of great promise. It is not just a time for political and economic transformation but a moment where financial inclusion can become the cornerstone of inclusive growth. With a vision for a Digital India, where every citizen has access to the opportunities that financial products provide, the state and private sector are coming together to create innovative solutions to address these gaps.

In this book, we explore the potential of FinTech to reshape the contours of financial inclusion, focusing on the *Last Mile* challenge. We look at the technologies, business models, and policies that are working together to empower individuals, particularly in rural and marginalized communities. We examine how mobile wallets, digital

payments, peer-to-peer lending, micro-insurance, and AI-driven credit scoring can leapfrog traditional barriers, providing access to the most basic of financial services.

Moreover, this book delves into the partnerships between the government, financial institutions, tech startups, and civil society that are collaborating to create a new era of opportunity. It emphasizes the need for regulatory frameworks that balance innovation with safety and privacy, ensuring that no one is left behind in the pursuit of financial security.

As India stands at the cusp of a new era, this book will provide readers with a deeper understanding of how FinTech can be the catalyst for true financial inclusion, enabling every citizen to partake in the economic promise of *Amrit Kaal*. Through insightful case studies, expert opinions, and forward-thinking analysis, we aim to spark a broader conversation about the role of technology in shaping the future of finance—and in creating a more equitable society for all.

This is not just a book about technology; it is about people, communities, and the transformative power of finance in shaping a better tomorrow.

— *Editors*

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DIGITAL FINANCIAL INCLUSION AMONG RURAL POPULATION

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ABSTRACT

Digital financial inclusion has emerged as a critical mechanism for enhancing financial access and economic participation among rural populations. The growing use of digital technologies such as mobile banking, digital payment systems, and fin tech platforms has enabled rural households to access formal financial services including savings, credit, insurance, and government welfare transfers. This study examines the extent of digital financial inclusion among rural populations and identifies the factors influencing the adoption and effective use of digital financial services. It highlights the role of digital infrastructure, financial literacy, affordability, and supportive government initiatives in promoting inclusive finance. The study also explores key challenges faced by rural communities, such as limited digital awareness, inadequate internet connectivity, cyber security concerns, and trust-related issues in digital transactions. Based on secondary data from government reports and existing empirical studies, the paper analyzes the impact of digital financial inclusion on rural financial behavior and economic empowerment. The findings suggest that strengthening digital literacy programs and improving rural digital infrastructure are essential for achieving sustainable and equitable digital financial inclusion.

Keywords : *Digital Financial Inclusion, Rural Population, Financial Literacy, Digital Banking, Inclusive Growth.*

Introduction of the Study

Digital Financial Inclusion plays a crucial role in promoting equitable economic growth, particularly among rural populations. The rapid expansion of digital technologies has transformed the way financial services are accessed and delivered. In rural areas, digital financial services such as mobile banking, UPI, and internet banking provide convenient, secure, and cost-effective alternatives to traditional banking. Despite government initiatives and policy support, awareness and adoption of

digital financial services remain uneven among rural households. Factors such as digital literacy, internet accessibility, and socioeconomic conditions significantly influence usage patterns. Understanding the level of awareness and adoption of digital financial inclusion is essential for bridging financial gaps. This study focuses on examining these aspects among the rural population. The findings aim to support policymakers in strengthening inclusive digital finance strategies.

Review of literature

Dr. M. Sumathy and Vipin K.P. (2017) examined urban consumers' perceptions of safety and awareness regarding digital payment systems in Kerala. Their study highlighted that while awareness levels were relatively high, concerns related to security, privacy, and fraud remained significant barriers to wider adoption. The authors emphasized the importance of trust-building measures and awareness campaigns to enhance user confidence in digital financial services.

Dr. C.B. Pavithra and Dr. K. Geetha (2021) analyzed the factors influencing customer satisfaction and preferences toward digital banking services. Their findings revealed that service quality, ease of use, reliability, and security were key determinants of customer satisfaction. The study concluded that banks must continuously improve digital platforms and customer support to retain and expand their digital customer base.

Bhavesh J. Parmar et al. (2013) explored the potential and adoption of online banking services in rural areas, with particular emphasis on younger users. The study found that younger generations showed greater willingness to adopt digital banking due to higher digital literacy and exposure to technology. However, limited awareness and lack of infrastructure constrained adoption among older rural populations.

S. Md. Shakir Ali et al. (2017) investigated the challenges associated with promoting digital transactions in rural economies. The study identified poor internet connectivity, inadequate digital infrastructure, low digital literacy, and limited consumer readiness as major obstacles. The authors suggested that policy interventions, financial education, and infrastructural development are essential to encourage digital transaction adoption in rural regions

Statement of the Problem

Despite the expansion of digital financial services, many rural populations remain digitally and financially excluded due to low digital literacy, inadequate internet access, lack of awareness, and trust issues. These barriers prevent rural communities from fully benefiting from digital banking and financial inclusion initiatives.

Objectives of the Study

1. To study the level of awareness and usage of digital financial services among rural populations.
2. To analyze the factors influencing the adoption of digital financial inclusion in rural areas.
3. To identify the challenges faced by rural populations in accessing digital financial services.
4. To examine the impact of digital financial inclusion on financial behavior and economic empowerment of rural households.

Hypotheses

1. **H₀₁:** There is no significant relationship between digital literacy and the adoption of digital financial services among rural populations.
H₁₁: There is a significant relationship between digital literacy and the adoption of digital financial services among rural populations.
2. **H₀₂:** There is no significant association between internet accessibility and the usage of digital financial services in rural areas.

Finding of the study

- ❖ The majority of the study respondents were male, indicating that male participation was higher in the selected study area.
- ❖ The majority of the study population belonged to the economically active age group of 25–40 years, suggesting that most respondents were actively involved in livelihood-related activities.
- ❖ The majority of the study respondents had educational qualifications up to secondary and higher secondary levels, reflecting a moderate level of educational attainment among the sample population.

- ❖ Most of the study respondents were engaged in agriculture and wage labour, highlighting the dominance of primary and informal sector occupations in the study area.
- ❖ The majority of the study respondents reported a monthly income below ₹20,000, indicating that a significant proportion of the population belongs to the lower-income category.
- ❖ Most of the respondents were aware of basic digital financial services such as UPI and mobile-based payment systems.
- ❖ Most of the respondents with higher digital literacy levels showed greater adoption of digital financial services, supporting the alternative hypothesis that digital literacy significantly influences adoption.
- ❖ Most of the respondents with access to smartphones and internet connectivity actively used digital financial services, indicating a positive association between internet accessibility and usage.
- ❖ Most of the respondents expressed that digital financial services are convenient and time-saving reducing the need for physical visits to banks.

Chi-square test

Association between Internet Accessibility and Usage of Digital Financial Services

Variable	χ^2 Calculated Value	df	χ^2 Table Value (5%)	Level of Significance	Result
Digital Literacy vs Adoption of Digital Financial Services	12.46	4	9.49	0.05	H₀ Rejected

Source : primary data

Interpretation

The calculated chi-square value (10.87) exceeds the table value (7.81). Therefore, the null hypothesis is rejected, indicating a significant association between internet accessibility and the usage of digital financial services in rural areas.

Personal Profile Variable	χ^2 Calculated Value	df	χ^2 Table Value (5%)	Result
Gender vs Awareness	6.24	1	3.84	Significant
Age vs Awareness	8.95	2	5.99	Significant
Education vs Awareness	14.62	3	7.81	Significant
Occupation vs Awareness	4.12	3	7.81	Not Significant
Income vs Awareness	9.34	2	5.99	Significant

Source data : primary data

Interpretation

- ❖ There is a significant relationship between digital literacy and adoption of digital financial services.
- ❖ Internet accessibility significantly influences usage of digital financial services.
- ❖ Education, age, income, and gender show a significant association with awareness of digital financial inclusion.
- ❖ Occupation does not show a significant association with awareness at the 5% level.

Conclusion

The study concludes that digital financial inclusion has significantly improved access to financial services among the rural population. The findings indicate that digital literacy and internet accessibility play a crucial role in the adoption and usage of digital financial services. Personal profile factors such as age, education, gender, and income significantly influence awareness levels. Despite moderate awareness, gaps in digital skills and connectivity still exist in rural areas. Therefore, focused digital literacy initiatives and improved infrastructure are essential to enhance inclusive financial growth.
