

Digital Financial Inclusion in India: A Conceptual Study

Dr. Manoj Kumar Sahoo

Professor in Economics & Head

Dept. of MBA

Nalanda Institute of Technology, Bhubaneswar

(Affiliated to Biju Pattnaik University of Technology)

Mr. Prafulla Kumar Dwibedi

Assistant Professor in Marketing

Dept. of MBA

Nalanda Institute of Technology, Bhubaneswar

(Affiliated to Biju Pattnaik University of Technology)

“Digital financial inclusion involves the deployment of the cost-saving digital means to reach currently financially excluded and underserved populations with a range of formal financial services suited to their needs that are responsibly delivered at a cost affordable to customers and sustainable for providers.” –

Jim Yong Kim - Former President, World Bank Group.

Abstract: Digital finance can serve as an incentive for the growth of financial inclusion. Digital financial inclusion is defined as digital access and use of formal financial services by the unserved and unbanked population at an affordable rate. However, the use of digital financial services increases the level of financial literacy and financial inclusion in the economy. Given the above, the main purpose of this study is to explain the benefits of financial inclusion and assess the growth of digital financial services (DFS). In addition, this document aims to explore the current challenges and opportunities for digital financial inclusion in recent times. Finally, this study concludes with important information for policymakers and service providers to improve digital financial inclusion.

Keywords: Financial Inclusion, Digital Payments, Digital Receipts, Digital Finance

Introduction

Digital financial inclusion can go a long way in stimulating economic growth and in resolving agricultural and rural development. With the help of digital financial inclusion has had a significant impact on reducing the cost of financial services and improving the efficiency of financial services. Digital financial inclusion often refers to digital access and the use of formal financial services by subordinate and marginalized individuals. In other words, digital financial inclusion includes the use of less expensive digital methods to reach current financially disenfranchised and uninhabited people with a variety of structured services tailored to their needs delivered reliably at an affordable cost to customers and supplier sustainability. India's journey of financial inclusion has been remarkable for the past decade and has been openly encouraged by the Indian government through its Digital India Movement & Pradhan Mantri Jan Dhan Yojana. Poverty alleviation and income challenges can be key to achieving an inclusive society. Information and Communication Technology (ICT) gradually provides access to the unbanked population and contributes to their integration into the banking sector. Digital technology promotes large usage and has a positive impact on the lives of citizens. In this article, we discuss what has been achieved in financial inclusion so far and the next step, and how we use digital technology to achieve an inclusive society.

Review of Literature:

The following literature has been reviewed from reputed national and international journals, research articles, books, working papers, etc. for the current piece of research.

Year	Authors	Findings
2011	Kazi et al	Information technology is the key to financial inclusion because this is the only way to significantly reduce costs and reach people. However, not all technologies are suitable for financial inclusion because of their availability, accessibility, security, and privacy.

2013	Gupta et al	Financial inclusion is a key factor in the survival of banks in the current banking environment and in improving the quality of life of the poor in rural areas. IT-based payment system and services from RBI and banking institutions in India.
2013	Patnaik et al	Those people who are excluded from finance, joint financial inclusion by policy reforms, process amendments, and financial literacy and banks are the way to go. The important thing to do is to persuade those who voluntarily refuse the idea of linking to a formal financial system.
2014	Rachna et al	Their research found that the banking system is one of the most important tools in financial planning and is, therefore, one of the keys to economic development in all countries. They found that rural people were unaware of the new technology due to a lack of education.
2018	Haider	The author of his work found new financial technologies that encourage people to live, as well as financial success and economic outcomes that improve people's lives. The availability of digital technology, especially mobile phones, the internet, and biometric authentication, makes it easier to provide a variety of financial services to unbanked people, such as online banking, mobile banking, and digital lending.
2020	Ghosh&Chaudhury	Research shows that men, the rich, the educated, and the elderly are choosing digital technology for financial gain. The impact of access to education and income status is more evident in digital finance in the post-demonetization period (2017) than in the pre-demonetization period (2014).
2020	Mondal	He pointed out that simply extending digital services to bank accounts could not break the barriers that unscrupulous groups face. To support human development and reduce poverty, a good digital financial education program should be designed to support the integration of marginalized classes.
2020	Ozili	The main findings of this study show that financial inclusion affects and influences financial innovation, poverty levels, financial sector stability, economic conditions, financial literacy, and regulatory frameworks.
2020	Allmen et.al	The COVID-19 epidemic has the potential to turn into a digital financial services game. Low-income households and small businesses can benefit greatly from the advancement of mobile money, fintech services, and online banking. Financial inclusion as a consequence of digital financial services can also boost economic growth.

Objectives of the Study

The major objectives of the study are:

- To understand the major benefits of digital financial inclusion.
- To identify the challenges & opportunities related to digital financial inclusion.
- To study the growth in digital financial services (DFS) since 2014.

Methodology

The data that has been used for this study is secondary data comprising of various websites, National and International Research Journals articles, magazines, Global Findex database, world bank reports and research papers, etc. Data has been collected between 2014 and 2017, which stated various challenges and opportunities relating to digital financial inclusion.

Benefits of Digital Financial Inclusion

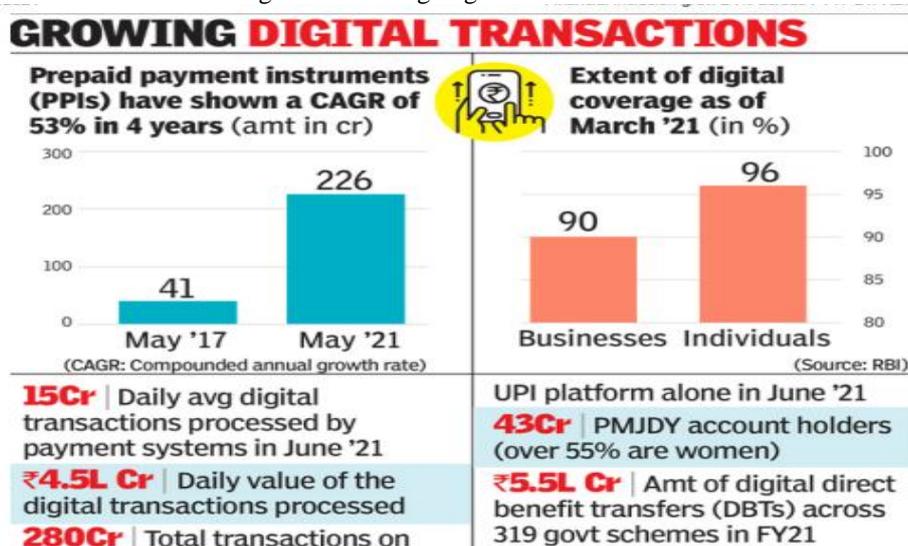
The benefits of digital financial inclusion for financially disadvantaged and excluded people include the following:

- 1. Access to formal financial services** - Financial services such as payment, transfer, savings, debt, insurance, security, etc. have become easy thanks to digital transactions. Moving to account-based services is often extended over time as customers learn and trust a digital transaction platform. Government payments to people, such as conditional transfers, can activate digital value accounts that can keep track of people who have been financially excluded out of a financial system.
- 2. Low-cost digital platforms:** Digital business platforms support both service providers and businesses by empowering customers to participate in the irregular and tiny amounts, helping them in managing their income and expenses.
3. Additional **financial services tailored to customer needs** and financial conditions are provided by payments, transfers, pricing, and generated data, which are added to the digital business platform itself.
- 4. Reduce the risk of loss, theft and other financial crimes** brought on by cash based transactions, and reduce costs associated with cash transactions.
5. It can also **promote economic freedom** by increasing wealth especially women by increasing their economic participation.

Growing Digital Transactions

The financial inclusion index collects data on various aspects of financial inclusion in a single range from 0 to 100, where 0 represents total financial exclusion and 100 indicates full full financial inclusion. One of the main drivers of financial inclusion in the country has been PradhanMantri Jan DhanYojana (PMJDY). There are approximately 42.6 crore PMJDY account holders, over 55% of whom are women. When JDY was launched in 2014, account holders accelerated with the increase in direct benefit transfers (DBTs), which was facilitated by digital and Aadhaar platforms. The impact of digital payments on DBT can be distinguished by the fact that Rs 5.5 lakh crore is digitally transferred. There are 319 government schemes distributed to 54 ministers by 2020-21. Since the pandemic, financial inclusion has improved due to the increase in small digital small merchants and peer-to-peer payments. According to RBI Governor Shaktikanta Das at the Financial Inclusion Summit "Past studies and information gained during the Covidpandemic show that inclusive economic growth and growth are enhancing financial stability,".He said that as of March 2021, banks have achieved a digital coverage of 95.9% of individuals, while the corporate performance stood at 89.8%.The rise of fintech also supported financial inclusion as they sought to simplify and improve digital payments such as the UPI (Unified Payments Interface). According to Macquarie's report, while retail payments (by value) increased by 18% CAGR over FY15 to '21, UPI grew at a CAGR by about 400% over FY17-21 and now counts to 10 % of total retail payments (excluding RTGS) from 2% were seen in the last few years. "Despite its late participation, the annual value of UPI transactions of FY21 was about Rs lakh crorealmost 2.8 times the value of credit and debit card (at POS) combined," the report said.

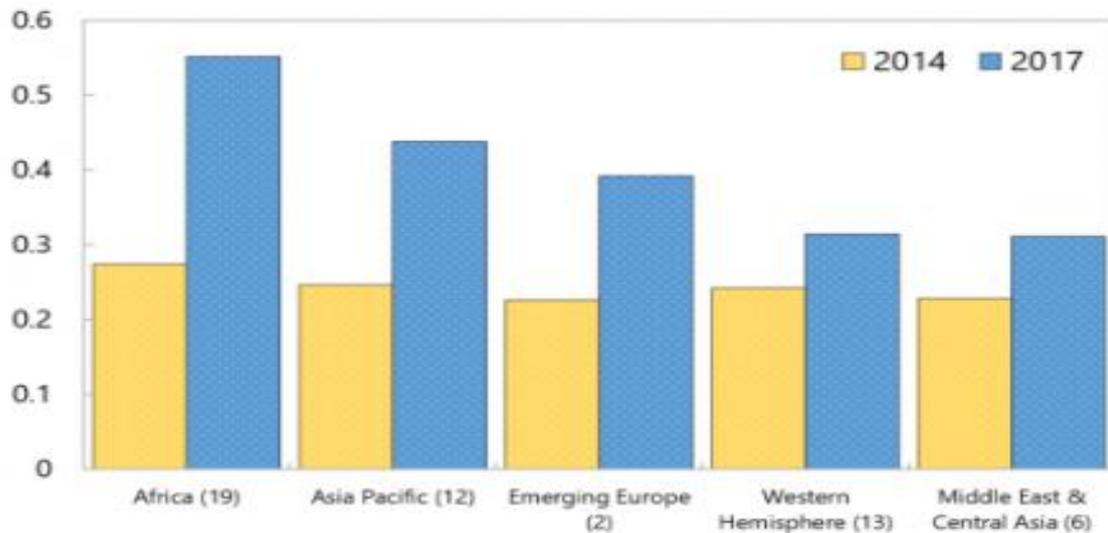
Figure-1 Growing Digital Transactions



Source: Times of India (Online), Aug 18, 2021, 04.00 AM IST

Based on digital financial inclusion index, financial inclusion is growing because of increase in fintech payments. Digital payments have increased in every region of the world. Growth rates in China, the UK and the US seem to be growing and also in other parts of the world, such as Kenya and India.

Figure-2 Fintech’s Inclusion Effect



Source: IMF Staff Calculations.

Note: The index lies between 0 and 1 where a higher number indicates higher digital financial inclusion.

Growth in Digital Financial Services (DFS) Since 2014

The growth trend of Digital Financial Services (DFS) in India from 2014 can be divided into three growth stages as shown in Figure 2 below. The first quarter, from the beginning of 2014 to about August 2016, had risen sharply by about 2% per month on business prices on large digital platforms. So, in the last few months of 2016, transaction through pre-paid instruments (PPIs - many digital wallets like Paytm and Mobikwik) began to grow - the business volume of PPI was multiplied in mid-September of 2016 and January 2017. The second phase was driven mainly by demonetization. This growth has been achieved despite the fact that the third level is not only for pre-paid instruments, but also for the introduction of the Unified Payment Interface (UPI), NPCI's digital payment system, which grows from any small business in mid-2017 to overtake PPIs and debit cards as the principal shuttle for digital transactions.

Figure-2 Growth in Digital Transactions 2014-18



Source-RBI Data

Current Challenges and Opportunities

1. People who participate in financial inclusive programs end up being excluded and are not able to withstand for many general or health related purposes.
2. There is a clear distinction of digital divide - some people are comfortable in use of technology and are not facing any difficulty in delivering services and make them understandable, while others in semi-urban areas and majority of people in rural areas facing difficulty to understand and use technology effectively.
3. Lack of financial information and awareness of cybercrime has led to widespread mistrust among rural people, which has led to a decline in digital access.
4. There is a responsibility to manage the sustainable mileage delivery model, especially in rural areas and service delivery at the end of the mile. Many Govt. & Commercial agencies try to reach the same destination for a variety of reasons related to financial, social or health inclusion and this is an effort to meet and lead to higher costs.
5. Different data elements available with govt. such as healthcare schemes data, social inclusion data, COVID data, vaccination data, etc. are not leveraged to the full extent as there is a clear lack of coherence between these data elements.
6. Last mile technological systems and artifacts are vulnerable to exposure and exploitations. It is loosely handled by BC or BF agents as adequate security measures to control it are not put in place. This has resulted in a lot of fraud happening on the ground. About 22% of BC agents faced fraud in 2017, a noteworthy increase from 2% in 2015. The business model of the Last-mile & BC Agent network must be looked at again from a privacy security & safety angle.
7. Data Privacy is still a major concern as a lot of captured data is easily available to various stakeholders as PII norms are not completely followed. KYC Data & mobile numbers are available everywhere.
 - a. Biometric data is captured duplicitously by some BC Agents in clay who will replicate it later for fraudulent reasons.
 - b. Another way is when they give a manual receipt instead of a computerized one during transactions.
8. SMS messages for transactions in an account are not reaching the customer due to lack of mobile device (More than 310 Mn people still do not possess a basic feature phone or a smartphone) or financial institutions are not sending these messages for low-value transactions. This has led to increased dependency on local agents.
9. Access to credit is still a concern as small-time lenders charging high rates of interest are prevalent in rural areas. Govt. schemes have not penetrated fully and need more rural outreach to enhance credit access. The lack of avenues for digital lending and online loans from credible financial institutions is missing.
10. Recommendations for individuals based on their requirement are not provided and leveraging the personalized data of the person, by performing analytics using AI & ML, banks can offer loans, insurance, and other services based on analytics & credit score.

Suggestions:

1. To be more effective in supporting human development and fighting poverty, digital financial inclusion programs must be structured in a comprehensive way that addresses the integrated needs of the targeted classes. It should be integrated with other interactive tools that make digital literacy an integral part of financial education at all levels.
2. The availability of digital services to the unprivileged section of the community can be very helpful in this endeavor. Private and non-profit organizations can also play a very important role by providing training to improve the digital literacy of whole citizens of all ages.
3. If digital financial platforms are comfortable to use, users of digital financial services can assist, inform and persuade about the use of digital financial services and digital finance in both formal and informal (rural) sectors to use digital financial services, leading to a large number of people using digital finance and thus leading to financial inclusion.
4. According to a study conducted by the World Bank, in 2014 a large number of excluded populations own or having a mobile phone. Therefore, the provision of financial services for mobile phones and related devices can improve financial access for excluded people as long as these people should have an affordable internet connection.
5. It is easier for people to open accounts by making eKYC with digital IDs and a fully digitalized system. Further, financial service providers will be able to reach customers of underserved societies. The suitability of having financial services at the doorstep of the people who sometimes travel long hours and lose a day of wages to reach the bank branch is a good sign of digital financial inclusion. It will also benefit the financial services providers as they can reach out to the low-wage workers which will lead to financial inclusion in India.

6. All the current financial inclusion sectors such as NGOs, banks, non-bank financial companies, and government departments should be encouraged on a priority and sector-wise basis to increase the use of digital financial services leading to the pace of financial inclusion.

Conclusion:

It is clear from the above discussion that digital integration of financial services will increase the rate of financial growth. Financial inclusion is not a one-time effort. It will take time to connect all citizens to the banking system but now it seems easier to reach people by electronic means. With the digital payment system, everyone would like to pay by electronic means. The use of electronic means will increase the banking practices of the lower-income community. A zero charge or minimum banking fee will also result in banking practices. Increasing access to and use of digital financial services enables the society, free from cash-related robbery and corruption, thereby reducing the risk of money laundering, the disappearance of blocked funds, and ultimately soliciting and accounting for each financial transaction. In conclusion, it can be said that digital financial inclusion will create an easy way to achieve the goal of financial inclusion.

References:

- [1]. Agrawal, Gaurav & Jain, Pooja. (2019). Digital Financial Inclusion in India. Pp-195-203. DOI:10.4018/978-1-5225-7399-9.ch011.
- [2]. Allmen et.al (2020) Digital Financial Inclusion in the Times of COVID-19, IMF Blog: Insights & Analysis on Economics and Finance (online).
- [3]. By combining digital education tools & digital financial tools, and slight changes to tax regulations, underbanked & unbanked people can break the chain of poverty and sustain success in a cash-lite economy.
- [4]. Chandra Mohan Malladi, · Rupesh K. Soni¹ · Sanjay Srinivasan, (2021), Digital financial inclusion: next frontiers—challenges and opportunities CSIT (June 2021) 9(2):127–134 <https://doi.org/10.1007/s40012-021-00328-5>.
- [5]. Chandrakha Ghosh & Rimita Hom Chaudhury (2020) Determinants of digital finance in India, Innovation and Development, DOI: 10.1080/2157930X.2020.1850012
- [6]. Gupta, Anurag & Chotia, Varun & Rao, N V Muralidhar. (2014). "Financial Inclusion and Human Development: A State-Wise Analysis from India." International Journal of Economics, Commerce, and Management. II, pp. 1-23.
- [7]. Haider, H. (2018). "Innovative financial technologies to support livelihoods and economic outcomes". K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.
- [8]. Kazi, I. & Moin, & Baseer, Qazi & Professor, Ahmed. (2011). Financial Inclusion through Mobile Banking in India. International Journal of Advanced Computer Research. 2. 299-303.
- [9]. Malladi et.al (2021), Digital financial inclusion: next frontiers—challenges and opportunities, CSIT 9, 127–134.
- [10]. Mondal, S (2020) "Digital Financial Inclusion and Inclusive Development of India", International Journal of Innovative Science and Research Technology, 5(3), pp.1054-1059.
- [11]. Ozili, Peterson. (2020) Financial inclusion research around the world: A review. Forum for Social Economics. 10.1080/07360932.2020.1715238.
- [12]. Patnaik et al (2013), "Mainstreaming the Financially Excluded (With special reference to the rural population of the Varanasi district of Uttar Pradesh)", Indian Journal of Applied Research, 3(12), pp.338-344.
- [13]. Rachna et al. (2014), "Issues and Challenges of Electronic Payment Systems", International Journal for Research in Management and Pharmacy, Vol. 2, Issue 9, pp.25-30.
- [14]. Rajesh Kumar, Vagish Mishra and Somraj Saha (2019), Digital Financial Services In India: An Analysis Of Trends In Digital Payment, International Journal of Research and Analytical Reviews (IJRAR), Volume 6, Issue 2, pp-6-22.
- [15]. RBI Discussion Paper on Banking Structure in India (2013).
- [16]. Times of India (2021), Financial inclusion grew 24% across FY17-21: RBI, Aug 18, 2021, 04.00 AM IST
- [17]. USAID (2019): India Digital Financial Inclusion, Journey Map Report, Mobile Solutions Technical Assistance, and Research (mSTAR) project.
- [18]. World Bank (2013) Digital Financial Inclusion Report
- [19]. World Bank Digital Financial Inclusion Report- Digital Financial Inclusion (worldbank.org).
- [20]. <https://blogs.imf.org/2020/07/01/digital-financial-inclusion-in-the-times-of-covid-19/>