

Financial Inclusion in India via Mobile Phone Technology: Opportunities and Challenges

Dr. Rachna Jawa

Associate Professor, Shri Ram College of Commerce, University of Delhi

Dr. Minakshi Paliwal

Assistant Professor Department of Commerce, Daulat Ram College, University of Delhi

Dr. Shikha Gupta

Associate Professor, Department of Commerce, Shaheed Bhagat Singh College, University of Delhi

Abstract:-

It is a paradox that more than one-third of its population is excluded from the formal financial system in a globalized world. According to the findings, appropriate financial services can help increase household welfare and boost small businesses. Various factors have been blamed for the financial isolation. The conventional financial system has several inherent limitations, leading to an unserved population. Technology is critical to financial inclusion since it is the only method to lower costs and dramatically reach people. However, not all technologies are suited for financial inclusion due to accessibility, affordability, security, and privacy concerns. Recently, mobile phone innovation has arisen as the most encouraging, promising and well-suited conduit for financial inclusion. In nations where the majority of the population is unserved, digital currency and mobile technology can cater to the needs of small transactions at an affordable cost. It can also help reduce time accurately and make faster transactions in bulk. The Indian government has found multiple ways to advance mobile banking and build admittance to credit and monetary administrations to the maximum potential users and non-users. Adopting and successfully implementing mobile technologies face numerous hurdles, particularly in rural areas. The study motive is to explore the possibilities of mobile phone technology in accelerating the reach of financial inclusion to the broadest possible audience in India. This paper also sheds light on opportunities, challenges, solutions and policy options in floating digital currency and mobile technology for financial inclusion.

Keywords: Financial Inclusion, Mobile phone technology, Opportunities, and challenges.

Introduction:

The concept of financial inclusion is the delivery of financial services at affordable costs to sections of disadvantaged and low-income segments of society. As per World Bank Report, two billion people, or 38% of adults in the world, do not use formal financial services, and

73% of poor people are unbanked because of costs, travel distances, personal beliefs, and often tricky requirements involved in opening a bank account. This chapter highlights the role played by mobile technology in improving financial access across the developing nation, where the majority of the disadvantaged people live. Mobile technology is penetrating across the globe. However, despite this progress, problems persist. More than half of adults in developing countries lack a bank account. Extending access to finance is the first building block for people to build a better life. Not only does it help families plan for long-term goals and emergencies, but it also facilitates day-to-day living and yields positive results in many different ways, e.g. education, health, and employment. Mobile transfer can help to cover unserved populations under the formal financial market. Throughout recent many years, various kinds of monetary administrations providers have offered new instruments, which have opened up possibilities for the financially excluded populace.

Digital connectivity is vital, but it is only a starting point for successful digital development. It is essential to strengthen other factors that interact with technology, such as creating awareness, training people, protection from frauds, responsible regulation and institutions, all that in order to make digital technologies work for the poor. If there is strategic alignment of these factors in digital money market, it will help to realize financial inclusion goal. To realize financial inclusion, it is very important to understand why people are excluded from the financial system. Investments are needed to deliver digital payments in emergencies. Countries where crisis are most likely to occur are least prepared to deliver digital payments. Mobile payments reduce government costs, time, efforts, and resources which can be channelized in other welfare programs to help economy and the society. It enhances convenience to the payee and payer. Mobile transactions overcome some of the challenges and help government to keep track of transactions, which may lead to higher revenue collection on account of taxes. The users can transfer money by using mobile payments, multiple transactions more accurately, and within less time and cost.

The deployment of cost-effective digital means to reach currently financially excluded and underserved populations with a scope of formal monetary administrations customized to their necessities that are capably conveyed at an expense that is reasonable to clients and feasible for suppliers is known as digital financial inclusion. While years of experience with digital financial services frequently provides major advantages to suppliers, the new services also pose new hazards.

With the possibility of arriving at billions of new clients, banks and an enlarging cluster of non-banks have started to offer advanced monetary administrations for monetarily barred and underserved populaces, expanding on the computerized approaches that have been utilized for quite a long time to further develop access channels for those generally served by the formal monetary area. Advanced monetary administrations - including those including the utilization of cell phones - have now been sent off in excess of 80 nations, with some arriving at huge scope. Thus, a great many previously barred and underserved unfortunate clients are moving from only money based exchanges to formal monetary administrations - installments, moves, reserve funds, credit, protection, and even protections - utilizing a cell phone or other advanced innovation to get to these administrations. Also the image is proceeding to move quickly with the rise of always new advances.

Across the created world, admittance to monetary administrations is generally pervasive; there is a wealth of money and credit on request, from various channels, any areas, and 24 hours per day. Yet, this story is totally different in the emerging nations, which house almost 90% of the world's unbanked populaces. The circumstance is more awful in least emerging nations (LDCs), where more than 90% of the populace is barred from admittance to the formal monetary framework. In different nations of the world including India, low income people do not have access to basic financial services like saving accounts (Richard et al, 2009), insurance, credit and even less to more advanced financial services that could help to improve security, predictability and opportunities for entrepreneurship. The restricted admittance to back seriously lessens the decisions residents have in deciding the manner they work and live. Without broader access to finance, only the rich and connected people are able to take advantage of economic opportunities. Likewise, when a larger part of the populace is barred from admittance to monetary administrations, it can altogether and unfavorably influence the effective portion of monetary and actual assets, financial development, pay and non-pay imbalances, and the conveyance of advantages in an economy. Therefore, the provisions of financial services to the poor and underprivileged sections of the society have continuously been in focal point of different projects started by the Governments of India since independence (Dasgupta, 2001). Undoubtedly, the government has formulated policies, put in place many rules and regulations, tried to mandate rural branches, leading to underprivileged, controlled money lenders. In spite of empowering strategies and having a wide organization of rustic bank offices in India which executed explicit neediness easing programs that looked for the making of independent work open doors through bank credit, countless least fortunate of the poor kept on excess outside from the field of formal financial framework.

Several countries used different strategies to serve financial excluded masses. Asia, Africa, and Latin American nations used mobile and digital technology as financial inclusion tool. Forty percent of Indians currently do not have access to a bank, and most of these people belong to low-income or rural regions. Beginning in 2005, the Reserve Bank of India (RBI) has prescribed that banks increment admittance to banking administrations for the unbanked populace utilizing the portable installment (m-installment) frameworks. With almost 51% of the populace conveying a cell phone, private accomplices in India created m-installment frameworks displayed after the M-PESA framework to increment monetary effort by giving store and withdrawal administrations to clients. Interbank Mobile Payment System (IMPS) was launched, in which a portable based reserves move administration for clients enrolled with partaking banks. MNOs and banks cooperated to give m-banking administrations all over India including Airtel's (MNO) "Portable Money Transfer", and by different banks like ICICI, HDFC, and State Bank of India (SBI) have sent off their own versatile installment administrations in association with a few MNOs encountering changing levels of progress. In spite of these drives taken in India, the reception of portable installment innovation, particularly among the low-pay populace, has been wary. This is basically because of tough guidelines and promoting models pointed toward getting the prevalently metropolitan and in fact progressed clients. Moreover, exchanges should be led on a telephone through an Internet association, which isn't just a somewhat costly help yet in addition requires essential

skill about the Internet innovation. While these frameworks have been taken on by around 15% of metropolitan portable clients starting at 2009, cash keeps on being a prevalent method of exchange for sloppy retailers and their clients. In a survey conducted by the 2014 Intermedia Financial Inclusion Insight (FII) Survey, it was revealed that 0.3% of adults use mobile money, compared to 76% in Kenya, 48% in Tanzania, 43% in Uganda, and 22% in Bangladesh. This result indicates a huge room for mobile payment business. The low mobile payment user is attributable to many factors, but a major factor is government policies.

State of Financial Exclusion in India:

"The RBI brief features that the FI-Index has been built with no 'base year' and as such it reflects total endeavors of all partners throughout the years towards monetary consideration. As far as system, the FI-Index involves three wide boundaries (loads showed in sections): Access (35%), Usage (45%), and Quality (20%)."

Up to 80% of Indians presently have a ledger, the very extent that have cell phones, yet monetary incorporation levels are still among the world's most awful, lower than sub-Saharan Africa on certain counts, as per another report. In spite of the accessibility of portable financial administrations and the limiting of orientation, riches and training holes in account possession, not many record holders are utilizing offices accessible to them, raising questions around upgrades for monetary incorporation, as per the most recent Global Findex Survey delivered by the World Bank in April 2018. The public authority's lead "Pradhan Mantri Jan Dhan Yojana (PMJDY)," or Prime Minister's People's Wealth Program, was sent off in 2014 determined to arrive at India's unbanked populace. As per the Global Findex report, it is basically liable for the fast extension of opened accounts. As per late information, under 1% of PMJDY account holders-3.1 million recipients use overdraft work environments accessible to them, and 17 percent of PMJDY accounts have "zero-balance," showing they are not utilized, down from 25% in 2016 and 75% in 2014.

There is no obvious improvement in admittance to formal credit, and 38% of Indian records are idle importance, there were no withdrawals or stores throughout a year-proposing that numerous Indians are as yet not coordinated into the proper financial framework. Support in and viable utilization of monetary administrations can assist with driving improvement objectives by helping interest in training and wellbeing, assisting with overseeing monetary crises and lessen reliance on cash, the report said.

The economic survey presented in the Indian Parliament for the 2015–16 budget states that the use of mobile network can be the game-changer tool for achieving financial inclusion target. It emphasized to take advantage of deep mobile penetration and agent network as it transfer money quickly, securely, and inconvenient manner. It is important to note that mobile density in India rose to 82.5% in 2015.

Among 1.29 billion individuals, banking entrance is just 54%, and less than 10% of 650,000 Indian towns have a bank office. Indeed, even in metropolitan India, less than 35% of the functioning populace with yearly income under 50,000 rupees own a ledger. Solid policymakers like the Reserve Bank of India (RBI) are moving to strategies that assist with

driving monetary incorporation. It has sent off Interbank Mobile Payment Service (IMPS) to move cash quickly between ledgers inside the nation utilizing cell phones. Through the RBI and the National Payments Corporation of India, a broadly conveyed, promptly open, and interoperable portable installments network is being worked to cover impeded populace casual monetary channels. The public authority of India has given guidelines to bring all Central Government plans having a monetary part under the immediate advantage move (DBT) from April 2015, to plug spillages and to hold the endowment bill in line. Comparable systems are utilized by numerous nations to assist poor people or the individuals who with confronting a likely gamble of falling into neediness without the exchange by moving money using innovation. The motive of these projects is to increment poor and weak families' genuine pay and shield them from pay off searchers government workers.

Guidelines in India grant portable exchanges provided that they are connected to an enrolled ledger, through which exchanges occur. While it is a benevolent guideline to safeguard clients, this bars the 40% unbanked populace and may likewise be an obstacle for those awkward with the financial framework. One more review led by CMF-IFMR observed that the monetary incorporation order by the RBI doesn't permit private accomplices to charge proper expenses for zero-balance accounts focused on for the low-pay populaces. This brings deterred specialists to the table for variety of monetary items to low-pay clients through them-banking channel. To make the mainstream banking services available to all, RBI and the government have been outlining many initiatives that could accelerate efforts on this. The years 2005 and 2006 witnessed two key initiatives of RBI to reinforce the financial inclusion drive by introducing 'no-frills' account and 'business correspondent (BC) model' of banking respectively. Customer Service Providers are responsible for direct interaction with clients and to take the BC services to clients on the ground.

Mobile Phone as an Option for Financial Inclusion:

From the above discussion, it is clear that the objective of inclusive finance can not be achieved in India in the existing structure due to both demand and supply-side constraints, which limit the access to financial services, especially in the poor and marginalized group. But, the real question is how to promote inclusive finance in India as many initiatives have failed. Some experts argued that technology is the answer (Gangopadhyay, 2009; IBA, 2007). But all technologies are not suitable for inclusive finance due to affordability, accessibility, security and privacy (Sumanjeet, 2008). Mobile phones fit into the picture so well, as they could take the financial inclusion initiative to the next level.

Mobile phone technology ensures potential, not a guarantee of adoption. Potential can be realized only after adoption of technology. Indian government has already taken some initiatives in this direction. But, financial inclusion initiative of government through mobile phones will have to overcome a range of challenges from technical to administrative and regulatory ones before it becomes reality. There are many issues and challenges which are necessary to be dealt with for successful implementation of mobile technology in financial inclusion. The first component that must be provided is an effective payment system that can be deployed by means of mobile technology. This payment system must be secure, easy to use and enable payment over a distance (money remittance). The system should support the

needs of the subscriber to such a degree that a large percentage of the cash can be taken up into the system. This is then a logical transition to savings. With the cash having been turned into electronic value, it will be easier to start offering saving products based on regular payments. These products should typically be targeted saving products with a monthly installment. Credit risk does not exist as it is a saving product, but the discipline of the subscriber to meet his/her monthly installments will be important. The behaviour of a subscriber with regards to payments and savings will provide mechanisms to start scoring credit, making an introduction of lending products easier. As of now, no one single model has been found internationally that can serve all the requirements of the poor. However, there are many ongoing experiments, and the great successes are likely to come from some model that has digital payments at the core. While mobile density is rising at an unprecedented pace in India, payment systems that use this growing network will be in the position to reach the masses that have so far been excluded from the formal banking system. It is also important for the retailers to connect with payment systems in such a way that allows the spread of the services amongst the low income unbanked consumers. For instance, the Indian Railways allow purchase of the tickets through kiosks or through the internet using a variety of methods. For this to become a reality, it is important to create an environment that will enable greater numbers of such service providers and greater range of services for digital payments. There is also a need to ensure entry by ensuring a high degree of inclusiveness in types of services providers, ensuring a level playing field, and also ensure that both large and small players can enter the industry.

Monetary incorporation gives open doors to the financial area to cut across different layers of society, areas, orientation, and pay and urge people in general to embrace banking propensity. Reserve Bank of India has intervened for the success of financial inclusion by introducing various enactments, financial literacy drives, leveraging technology etc.

Financial inclusion will help the poor in meeting various needs with the help of a wide range of financial services which are readily available and affordable also. Monetary administrations will give devices which will help in giving simple financing offices in many fields like microenterprises' interests in new creation advances, helping in ranchers' buying efficiency upgrading data sources like manures, workers' quest for better open positions, or kids' schooling and to relieving individuals' openness to huge Lifecycle occasions or erratic dangers.

Challenges of Financial Inclusion:

India not yet benefitting from mobile banking: The extent of the Indian populace getting to monetary foundation accounts from their telephones or the Internet, making advanced installments or utilizing portable cash wallets is altogether lower than in other creating economies. In 2017, 5% of Indians got to a monetary foundation account from their telephone or the Internet, and 2% of the populace claimed a portable cash account, the Global Findex information show. Contrast this with sub-Saharan Africa, where 21% of grown-ups had a portable cash account in 2017, the most raised wherever on earth and a half addition beginning around 2014. Advanced installments are likewise more broad, with 97% of grown-ups in Kenya making a computerized installment in 2017 and 60% in South Africa,

contrasted with 29% in India. Grown-ups in these nations are moving towards monetary consideration, bypassing customary passage focuses and exploiting the development of advanced finance. The equivalent can't be said about India.

India accounts for the world's highest share of inactive bank accounts: Worldwide, 13% of grown-ups (or 20% of record proprietors) detailed having what can be viewed as an idle record, with no store or withdrawal - in advanced structure or in any case in the beyond a year. The portion of record proprietors with an idle record shifts across economies, yet it is particularly high in numerous South Asian economies. In India, the offer is 48%-the most elevated on the planet and about double the normal of 25% for creating economies. As per the Global Findex Report 2017, a piece of the clarification may be India's Jan Dhan Yojana plot, created by the public authority to increment account possession. Sent off in August 2014, the program had brought an extra 310 million Indians into the proper financial framework by March 2018, large numbers of whom could not as yet have had a chance to utilize their new record.

Accessibility: Despite efforts to address issues such as access to physical bank branches and the requirement to provide specific documentation, which are frequently mentioned as hurdles to financial inclusion, the majority of Indians have yet to benefit from mobile banking.

Trust: Generally people are still not entirely comfortable with using their phones for banking. There is a fundamental mistrust in using phones or digital modes to transact, particularly in rural areas.

Connectivity: However, poor access to electricity and internet penetration hinders connectivity in India, and Perhaps this is one of the reasons for the delayed uptake of mobile banking. There is currently a rural-urban split in Internet penetration. According to a 2017 research published by the Internet and Mobile Association of India, 65 percent of urban homes had an internet connection in December 2017, compared to 20 percent in rural India. Similarly, while mobile phone ownership is on the rise, many rural residents still lack access to energy for basic everyday tasks like charging their phones. Despite the fact that the Rural Electrification Corporation Ltd (REC)—the organisation charged with implementing the "DeenDayal Upadhyaya Grameen Jyoti Yojana" or 'Power For All' program—claims to have electrified 99.8% of villages, there are now 31 million households without electricity.

Literacy: Apps and online banking websites necessitate a degree of technical literacy and confidence that many Indians in rural and low-income areas lack. In terms of mobile account access and digital payments, there is still a knowledge gap. According to the Global Findex statistics, 2% of individuals with a primary education or less utilized a cell phone or the web to get to a record in 2017, contrasted with 9% of those with optional training or less.

Cost: India cannot rely solely on technology to assist lower the number of people who are unable to access formal financial services. "Access isn't always the same as using financial services," he explained. "While Global Findex data suggests that consumers have easy access to financial services, they may choose not to use them—either freely or because the opportunity costs are too high. While insurance and pensions are certainly needed, we have yet to see suitable products for low-income rural households."

Government Initiatives for Financial Inclusion:

Financial Inclusion Plans (FIPs): To have an arranged and organized way to deal with monetary incorporation, banks ought to take on Board-endorsed Financial Inclusion Plans (FIPs). These FIPs track the quantity of outlets (branches and BCs), Basic Savings Bank Deposit Accounts (BSBDAs), overdraft offices, KCCs and General Credit Card (GCC) accounts, and ICT-BC account exchanges.

National Strategy for Financial Inclusion: was developed under the auspices of the FIAC and is based on inputs and suggestions from the Government of India and other financial sector regulators to efficiently speed up the degree of monetary consideration in the country in a feasible way.

Penetration of Banking Services: The Reserve Bank has taken many initiatives to bring banking services to the country's unbanked villages. The utilization of data innovation (IT) and mediators has empowered banks to expand their reach, scope, and breadth of services at a low cost.

'Train the Trainers' Programme for Capacity Building of Business Correspondents: The Department made a two-level 'train the coaches' program, 'Ability Upgradation for Performance of Resources - BCs' (SUPER-B), to build the capacity and capabilities of Business Correspondents (BCs) for efficiently delivering financial services at the grass-roots level.

Setting up of National Centre for Financial Education (NCFE): RBI, SEBI, IRDAI, and PFRDA formed the NCFE u/s 8 of the Companies Act, 2013 in response to the Financial Stability and Development Council – Sub Committee (FSDC-SCdirectives.)'s Under the aegis of the National Strategy for Financial Education for creating financial awareness and empowerment through financial education campaigns across the country in the form of seminars, workshops, conclaves, trainings, programmes, and campaigns, the NCFE continued to focus on promoting financial education across India for all sections of the population.

Financial literacy Camps: Financial literacy is critical for the Reserve Bank's financial inclusion policies to be effective. Various new endeavors have been sent off in this methodology.

Conclusion:

In order to reach out to them around 72,315 villages, with a population of over 2000 (as per the 2001 census), that are yet unbanked and which need to be brought under the banking net, it is a foregone conclusion that the solution lies in making effective and creative use of technology. The time is now to put mobile phone technology into action. India is the world's fastest-growing mobile market with more than 670 million customers. Many of these users are in remote parts of the country where banks and even microfinance institutions do not reach. Harnessing the power of mobile phones to make payments and disburse loans instead of risky, labor-intensive manual collection could help transform the lives of millions more needy Indians. Further, it is also an opportunity for the banks to serve the customer, who has a low amount of savings or transactions. At brick and mortar branch, it is not economical.

Mobile phone with their wider reach depth and low cost would definitely play a very big role in financial inclusion process provided there is a regulatory framework that can allow safe and secure transaction. There is also need to devise clear guidelines for banks, mobile operators and end-users. Banks that are experimenting with mobile technology for the first time should proceed with caution. The most important decision that banks must make is which channel they will use to support their services. It's also crucial to recognise that technology is only one component. If technology is aligned with business models, probably dividend would be far better. Last but not the least, mobile technology can accelerate financial inclusion in India only when the policymakers have a clear vision about the challenges and opportunities posed by mobile technology and what they want to achieve.

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