GRAND ACADEMIC PORTAL
RESEARCH JOURNALS

GAP BODHI TARU
A GLOBAL JOURNAL OF HUMANITIES
(ISSN – 2581-5857)
Impact Factor: SJIF - 5.551, IIFS - 5.125
Globally peer-reviewed and open access journal.

GRAND ACADEMIC PORTAL (GAP) 2017
ज्ञान: अध्ययन: परम्परा

FINTECH INTERVENTION IN BANKING SYSTEM – A REVIEW

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Abstract

With a passionate desire to improve life, humans have found a niche in producing instruments and mechanisms that affect day-to-day living. As a result, people have invented a great lot throughout many generations. The result of this mind-set is "technology," which has long been the cornerstone of advancement and stands for the hopes, objectives, and values of the public. Technology is currently what sustains humanity since it has allowed us to survive and evolve at an astounding rate. The diverse range of goods and services offered by the financial sector, often referred to as fintech, is significantly influenced by the development and use of information technology. Connecting youth, financial literacy, and human capital is an inherent part of the FinTech ecosystem, which includes software developers, government agencies, financial clients, and conventional banks. The present paper reviews the existing literature to answer certain research questions, concern about the influence of financial technology adoption on access to capital on one hand and its effect on ease of financial access on the other. For the paper secondary sources have been used for collecting the data. The research concluded that there is a definite relation between fintech and ease of financial access. Various research studies have been conducted to find out the fintech aspects and its overall effect on financial ecosystem, still more research is required to be conducted focusing on diverse population groups that exist in India.

***Keywords**: - Financial –Technology, Banking, Innovation, Digitalization*

1. INTRODUCTION

Technological advancements have historically played a significant role in shaping the financial sector and influencing long-term profitability (Fuentelsaz, Gómez, & Palomas, 2009) (Haynes & Thompson, 2000) (Scott, Van, & Zachariadis, 2017). However, the emergence of FinTech innovators in recent decades has the potential to mark the most substantial disruption in the financial sector to date (Gomber, Koch, & Siering, 2017). Fintech, short for financial technology, embodies the innovative integration of technology to revolutionize financial services, striving for expedited, user-friendly, secure, and transparent experiences. The evolution and adoption of information technologies profoundly shape the array of products and services within the financial market, collectively known as fintech.
In recent years, an unparalleled Fintech revolution has unfolded, marked by its rapid momentum and significant influence, carrying the potential to disrupt the financial 2 intermediation sector (Philippon, The fintech opportunity, 2016) (Thakor, 2020). (Rufaidah, Karyani , Wulandari, & Setiawan, 2023) - Fintech represents a modern approach to financial services, leveraging advanced technology to bring about accessibility practicality, cost effectiveness and convenience (Sukma, 2016) (Chrismastianto, 2017). A wide array of financial products and services fall under the umbrella of FinTech. Fintech builds on three waves of digital technology advancements.

2. RESEARCH DESIGN

The present study covers the review of existing literature related to various aspects of Financial Technology especially in banking sector. The study is an attempt to find out the probable answer for the research questions raised. The researchers framed the questions as :

What is the role of fintech in expanding the banking services?
What is the impact of fintech on ease of living and ease of access?

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The data for this case study has been compiled from secondary sources, including various research articles in journals and information sourced from the internet. Employing a case study research approach, the study endeavours to evaluate fintech and digital transformation in banking, with a specific focus on assessing the role of Fintech in the banking sector.

3. LITERATURE REVIEW

3.1 Financial inclusion and Banking facilities:

A new wave of technologically-enabled innovations in banking, dubbed "FinTech," is shaking things up in the banking sector. According to academics, Fintech has the potential to make banking systems more secure. (Fung, Lee, Yeh, & Yuen, 2020), advance financial inclusion (Kass-Hanna, Lyons, & Liu, 2022), help financial institutions by reducing data gaps and improving borrower information collection (Fuster, Plosser, Schnabl, & Vickery, 2019), maximize the effectiveness of loan distribution to SMEs (SMEs) (Sheng, 2021), lessen the likelihood of credit problems (Cheng & Qu, 2020) (Katsiampa, McGuiness, Serbera, & Zhao, 2022), and alleviate financing constraints for firms (Lin-Hi & Muller, 2013) (Buchak, Matvos, Piskorski, & Seru, 2018) (Pan & Tian, 2020). Similar results are found in reports by (Carney, 2017), (Philippon, The FinTech opportunity, 2019), (Demir, Fintech, fnancial inclusion and income inequality: , 2020) and (Frost, 2020). FinTech adoption holds promise in enhancing banks' productivity and efficiency by cutting costs, thereby 12 fortifying the overall financial system and fostering inclusivity, particularly for under banked populations (Singh, Alhazmi, & Devi, 2023).Many people throughout the globe who do not have access to traditional banking services are now able to do so because to the rise of fintech. While social exclusion persists, new opportunities for digital financial services have arisen as a result of the COVID-19 health crisis. Aside from the conventional banking system, Fintech opens up new avenues for borrowers to access funds via non-traditional banking systems. (Jagtiani & Lemieux, 2018) (Tang, 2019) (Pan, Xu, Li, Ling, & Lu, The impact of supply chain finance on capital structure adjustment: evidence from China. , 2023). When it comes to achieving strategic goals in the banking industry, mergers and acquisitions (M&As) incorporating FinTech are becoming more popular than partnerships (KPMG, 2018). The rate of incorporating and evaluating new technology in the financial sector is outpacing earlier rates. (Goldstein, Jiang , & Karolyi, 2019). (Gao, Leung, Liu, & Qiu, 2023) Policymakers and regulators are paying more and more attention to financial technology (FinTech) businesses because of the disruption they are causing in the conventional consumer credit markets, especially via initiatives like open banking. Groceries, utilities, insurance, transportation, telecom costs, gaming, and TV subscriptions are the seven consumption areas covered by these businesses' offerings. While most studies on FinTech lending have used American data, this new study adds to the expanding body of research from an Australian viewpoint. According to the results, FinTech lenders consider the consumer behavior of loan applicants when making their lending judgments. A borrower's ability to borrow money in this FinTech age depends, in part, on how much they spend on gaming and how often they use cash. Even more so, distinct demographic profiles are associated with distinct purchasing habits. Take, for example, (Das & Das, 2020) Members of Generation X and baby boomers tend to spend recklessly, whereas members of Generation Z and millennials show more self-awareness and prudent spending habits when taking out loans from FinTech companies. Millennials and Gen Xers are more likely to put their loans to good use, whereas baby boomers and Generation X tend to rack up debt without producing tangible results. (Das & Das, 2020). A more FinTech-oriented strategy has been adopted by conventional financial institutions due to the digitization and automation of banking processes becoming necessary and the preference of young people for new technology.. (Krupa & Buszko, 2023). Academics, regulators, and industry experts are closely watching the dynamic between banking and FinTech. There is a wide range of approaches that banks might use when interacting with FinTech, depending on their goals and company culture. Large financial institutions get access to new markets and consumers when they acquire fintech startups. Most notably, fintech affects the way banks deal with deposits, loans, and investments. Financial institutions may get inexpensive access to new client groups and cross-selling possibilities by purchasing FinTech companies. Payments, clearing, and settlement; deposit, credit, and capital-raising; and investment management are the three main areas that financial technology advancements aim to impact in the banking industry. The majority of financial technology firms want to simplify online payment processes. Others provide loans to individuals and companies that would otherwise have to deal with traditional banking institutions. Innovative payment options, especially in retail, have been pushed on by the growing usage of smartphones and mobile internet. One new way that people and companies may get the money they need is via financial technology (FinTech) loans, which are made possible through online platforms rather than conventional banks. (Claessens, Frost, Turner, & Zhu, 2018). In addition, banks are quickly speeding up their digitization efforts to fulfill the increasing demand for online and new services from consumers in reaction to global trends like the COVID-19 pandemic. (Yu, 2024) If we are serious about eliminating systemic risks and promoting steady economic development, we must strengthen commercial banks' capacity to assist the real economy by implementing more extensive reforms. Commercial banks' ability to manage their capital, implement reforms, reduce risk, and bolster the economy is dependent on it. (DeAngelo & Stulz, 2013). A promising new channel for commercial banks to implement their changes has opened up with the explosion of

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FinTech. Financial technology has the ability to streamline the processing of credit resources, lower the costs of financing debt, and eliminate information asymmetry. (Fuster et al., 2019), while maximizing pre-loan administration (Calomiris & Carlson, 2016). Also, FinTech may make financial services more accessible, which means more people can use them. (Ahamed, Ho, Mallick,, & Matousek,, 2021). Another way FinTech helps banks weather financial storms is by allowing them to diversify their customer bases and lending portfolios. (Mehrotra & Yetman, 2015). According to the data, commercial banks' leverage risk is affected by FinTech, and the extent to which this is affected varies with the banks' return on equity. major banks, listed commercial banks, and major state-owned banks all see a considerable improvement in their return on equity as a result of FinTech, which in turn reduces their leverage risk. 3. On the other side, FinTech has a considerably unfavorable influence on other commercial banks' return on equity, which makes leverage less effective in lowering risk. FinTech has the potential to mitigate systemic risks by acting anti-cyclically and mitigating the procyclicality of commercial banks' leverage risk. Banks can support China's new growth pattern and increase their contribution to the real economy by improving the efficiency of financial services while balancing innovation in FinTech with risk reduction. This may be accomplished in the following ways: - Regulatory bodies keep an eye on the mix of assets and liabilities, and commercial banks can optimize their capital structure by actively managing their debt. - In response to changes in the economy and individual banks' traits, regulatory agencies should implement a system of dynamic leverage ratio management for commercial banks. Collaborating with FinTech startups, increasing investments in FinTech projects, and developing talent are all ways that commercial banks may strengthen their capabilities in the FinTech space. Regulatory measures that provide assistance, such low-interest loans for technological innovation and more leeway for banks to experiment with FinTech, may help small and medium-sized commercial banks, in particular, improve their FinTech capabilities. Extending the scope of inquiry outside Chinese banks, improving the precision of FinTech indices, and investigating other types of FinTech involvement to accurately assess bank risk associated with FinTech are all goals of future work.

a. Ease of living, Ease of financial Access:

(Liu & Chu, 2023) Innovative financial services like mobile payments allow users to conveniently receive and make payments for goods, whether digital or physical, using mobile devices such as cell phones, tablets, or computers. This convenience has reshaped how transactions are conducted, offering greater flexibility and accessibility to users worldwide. Moreover, the financial industry harnesses core technologies like cloud computing and big data to analyse vast amounts of information. This analytical approach offers deep insights into consumer behaviours and preferences, enabling the delivery of tailored and efficient financial services. By leveraging these technologies, financial institutions can better cater to the diverse needs of their clientele. (Rufaidah, Karyani , Wulandari, & Setiawan, 2023) The agriculture sector plays a crucial role in Indonesia's economic development, yet its contribution to the GDP remains suboptimal. Fintech is seen as a potential catalyst to bridge this gap, strengthening and enhancing smallholder farming business management by improving the accessibility and availability of financial resources. Disparities in farmers' fintech accessibility exist between urban and rural areas, influenced by factors such as education levels and infrastructure availability. Fintech presents a viable solution to existing societal challenges in Indonesia, offering practicality, accessibility, convenience, and cost-effectiveness. Simple procedures, close social and physical proximity, speed and efficiency of service delivery, service alignment with farmers' needs, accessibility, absence of bank interest, and various bonuses offered are factors that contribute to the strong bond between farmers and informal/non-formal financial service institutions. Even though the formal lending sector is just as efficient as the informal one, it still needs to fix its notoriously bad image by fixing things like cumbersome processes, few payment choices, rigid policies, and similar problems. This study delves deep into the topic of farmer technology access, exploring their choices in fintech, the effects and problems it presents, and what the future holds. Fintech has gained significant traction in the agricultural sector, facilitating agricultural sustainability through convenient funding options like crowd funding and digital payment systems (Anshari, Almunawar, Masri, & Hamdan, 2019). Becoming a partner in agricultural fintech holds the potential to enhance the dignity of farmers by directly linking them with investors and modern fintech platforms 6 equipped with advanced IT systems, enabling farmers to access a wide range of services. Agricultural fintech presents a significant opportunity to rejuvenate the agricultural sector, driven by innovative agribusiness funding mechanisms such as peer-to-peer investment (Fitriani, 2018). While previous studies underscore its positive impact in various Southeast Asian nations countries such as India, China, etc and African country Ghana, some challenges still persist (Menkeh, Global journal of Business and Integral Security 1); (Yang, Xiang Su, & Yao, 2021)). The use of fintech has improved public banking in Indonesian cities. ((Anggraeni, 2020); (Jaya, 2019) Especially when it comes to improving the efficiency and effectiveness of MSMEs (Zanaria, 2021) and streamlining transactions and investments for all stakeholders (Anzelina, 2021). But there are challenges to implementing fintech, as farmers may not immediately embrace or use it because of how new and foreign it is. Critical stages in resolving these issues include understanding diverse application considerations, reaching agreement, and aligning farmer and fintech industry viewpoints. Fintech, which has its foundation in digitalization, improves working conditions for farmers while reducing the environmental effect of agriculture. It also helps with social inclusion, tackles problems of rural isolation, and more. New business models made possible by digital technology are increasing the allure of rural places, especially among younger

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generations. (Rivza, Kruzmetra, Gudele, & Foris, 2019). (Krupa & Buszko, 2023) According to studies conducted on FinTech clients, the major reasons people switch financial institutions or choose FinTech as their main service provider are a lack of confidence in others and unhappiness with the customer-financial institution relationship. (Maier, 2016). A study by (Ju¨nger & Mietzner, 2020) analyzing data from German consumers showed that three key factors—trust, transparency, and financial education—have a substantial influence on choices to utilize FinTech services. (Etudaiye-Muhtar, Johan, Lawal, & Sakariyahu, 2024) Human capital development, health, and education are predicted to be favorably impacted by the adoption of fintech, which aims to enhance access to financial services, mobilize savings, and provide credit facilities. (Demirgüç-Kunt, Klapper, Singer, Ansar, & Hess, 2018) (Matekenya, Moyo, & Jeke, 2021)Mobile banking, mobile payments, and blockchain technology are all examples of fintech activity, and energy plays a moderating role in their development. Encouraging the uptake of finance and powering mobile gadgets both need access to dependable energy. (Yermack, 2018). Fintech technologies have the potential to improve human growth, but their widespread use is highly dependent on reliable power sources. This research delves into the impact of energy poverty on the link between fintech and HDI, taking into consideration the obstacles faced by certain locations in this regard. According to the results, having access to energy at all times is crucial. consumers under the age of 35 are more likely to be interested in, utilize, and positively review financial technology (FinTech) solutions than consumers over the age of 35, and they are also more likely to completely ditch conventional banking services in favor of these newer, more convenient options. People under the age of 30 are disproportionately likely to make heavy use of FinTech services, whereas individuals above the age of 30 are more likely to do so if they have a good impression of FinTech products. One possible explanation for the increased receptivity of young people to financial technology is the low or nonexistent price tag associated with many of these goods and services. Because of the difficulties that low-income young people may have accessing the goods and services provided by brick-and-mortar banks, this is an especially welcome development. Young people's fascination in financial technology (FinTech) is mostly attributable to the sector's attractive and modern operational profile and philosophy. These businesses depend heavily on online or mobile platforms, which fit in well with the way young people live, the way they want to communicate, and what they do every day. Research also conducted by (Polasik, et al., 2013) and (Tru¨tsch, 2020) have shown that the time it takes to complete a transaction has a major impact on the method of payment chosen, an aspect that is especially important for younger consumers, as emphasized by (Borzekowski & Kiser, 2008). Furthermore, traditional banks are often well-respected by the younger generation. Because of the benefits, such as low risk perception and apparent ease of use, and the apparent usefulness of the services, they have a favorable view of FinTech. Within the subgroup of adults, there may be less of a tendency to utilize FinTech products and solutions because to lower perceived benefit and increased perceived difficulty of usage. The rapid evolution of FinTech may make it challenging for older individuals, in particular, to embrace new technologies and keep up with emerging trends. People may start to doubt the usefulness and simplicity of FinTech solutions because of this. Their unwillingness to put money into FinTech could be influenced by their lengthy list of negative encounters with traditional banks, which includes exorbitant fees, unfair terms in contracts, and poor customer service. Their reluctance to seek out financial innovations that might benefit them in the future is probably shaped by their past bad experiences. Some people may be hesitant to embrace FinTech since they have access to more traditional financial institutions' solutions, which are both suited and reliable. Similarly, it seems that larger families are more prone to use FinTech when we look at household size. Once again, this was an environment where younger customers outshone their elders in terms of FinTech expertise. When both groups were able to support themselves financially and had access to prepaid cards, their experiences with FinTech were much better.

An Epilogue

Literature reviews have shown that further study is needed to determine how different Indian people embrace technology in relation to banking services and other financial goods. New, problem-solving policies and solutions may then be developed in response to the concerns voiced. Conducting thorough study on many elements of financial technology is crucial, since digitalization forms the basis of Indian planning and has been highlighted as a primary policy initiative by the government. Research in the future should concentrate on two main areas: how individuals perceive the ease of access to financial services and how financial technology affects financial inclusion. Indapurkar et al. (2024) note that fintech plays a significant role in retirement planning by impacting people's financial attitudes and behaviors, which in turn affect their financial well-being. These attitudes and behaviors are likely to be socio-economically specific.In order to identify the best policy option for India, these research should target varied demographics. It is important to build a model and provide relevant policy recommendations to emphasize the interconnections among fintech and its many facets.

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