

**ROLE OF FINTECH IN TRANSFORMING BANKING AND FINANCIAL SERVICES: AN EMPIRICAL STUDY****Harikumar Pallathadka, Laxmi Kirana Pallathadka\***

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**ABSTRACT**

The rise of Fintech globally is the new norm of this century. Previously, only Western countries' dominance like the USA and UK could be observed. However, nowadays, developing countries like India have adopted the new norm and at an exceedingly fast rate to become one of the most significant users of Fintech. With the help of fintech companies and their new innovative technologies, safer payments, and technologies like AI, the finance sector is growing exponentially. This study discusses the particular role of Fintech behind the ascension of the financial sector. A brief history of the fintech services and the main reason for their blooming growth is also relevant to the study, accorded by the benefits or drawbacks the countries might face and what the finance sector might look like in the future.

**Keywords-** Fintech, Financial, Exponential, Blooming.

**INTRODUCTION**

Fintech, a short abbreviation for "financial technology," is an application of a new financial technology that has been hugely beneficial and handy for the products and services in the financial sector. Starting off with mobile banking and insurances to cryptocurrencies and investments, this new technology's vast array of services has been widely popular, which is in the interests of both consumers and the customers. The fast and innovative progress such as mobile payment and online banking has changed how we manage our wallets (Omarini, 2017).

The industry is rapidly expanding; as seen from the CB reports, 41 VC-backed Fintech unicorns are worth a combined \$154.1 Billion. A factor driving this application in the financial sector might be many traditional banks switching to Fintech, making using the services more accessible. Some are actively investing in, acquiring, or partnering with start-ups of fintech companies. The key behind this process, from payments and loans to credit scoring and stock trading being more efficient, faster, and safer, is integrating technologies like AI, blockchain, and data science. Apart from making banks more accessible and efficient, the fintech technology helps engage more with the customers (Hinson et al., 2019).

Due to the apparent demands of the customers and expectations, the main of the companies have moved away towards creating services and implementing them for a long time potential. The socioeconomic change brought about by fintech companies, such as the desire to achieve that degree of transformation while considering the demographic and social requirements of the south, maybe good in the long run. Especially people in developing countries such as India, Asia, and China are having a real benefit. Previously, the traditional banks had mainly its customer pool from the privileged section of the society. After Fintech, the rest of the customer pool can also avail its services, making the companies' future even brighter. Besides, the insurance industry (InsureTech) and Robo-advising have helped the main structure of financial technology facilities (Gomber et al., 2018).

The technology and its application have been all over our daily lives, starting from investments and trading to several other features. Robo-advisers are mainly automated financial advisers with low human intervention. They use mathematical calculations and formulae and are a low cost-efficient alternative compared to human advisers. AI algorithms can furnish a perceptive about a customer, his spending habit, and risk appetite to portray the customer's demands to the company in a better perspective. Chatbots are also helpful in customer service and other sections. The NLP-based chatbots can help as there is a rush of innovations with problems, which is when the chatbots come in handy. The installments have been of notable changes recently; the facility of cloud banking is cost-effective. Cloud adjusts to the change of requests and gives versatility to serve the transforming needs of clients. Big data can provide insight into investments and market changes, which require new policies to be undertaken, analyze customer spending habits, advancement in fraud detection, and produce new marketing strategies. Another developing technology is blockchain, which eliminates the requirement for a

third party to serve as a middleman between the recipient and sender throughout the transaction's execution. It received much attention from the fintech companies (Varga, 2017).

## **HISTORY AND THE EVOLUTION OF FINTECH**

Fintech has been evolving since the banks went online. Though the term has only been in people's attention recently, it has been manipulating the whole transaction process for almost a century. It originated in the late 19<sup>th</sup> century when mobile money was only possible by morse code and telegrams. The first-ever transatlantic cable only used telegram and Morse codes. Then there was the revolutionary incident, the installation of the first Automated Tailor Machine In 1967 by Barclays. This is the fine line where the analog and digitization of finances can be discerning. The first moments towards digital banking were witnessed by the 1990s (Awotunde et al., 2021).

PayPal was launched in 1998 that showed a clear hint of what the future of money lending and the other finance procedures might look like in the future. The 2008 financial crisis signaled the end of that period, and after the financial crisis, a loss of confidence in banks spawned Bitcoin in 2009. Some other cryptocurrencies were also coming into play. Then the adoption of smartphones, which was a huge turning point for fintech users. They became the primary means for people's access to the web and other financial services. The era of start-ups was already begun. Banking as a service platform, including Treezor and Solarisbank, did make it a lot more lenient. And then, the dominance of the western countries was coming to an end as players like China and India were in the play, and they eventually became the two countries with the highest users of Fintech. As the burdens of banking infrastructures like the western countries were not incumbent on countries like China and India, the ability to adopt new resolutions and implementation was quicker than their western counterpart. The mobile payment market exceeded \$1 trillion in 2019(Laven, & Bruggink, 2016).

## **FINTECH IN INDIA**

The finance market of India has been one of the fastest-growing sports, with a growth rate of more than 65%. The number of fintech companies currently working in India is more than two thousand, with most of them having their headquarters in Mumbai and Bengaluru. These two are called the country's technology and financial hubs (Li et al., 2017).

The total value of India's financial market counts for a whopping \$31 Billion when the aim is to \$25 Billion by 2025. The total turnover is \$66 Billion in 2019, which aims to be \$138 billion by 2023. The success of India's financial market does not lie only on the number of established companies; there are far too many reasons behind it. The research found that the Covid 19 pandemic has provided India with a 60% increase in fintech investments(Dimbean-Creta, 2017).

Paytm stands on top of the fintech companies of India, and it is valued at \$16 billion. The Indian fintech scene is divided into many parts, such as banking, installment handling, and exchanging. Over the last couple of years, the Indian economy has exploited the opportunity that Fintech provided. These include digital wallets, loaning, and safe transactions. The opportunities for new turns are open as the partnership between Fintech and Corporate can steady acceleration to the current situation, which can last for a long run. Likewise, the banks are also planning to cooperate with the fintech companies. This new initiative can make the customers and the company better off. It will come with a package of more security, more clarity, and, the biggest of all, smoother transactions. This bliss creek could result in lending becoming the sector with the highest digital penetration in India. Digital lending platforms are in critical need of providing access to credit when customers need it the most. They also offer a small ticket size loan to the customers, which usually are not offered by traditional banks in India, making a clear distinction between them. There are many reasons behind this massive growth in the fintech sector in India (Navaretti et al., 2018).

## **FACTOR BEHIND FINTECH BOOM IN INDIA**

The reason behind the fintech boom of India recently is neo-banking, Lending platforms, the rise of digital payment, insurance, increased tech adoption, government initiatives, digital India, unified payments interface, trade receivable discounting system, and many more. These are discussed as follows (Wójcik, 2021).

- **Neobanking** - Neobanks is a term that refers to the method through which new-age financial service providers operate. Its main objective is to expand its technology and facilities to attract more consumers. It offers payment gateways, payment processing, cash delivery, and online payment solutions.
- **Lending Platforms** - With digital methods, some platforms keep track of personal and business loans. The lending platforms and loans that have disrupted the traditional lending process are now more accessible than before. The unprivileged customer pool is also facilitated by the service it provides. They also calculate the creditworthiness of the borrowers and supply them with the number of loans they need (Breidbach et al., 2019).
- **Rise of Digital Payments**- As the government of India backs the digital initiatives, the digital payment ecosystem is growing fast, and UPI payments have grown at an exponential rate as the new norm of this country has been replaced by an online payment system. Beginning with a modest number of 21, it now monitors more than 200 banks. According to the most recent NPCI statistics, UPI payments increased thrice from 2020-to 21.
- **InsurTech** - The Insurance system In India is evolving fast as policyholders push the limits of product innovations. Subsequently, the offerings of new value-added products appear in the market. Some data-driven innovations are also present in the value chain. There are at present 66 insure tech companies in India which account for almost 35% of the insure tech-focused venture capital invested in the APAC region (Zavolokina et al., 2016).
- **Increased Tech Adoption**- Companies use artificial intelligence and comprehensive data analysis to raise their game in a competitive market while also considering the buyers' benefits. Advanced fraud checks, risk identification, and safer payment methods have been introduced. Eleven Indian banks have also used blockchain technology for small and medium-sized businesses.
- **Government Initiatives** - The Government of India's efforts, serve as the bedrock for the country's accelerated Fintech and digital banking development. Affluence development is facilitated by programs such as Jan Dhan Yojna and Digital India. India's fintech sector boosted in 2016 due to demonetization, with the government aiming to accelerate the transition from paper to electronic payments (Dimbean-Creta, 2018).
- **United Payments Interface**- UPI has become one of the most significant accomplishments of the Indian Payments Infrastructure. UPI managed to capture a 74% market share of all digital transaction volume in five years. The growth has encouraged many private players to provide alternatives for digital payments that completely transform the Indian economy.

## **FINTECH COMPANIES IN INDIA**

India stands as one of the biggest fintech countries in India. United Kingdom, Singapore, Germany are occupying positions behind India. Indian companies have given the payment methods a genuine transformation. They have changed some of our everyday activities, starting from insurance purchases to paying the electricity bill. Kudos to the Digital India Initiative by the incumbent government of India. Fintech companies did receive a boost, as it converted the skeptical mind of Indian people to India we are in today. The demonetization also came into play in 2016 and changed people's thoughts about online banking and Fintech forever (Asmarani, & Wijaya, 2020).

Today, a large proportion of Indians use payment apps like PhonePe, GPay, efficiently. The young generation and the older generation have witnessed a significant difference. As smartphones increased, fintech companies saw a hike in online payment methods, including UPI. There are some noteworthy fintech companies India has witnessed in recent years. Individuals have been keen on the idea of digital payment. Starting from Paytm, Phonepe to PolicyBazaar, Billdesk several companies are prospering at present. Talking about Paytm Paytm is the bulkiest fintech service India can offer right now. The number of current users, being 85 million, is a mammoth in the fintech market of India (Pant, 2020).

Paytm has a prominent share in the Indian finance market. The services vary from safety bank transfers to recharging phones, paying bills, recharging DTH, and more. At the same time, the Phonepe platform is available in over 11 languages, which has partnered recently with RedBus, Ola, Goibibo, FreshMenu. MobiKwik. PayU is a Netherland-based company. Starting in India in 2011, the company runs its operations in over 17 countries. Policybazaar is another fintech company that provides information about insurance policies, which helps buyers choose one that best fits their risk appetite. Billdesk, Ezetap, Mswipe, and Freecharge are a few prominent fintech companies (Shin & Choi, 2019).

### **PRO'S & CON'S**

Fintech, like every coin, has a head and a tail. As an explanation of its benefits, it may be said that Fintech increases money circulation. Cashless transactions are more straightforward, increasing money liquidity and removing the technology-related cost of change. It brings conventional non-banking customers into the banking system, resulting in a more extensive client base. Additionally, one might argue that, unlike the advent of other commercial services, Fintech democratizes the economy by providing an affordable means of participation. Fintech also encourages transparency in its transactions and other services. Fraud detection and security are enhanced due to the complexity of the global financial environment and the ease with which unethical conduct may be hidden (Thakor, 2020).

Fintech's drawbacks include lack of privacy and specific instances of abuse. Since the financial system has been a new standard for less than a century, some individuals are left behind. To use digital technologies effectively, one must have a broadband or data internet connection, a smartphone, and wireless connectivity. In a nation where everyone cannot feed themselves adequately, having a smartphone for everyone is a far-fetched fantasy. Certain nations are not fortunate enough and have considered purchasing an internet connection at the high cost of obtaining the service above in that country. This implies that none of Fintech's cost-effective features will be available to residents in these regions. As a result, not everyone has access to net banking and online payment. Now, though, there is a low-cost smartphone that performs the job. Additionally, security may be an issue (Kandpal & Mehrotra, 2019).

A smartphone is mobile and can keep track of every financial record made. It also does contain information about the user, and if someone knows the UPI pin, getting access to the phone makes it an easy job to transfer a large amount of money to his account. Smartphone use with fintech apps is safe, but to what extent? Cyberattacks are common, and it violates someone's right to privacy too. This way, Fintech can be a boomerang for the user, causing him permanent damage, and a fear of this can make him do away with the services forever.

Furthermore, with the significantly changing technologies and the rapidly implementing systems, it is harder for a person to keep track. The quality of software used is also of question. Digital transactions make companies more dependent on their software products, shifting focus to fintech innovations and development (Gimpel et al., 2018).

### **Objectives of the Study:**

1. To find the reasons for the role of Fintech in transforming banking and financial services
2. To ascertain the significance of the reasons for the role of Fintech in transforming banking and financial services

### **Research Methodology:**

The present study is descriptive in which the reasons for the role of Fintech in transforming banking and financial services have been studied. The sample size of the study is 160. The data were gathered using a standardized questionnaire and evaluated using mean values and the t-test.

### **Table1 Demographic profile of the respondents**

<b>Variables</b>	<b>Number of respondents</b>	<b>%age</b>
<b>Gender</b>		
Male	71	55%
Female	59	45%
<b>Total</b>	<b>130</b>	<b>100%</b>
<b>Fintech services have made life easy</b>		
Yes	96	74%
No	34	26%
<b>Total</b>	<b>130</b>	<b>100%</b>
<b>The most helpful service of Fintech is</b>		
Net banking	39	30%
Mobile banking	32	25%
Online payment services	38	29%
Online loan disbursement service	21	16%
<b>Total</b>	<b>130</b>	<b>100%</b>
<b>AI in banking and insurance has made it safe</b>		
Yes	102	78%
No	28	22%
<b>Total</b>	<b>130</b>	<b>100%</b>

Table 1 presents the demographic profile of the respondents on the role of Fintech in transforming banking and financial services. There are 55% males and 45% females in the study. Among the respondents, 74% believe that Fintech services have made life easy, and 26% believe Fintech services have not made life easy. Online banking is the most helpful fintech service, according to 30% of respondents, followed by mobile banking (25%), online payment services (29%), and online loan disbursement (16%). The percentage of respondents who think that AI in banking and insurance has made it safe is 78%, and 22% think AI in banking and insurance has not made it safe.

**Table 2 Mean Value of the measurement of employee attitude towards organizational commitment**

<b>Sr. No.</b>	<b>Factors for the role of Fintech in transforming banking and financial services</b>	<b>Mean Score</b>
1.	AI has helped the financial sector is growing at a fast pace	4.19
2.	The online payment system has completely changed the way transactions happen	4.17
3.	Every company needs to adopt the Fintech services	4.20
4.	Fintech service is a good alternative for human advisors	4.04
5.	Online banking has made life easy and fast	4.11
6.	Paytm is one of the top Fintech companies in the country	4.16
7.	India is one of the top Fintech using nations	4.02
8.	Today, most Indians prefer using online payment systems	4.05
9.	Fintech helps in bringing more money into circulation	4.10
10.	Fraudulent instances have been reduced because of Fintech services	4.01

Table 2 shows the opinions of the respondents. It is observed that It is essential for every company to adopt the Fintech services with the mean value of 4.20. AI follows it has helped the financial sector is growing at a fast pace (4.19), Online payment system has completely changed the way transactions happen (4.17), Paytm is one of the top Fintech companies in the country (4.16). Further Online banking has simplified and accelerated life (4.11); Fintech contributes to increased money circulation (4.10); nowadays, most Indians choose online payment systems (4.05); and fintech services are a viable substitute for human advisers (4.04). Reasons like India is one of the top Fintech using nations (4.02), and Fraudulent instances have been reduced because Fintech services (4.01) were also viewed as necessary.

**Table 3**

<b>Sr. No.</b>	<b>Factors for the role of Fintech in transforming banking and financial services</b>	<b>Mean Score</b>	<b>t-Value</b>	<b>Sig</b>
1.	AI has helped the financial sector is growing at a fast pace	4.19	8.542	0.000
2.	The online payment system has completely changed the way transactions happen	4.17	7.801	0.000
3.	Every company needs to adopt the Fintech services	4.20	7.948	0.000
4.	Fintech service is a good alternative for human advisors	4.04	5.237	0.000
5.	Online banking has made life easy and fast	4.11	6.208	0.000
6.	Paytm is one of the top Fintech companies in the country	4.16	7.575	0.000
7.	India is one of the top Fintech using nations	4.02	6.201	0.000

8.	Today, most Indians prefer using online payment systems	4.05	7.254	0.000
9.	Fintech helps in bringing more money into circulation	4.10	7.192	0.000
10.	Fraudulent instances have been reduced because of Fintech services	4.01	6.153	0.000

Table 3 shows the results of the t-test. The table indicates that the significance value for each assertion is less than 0.05; therefore, all comments about Fintech's role in changing banking and financial services are significant.

**CONCLUSION**

The fintech sector is one of the major driving forces behind, asking the financial sector what it is today. Especially the recent boom in the fintech companies in India are china makes the finance sector rise exponentially. This has made every life more accessible for some people, thus marketing the banking services available for everyone who has a smartphone and can pay for an internet connection. The fast innovation technologies help to bring more money to the finance sector. However, the primary issue is privacy, safety, security, and the accessories required to access and utilize their services and goods. Considering the arguments, one might argue that Fintech can serve as a dark knight for certain nations if further adjustments are made and security is strengthened (Omarini, 2020).

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