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Digital Financial Inclusion and Inclusive Development of India

Dr. Susanta Mondal
Assistant Professor in Economics
Bolpur College, Bolpur, India

Abstract:- An efficient financial system is a prerequisite for a country's socio-economic development. It acts as a building block for the mobilization of savings and allocating them to the productive resources. Realizing the role of financial inclusion as an enabler of inclusive growth, the Government of India along with Reserve Bank of India have taken a number of policy initiatives to include the large unbanked masses into the financial mainstreams. Recent development in communication technology can be used in a very efficient manner for bringing the financially excluded people under the ambit of digital financial inclusion in a cost-effective manner. Digital financial services have a great capacity to support financial inclusion for inclusive economic development.

Keywords:- *Financial Inclusion, Digitization, Mobile Banking, Inclusive development.*

I. INTRODUCTION

The financial sector of any country plays a pivotal role in its economic growth and development. Financial capability is a key factor to stability and functioning of financial markets. An inclusive financial sector ensures availability, ease of access and usage of basic financial resources to all of its citizens. For effectively use of these financial resources, financial literacy lies in the frontline. Financial literacy may be defined as a combination of a person's awareness, knowledge, attitude, skill and behavior necessary to make informed and effective decision in managing their personal financial matters. Financial knowledge is regarded as a form of investment in human capital that ensures smoothen consumption over time. In their model of intertemporal Consumer's choice, Jappelli and Padula (2011) incorporated financial literacy as a determining factor where the objective of the individual is to maximize lifetime utility against intertemporal budget constraint. As a means of financial literacy, Digital Financial Literacy (DFL) is appearing to be an important aspect of the present digital world. It is defined as a process of acquiring knowledge, skills and enlarging necessary habits for effective use of digital services to financial transaction. This habit develops through an interaction of an individual's own literacy level and his ability to use digital devices or technology.

Financial knowledge stimulates a wide range of financial behavior such as opening of bank account, having insurance policy, business literacy, retirement planning, borrowing habits and investment planning. On the other hand poor financial literacy leads to sub-optimal decision making in borrowing decision, stock market participation, and indebtedness. Expanding digital literacy is a key factor to Governments in assisting economic and social inclusion by promoting civic engagement, improving public safety and increasing access to public-sector services. At the same time it is also beneficial for the businesses in establishing a successful cloud-enabled organization that stimulates the creation of any innovation-driven industry.

II. LITERATURE REVIEW

Financial literacy is an essential component of financial capabilities which is a combination of understanding, knowledge, attitude, skill and behavioral changes, needed for the sound economic decisions that are appropriate to their social and financial circumstances (World Bank, 2013). In the life cycle hypothesis, financial literacy is regarded as a form of human capital required for managing income between savings and consumption over a consumer's lifetime, to maximize his utility (Modigliani and Brumberg, 1954). Enhanced financial literacy enables individuals and families to have greater control over their money and helps them to take better financial decisions (Subha and Priya, 2014). According to Tomaskova, Mohelska and Nemcova (2011) financial literacy is the perfect way to prevent over-indebtedness of citizens. Poor people have a natural tendency to have less interaction with formal financial institutions and have a preference to informal mechanisms (Matin, Hulme and Rutherford 2002). A study conducted in India by PWC (2011) found that digitally active customers own large product holding. In the developing world, mobile communications are the rapidly growing technology and it has significant socio-economic impact poor communities (Abraham, 2006). Mobile banking as a means of financial inclusion can be used as it is accessible to both low-income and better-off individuals. The internet based mobile-banking apps are being increasingly used by the Indian smart phone users for account and loan statement, fund transfer, insurance and portfolio management, utility bill payments etc. (D'Souza, 2018). Digital transactions can overcome the difficulties of physical access to banks and other financial institutions and is also cost effective. It also reduces human error. Due to the advantage of 'Anywhere Banking', digitization enables a strong reporting system. The cost of mobile banking in India is Rs 1 or less, Rs. 15 to 16 on ATMs, Rs. 2 or less in internet banking, whereas the cost of bank transaction through branch banking is estimated to be between Rs. 70-75 (Forbes India, 2017). The basic objective of spreading the digital services in the developing economies is to

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contribute to poverty reduction and financial inclusion (UN, 2016). A majority of the financially excluded population of these countries own a mobile phone and the arrangement of financial and related services through mobile phones can improve access to finance to them (World Bank, 2016). Hannig and Jansen (2010) pointed out that financial institutions spreading to the vulnerable group tend to survive through macroeconomic crisis and supports sustain local economic activity.

➢ *Objective:*

The objective of the present study is to examine the present status of the digital financial inclusion in India. It also analyses the role of digital financial literacy in boosting inclusive development of India.

III. METHODOLOGY

For the present study descriptive analytical method is adopted. Various reports published by RBI and other financial and non financial institutions have been used as relevant inputs. Besides, research articles from different reputed journals, websites and magazines have been used.

IV. DIGITAL FINANCIAL INCLUSION IN INDIA

➢ *Policy and Regulatory Framework for Digital Financial Inclusion in India*

Despite remarkable economic growth as compared to other developing countries of the world in recent years, a sizeable portion of the Indian population still remains unbanked. According to World Bank (2017) report, India is the second largest country with more than half of its population financially excluded. One of the basic objectives of the present NDA government (started from May 2014) is to use digitally-driven financial inclusion as a means of promoting economic and social development of the nation. The initiation of PMJDY is the first step of this mission with the aim of providing all Indians with a bank account. It provides basic financial services like remittance facility, pension and insurance benefit to the disadvantaged section of the society by incorporating technology. It has linked with other two initiatives of the government- Digital India and Aadhaar. While the former aims at rapid expansion of the use of mobile phones and internets, the latter provides a unique digital ID for every citizen. Aadhaar card makes it simple to identify the actual beneficiaries and to transfer the money to their account. The triangle formed by PMJDY, Aadhaar and Mobile for enhancing digital financial literacy was called J-A-M trinity. The government hopes that with J-A-M trinity it would be able to reduce leakages through intermediaries, corruption and inefficiencies that eat a large part of government subsidies.

Besides, Indian Government and Reserve Bank of India (RBI) have introduced several schemes for enhancing digital financial literacy of the people. For example, the Ministry of Electronics and IT initiated the Digital Saksharta Abhiyan (DISHA) to provide digital financial literacy training and access to such instruments by one crore rural citizens. Again, Ministry of Human resource has launched the Vittiya Saksharta Abhiyan (VISAKA) for the training of more than one lakh students of higher educational institutions (Prasad and Meghwal, 2017). During training, they would be trained about the opening of bank account, linking mobile number and Aadhaar card number to bank account, mobile wallet, Unified Payments Surface (UPI) based transaction etc.

➢ *Initiative taken by India Government:*

With the opening of the Indian economy in 1991-92, the adoption of computerization was accelerated. To remain competitive in the globalised era, several Indian commercial banks started to offer digital customer services. Banks also get benefitted from the adoption of new technologies. Operational costs of the banks have reduced to a great extent with the introduction of e-banking facilities. India is now approaching towards the second phase of financial sector reforms. With increased integration of the Indian economy with the world economy, the risk associated with world economy would also have greater impact on Indian economy. The government is contracting its net of social security schemes even from the organized sector. In the absence of such schemes, the instability in the financial position of the general citizens would increase. So for financial well being of Indian citizens, the improvement of financial literacy is very important. Although citizens are capable of using technology, they are incompetent to use it effectively, particularly when it comes to the financial operations. In order to make the Indian economy a cashless digital economy and to eradicate black money, Indian Government adopted demonetization policy in 2016. Demonetization promoted increased use of web and app based e-wallet platforms. Though digital access to bank account has increased after demonetization, people still rely on the use of money as their preferred mode of financial transaction. This is due to the lower level of digital financial literacy of the common people.

India's journey in the digital financial service path can be characterized as a two-phase growth process. The first phase include the period up to august, 2016, the period of demonetization and the second phase covers the period after demonetization. In the first phase digital financial transaction volume grew steadily by 2 per cent per month (starting from early 2014) (USAID, 2019). At the initial stage of the second phase, transaction through pre-paid instruments (PPIs) and debit cards started to grow rapidly with the introduction of different digital wallets and bank debit cards. Soon this place is captured by Unified Payment Interface (UPI) and NPCI's (National Payments Council of India) digital payments platform.

In 2014 Indian Government introduced Pradhan Mantri Jan-Dhan Yojona (PMJDY) for the financial inclusion of the unprivileged section of the society. It is a bank-led financial inclusion that aimed at to have a bank account to all adult Indian citizens. Until March, 4, 2020 there are 38.22 crore bank accounts that are largely with large public sector banks with a total deposit of Rs. 117015.5 crore (PMJDY website). Though some controversy exists regarding the actual figure in terms of new account opening and account dormancy, nevertheless it has been able to lift the accessibility barrier for the majority of the population who were previously financially excluded. PMJDY has now linked with Direct Benefit Transfers (DBT) and Government-to-person (G2P) payments to provide direct benefit of government schemes to actual beneficiaries. So the new challenge to the government is to move from the 'access' stage to 'active usage' stage of financial inclusion. In order to promote digital transaction in PMJDY accounts, customers were issued RuPay debit cards for cashless transactions. So far 29.20 crore RuPay debit cards have been issued to the beneficiaries.

➢ *Digital Financial transaction in India: Current State, Future Goals and Challenges*

Over the past few years, the issuance of debit and credit cards by the scheduled commercial banks in India has grown rapidly. Debit cards issued by commercial banks in India has grown at a CAGR (Compounded annual growth rate) of 14 % from 55.4 in 2014 crore to 92.4 crore in 2019. In the same period credit cards has grown at a CAGR of 22% from 2.1 crore in 2014 to 4.7 crore in 2019.

	Debit Cards			Credit Cards		
Year	Number	Growth	CAGR	Number	Growth	CAGR
2014-15	554	67%	14%	21	123%	22%
2018-19	924			47		

Table 1:- Issuance of Debit and Credit Cards by scheduled Commercial Banks (in Millions)
Source: RBI

India's mission to a cashless economy is gaining momentum with a remarkable growth in digital transaction over the past few years. Undoubtedly, the adoption of UPI and other digital innovations are making banking and payments very factual for the customers. According to RBI reports, total digital transaction in volume terms recorded a growth rate of 25.7 per cent in 2018-19 as compared to 2017-18. Total volume of digital transaction has increased from 8.56 million Rs. to 24.13 million. The report also points out that UPI transaction volume reached a peak of 799.5 million in March, 2019 which is 405 times the volume in March 2018 (Fig. 1).

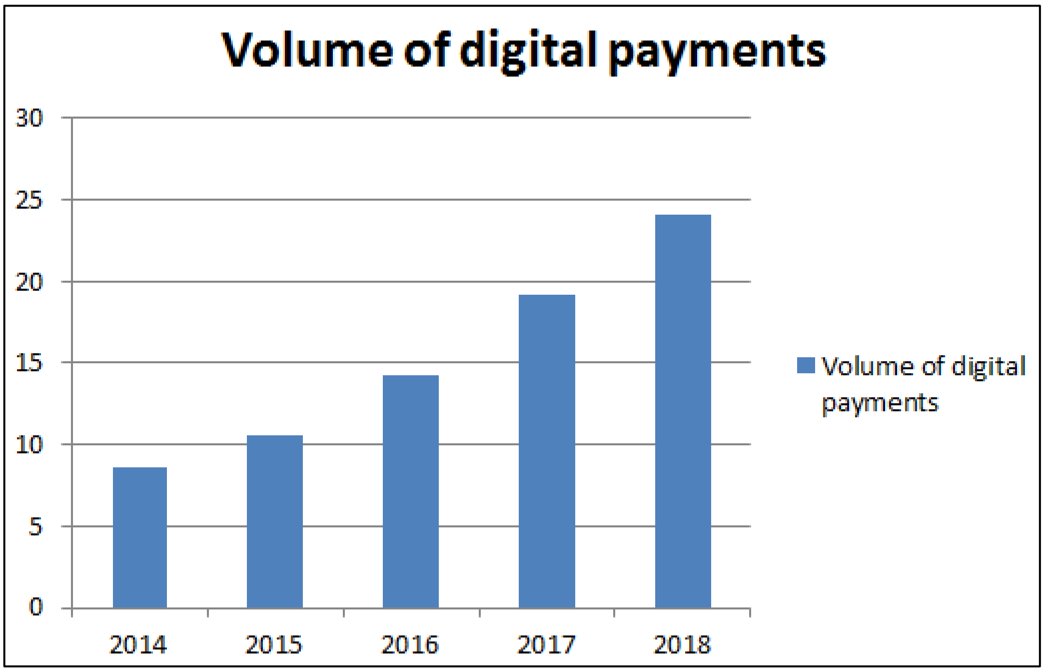

Fig 1:- Year wise volume (in million Rs.) of digital payments in India
Source: RBI

An important determinant for the measurement of digital transactions in the country is the digital transaction per capita which is measured by the formula:

Yearly per capita transaction =12 × (total volume of digital transaction in one month)/population.

Over the past six years per capita digital transaction in India has shown significant growth – from 2.4 in Mar.2014 to 22.42 in March 2019. According to the estimate of RBI high level committee on deepening of digital payments, the figure can reach 220 by March 2021 i.e. a 10 fold increase in 3 years (RBI, 2019). (Fig. 2)

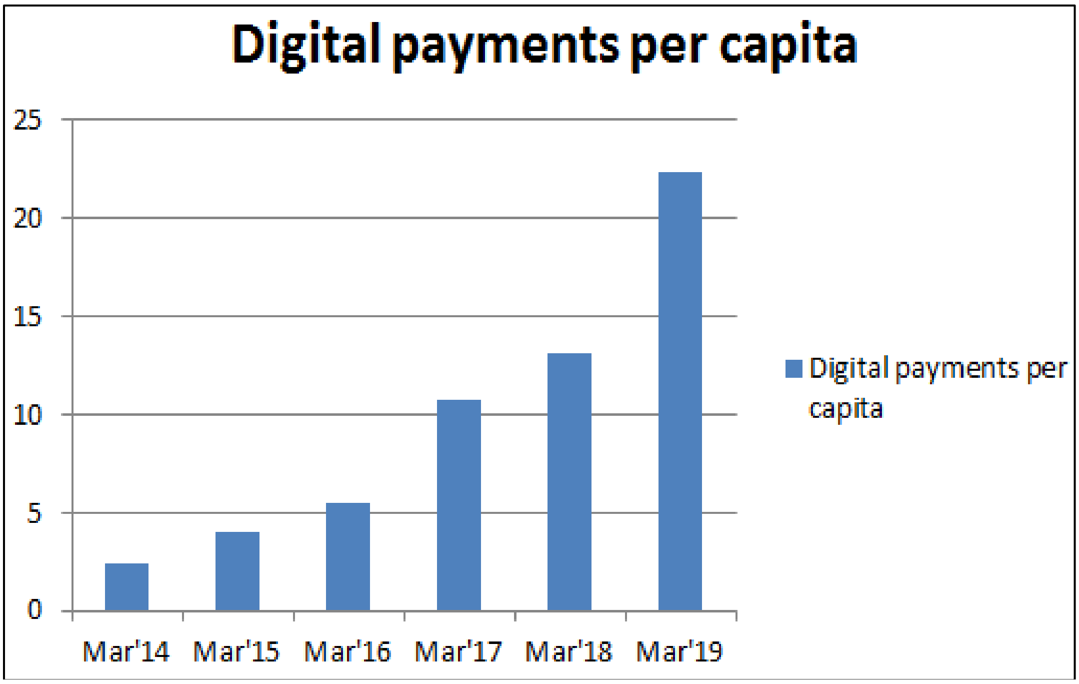

Fig 2:- Digital payments per capita. Source: RBI data

India's digital payment's transaction value is expected to grow at 135.2 billion US$ in 2023 as against 64.8 billion US$ in 2019 i.e. it is expected to grow at a CAGR of 20.2 % over the period as against 8.6% in USA and 18.5 % in China (Fig. 3). In terms of market share of worldwide transaction value of digital payments India's share is expected to grow from 1.56 % to 2.02 % during the same period (Fig. 4).

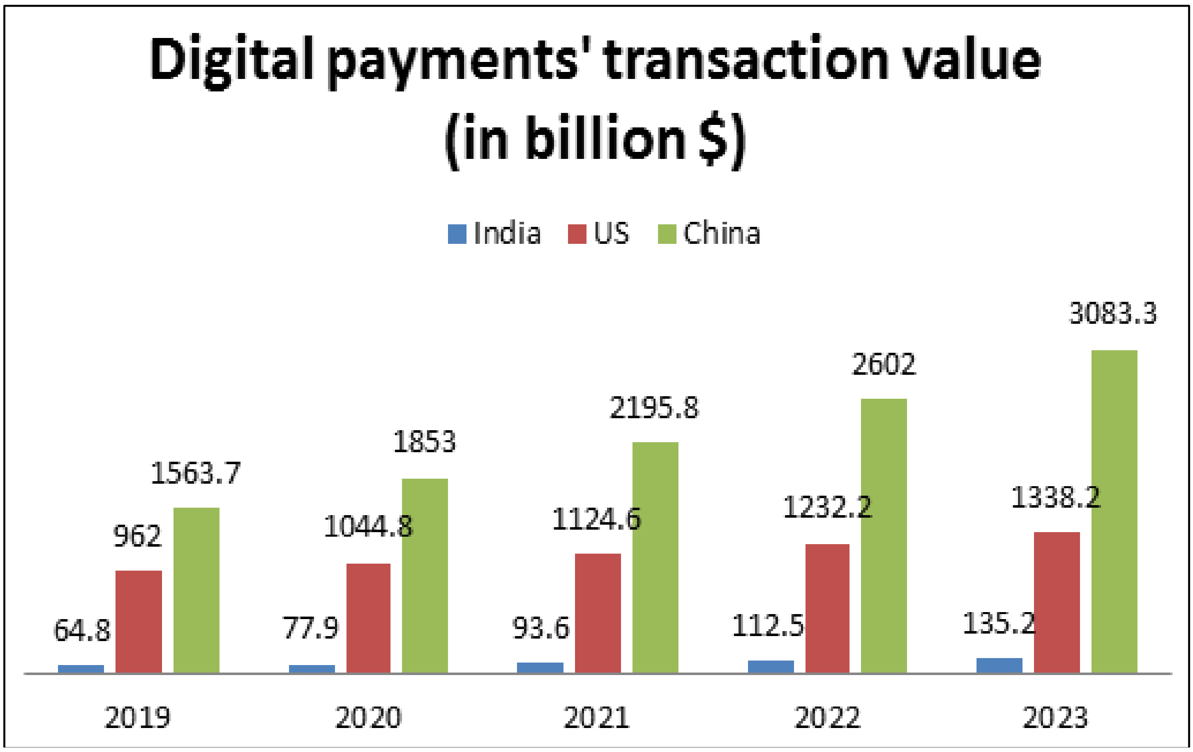

Fig 3:- Digital payments' transaction value of different countries from 2019–2023
Source: Statista, 2019

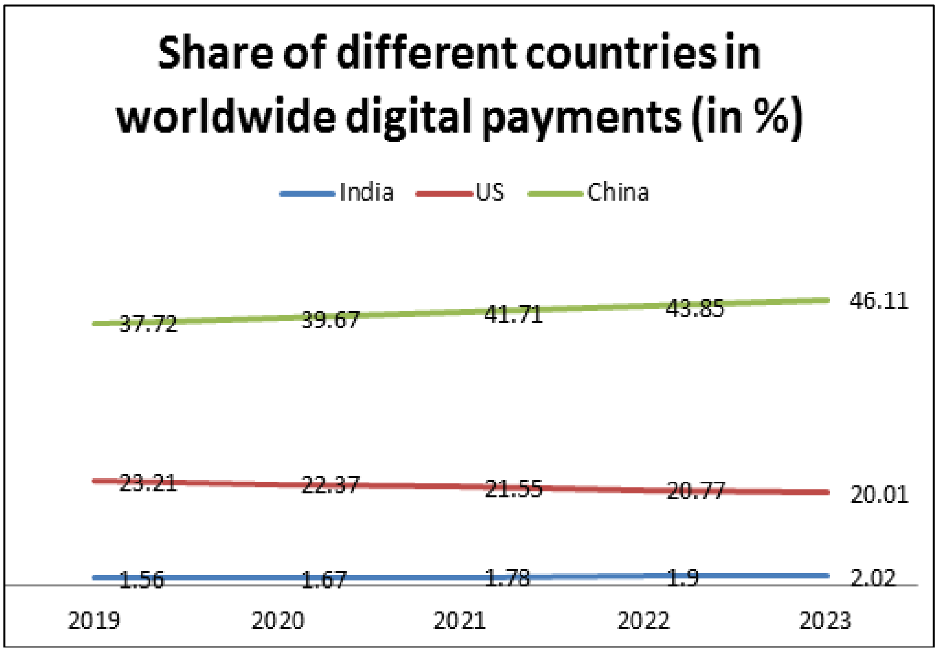

Fig 4:- India's share in worldwide digital payments; Source: Statista, 2019

Note: Above chart only includes digital payments via online processed payment transactions, POS payments via smart phones, and digital consumer commerce

One of the biggest challenges in online banking in India is the preference to traditional banking method by older generation and rural people. The fear of online fraud is a great barrier to the usage of e-banking. Lack of adequate knowledge among common people regarding the use of e-banking facilities is a major constraint. Bank employees should also be trained on changing trends in IT to deal with the innovative and changing technology. There is also the threat of external risks like hacking, sniffing and spoofing. Besides, introduction of Artificial Intelligence (AI) is also a great challenge to the Indian banking system.

➢ *Interrelationship between digital financial inclusion and inclusive development:*

Financial inclusion affects the level of economic development both from demand and supply side. The demand side factors are i) illiteracy; ii) poverty; iii) uncertainty of job that reduces the ability to save and allocation of fund for credit and insurance while the supply side factors include i) cost associated with maintaining the bank account; ii) slow growth of bank branches and ATMs and iii) lengthy and tedious process of banking operations (D'Souza, 2018). Financial inclusion enables low-earning individuals to become financially independent, achieving economic stability and to alleviate poverty. Unexpected extremity and long term financial goals should not thrust them into debt. The use of digital technologies in the form of mobile phones, internet and other tools have spread rapidly throughout the world for colleting, analyzing and sharing information digitally. In a developing country like India more people have access to mobile phone than have access to clean water or medical facilities. As more than 50 per cent unbanked and 66 per cent dormant account holders of India have a mobile phone, digital financial inclusion can overcome the constraints of limited bank branches and the Business Correspondent (BC) model (Demirguc-Kunt, Klapper, Singer, Ansar, and Hess 2018). Rapid expansion of mobile networks in the developing countries has opened new avenues to fulfill the financial service needs of the poor, particularly to the unbanked masses. Mobile communications have the potential to become the low cost channel for delivering financial information including micro-payments, regular savings and micro-credit (Claessens, Glaessner and Klingebiel 2002). Digital financial services have expanded the information base of the customers and lowered the information costs (World Bank, 2016). Digital financial inclusion brings great opportunities to consumers, businesses and to the government.

Consumers: It provides convenient, affordable and secure banking services to the unprivileged section of the society in the developing countries, as half of the total population of these countries own a mobile phone (World Bank, 2014). Increased financial services bring job opportunity and generate consumer surplus.

Businesses: Digital financial transaction helps the financial institutions to reduce the operational costs by minimising manual paper works and documentations, to maintain fewer bank branches and reduced queuing lines in the branches (IFC, 2017). As the depositors can switch banks within moments in response to inferior services, it forces the banks to provide quality services which indirectly enhance their efficiency. As the marginal cost of offering financial services is very small, increasing returns to scale operates which stimulates new business models.

Government: Increased use of digital financial services helps the government to reduce the volume of physical cash in circulation and acts as an effective tool for curbing high inflation levels (GPFI, 2016). It increases government capability by providing public services more easily. Digital G2P (Government to person) payments can improve the efficiency of payments by lowering the cost of distribution and receiving them and by increasing the speed of payment. It also increases the transparency of payments and reduces the leakage between the sender and receiver. Moreover, it increases the security of payments and reduces the possibility of associated crime. By enhancing the security of payments and greater control over the fund received, digital payments can play an important role in women's economic empowerment (Klapper and singer, 2017).

V. CONCLUSION AND RECOMMENDATIONS

Digital transaction in financial operations is going to be the most preferred form of transaction in the coming years. But the benefit of digital financial inclusion has not been shared equally by all. Within country much improvement should be made to bridge the gap of accessing and functioning of technological innovations for digital transactions. Mere extension of digital services and bank accounts cannot fully break the systematic constraints faced by disadvantaged group. To become more effective in upholding human development and poverty alleviation, digital financial literacy programmes should be organised in holistic ways that captures the inter-connected needs of the marginalized classes. It should be combined with other complementary tools that make digital financial literacy a fundamental component of education at all levels. The availability of online services to the unprivileged section of the community may be an instrumental in this mission. The private and nonprofit organizations can also play a crucial role by providing training for improving the digital literacy skill of the common citizens of all ages.

REFERENCES

[1]. Abraham, R. (2007): Mobile phones and economic development: Evidence from the fishing industry in India, *Information Technologies and International Development*, 4(1), pp.5-17.

[2]. Claessens, S., Glaessner, T. & Klingebiel, D. (2002): Electronic finance: a new approach to financial sector development, World Bank Discussion Paper No.431, The World Bank, Washington, D.C.

[3]. D'Souza, R. (2018): Examining mobile banking as a tool for financial inclusion in India, ORF Issue Brief, Oct. 2018.

[4]. Demirguc-Kunt,A., Klapper,L., Singer,D., Ansar,S. and Hess,J. (2018): Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution, Washington, DC: World Bank.

[5]. Forbes India (2017): Digital revolution in the Indian banking sector, August 12, 2017.

[6]. GPFI (2016): G20 High-Level Principles for Digital Financial Inclusion. Available at: https://www.gpfi.org/sites/default/files/G20%20High%20Level%20Principles%20for%20Digital%20Financial%20Inclusion.pdf.

[7]. Hannig, A., & Jansen, S. (2010). Financial inclusion and financial stability: Current policy issues, ADBI working paper 259, Tokyo, Asian Development Bank.

[8]. IFC (2017): Digital Financial Services: Challenges and Opportunities for Emerging Market Banks, EM Compass Report, No 42, August. International Finance Corporation, World Bank.

[9]. Jappelli, T. and M. Padula (2011) Investment in financial literacy, Centre for Studies in Economics and Finance, Working Paper No. 272.

[10]. Klapper, L. and Singer, D. (2017): The Opportunities and Challenges of Digitizing Government-to-Person Payments, *The World Bank Research Observer*, 32 (2), pp. 211-226.

[11]. Matin, I., Hulme, D. & Rutherford, S. (2002) Finance for the poor: from microcredit to microfinancial services, *Journal of International Development*, 14, pp. 273-294.

[12]. Modigliani, F. and R. Brumberg (1954): Utility analysis and the consumption function: An interpretation of cross-section data. Franco Modigliani, 1.

[13]. PMJDY (2020): https://www.pmjdy.gov.in/files/E-Documents/Continuation_of_PMJDY.pdf

[14]. Prasad, H. and Meghwal, D. (2017): Digital Financial Literacy: A Study of Household of Udaipur, *Global Journal of Advanced Research*, 4(5), pp. 201-209.

[15]. PWC (2011): The new Digital Tipping Point, www.pwc.com/digitaltippingpoint.

[16]. Statista (2019): Digital payments worldwide outlook. Retrieved from https://www.statista.com/outlook/296/100/digital-payments/worldwide.

[17]. Subha, D. V., & Priya, P. S. (2014, February): A Study on The Factors Determining Financial Literacy of Households. *International Journal of Advanced Information Science and Technology*, 22(22), pp. 15-20.

[18]. Tomaskova, H., Mohelska, H., & Nemcova, Z. (2011): Issues of Financial Literacy Education. *Procedia - Social and Behavioral Sciences*, 28, pp. 365-369.

[19]. United Nations (2016): Digital Financial Inclusion. International Telecommunication Union (ITU), Issue Brief Series, Inter-agency Task Force on Financing for Development, July, United Nations.

[20]. USAID (2019): India Digital Financial Inclusion, Journey Map Report, Mobile Solutions Technical Assistance and Research (mSTAR) project.

[21]. World Bank (2013) Why Financial Capability is important and how surveys can help: Financial Capability Surveys around the World, Washington, DC: The World Bank.

[22]. World Bank (2014) Digital Finance: Empowering the Poor via New Technologies, April 10. Available at: http://www.worldbank.org/en/news/feature/2014/04/10/digital-finance-empowering-poor-new-technologies.

[23]. World Bank (2016): Digital Dividends, Washington, DC, World Bank Group.