The Role of Fintech in Financial Inclusion

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Abstract: *Fintech helps to achieve financial inclusion through its various applications. Fintech has made the work of financial inclusion much easier. Majority of the people can now have access to various types of financial services such as banking, investing, lending, borrowing and insurance, etc… There has been a rise in the usage of fintech, especially after the spread of covid-19 pandemic. The purpose of the study is to determine the usage level and satisfaction level of people towards services offered by Fintech and to study the role of fintech in financial inclusion. In this descriptive study, the data were collected from 111 respondents from Bangalore and Mysore using random sampling method. The findings of the study include majority of the fintech customers are satisfied with the services as they can transact with ease and speed. However, security was the main concern for the majority of respondents. Fintech companies are able to reach to the all-income group people because of technology. The agility of the fintech made banks to learn from them and forced them to use the technology in their services.*

Keywords; *Fintech, financial inclusion, financial services, pandemic situation, economic development.*

1.Introduction: Due to the pandemic, not only did the physical health of society be threatened but also the financial health. In this crucial condition, financial technology became a ray of hope for society. By using online digital payment applications, people were able to maintain their finances at their homes and it promoted the safety of people. With the rise in the applications of Fintech, there is the emergence of risk. Government and various Fintech companies have enforced the safety and security of the users of the digital payment platforms from uncertainties. Fintech not only helps to create financial inclusion, but also to achieve higher GDP (Sahay, 2020). Fintech is a financial technology to aid various financial services by means of net banking, mobile banking, various banking applications and crypto-currency. It is useful in banking activities, in risk minimization by use of machine learning and artificial intelligence, trading of cryptocurrency, insurance activities, planning through budgeting apps, data analytics and many more. The fintech industry gained its momentum because of convenience, and ease of doing transactions. However, lack of awareness and security are major concerns.

Fintech is of great use for investors because of its two important frameworks, that is Fintech Ecosystem and Digital Transformation. Fintech Ecosystem helps in the investigation of different areas and usefulness of technology involved in financial services, which would help speculators and investors to analyze and predict the future of their investments. Digital transformation made people's lives happy by making financial transactions from home. This has encouraged people to adopt various applications of Fintech such as mobile banking, net banking, and various digital payment apps, etc. (Imerman & Fabozzi, 2020).

There has been a growth in fintech and its impact over the years, such as; Initially, ATMs, debit cards and credit cards were developed. Then stock market trading came into existence, digitalization of the functions of the bank and its employees were introduced, then E-commerce was developed to aid wide reach of goods and services, and now Digital financing such as net banking, crowdfunding, and various mobile banking apps have been developed by the advancement of financial technology (Wulan, 2017).

Financial innovation has given rise to Mobile money, crowd funding etc. Big data and AI have made the work easier by collecting the readily available data of the clients and this helps to improve their system and reach. Pandemic made online banking popular thereby giving rise to fintech companies and this further increased the use of digital financial services by everyone resulting in the financial inclusion. As financial innovations take place, it becomes important to protect consumer's interest and the main attention should be on adequate disclosure of data of the consumers, prevention of biased business practices, effective utilization of resources, and increasing the financial literacy (Beck, 2020).

Fintech is a trending financial invention and owing to the benefits provided by them, present generation are opting for mobile or net banking and this has forced banks to adopt new technologies in their system. Fintech credits, Crowdfunding, p2p lending etc., are the modes by which fintech allows to give and take credits. Fintech has its own risks; it has the potential to cause micro and macro-economic risks. The development of big tech companies can help in the growth of Fintech, thereby posing a risk to the traditional financial service providers (Vucinic, 2020). Giudici, 2018, noted that various technologies (Artificial intelligence, Big data, and machine learning, etc.) has proved to be useful for consumers, bankers and investors. Every new innovation has its own risks and Fintech too has uncertainties and various start-ups have come into existence to minimize the risk involved in this sector. One such is risk minimizing technology is Regtech that mainly deals with automation of data monitoring, assessing and analyzing the data to prevent money laundering and it checks upon various changes in regulations from time to time. Thus, along with Fintech, Risk minimizing technology such as Regtech is also gaining popularity and growing rapidly.

Financial inclusion through fintech: Low-income groups of people do not get the opportunity to avail all the financial services and that results in financial exclusion. Fintech, through its technology and digital payments ensures that all groups of the society get an equal opportunity to enjoy all the financial services and thus promotes financial inclusion (Salampasis & Laure, 2017). Financial inclusion is essential for the development of a country and fintech credit helps to achieve financial inclusion. Applications of fintech such as machine learning and data analytics help to determine the credit score and in evaluating credit risk. Countries where there is no financial inclusion can benefit greatly by fintech lending (Bazarbaash, 2019). Mobile banking is one of the ways to establish financial inclusion. Mobile banking has become a massive hit since it is offering the banking services at the tip of the finger, people should adopt themselves for the new technological changes for a better future (Osabutey & Senyo, 2020). Due to lack of banks in villages, people in villages are unable to get financial services such as saving, investing and borrowing, etc. But, fintech, through its online banking helps to get access to various financial services. Mobile Money has made it convenient to pay the bills and insurance premiums (Senyo & Karanasios, 2020).

Design of the study: The objectives of this paper are to determine the usage and satisfaction level of people towards services offered by Fintech and to study the role of fintech in financial inclusion.

Data collection: Primary data has been collected by using structured questionnaire. Secondary data has been collected by referring to various journals, articles, research papers, blogs and websites.

Sampling design: Simple random sampling method was used to select the respondents from the study in Bengaluru and Mysuru. The sample size for the study was 111.

2. Review of Literature: Managing the bank accounts at the comfort of the house by means of mobile banking has become possible through Fintech. New financial technologies have greatly contributed to mankind by dropping the cost, effort and time and have improved the reach of the services worldwide (Badruddin, 2017).

Technological development in the finance sector has helped to achieve financial inclusion. The government is working hard to ensure that these technological innovations with respect to the BFSI sector are reaching out to the rural population so that the money earned by them are safely invested. The RBI and the Government of India are aiming to achieve financial inclusion; this has resulted in the emergence of online banking services which can be used by anyone and anywhere in India (Kandpal & Mehrotra, 2019).

With the emergence of digital credit and Fintech, lenders and borrowers can connect on various digital platforms such as crowdfunding. With the help of another digital technology- Big data, credit score and credit risk of a consumer can be assessed. Digital credit has greatly reduced the risk of visiting banks and following the long procedure of obtaining credit.

Fintech has a positive impact on the society by making various contributions in both financial and technological sectors. Innovative changes made by Fintech include lower pricing and affordability of financial services, increase in effectiveness and efficiency of banking services and economic growth by means of more people accessing services provided by banks and financial institutions (Carney, 2017).

Patwardhan, Singleton, & Schmitz, 2018, highlighted that progressed information examination and utilization of Fintech applications such as AI have clear uses in loaning environment and protection, in misrepresentation identification and anticipation, and for better credit appraisal. This presents an opportunity for people who have generally been bolted out because of a need of formal financial records. Additionally, AI can be used for protection and to enhance the conventional endorsing cycle and upgrade controls. The worldwide monetary framework is ready for remarkable development. Fintech can decrease costs and improve access. People need to understand the relationship between Monetary system and the positive impact the technology has on financial sector and the economy. By empowering innovations and overseeing hazards, another monetary framework can be created which is more comprehensive and stronger (Das, 2019).

Due to lack of financial awareness among people and absence of banks in rural areas and complex procedures involving in opening a bank account. But, after the development of innovative financial technology, banks and insurance companies have a bigger reach (Gulamhuseinwala, Bull, & Lewis, 2016).

Durai & Stella, 2019, research states that, the development of technology in finance sector has been useful for banks, its users, and in economic development of the country. Use of mobile payment apps, credit and debit cards has proven to be beneficial and convenient to the customers. Several limitations such as hacking, lack of internet connection and inability to purchase mobile phones due to high cost have been a concern for people to adopt to fintech. Thus, by encouraging the financial education and creating the awareness about the advantages of fintech, financial inclusion can be achieved.

3. Hypothesis statement: The following hypothesis were tested.

Null Hypothesis (H_{0a}): There is no significant influence of Educational Qualification of the respondents on the awareness about Fintech and financial inclusion.

Alternate Hypothesis (H_{1a}): There is a significant influence of Educational Qualification of the respondents on the awareness about Fintech and financial inclusion.

Null Hypothesis (H_{0b}): There is no significant difference between the level of satisfaction towards the security offered by the digital payment applications and frequency of using digital payment applications.

Alternate Hypothesis (H_{1b}): There is a significant difference between the level of satisfaction towards the security offered by the digital payment applications and frequency of using digital payment applications.

4. Data Analysis and Findings: 30% of the respondents are aware of Fintech; 14% are aware of only financial inclusion; 33% are aware of both Fintech and financial inclusion, and 23% of the respondents were neither aware of Fintech nor of financial inclusion. 96% of respondents have mobile payment apps on their smartphone and around 5% do not use mobile payment apps. While 85% are aware of online financial services, 45% are aware of artificial intelligence, 31% have awareness about machine learning, 40% are aware of cryptocurrency, 24% have knowledge about blockchain, 32% have awareness about crowdfunding, 40% are aware of data analytics and 29% are aware of budget planning apps. 47% of the respondents prefer Net banking, 72% prefer Mobile banking, 60% opts for Digital payment applications, 51% prefers to use Credit/Debit cards and 22% prefers the physical visit to the bank while 81% of the respondents uses Google-pay app to make payments, 69% uses phone pe, 44% makes the payment in Paytm, 13% has PayPal app, 5% uses Mobikwik, 17% uses Bhim app, 27% carry on their transactions in amazon pay and 32% uses apps created by different banks.

57% of the respondents are using the online transaction system from past 1-3 years, 32% are using the online payment system from 3-5 years and 12% are making the online payments from more than 5 years. 87% of the respondents uses digital payment applications to transfer money, 76% uses to pay bills, 72% uses for mobile/dth recharge, 38% uses digital payment applications to claim cashbacks/offers/discounts, 41% uses the digital payment applications because it helps in keeping track of the transactions, 22% pays the insurance using digital payment applications, 13% takes loans through digital payment applications, 37% uses for purchasing the commodities, 46% uses the digital payments due to easy accessibility, in order to avoid the visit to banks, 45% of the respondents make digital payments, 57% uses the digital payments to save time, 36% uses the digital payments because of the good security, 56% uses because of the ease provided in digital payments, 15% uses the digital payment applications for other purposes.

Satisfaction level: 23% of the respondents are highly satisfied with the security offered by the digital payment applications, 52% satisfied with the security provided in digital payment applications, 21% are neither satisfied nor dissatisfied, 4% are dissatisfied and none are highly dissatisfied towards the security provided in digital payment applications while 35% of the respondents always uses the digital payment applications, 37% often uses the digital payment applications, 23% uses the digital payment applications sometimes, 2% rarely uses the digital payment applications, 4% never uses the digital payment applications. And 29% of the respondents use the budget planning applications and 71% of the respondents do not use the budget planning applications. 27% of the respondents strongly agree that Fintech has made life easy, 43% agrees for the above statement, 27% neither agree nor disagree for the above statement, 3% feels that Fintech has not made life easy, and none strongly disagrees for the above statement.

Financial inclusion: 23% of the respondents strongly feels that Fintech results in financial inclusion, 39% of the respondents agrees that Fintech results in financial inclusion, 31% neither agrees nor disagrees, 7% disagrees for the statement; Fintech results in financial inclusion and none strongly disagrees for the fact that Fintech results in financial inclusion. 16% of the respondents have used crowdfunding platforms, and 84% of the respondents have not used the crowdfunding platform. 69% of the respondents feels that, hacking risk is the major drawback of online financial services, 27% of the respondents do not use online financial services frequently due to lack of internet connection, 32% of the respondents has a poor network that does not permit for making the online transactions, 17% feels that the lack of provision for making deposits holds them back from using the online financial services, 25% do not use the online financial services due to the risk of forgetting the password, absence of technical knowledge do not let the 14% of the respondents to use the online financial services, according 26% of the respondents amount transfer limit is another drawback of online financial services, 18% feels that other factors are responsible for holding them back from using the online financial services.

Satisfaction level towards the financial services offered by fintech companies: One-third of the respondents were satisfied by the financial services provided by Fintech and very little number of respondents were not satisfied by the financial services provided by Fintech. This shows that Fintech are providing good services and are creating satisfaction among the users.

Table 4.1: Showing Awareness about term Fintech and Financial Inclusion amongst respondents

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	15.985	5	3.197	2.628	.028
Within Groups	127.745	105	1.217		
Total	143.730	110			

Source: From Calculation

Table 4.2: Showing Results of Chi Square Analysis

Chi-Square Tests

	Value	Df	Asymptotic Significance (2- sided)
Pearson Chi-Square	36.191	12	<.001
Likelihood Ratio	35.903	12	<.001
Linear-by-Linear Association	18.160	1	<.001
N of Valid Cases	111		

Source: From Calculation

5. Conclusion: More awareness has to be created among the people about fintech and financial inclusion by conducting training programs so that they use upgraded technological devices and start using fintech services. Digital payment systems should increase security and should build trust among people. Overall, both government and people should work together to make digital India by using the online transaction systems and thus can achieve financial inclusion, where everyone can use the financial transaction functions from any corner of the country. Everything has pros and cons; likewise, Fintech too has its own merits and demerits; but risks and demerits are very little when compared with the benefits. Thus, Fintech helps to provide financial services to everyone and this will result in financial inclusion, which in turn leads to the economic development of the country (Jaksic & Marinc, 2018). Fintech facilitates for digitalization, secured transactions and ease of work for both bankers and customers. Many banks are being partnering with the Fintech companies to provide quality service to their customers and to increase their reach. Traditional banking and Technological banking, both have its own benefits and limitations and their combination would result in a synergy effect (Vasiljeva & Lukanova, 2016). Jan Dhan Yojana, an initiative by the government to increase the awareness about bank accounts has resulted in the creation of 1 billion bank accounts, increase in the usage of smartphones, India has 1.2 billion mobile phone users, increase in the disposable income, growth of middle-class and high-income groups facilitates the expansion of Fintech. By promoting the knowledge about fintech, everyone can avail the financial services which leads to financial inclusion and results in a good financial health of the public (Panos & Wilson, 2020).

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