
AN ANALYTICAL STUDY ON ASSESSING THE ROLE OF FINTECH TOWARDS ENHANCING FINANCIAL INCLUSION OF WOMEN

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Abstract

Fintech or financial technology refers to the recently emerged new technology-based innovations for successful deliverance of financial products and services to the individuals. Fintech has been considered of utmost importance in improving access, usage & quality dimensions of financial inclusion. Today India's financial market has been flooded with easy technology based financial solutions meant to create digitally empowered societies thereby ensuring inclusive & sustainable economic growth. This research article has been a modest attempt by the researcher to uncover the role of Fintech in improving financial inclusion of women through removal of existing barriers and impediments which act as roadblocks for ensuring their better inclusion into the financial mainstream. The data for the present study is compiled from existing literature, websites of government and non-government agencies, newspapers and articles. The results from this study that Fintech has had far reaching implications for women in terms of ensuring their inclusion into the financial system. However, there are certain constraints which limit women's willingness & ability to avail full benefit of financial offerings which can be addressed through effective government backed support systems.

Keywords – Fintech, Financial inclusion, Financial services, innovations

1. Introduction

The term Fintech is a newly recognized phenomena in the context of financial services sector though the term came to be used way back in the 19th century when it was coined first by a New York banker. However, it gained prominence in the Indian economy since 2008 post the financial crisis when bitcoin, and other cryptocurrencies using Block chain technology were introduced. The increased smartphone penetration, hassle free internet connectivity uninterrupted internet connectivity & increased appetite among consumers and investors for technology driven innovations were the major factors contributing to the success of fin Tech in India. The digital revolution followed by a slew of initiatives meant to improve delivery of financial products & services to customers has brought about a paradigm shift banking and financial services sector. This has facilitated a behavioural change in financial transactions. The emerging economies like India have perceived Fintech to be a pre-emptive role player in terms of leveraging the newly innovation driven digital

technologies for enlarging the spectrum of financial products and services available to the banking customers and users of financial services. The Fintech has been the fore-front of the financial innovation owing to its exemplary benefits in the manner of delivery financial services to the beneficiaries. The past half- decade has revolutionized the Fintech industry owing to the digitalization of Indian economy, National Mission for financial inclusion, Start Up India initiative cashless India, demonetization policy, the hike of initiatives have attracted attention from provided massive impetus to Fintech players, private entities who have joined hands with the government for improving outcome of financial sector industry thereby emerging to become global leaders the enhanced adoption of digitalization regime

2.Meaning of Fintech

The Financial Stability Board (FSB) defines FinTech as “technology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services”.

Fintech firms aim at providing innovative financial products and services to create value based long run relationships with the end users. The term encompasses the deployment of big data analytics, cloud computing internet of things, block chain & Artificial intelligence to provide secured, instant, easily accessible highly customized low cost, easy to use financial products & services to customers. Currently FinTech can be defined as technology enabled financial innovations that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services. Fintech encompasses within its purview services like payment processing, online and mobile banking, online and peer to peer lending, person to person payments, financial software & financial services. It encompasses a paradigm shift in payment mechanisms, lending, investing and banking services towards Digital and App based delivery models. The FinTech era had largely affected banks, several companies and financial aspects of business activities for purpose of ensuring affordability, inclusivity, transparency & accessibility of financial services for all (especially the Underprivileged, Undeserved and Previously Unserved ones). The main idea behind FinTech was to increase the uptake of financial products and services among the left-out section thereby bridging the digital divide and financial inclusion gap. FinTech is rightly referred to as the future of finance because almost all financial activities in the current era are routed through FinTech. Nowadays, the scope of FinTech has widened keeping track of the recent economic developments including multiple of activities such as Online Payments, Digital Lending, Insurance Technology (InsurTech), Wealth Management & Personal Finance Management (RegTech). The Indian FinTech industry is regulated by the Reserve Bank of India (RBI) serving as the Central Bank of the country in close proximity with the FinTech entities like Banks, Non-Bank Financial Companies (NBFCs), Securities & Exchange Board of India, Insurance Regulatory and Development Authority of India, Ministry of Information and Broadcasting and Credit information companies (CIC'S) thereby ensuring better inclusivity to improve financial inclusion outcomes.

Table : Fintech innovations

Category	Innovations
Deposit, Lending and Capitalraising	Crowd funding, peer to peer lending, distributed ledgerdigital currencies
Market Provisioning	Smart contracts, e-aggregators, cloud computing
Payment and Settlement Clearing	Mobile and web-basedpayment, digital currencies, distributed ledger
Investment Management	Robo advice, smart contracts, e-trading
Data Analytics and Risk Management	Big data, artificial intelligence, robotics

Source: Report of the working group on Fin Tech & Digital Banking (2018)

3.Fintech in India

As per the KMPG report, India is moving into a dynamic Fintech ecosystem offering fintech start-ups with platform to expand and grow. The fintech industry revolutionized in India as a result of mixed efforts of technology enablers, regulatory framework & ample business opportunities. Moreover the significant growth drivers behind creation of a sustainable fintech ecosystem were the increased use of smartphones,, high volume of venture capital and institutional investors investments use of artificial intelligence and Machine Learning, a favorable demography comprising of young and tech-savvy population showing trust in Fin techs,, India stack (digital infrastructure) in the form of Application Programming Interface(API'S) like Aadhaar, UPI, Bharat Bill Payment GSTN & massive financial inclusion initiatives giving way to digital financial inclusion. India has the highest Fintech adoption rate of 87% as against 64% of the global world. Moreover, there exists 23 Fintech Unicorns at present. As per latest report of Ernest & Young, the India's fintech market is one of the fastest growing globally which is the culmination of the technological innovations along with effective & efficient policies serving as major growth drivers. With more than 6386 startups, the Indian economy and dominance of investment tech, digital lending & payment companies India is likely to become global giant in the fintech out performing other developed and developing countries of the world.

4.Fintech - As an equalizer for financial inclusion of women

Financial inclusion of women has been the top most priority of the different governments globally. The main idea behind financial inclusion was to wipe out the persistent gender gap, rural –urban gap and inequalities of income and wealth witnessed by Indian masses leading to sluggish economic development and widespread poverty. Financial inclusion is particularly important for gender equality and women's economic empowerment stated the RBI national strategy for financial inclusion. The millennium development goal 3 and sustainable development goal (SDG 5) which is gender equality prioritizes women equal rights to economic resources and assets aims to eliminate violence against women and girls seek to

recognize and value unpaid work and promoted enhanced use of enabling technology.

The introduction of Fintech solutions has given way to a new-phenomena which is digital financial inclusion. But this seems to be a challenge in developing countries like India where gender gap persists. The financial inactiveness of women is reflected by the data released from the global Findex report women are 33 % less likely to own a bank account as compared to their male counterparts. The Fintech has been perceived to be a medium for improving financial inclusion barriers previously faced by women like mobility constraints, poor access to technology, shortage of funds by providing them with avenues for undertaking investment thereby empowering them financially. The main idea behind fintech solutions for financial inclusion of women was to grant women a sense of self-worth, financial independence and substantial decision-making power so that they feel free to and are accorded a status equivalent to men. The digital payments and the lending sphere of fintech have largely empowered women to rise both as leaders and users. The women who were previously remained unrecognized by the banks and financial institutions are easily accessible now via digital payment platforms. Hence the outreach of policies and microfinance through digital means have become easy via fintech solutions. Moreover, this has improved lending opportunities for women by way of loans and credit at subsidized interest rates from a formalized banking institution. Women can avail easy loan facilities and undertake establish their own ventures and enterprises thereby fulfilling their self-employment needs. Thus, fintech with its proposed benefits can serve as a one stop solution for women financial needs & aspirations. Moreover, can help in improving financial inclusion outcomes for women thereby improving their inclusivity into the financial mainstream leading to sustainable empowerment of women thereby contributing to inclusive economic growth.

5.Review of literature

Hadi Esmaeilpour Moghadam & Arezou Karami (2023) Financial inclusion through Fintech and women's financial empowerment analyzed the Global Findex World Bank Report in two group of countries classified by high and low levels of gender discrimination. The results from the research study show that there exists a significant positive relationship in countries with low level of gender discrimination whereas the relationship is insignificant in case of high gender discrimination countries. thus this study shows that gender inequality acts as a barrier to financial independence of women.

EP, Siason (2019) in “Closing the gender gap in Financial Inclusion through Fintech through financial inclusion” in their study discussed the relevance of Fintech services and the gender gap associated with it. The authors in this study tried to bring out the importance of Fintech services in improving the ease of access and usage of financial services. The study's findings are suggestive of the view that appropriate policies should be framed considering gender specific factors for improving financial access for women.

S, Chen et al (2023) in their study “The Fintech gender gap” conducted a novel survey across 28 countries to investigate the gender gap in the usage of Fintech enabled services. The results reveal that only 21% of women use Fintech as against 29% for men in almost all countries. Thus, the gender gap in the usage of Fintech by men and women is widening. However, this econometric analysis reveals that partially due to country specific factors and individual differences and gender differences account for 60% of it. Hence the authors concluded that gender gap acts as a major barrier in fostering financial inclusion with new technologies.

H Baber (2018) in the study, “Is Fintech a solution for financial inclusion & women empowerment?” Utilized the global Findex Report 2017 data to study the relationship between Fintech & financial inclusion of women in 144 countries comparing the high- and low-income country's women. The results from the research study reveal that women belonging to low income countries are more likely to be financial excluded than women belonging to higher income countries. The study offers better understanding of impact of fintech on the inclusion of excluded population which can act as a solution for poverty and women empowerment.

HY, Mohamed et al (2021) in “Fintech in Bahrain: The role of Fintech in empowering women” explored in detail the Fintech history and its stages of evolution presenting its different concepts and categories. This research study has been conducted with the help of review of literatures and interviews. The study focused on implementation of Fintech in Bahrain region, role of women within the Fintech industry and the initiatives taken to empower women. Based on the analysis, the author's suggested a future research framework to address women Fintech issues more appropriately.

P, Khera (2021), “Women in Fintech: As leader & users “examined the role of women leaders on firm level performance and determinants of cross-country usage of Fintech across gender. The findings from the study indicated that greater deployment of women in the executive board results in better performance of Fintech firms as far as usage of Fintech is concerned the author's reported that a higher level of financial & digital literacy results in lower level of gender gaps in digital financial inclusion with socio-cultural factors playing an important role as a determinant of usage.

6. Need and significance of study

This study is relevant as per the current scenario where Fintech has penetrated through each and every sector of Indian economy. Moreover, this research study shall provide useful insights into how Fintech can improve financial inclusion outcome for women through removal of barriers hindering women's financial inclusion. The existing literature review hints that there is a dearth of studies addressing the relation of Fintech with women's financial inclusion in a comprehensive way (Patel, A.K. and Jalota, S., 2023). This research study shall fulfil the existing gender gap by addressing women's most debated issues in a holistic manner. This study is relevant from the point of view of financial inclusion of women context of Indian economy and shall further the literature on the gender issues pertaining to Fintech's. The main rationale or gist of this study shall be to investigate the pre - emotive role of Fintech in fostering women's financial inclusion & empowerment. This study shall advance the literature on the Fintech and its correlates as far as financial inclusion of women is concerned.

7. Objectives of research study

The main purpose of this research study is to discuss in detail the various facets of fintech and their role in enabling financial inclusivity of women. The author seeks to address following research objectives:

1. To analyze the present fintech ecosystem in the context of Indian economy.
2. To examine the role of fintech in ensuring financial inclusion of women.
3. To study the significance of fintech in removing access and usage barriers for financial products and

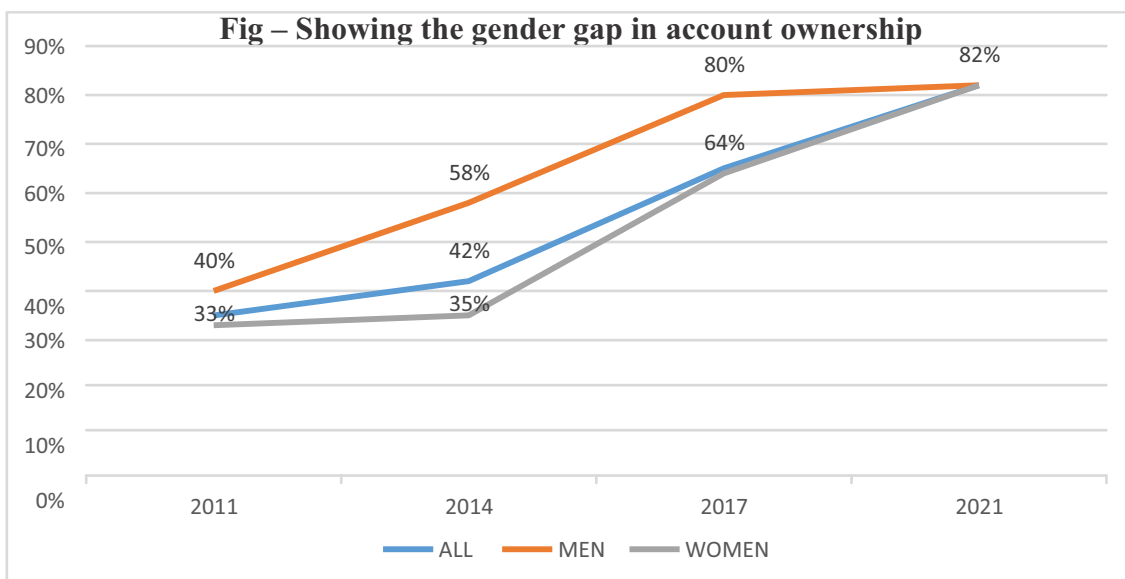
services for women.

8. Research methodology

This research study is empirical and analytical in nature. The main purpose of this research article is to discuss in detail different facets of Fintech and its role towards enhancing financial inclusion of women. The studies relating to women's financial inclusion are found in the literature many times, but studies showcasing fintech enabled financial inclusion of women are seldom found. The fintech tech-based solutions and their proposed benefits are discussed in this study in detail. The data for the current research study has been compiled through different research papers, articles, government websites, reports released by alliance for financial inclusion and global Findex database. The study strives to provide useful insights into the Fintech based and its implications on the financial inclusion of women. The study shall elucidate the role and potential of fintech based apps in closing the gender gap as far as usage and access of financial inclusion products and services are concerned.

9. Analysis & Discussion

This research study was undertaken with the sole purpose of Fintech in improving financial inclusion of women India's account ownership growth has stagnated since 2017, though the gender gap narrowed Account ownership has more than doubled in India between 2011 and 2021, from 35 percent of adults to 78 percent Much of that growth occurred between 2014 and 2017 as a result of a government program that began in 2014 and provided unbanked adults with a financial account leveraging an official government identification document. Between 2017 and 2021, account ownership rates were unchanged, yet the Global Findex 2021 shows that 35 percent of accounts are inactive, a rate that is 7 times higher than the average across developing economies. In addition to growing the total share of adults with access to financial accounts, India has improved equity in account access. In 2011, the income gap was 14 meaning, a larger share of the richest 60 % of households in India had accounts compared to the poorest 40%. By 2021, the gap was insignificant. The gender gap also declined between 2017 and 2021 by 6 percentage points to effectively zero. This can be attributed to the fintech based solutions which have increased account ownership among women through promotion of digital payment modes among women.



HOW FINTECH STARTUPS ARE ENABLING FINANCIAL INCLUSION OF WOMEN?

Undoubtedly, the financial services (Traditional or Digital) can help and grant women greater financial independence and control over their income & assets. The financial inclusion of women through fin-tech solutions is both an opportunity and challenge in a developing nation like India. The major perceived barriers to fin-tech adoption are the patriarchal structure of Indian society, the gender biasedness, mobility constraints, shortage of funds, technological backwardness and lack of self-confidence which impede women's ability to gain adequate access to formal banking products & services. As depicted by a narrow gender gap in the ownership of bank account, The Fintech led start-ups have contributed a lot towards ensuring better inclusivity of women in the financial mainstream. The new fintech market entrants and policies and initiatives have provided a headway towards female financial inclusion. Fintech startups such as Svatantra are harnessing technology to enable entrepreneurship for marginalized sections of society particularly women. This in turn has boosted women empowerment in all aspects. The fusion of finance & technology has been welcomed as an opportunity by majority of Financially literate Indian women. It is therefore noticeable that India ranks fourth in terms of startups owned by women. As a result, the Indian women who were once denied access to technology have risen as successful businesswomen due to opening up of avenues in the digital lending and credit market sphere.

10. Conclusion

This research study has brought to limelight that fintech based solutions are a necessary need of the hour to meet the unmet needs of the previously excluded marginalized population especially women. The digital financial inclusion enabled through fintech can remove various hurdles in way of successful financial inclusion of women. It can help address the persistent gender gaps as far as accessibility, usability and quality of affordable financial products & services is concerned. This research study brings out the importance of financial inclusivity of women and its role in elevating GDP levels, improving human development index & fostering overall economic growth. There is dire need for Fintech led start-ups to collaborate with the tech players for harnessing technology so as to revolutionize fintech ecosystem in India. Moreover there is immediate need to boost adoption of fintech through spreading financial awareness through local level organizations like SHG'S & NGO'S for purpose of creating universally financially inclusive India. However it is equally important to supplement these FinTech services with risk mitigation procedures to remove the current ambiguities inherent in their usage. This shall help keep intact stability of the Indian financial ecosystem and bring the vision of universal financial inclusion to the last mile.

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