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The Role of Innovative Financial Inclusion Technologies in Economic Development of India

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ABSTRACT

Financial Inclusion is the universal access to the financial service by every person of the society at an affordable price. Covid 19 pandemic imposed social distancing and lockdown all over the world, then digital payment become the lifeline of many people. Indian government initiated various measures to encourage financial inclusion in country since 2000 but this process took speed in 2015 when Pradhan Mantri Jan Dhan Yojana was launched, its main objective was to provide financial services to wide areas at an affordable price and its first step was to provide adults with a bank account which plays the key role in boosting financial inclusion in India. After demonetization many schemes and new technologies came into existence to make financial service safe and easy, some of them are Unified Payment Interface (UPI), Aadhar Enabled Payment System (AEPS), mobile wallet or E-Wallets like Google pay, Jio pay, BHIM app etc. Increase in the use of mobile phone, availability of speedy internet boosts the use of these technologies. Though there is the lack of financial literacy among most of the Indians but Indian government is taking many initiatives like Vittiya Saksharta Abhiyan (VISAKA), Pradhan Mantri Jan Dhan yojana, Mudra bank yojana etc. to enhance financial literacy. The aim of this paper is to discuss what are the innovative e-services available for financial inclusion, how these technologies and mobile apps are helping India to reach the unserved population and leading to economic development in India.

KEY WORDS: Financial Inclusion, Financial Literacy, Innovative Technologies, Economic Development, India

INTRODUCTION

Banking and financial services are essential for the growth and development of an economy. Thus, financial inclusion plays a key role in the development of Indian economy. Financial inclusion is defined as "the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups, such as weaker sections, and low-income groups at an affordable cost" (Rangarajan Committee, Jan 2008) as the definition suggests financial inclusion is the availability of easy and affordable financial services to all the section of the society. There are many financial institutions which provide different innovative financial services to upper and middle class of people but when it comes to poor people they are not much interested because poor people cannot save and invest much. This Financial exclusion will lead to social exclusion of low-income groups. In India nearby 228.9 million people are living in poverty hence upliftment of this section of the society is needed to achieve the complete economic development of India. In order to achieve this easy and affordable financial service and product are necessary. Banks and government should work hands in hand for promoting financial inclusion and financial literacy in India. Government of India has launched many schemes like Vittiya Saksharta Abhiyan (VISAKA), Pradhan Mantri Jan Dhan Yojana, Mudra bank Yojana etc to promote financial inclusion in India. However, the lack of financial literacy, awareness and infrastructure are the major obstacle before financial inclusion, to overcome this many innovative and easy to use technology-based e-services like mobile wallets, mobile banking, ATM, internet banking

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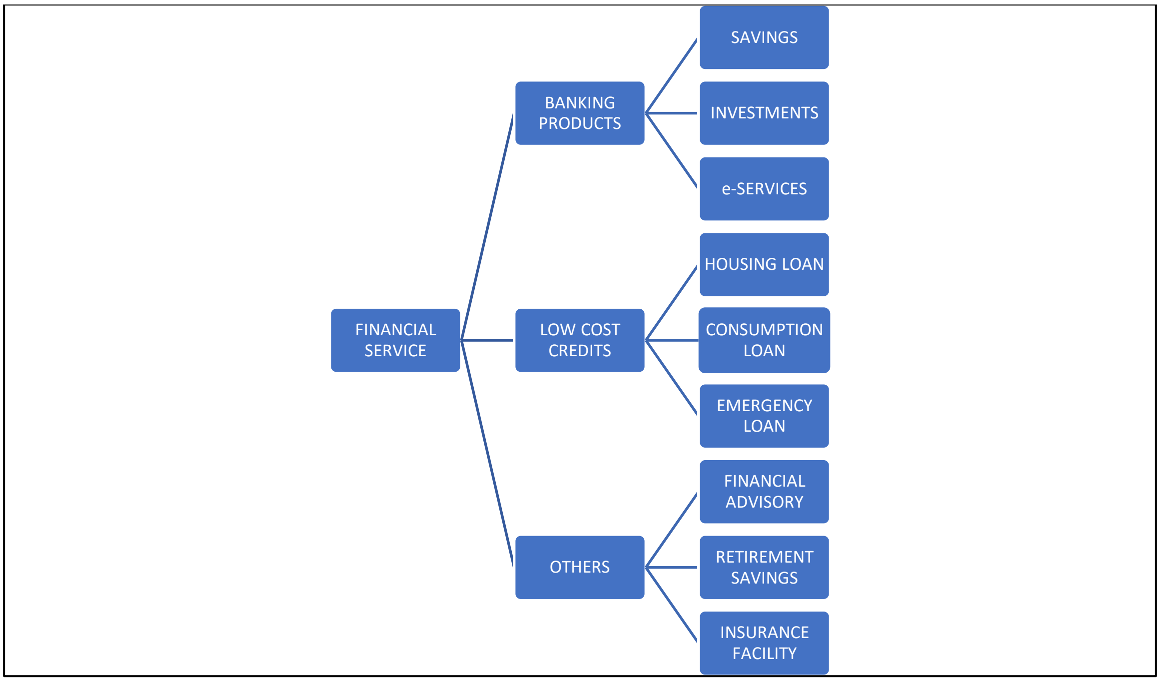
etc are being used by the banks and financial institutions. These cashless digital enabled technologies will bring transparency in the country, it will reduce corruption and will help in achieving sustainable development goals.

Conceptual framework

Financial inclusion is "the process of promoting affordable, timely and adequate access to a wide range of regulated financial products and services and broadening their use by all segments of society through the implementation of tailored existing and innovative approaches including financial awareness and education with a view to promote financial well-being as well as economic and social inclusion" (Atkinson and messy, 2013). Or Financial Inclusion, is the "universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products" (The Committee on Financial Sector Reforms, Chairman: Dr. Raghuram G. Rajan). From the above definitions it is clear that the scope of financial Inclusion has wide coverage, it not only limited to products and services of banks like savings, investments, e-bankings but it also covers low-cost credit facilities, financial advisory, insurance facilities etc

Figure-1 Financial Services



Source- A Hundred Small Steps- Report of the Committee on Financial Sector Reform (Chairmen Dr. RaghuramRajan)

Financial literacy- Financial stability in the country can be achieved by promoting financial inclusion and financial inclusion is possible by educating people about financial services available in the market and teaching how to use them. Thus, financial literacy is an important element of financial inclusion. It can be defined as the knowledge or understanding of finance i.e., investments, borrowing, savings, personal finance etc and the ability of using that knowledge to meet one's essential financial needs.

Literature Review-

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Dwivedi et al., 2022 investigated the various available technology based financial service and their role in boosting financial inclusion in India. Also analysed in depth the government policies for promoting financial inclusion and financial literacy in unserved or underserved area of India. At the end concluded that for economic development and growth of the country technology-based e-service and financial literacy can play major role, government should motivate citizen to go cashless.

Bhuvana & S.Vasantha, 2016 discuss demand side and supply side drivers of financial inclusion in rural area like financial literacy, technology, high cost, income, risk, policies and regulation etc. Innovative delivery channels like micro finance institutions, self-help groups bank linkage program and business correspondence models were also discussed in this paper to find out the factors which derives financial inclusion. It was suggested that in rural areas awareness should be created by bank officials about the e-services and products provided by banks and how to utilize them.

Joseph & Varghese, 2014 analysed the effect of financial inclusion on the economic growth and development of India. He evaluated the initiatives of government, banks and RBI taken to promote financial inclusion in India. Also analysed five state bank groups and five private banks in the term of branches, use of debit and credit card, offsite and on-site ATM use and found that the use of debit card has been increased. He concluded that financial inclusion plays vital role in development and growth of Indian economy.

Prasad et al., 2018 examined the digital financial literacy among the people of Udaipur. Further investigated how personal characteristics impact digital financial literacy. For analysing took 268 household sample from Udaipur city of Rajasthan. It was concluded that government should run awareness campaign to encourage people to go cash less and use digital e-services. And government should also work towards reducing financial gender gap.

Pandey et al., 2022 investigated the impact of drivers of financial inclusion, financial literacy and financial initiatives on sustainable growth of northern region of India by using PLS-SEM model. It was found out that drivers of financial inclusion like usage, digitalization and Fintech have direct impact on sustainable growth and derivers of financial literacy have indirect impact whereas financial initiatives have positive impact on sustainable growth of north Indian region.

Ghosh & Hom Chaudhury, 2019 investigated the presence of gender gap in financial inclusion in India. Used global FINDEX database and fairlie decomposition technique and found out that the gender gap in socio-economic status is responsible for gender gap in financial inclusion in India. At end concluded that education and employment among women can fill this gap.

OBJECTIVES OF THE STUDY

1. To discuss the role of financial inclusion in economic development of India and what are the obstacles coming in its way.
2. To study the various derivers of financial inclusion.
3. To highlight the innovative e-services technologies available in India to reach out rural areas.

The Role of financial Inclusion in economic development

After demonetisation financial inclusion became the buzzword in academic and policy circle due to its ability to bring equitable and faster economic growth and development in country. Following are the roles played by financial inclusion:

1. Financial inclusion promotes financial literacy which educate the people how to channelize their incomes to buy productive resources and guide how to avoid unreliable and expensive financial services.
2. It mobilizes savings through productive investment which ultimately will leads to economic growth

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3. The banking sectors and financial institutions are improving the accessibility of capital formation and also encouraging investments, savings and innovations through its products and services which leads to growth and development in country (internationalbanker, 2021)
4. Enhance earning potential of rural population hence reducing income inequalities.
5. Help Reducing poverty.
6. Financial inclusion encourages people to save, borrow, invest in education and ventures etc thus help rising standard of living.
7. Women, rural population and low-income groups are most likely to be benefited from financial inclusion.

CHALLENGES FOR FINANCIAL INCLUSION

1. **Financial literacy-** In India majority of the population specially women and rural people are unable to understand financial terms, product offerings and conditions of financial services provided by banks due to illiteracy or less education. financial literacy is necessary for the success of financial inclusion in India. For this government and banks should work hand in hand.
2. **Poverty and Low earnings –** In India 228.9 million people are living in poverty. Most of them have little or no saving thus they cannot afford financial products. As they don't have savings they cannot invest in the markets. As per the World bank Global FINDEX report in India only 7.86% of poor people use mobile money account and 12.28% of poor people make digital payment. Nearby 35.11% of accounts of poor people remain inactive. Hence, we can say that poverty or low earning is a big obstacle before financial inclusion.

Table- 01 Financial Inclusion report by income in India

S.No	Variables	Year-2021	
		Rich	Poor
1.	Account	77.05	78.25
2.	Inactive account	12.28	35.11
3.	Made digital payment	32.94	12.28
4.	Owns Debit card	34.76	15.51
5.	Owns Credit Card	6.15	2.34
6.	Using a mobile money account	18.23	7.86

Source: Global FINDEX database 2021

3. **Non-Performing Assets**- The rising level of Non-Performing Assets (NPAs) of banks due to the large corporates makes it difficult to improve financial inclusion situation in India.
4. **Insecurity:** The insecurity that continues to challenge the country hinders the expansion of financial institutions' footprints to specific areas and contributes to the closures of existing banks, thus limiting access to the financial system for those living in areas with elevated insecurity challenges.
5. **Digital Exclusions:** unfamiliarity with the technology, innumeracy, digital illiteracy, expensive gadgets etc hinder the use of e-services
6. **Financial Gender Gap-**The world bank Global FINDEX report 2021 highlighted (as given in Table 2) that when it comes to the use of digital financial service in India only 5.98% women are using phone or internet to pay bills

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where as in case of men it's 13.5%. Same is case of the use of Bank accounts, as compared to men inactive accounts of females are more i.e., male 22.89% and female 32.32%.

Table 02 Financial Inclusion by Genders in India

SNO.	VARIABLES	2021	
		MALE	FEMALE
O1	Accounts at financial institution	77.15	77.47
02	Borrowings from financial institution	13.27	10.19
03	Savings at financial institution	13.48	11.97
04	Inactive account	22.89	32.32
05	Owns a Credit Card	6.72	3.38
06	Owns a Debit Card	34.52	19.08
07	Use of mobile phone or internet to pay bills	13.5	5.98

Source: Global FINDEX database 2021

DRIVERS OF FINANCIAL INCLUSION

As per World Bank's Global FINDEX report 2021 in India 77.53% adults have a bank accounts. The Financial excluded people are mostly low income and poor people. The expectation of financial excluded people from financial system are easy access of credits, less transaction cost, safety, security of deposits etc.

Factors Responsible for boosting Financial Inclusion in India are-

1. **Digitalization and Financial Technology-** Covid19 boost the use of financial e-services. Mobile phones, internet connectivity etc has become affordable. Innovative technologies like e-wallet, UPI, NEFT, biometric ID system, online banking etc are making the use of e-services easy.
2. **Financial literacy-** Financial literacy can be defined as the knowledge or understanding of finance i.e., investments, borrowing, savings, personal finance etc and the ability of using that knowledge to meet one's essential financial needs. A financially literate person is well versed in handling money and planning their budget.
3. **Policy and regulation-** For promoting financial inclusion government of India has launched many schemes like for financial literacy Vittiya Saksharta Abhiyan (VISAKA) was launched, Pradhan Mantri Jan Dhan Yojana, Mudra bank Yojana etc. Under the Basel III norms RBI took many initiatives along with increasing regulation and supervision, it stressed on opening of branches of bank in unbanked-rural areas, gave permission of using business correspondent (agent) to expand its outreach and provide some banking facilities at low cost where they can't reach, relaxing KYC norms i.e. simplifying the opening of account process by self-certification and using only one Aadhaar card as ID proof, opening of account with zero balance or low balance etc.
4. **Open Ecosystem-** COVID-19 pandemic - social distancing forced people to go digital. Collaborative approach of Government and commercial sectors help broadening the digital ecosystem.

INNOVATIVE FINANCIAL INCLUSION TECHNOLOGIES IN INDIA

Financial service can be provided by traditional method or by technological based e-service. Technology based financial service provided by banks are: debit card, credit card, ATM card, electronic fund transfer, mobile banking, tele banking, internet banking etc.

1.Online Banking-

Online banking is also known as e-banking, digital banking and virtual banking. In India all banks provide wide range of e-service to their customers like online payment, money transfer between accounts, account balance information, bank

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statements, apps for e-banking etc. Financial literacy, infrastructure and internet connectivity is needed to use these facilities but low-income group of people specially people in rural areas are facing problem in using these services.

2. Debit/Credit card-

Under this method the card is swiped in a machine and a confidential pin is entered into it and the payment is done. The amount deducted from an account is updated and sent on message on mobile. This method is mostly prevalent in Urban areas. In India only 15.51% of poor people have debit card as compared to rich which is 34.76.

3. Mobile Wallet-

Mobile wallet is an app which is used to make payments electronically. In India many mobile wallets are available like Google Pay, PAYTM, Airtel money, PayUMoney, Jio money, Amazon Pay etc. As per the report of FIS 2021 45.4% of e-commerce payment are done through digital wallets in India.

4. ATM-

"Automated teller machine (ATM) is an electronic telecommunications device that enables customers of financial institutions to perform financial transactions, such as cash withdrawals, deposits, funds transfers, balance inquiries or account information inquiries, at any time and without the need for direct interaction with bank" (Wikipedia).

5.InterBank mobile payment system-

Interbank mobile payment system facilitates interbank electronic funds transfer through mobile service available 24X7.

6. Unified payments Interface (UPI)-

"UPI is an instant real-time payment system which facilitates interbank peer to peer and person to merchant transactions using mobile phone". (Wikipedia)

7. UDAI Aadhar system-

It is a biometric ID system. Finger print and Irish recognition techniques are used to identify 1000 million people of India. GOI is using this for issuing financial schemes to poor citizen of India. Thus, contributing towards Financial Inclusion.

CONCLUSION

Demonetization and COVID19 forced people to go cashless and adopt digital technologies. Innovative technologies help reach remote areas, promote financial inclusion and solved cash crunch situation in country. COVID19 pandemic led social distancing boost the use of e-financial services. Digital financial services took peak when it is made easy and affordable by innovative technologies. Financial illiteracy, unawareness and lack of infrastructure are the major obstacle before financial inclusion, technology-based innovative e-services can be used to overcome these obstacles. No technology is useful until people are able to adopt and use it. Financial institutions, banks and Government of India should run awareness program specially for illiterates, weaker section, low-income group and for the people living in rural areas. The RBI should promote safe, efficient, inclusive, accessible, interoperable and robust payment systems (Dwivedi et al., 2022). To achieve financial stability in country financial inclusion is needed and to achieve financial inclusion financial literacy is necessary. Hence awareness program and motivation can act as a driver of financial inclusion which will help in economic development in India.

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