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DIGITAL BANKING REVOLUTION: EMPOWERING RURAL INDIA THROUGH FINTECH

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Abstract

Digital technologies are frequently exposed as being at the forefront of significant changes in markets and job dynamics. FinTech can democratize access to money and bring the globe closer to attaining financial inclusion in a world where access to financial services and high-speed broadband internet is not universal or inexpensive. Over the past few years, India's financial inclusion has considerably increased. The percentage of Indians who currently have bank accounts has increased in recent years and is thought to be close to 80%. As the Indian government works to provide financial services to the underbanked segment of the population, FinTech enterprises in India are gradually gaining attention. India must work to enhance financial inclusion in order to reach the underbanked portions of the population and offer a stable operating environment for FinTech companies. The objective was to ascertain how digital and FinTech services would empower financial inclusion in rural India. The middle class in particular has benefited greatly from FinTech enterprises' contributions to financial inclusion in this country. This article will review many research that concentrate on the characteristics of FinTech in order to provide a summary of how it affects financial inclusion. The current study develops the theoretical framework on the basis of the structure in an effort to analyse the motivational impacts for the adoption of technology-based financial services. Policymakers who are working hard to integrate every citizen of our nation into an organized financial system may find these findings to be useful.

Keywords: Financial technology (FinTech), financial inclusion, developing economies, financial services, social influence.

Introduction

The shift to financial technology opens up opportunities for economic growth in many sectors of the economy. Financial technology and mobile money services have grown rapidly in emerging developing economies. FinTech has become so ingrained in the financial services ecosystem over the past several years that the phrase has now appeared in a few top dictionaries. FinTech is typically thought of as "products and businesses that employ newly developed digital and online technologies in the banking and financial services industries," but in our opinion, the field has developed to play a much more strategic and narrowly focused role. Since FinTech mobile money and digital wallets address the economic infrastructure gap with an innovative technology solution and enable users to conduct financial transactions affordably and dependably by removing spatial barriers, they are seen as some of the most significant advancements in the financial sector and have undoubtedly been fueled by the growth of digital transformation. They can also be used to close the gap between the banked and unbanked. Many Indians living in semi-urban and rural areas don't have access to official banking services. FinTech business owners are altering that, though. By making it simpler for small businesses and merchants and enabling small businesses, they are bringing online banking and financial services like Investment, Aeps, digital ledger apps, and digital payments to underserved areas. Through articles and videos on investments and financial planning, these FinTech businesses also instruct people about money. FinTech companies are bridging the gap between underserved communities and established banking infrastructure by utilizing technology and innovation, encouraging financial inclusion, and giving people the tools they need to create a better future for themselves. This study has analyzed studies from almost every field, including applied engineering, computer science, economics, business, and other social science disciplines.

Review of Literature

The amount of research related to financial technologies (FinTech) has grown rapidly since these modalities have been implemented. A review of this literature base will help identify the topics that have been explored and identify topics for further research.

Lagna & Ravishankar, (2022) highlighted that a joint evolution of finance and technology, FinTech encompasses crypto currencies, Internet banking, mobile payments, crowd funding, peer-topeer lending, Robo-Advisory, online identification, and many other important innovations.

Dang and Nguyen (2021) their study highlights how crucial it is to comprehend block chain technology as an ecosystem as its potential depends on network acceptance and expansion for the good of the whole community. We may obtain new business prospects by better comprehending the commercial potential of technology and its effects thanks to this study. Given that it enables us to comprehend each ecosystem member, it also acts as a roadmap for future studies. End-users, individuals, private businesses, and governments are at different levels of the ecosystem, and they play a crucial role by outlining their needs for resolving a particular issue, creating a market, and taking part in the development of technology by block chain alliances.

Cheah, et al. (2021) show that the gender divide in the ASEAN payment system (both traditional and digital) and find that gender gap persists in digital models like mobile money. Their results show that women are more likely to use traditional payment methods like cash and that age exacerbates the gender divide in the usage of financial institutions for payment.

Hanelt, et al. (2021) revealed that digital transformation as an organizational and continuous change that can be triggered and shaped by the generalized diffusion of digital technology. This continuous change shows that recent technological activity in the financial industry has led to the entrance of new agents in the market, known as FinTech. The term comes from the association of the words Finance and Technology.

Hornuf, et al. (2021) found that many banks acknowledge the technical superiority of FinTech start-ups and have incorporated these firms' products and services into their own business models.

Sahay, et al. (2020) cleared that FinTech has contributed to closing gender gaps in financial inclusion in most countries, there is a concern that this gender gap might widen in the post COVID era. This finding is supported by interviews with stakeholders who pointed out that FinTech does not address barriers such as cultural or social norms, financial and digital literacy, and safety and disparity in access to resources, and that such barriers are higher for women.

Thakor (2020) revealed that FinTech firms bare lower operating costs than traditional banks. For instance, Lending Club, a FinTech firm, has operating costs as a percentage of outstanding loans at 2.70% compared to those of banks at almost 7%.

Bertsch, et al. (2020) found that banks' increased misconduct is related to the emergence of the US online lending market. Large banks can also choose to acquire FinTech firms.

Wieser, et al. (2019) show that more significant usage of FinTech reduces the use of informal savings methods and boosts remittance transactions.

Lynn, et al. (2018) states that an efficient financial intermediary mobilizes funds from savers to those seeking these funds for more productive use at an affordable cost to help propel the growth and development of the population. This implies that FinTech is the most potent weapon of disintermediation of banks. In the theory of financial intermediation, transaction costs have been a fundamental issue in discussing the existence of financial intermediaries, including the FinTech services in this research.

Jack and Suri (2014) found that financial technology innovation may offer cheaper and more efficient options by reducing transaction costs. This also boosts the sales of micro and small businesses by lowering the expenses associated with alternative payment options.

Singh, et al. (2013) elaborate that the financial services is severely restricted in underdeveloped areas of India due to various institutional flaws and other factors that hinder individuals from realizing their particular economic potential and possibilities, resulting in limited economic development. As a result, microfinance programmes have been established in developed countries such as India to assist individuals living in underdeveloped regions such as inner cities.

Research Objectives

- To analyse the awareness of FinTech and digital transformation of financial service.
- To examine the perception of people towards FinTech services.
- To know the variables that significantly influence adopting financial technologies in rural India.
- To study the impact of financial technologies (FinTech) on influencing the development goals of financial inclusion development in rural India.
- To identify the building blocks for the future of FinTech.

Research Methodology

The Data required for the study has been collected from secondary sources. This paper is basically descriptive and analytical in nature. In this paper an attempt has been taken to analyze the empowering financial inclusion through FinTech in rural India. This paper investigates the critical success factors influencing the adoption of disruptive financial technology for financial inclusion in rural India. The data required for the study is mainly collected from secondary source such as newspapers, magazines, journals, articles, annual reports, periodicals, Government reports, regulatory publications and related planning documents, websites etc.

FinTech and Its Evaluation

FinTech is an umbrella word for innovative financial services enabled by technology that could lead to new business models, apps, procedures, or products having significant effects on financial institutions and the delivery of financial services. FinTech is not just for startups; it also challenges more established, larger financial services companies to stay innovative and competitive if they want to stay in business. FinTech companies are developing innovative, centred on the needs of the client, methods for obtaining and receiving financial services, ranging from simple methods for making payments to investing with robo-advice and developing a customized budget with the use of an app. By extending financial services to hitherto underserved segments of society, FinTech can boost financial inclusion, which will speed up inclusive economic growth. The implementation of the UPI Payments infrastructure, JIO-led digitization, and demonetization in India in 2016 marked the beginning of the adoption and acceleration of FinTech. Additionally, the rate of digitalization in financial services in India has been amazing because to the ground-breaking work done by Ispirit, NPCI, the government, and regulators in developing and pushing underlying public infrastructural rails like the India Stack and Aadhar. India is the third-largest FinTech ecosystem in the world, with around 2100+ firms. 67% of India's current FinTech companies were founded in the previous five years. In India, FinTech has had a 65-year history that is nothing short of extraordinary. Since credit cards were first introduced in the 1950s, a lot has changed. Bank cash withdrawals were revolutionized by ATMs, and the FinTech sector reached new heights with the introduction of the internet in the 1990s. A significant transformation has also been brought about by electronic payment systems, web-based business practices, portable banking, and bank digitization.

Blockchain Technology

Many people consider block chain technology to be among the most inventive technologies to have developed in the last ten years; some claim that within 20 years, blockchain will fundamentally

alter society in a similar way to how the internet fundamentally altered communication and the media (Hernandez, 2017). Blockchain technology is a type of distributed ledger technology that uses millions of open-access devices to maintain a massive, worldwide, decentralized database that is cryptographically secure. The distributed ledger's transactions are immutable and verifiable, making it transparent and simple to follow. Similar to the internet, blockchain functions as a protocol upon which programmes can be constructed. The fact that blockchain technology does not require conventional middlemen when conducting a transaction between two parties, drastically reducing or even potentially eliminating transaction costs, is one of its most powerful aspects.

FinTech and Infrastructure Drivers

Mobile Adoption and E-Payments: Consumer behaviour and corporate practices are being shaped by new technology and the digitization of life. Using new technologies to identify possibilities in the dynamic business environment and take advantage of them is a major area of focus for organisations when it comes to adding value. Digital financial inclusion is the use of computers and mobile devices to access and use formal financial services. Mobile devices are now among the most well-known consumer products ever introduced in this new digital era. These tools and the services they offered quickly spread around the world and became indispensable parts of daily life. The fact that mobile devices have constant access to a variety of services (communication, access to information, entertainment, or commerce) may be the reason for their rising global appeal. For their users, mobile gadgets are valuable in a wide range of ways. The shift towards using mobile devices to access the Internet is another trend that has evolved with the rising popularity of mobile devices. Mcommerce was brought about by the growing use of mobile devices and e-commerce. Every year, more people are turning to their mobile devices to make purchases of goods and services. With the addition of Apple and Samsung Pay to the ones provided by telecom providers and financial institutions, alternative mobile payment methods are expanding globally. All the players in the mobile payment ecosystem, from smart phone manufacturers to banks and small and large suppliers, will be able to build sustainable strategies with the aid of an understanding of adoption reasons and hurdles.

Rise of Micro ATM: In comparison to traditional ATM operations, micro ATMs (MATM) through business correspondents (BCs) have emerged as a more affordable retail banking strategy. Over the past two years, MATM and AEPS transactions have increased by more than 200% due to the increase in cash withdrawals made during the pandemic (for medical expenses and to take government cash subsidies). The success of the government's cashless incentives and Direct Benefit Transfers can be attributed to the existence of assisted payment companies in India's rural areas. Due to the near-doorstep services offered by banking BCs during the lockdown, demand for AEPS and MATMs increased.

Digital Identity Systems: Information used by computer systems to represent external entities, such as a person, organization, programme, or device, is referred to as a digital identity. It includes all of a person's collected data and is essential for automating access to computer-based services, establishing identification online, and allowing computers to manage interactions between entities. Digital identity, often known as online identity, is a component of a person's social identity.

Currency Digitization: The international monetary system's fundamentals may change as a result of digitization. It may also result in the emergence of new global currencies. By extending beyond the boundaries of conventional optimum currency areas (OCAs) and introducing new barriers to transaction, digital currencies have the potential to redefine networks of economic activity. They also enable us to introduce a fake global currency.

Financial Literacy Programs: The capacity to effectively handle personal finances is the main goal of financial literacy programmes. It is a vital life skill necessary for both one's personal and professional development. It is crucial because it helps us take care of ourselves and prevents debt. Financial inclusion is essential and only achievable when individuals are financially literate in a world where electronic transactions are increasingly the norm.

The Role of SHGs in Financial Inclusion

SHGs are small, informal groups of 10 to 20 people that come together voluntarily to encourage the habit of saving among members, generate money, and manage financial resources for the benefit of the group members. They are homogenous in terms of their social and economic origins. SHGs, particularly in rural regions, serve as platforms for financial inclusion and give many working women more influence. The Government of India (GoI) has quadrupled the amount of collateral-free loans to INR 20 lakh as the COVID-19 package provides relief to all sector of society. Through 63 lakh SHGs, this will benefit over 7 crore families.

In order to connect with women and promote more gender equality in terms of financial inclusion, FinTechs can collaborate with SHGs. To increase overall financial inclusion and connect FinTechs with SHGs, the GoI has already launched a number of programmes. This has led to the establishment of many services by women, including beauty salons, textile and dyeing firms, etc. The use of direct benefit transfer (DBT) has increased the financial literacy of women receiving financial benefits. According to the Reserve Bank of India (RBI), the development of supportive rural infrastructure has also boosted the potential for rural areas to absorb credit.

FinTech Models for Financial Inclusion

FinTechs confront a number of difficulties, such as a lack of confidence owing to security worries, the absence of physical branches, a near total lack of knowledge about financial goods, and inadequate infrastructure. FinTechs are nevertheless becoming a crucial driver in the growth of financial inclusion due to the change in rules to provide more support to NBFCs and established FinTech firms, disruptive innovation, and rising funding. Here are a few significant financial service models that, if expanded upon, could have an effect on financial inclusion:

- 1. Incorporation of e-KYC or video KYC for faster processing by SHGs/ authorised kirana stores.
- 2. Instant money transfer (IMT) facilities or kiosks to facilitate IMT.
- 3. Alternative database for customer onboarding to approve loans and check credit repayment history.
- 4. Smart villages and smart panchayats where kiosks are set up for banking.
- 5. Bank on bike initiative in which banking services are extended to remote villages.
- 6. Initiation of no-frills account.
- 7. Electronic benefits transfer (EBT) scheme.

Technological Empowerment in Rural India

The development of digital payment methods in rural India has significantly altered the financial environment. Rural India is catching up to metropolitan areas in the adoption of digital payments thanks to rising smartphone penetration and the government's drive towards digitalization. Many people, however, favour cash transactions and demand easier access to financial services. Cash is heavily used in daily transactions in rural India, especially in the agricultural industry, which supports rural populations. To buy agricultural inputs, employ labour, and pay employees during harvest seasons, farmers depend on physical money. Additionally, cash purchases are common in local markets since using real money is easy and familiar. Similar to small enterprises in urban areas, local stores, vendors, and artists rely on cash for product purchases, storage, and sales. In order to accept digital payments, infrastructure is needed, such as point-of-sale devices or mobile payment apps, as well as a reliable internet connection, both of which may be scarce in rural locations. Cash also offers instant liquidity, which is essential for small enterprises operating on limited budgets without access to credit lines. Rural residents who use digital financial services have access to a wider variety of financial goods and improve their knowledge of personal finance. They are then more equipped to make wise choices, enhance their financial security, and take an active role in the formal economy.

Making Rural India with Digital Skills

Giving access to basic financial services to the 62% of India's population who reside in rural and small towns continues to be a top priority for the government and FinTech firms. FinTech companies are digitizing the cash that a sizable portion of the nation's workforce generates through

various banking and financial services. These stakeholders are promoting digital empowerment by bringing financial inclusion to the last mile through the variety of digital payment systems offered in rural India. According to RBI data, start-ups and venture capital firms are swarming to the digital lending sector since there is an untapped audience of 120 million nominally employed Indians without a credit card. Following this pattern, digital lending start-ups received 44% of FinTech funding in 2020. The prognosis for the FinTech industry is favourable with more funding and increasing cooperation between established and new participants in the digital lending market.

The Future of FinTech in India

India's FinTech industry has been expanding during the past ten years. Thanks to the digital revolution and encouraging government policies, the sector has undergone a significant transition in recent years. Millions of underserved and unbanked people in the nation now have access to financial services because to FinTech, which has also upended traditional banking and financial services. The foundation of FinTech development is technological advancement and innovation, which will also fuel new, disruptive business models in the financial services industry. With various developments anticipated to influence the FinTech sector in the upcoming years, the future of the sector in India appears bright. Over the next ten years, the following significant technologies will propel the development of FinTech and influence the financial industry's competitive landscape:

Digital Lending: In India, FinTech is predicted to have tremendous growth in the area of digital lending. Digital lenders are in a good position to service the underserved and unbanked portions of the population as a result of the rising popularity of alternative credit scoring models and the use of digital payments.

Open Banking: In the FinTech sector, open banking is a new trend where banks and other financial institutions make their APIs (Application Programming Interfaces) available to outside developers. Banks in India have begun sharing their APIs with FinTech companies in accordance with the RBI's open banking standards.

AI and Machine Learning: In the future of FinTech in India, artificial intelligence (AI) and machine learning (ML) are anticipated to play a big role. To cut expenses and increase efficiency, FinTech can employ technology for personalization, fraud detection, and automation.

Blockchain: FinTech may be transformed by blockchain thanks to transactions that are safe, transparent, affordable, and effective. Blockchain technology is already in use in India in a number of industries, including supply chain management, identity verification, and electronic payments. FinTech firms are anticipated to create new goods and services that make use of blockchain as its popularity grows.

Financial Inclusion: The Indian government places a lot of emphasis on financial inclusion, and FinTech firms are anticipated to be crucial to accomplishing this objective. FinTechs offer digital payments, loans, and insurance to the unbanked through technology. Because cellphones and the internet are so widely accessible in rural India, FinTech companies may take advantage of this enormous untapped market.

Conclusion

The eradication of poverty, balanced economic growth, and economic stability all depend on financial inclusion. In developing nations, the majority of the populace lacks a basic bank account. They are primarily from Asia and the Middle East. For millions of individuals, particularly those living in rural and remote areas of India, basic financial services like banking remain a pipe dream. Rural residents who use digital financial services become more familiar with different financial goods and services, which improves their awareness of credit, savings, insurance, and other facets of personal finance. It enables people to make wise financial decisions, which enhances their wellbeing. In conclusion, the FinTech sector in India has experienced tremendous growth in recent years and is anticipated to do so in the future. Government financial inclusion measures, the use of mobile technology, and digital payments all contributed to India's FinTech boom. Overall, India's FinTech future is bright and its development will change the financial landscape of the nation. The financial

technology sector is quickly growing and disrupting traditional financial services as a result of the emergence of digital transformation.

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