

A Study of Impact of Fintech on Financial Inclusion

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Abstract: Financial inclusion, the process of providing affordable financial services to underbanked and unbanked populations, has been a global development priority. The emergence of financial technology (fintech) has presented a significant opportunity to accelerate financial inclusion efforts. This paper reviews the literature on the impact of fintech on financial inclusion, focusing on key areas such as mobile money, peer-to-peer lending, and digital payments. It explores the potential benefits of fintech in terms of increased access, reduced costs, and improved financial literacy. Additionally, the paper discusses the challenges and risks associated with fintech adoption, including regulatory hurdles, cybersecurity threats, and digital divides. Overall, while fintech offers promising prospects for enhancing financial inclusion, careful consideration of its potential drawbacks and the need for appropriate regulatory frameworks are essential to ensure its sustainable and inclusive impact.

Keywords: Financial Inclusion, Increased Access, Digital Payments.

INTRODUCTION

India is one of the most extensive countries with rich in minerals, marble, and tourism. However, a prominent tribal and rural area suffers from slow economic growth, poverty, and exclusion from formal financial services. With an irregular and unreliable income, managing one's finances is more important for the impoverished than anybody else. They need a wide variety of economic and suitable financial services to meet a wide range of financial requirements, such as easy access to savings, micro-credits, insurance, payment and transfer services. But due to the limited access to formal financial services, they use informal channels which are less reliable, insecure, and more expensive than standard services.

Financial Inclusion is described as the method of offering banking and financial solutions and services to every individual in the society without any form of discrimination. It primarily aims to include everybody in the society by giving them basic financial services without looking at a person's

income or savings. Financial inclusion chiefly focuses on providing reliable financial solutions to the economically underprivileged sections of the society without having any unfair treatment. It intends to provide financial solutions without any signs of inequality. It is also committed to being transparent while offering financial assistance without any hidden transactions or costs.

LITERATURE REVIEW

1) M. THANGAJESU SATHISH, R. SERMAKANI, G.SUDHA (2020): The study in the article "A Study On The Customer's Attitude Toward The E-Wallet Payment System" indicated that main reasons for low preference of E-wallet as mode of payment are tendency of people to do not move out of comfort of using traditional mode of payments, privacy concerns and threat to security. The study has discussed the trust is the main factor affecting users' satisfaction directly and it impacts on many user intentions to adopt mobile wallets.

2) Chowdhury et al., 2022, the goal of this study is to determine e-banking customers' faith in the influence of customer satisfaction on the e-banking infrastructural facility and e-banking communication environment. It is found that the private bank's e-banking customer trust value is much greater than that of the public banks. Customers, both male and female, have equal faith in the constantly expanding e-banking transaction procedure. In the event of a covid-19 pandemic, the e-banking transaction procedure should swiftly expand in the future to ensure good health.

3) Abu Dakar et al., 2021 The pandemic Covid-19 has had a substantial effect on speeding up the trend toward a cashless society everywhere. In the context of this pandemic condition, the tendency toward financial technology transactions has intensified. In their financial transactions and activities, consumers are aiming to reduce the use of cash. They are exploring alternate contactless

payment techniques, without any physical intervention, to execute this electronically.

4) Ozili & Arun, 2020 The Global FinDex dataset includes information on who hold the account, as well as whether people make payments from these accounts. 1/5 of accountholders indicated that in the last 12 months they have been unable to put or withdraw money from their accounts and these accounts are therefore regarded inactive and, of course, cannot be seen as supporting financing inclusion.

5) Al Nawayseh, 2020 The purpose of this research is to look into the influence of FinTech apps in building resilience during the COVID-19 disease outbreak. The study examines empirically the elements that influence Jordanians' desire to adopt FinTech applications. This suggests that a user's willingness for using FinTech apps is influenced by his or her perception of societal impact, benefits, and beliefs. Customers' risk perceptions did not affect their intention to utilize FinTech apps during the COVID-19 pandemic, but they did affect their belief in the service.

6) Alwi et al., 2021 Although conventional banking procedures have been questioned, COVID-19 has been used in digitization and novel ways such as mobile e-wallets as an important step in individual banking and in cash. World Health Organization(WHO) warns individuals not to utilize cash as much as possible since coronavirus remains alive. The disease will therefore continue to spread. This has encouraged bankers to take imaginative and new payment options such as e-wallets into consideration.

7) Wonglimpiyarat, 2019 This paper examines the spread of financial technology, or FinTech, in the banking industry. They draw insightful conclusions from the fact that the systemic characteristics of the innovation process change over time. Along the stages of innovation, innovators may employ various strategies for exploiting the innovation, and this process determines the systemic nature of the innovation.

8) (Al-Nawayseh and K, 2020) Financial technology is a technology-based industry in financial services outside conventional financial institutions, making it easier for the public to access financial products in transactions. Fintech makes

financial transaction more convenient, less expensive, and safer by using advances in technology.

9) Dipinder S Randhawa, Chan Jia Hao & Vani Swarupa Murali, 2018, Singapore: "India-Singapore FinTech Cooperation: Opportunities and Challenges" – Singapore and India lead developments in the use of FinTech. India offers the highest global returns on investment in FinTech. Singapore has developed cutting-edge sandbox for testing new FinTech products, it has a world-class digital and physical infrastructure. The potential for mutually beneficial collaboration is vast. Key recommendations include: On collaboration between governments, there is a need for information sharing on policies, consultations on data privacy, cyber security and more. Interoperability allows for seamless fund transfers across geographical zones via a single account.

10) Vivek Dubey, 2019, India: "FinTech Innovations in Digital Banking" – This paper discusses the role of Artificial Intelligence, Augmented Reality and Blockchain in Digital Banking. Currently, AR technology is having a vibrational impact in numerous industry sectors. From being deployed in healthcare, oil and gas construction, and retail as well as manufacturing, AR technologies are currently deployed to increase process efficiency, reduce costs and bring about a broad range of commercial benefits. Artificial intelligence is the rising star in the world of technology.

RESEARCH OBJECTIVES

- To identify the reason for the shift towards digital financial products.
- To study adaption and acceptance of fintech services.
- To analyse the problem face while use of fintech services.

RESEARCH METHODOLOGY

Research Design: - Descriptive Research

Source of Data: - Primary: 14 Literature Review & Chi – Square Test

Data collection method: - Survey Method & Public Records Sample size: - 100

Sampling method: - Convenience Sampling & Stratified Random Sampling

DATA ANALYSIS

Reason of using online banking and purpose of digital transactions.

| | | Ranks | | | | |
|---------------------------|----------|-----------|-----------|------------|---------|-----------------------------------|
| Table 1 | Age | N | Mean Rank | Chi-Square | P value | Result |
| Enables to conduct | 15 to 25 | 38 | 30.80 | 43.173 | .000 | Ho is Accepted and H1 is rejected |
| | 26 to 35 | 10 | 41.50 | | | |
| | 36 to 45 | 21 | 55.26 | | | |
| | Above 45 | 31 | 74.32 | | | |
| | Total | 100 | | | | |
| payment app | 15 to 25 | 38 | 36.04 | 36.216 | .000 | Ho is Accepted and H1 is rejected |
| | 26 to 35 | 10 | 30.20 | | | |
| | 36 to 45 | 21 | 52.29 | | | |
| | Above 45 | 31 | 73.56 | | | |
| | Total | 100 | | | | |
| test new technology | 15 to 25 | 38 | 37.76 | 32.035 | .000 | Ho is Accepted and H1 is rejected |
| | 26 to 35 | 10 | 29.65 | | | |
| | 36 to 45 | 21 | 51.10 | | | |
| | Above 45 | 31 | 72.44 | | | |
| | Total | 100 | | | | |
| Digital payment | 15 to 25 | 38 | 40.00 | 19.326 | .000 | Ho is Accepted and H1 is rejected |
| | 26 to 35 | 10 | 38.15 | | | |
| | 36 to 45 | 21 | 49.24 | | | |
| | Above 45 | 31 | 68.21 | | | |
| | Total | 100 | | | | |
| Pay all bills | 15 to 25 | 38 | 38.71 | 26.800 | .000 | Ho is Accepted and H1 is rejected |
| | 26 to 35 | 10 | 36.00 | | | |
| | 36 to 45 | 21 | 47.52 | | | |
| | Above 45 | 31 | 71.65 | | | |
| | Total | 100 | | | | |
| Ticket booking & recharge | 15 to 25 | 38 | 35.84 | 27.927 | .000 | Ho is Accepted and H1 is rejected |
| | 26 to 35 | 10 | 43.15 | | | |
| | 36 to 45 | 21 | 49.67 | | | |
| | Above 45 | 31 | 71.40 | | | |
| | | Total 100 | | | | |

GENDER + ADAPTION AND ACCEPTANCE:

gender and adaption and acceptance.

RESULTS AND DISCUSSION

- Ho: There is no significance difference between gender and adaption & acceptance.
- H1: There is significance difference between gender and adaption & acceptance.
- In case of significance value is 0.000, it is Greater than 0.05 so it indicates that the Alternative, Hypothesis [H0] can be selected there is no significance difference between

When the significance value is greater than 0.05, it means that the null hypothesis (Ho) cannot be rejected, and there is no evidence to suggest that there is a significant difference between gender and reason for the shift towards digital financial products. In this case, the alternative hypothesis (H1) would be rejected. Therefore, in all the cases you presented, the conclusion would be that there is no significant

difference between gender and reason for the shift towards digital financial products.

However, based on the statement you provided, if the significance value is 0.000, it means that the p-value is less than 0.05, which suggests that the null hypothesis (H_0) should be rejected. Therefore, there is a significant difference between gender and adaptation and acceptance. However, it is important to note that without further information on the study design, data analysis, and interpretation, it is difficult to provide a conclusive statement about the relationship between gender and adaptation and acceptance.

Based on the given significance values, we can conclude that there is a significant difference between occupation and adoption/acceptance of financial technology, and the null hypothesis can be rejected in favour of the alternative hypothesis.

It appears that the significance value for all the tests is 0.000, which is smaller than the significance level of 0.05. This indicates that we can reject the alternative hypothesis (H_1) and accept the null hypothesis (H_0) for all the tests. Therefore, there is no significant difference between occupation, income, and adoption and acceptance.

Regarding the hypothesis testing for the relationship between income and problem faced by users while using financial services, based on the given information, the null hypothesis states that there is no significant difference between income and problem faced, while the alternative hypothesis suggests that there is a significant difference. The significance value of 0.000 indicates that the result is statistically significant, which means that the null hypothesis can be rejected, and it can be concluded that there is a significant difference between income and the problem faced by users while using financial services.

LIMITATION OF THE STUDY

The study on the impact of fintech on financial inclusion faces several limitations, starting with the challenge of data availability and reliability. In many underdeveloped regions, accessing accurate, comprehensive, and recent data can be difficult. Additionally, reliance on self-reported data or third-party reports may introduce biases, further affecting the reliability of findings. These data constraints can

limit the study's ability to provide a precise and detailed analysis of fintech's role in improving financial inclusion.

Another key limitation is the difficulty in generalizing results. Fintech adoption varies widely across countries and regions due to differences in regulatory frameworks, cultural attitudes, and technological infrastructure. These variations mean that findings from one region may not be applicable to others. For instance, while some regions may benefit from fintech innovations, others may struggle with adoption due to systemic barriers.

Technological barriers also play a significant role in limiting the study. Many financially excluded individuals lack access to essential technologies such as smartphones, internet connectivity, or digital literacy. Additionally, the disparity in infrastructure between urban and rural areas can further exacerbate the digital divide, limiting fintech's impact on financial inclusion. These challenges highlight the need to consider accessibility issues in the study.

Economic and social factors are another critical aspect that the study may struggle to address comprehensively. Factors such as income inequality, educational levels, and cultural resistance can significantly influence fintech adoption and financial inclusion. These elements often operate independently of fintech's capabilities, making it difficult to isolate the impact of technology on improving access to financial services.

Finally, measuring financial inclusion itself poses challenges, as it is a multidimensional concept that involves not only access to financial services but also usage, affordability, and quality. Selecting appropriate indicators to evaluate these aspects can be complex, and qualitative factors like trust, user experience, and financial literacy may be difficult to quantify. These measurement issues, combined with the previously mentioned challenges, underscore the need for a nuanced approach to studying the relationship between fintech and financial inclusion, ensuring that all relevant factors are carefully considered and analysed.

CONCLUSION

The impact of fintech on financial inclusion has been transformative, breaking down traditional barriers and enabling greater access to financial services for underserved populations. By leveraging technology, fintech solutions have introduced innovative products such as mobile banking, digital wallets, and peer-to-peer lending, which have significantly

expanded the reach of financial services, especially in remote and rural areas. These advancements have empowered individuals and small businesses to participate more actively in the economy, fostering economic growth and reducing inequalities.

However, the benefits of fintech are not without challenges. Despite its potential, technological barriers such as digital literacy gaps, limited internet access, and the affordability of devices continue to hinder widespread adoption. Additionally, regulatory complexities, security risks, and privacy concerns present hurdles that need to be addressed to ensure fintech solutions are inclusive and sustainable. A balanced approach that combines innovation with robust policy frameworks, investments in infrastructure, and user education is crucial to maximizing fintech's role in achieving comprehensive financial inclusion.

Overall, while fintech has made significant strides in bridging the financial inclusion gap, a collaborative effort among stakeholder's governments, fintech companies, regulators, and communities—is essential to fully realize its potential. By addressing existing limitations and focusing on long-term, inclusive growth, fintech can play a pivotal role in building a more equitable and accessible financial ecosystem.

SUGGESTION

Fintech has emerged as a powerful force in driving financial inclusion, breaking down traditional barriers that have long excluded significant portions of the global population from accessing essential financial services. By leveraging technology, fintech companies are revolutionizing how individuals and businesses manage their finances, offering innovative solutions that are more accessible, affordable, and inclusive than ever before.

One of the most significant impacts of fintech on financial inclusion is the democratization of access. Mobile banking and digital wallets have transformed how people interact with their finances, enabling individuals in remote and underserved regions to open bank accounts, transfer funds, and make payments without the need for physical bank branches. This accessibility is particularly crucial for marginalized communities and those living in rural areas, who often lack access to traditional banking infrastructure. Fintech platforms also significantly reduce the costs associated with traditional banking,

making financial services more affordable for low-income households and small businesses.

While fintech offers immense potential for driving financial inclusion, it is essential to acknowledge and address the challenges that remain. The digital divide, which refers to the unequal access to technology and digital skills, continues to be a significant barrier for many individuals and communities. Ensuring equitable access to technology and digital literacy programs is crucial for maximizing the impact of fintech on financial inclusion. Additionally, cybersecurity threats and data privacy concerns require careful consideration to maintain trust and confidence in fintech platforms. In conclusion, fintech is reshaping the financial landscape by breaking down barriers to access, reducing costs, and empowering individuals with innovative tools and resources. By addressing the remaining challenges and continuing to innovate, fintech has the potential to revolutionize financial inclusion and create a more equitable and inclusive financial system for all.

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