

REACH OF FINANCIAL SERVICES TO ALL THROUGH FINTECH IN SPRINGING ECONOMY

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Abstract

New Financing Modalities (FINTECH) have created vast changes around the world. Because the principles of Block chain, Crypto currency, Artificial Intelligence, Machine Learning and their applications in the financial sector will be a development in the emerging economy like India. This chapter discuss about the growth of Fintech market in the India and through this fintech, all financial services will be reaching to each and every person in India. This chapter will also discuss about the lending and transactions made simple with the help of machine learning algorithms. The predictive behaviorial analytics and data driven marketing will take the financial decisions. Customers are highly benefited, because their UPI transactions made simple with the services providing through Fintech. Apart from customers, decision makers in the financial sector also make credit decisions with in a fraction of second. Finally we present the beneficiary driven by fintech to customers in India and to which level they got knowledge about fintech services. we provide the detailed review of India to reach the inclusive economy, still more knowledge of fintech services and their importance will be providing to customers from the top to bottom level in the developing economy like India.

It is important to provide differential and convenient financial services in the fast changing business market. Finally we discuss about the financial revolution created by fintech , by this customers satisfaction index was improved in the emerging economy like India. At last we discuss here, fintech and their total financial performance will increase the living standards of customers.

Key words: Fintech, Blockchain, Artificial Intelligence, Machine Learning, Algorithms, Behaviorial analytics, Data driven marketing.

1. INTRODUCTION

Digitalization in the financial service industry has a strong impact in the Indian economy. All financial services will be fully based on information. Examples are payment transactions, credit facilities, or purchase of car does not involve any physical transactions. Most of the processes are fully preceded with online payment. Recent development in the Information Technology leads to fully automation of financial process. Robo advisors with new business models are used in the financial services. The major drivers of IT induced transformation are (Alt and Puschmann 2012,

p. 204 f.; Alt and Puschmann 2016, p. 24 ff.):.

Recent developments in the Information Technology such as social computing, Internet Of Things(IOT) or cloud computing, Big Data will not only automate the financial services but also introduces new financial service products to consumers. Best examples of these are alternative crowd funding and peer to peer lending services are widely developed in banking and insurance services due to financial technology.

INDIA'S FINTECH GROWTH

Fintech market in India has seen an tremendous rise over last few years. Fintech sector has received overall funding worth\$9.8 billion in 2021. The payment segment of fintech funding's 53% of share verticals in India. Largest number of real time transactions was noted in India. UPI transactions in India has witnessed a growth of 650% at the rural and semi urban areas.

Jan Dhan Yojana: It is The world's largest financial inclusion initiative. It has helped in opening new bank account for 450 million beneficiaries such as insurance, credit, remittances and pensions enabling fintech companies to build technology based products in India.

E- RUPI: It is a person and purposeful digital payments to aloe contactless and cashless payment solutions. This solution is mainly adopted during Covid-19 vaccination for cashless payment.

India Stack: It is a set of apps that allows governments, startups and business people to use a unique digital infrastructure to solve cashless and paperless service delivery. APIs to promote private and public digital initiators and it has played the catalyst in India's digital foundation and Fintech evolution.

Financial inclusion initiatives such as DAY-NRLM, PMJDY, Atal pension yojana and Direct benefit transfer have infused the digital revolution of financial services in India.

2. THEORETICAL BACKGROUND

2.1 Digital Financial services

Improvement in technology, customers are switching from in person transaction to digital transaction through the services provided by digital banking and the customers are benefited with the new financial products provided by Fintech. This transition will enabled the non banking firms also offer financial products. Major financial services in the world are offered by technological giants Google and Apple (Peter Gomber, Robert J. Kauffman 2018). Purposive effect put forth by entrepreneurs and financial regulators will design the future of fintech in the productive direction.cooperative and proper utilization of Artificial intelligence will enable the growth of Fintech's products and services to more customization in the inclusive economy(Anne Laure Mention 2019).

Fintech creates healthy revolution in the financial market. Regulatory approach was not appropriate in controlling the fintech companies. But most of the countries will have strong regulatory authority for fintech governing bodies (Giorgio Barba Navaretti, Giacomo Calzolari and Alberto Franco Pozzolo 2017). Fintech segment promotes the growth of other industrial segments and provides an innovative platform for other financial institutions for their sustainable development. These tremendous growth in Fintech companies will raise the conflict among other traditional institutions, so government in the inclusive economy will help to solve such disputes and promote the technological innovation.

2.2 Customer gratification

Latest discussion in India now a days was creation of cashless economy. Effective implementation of demonetization has influenced our economy towards digital transactions. Quick adoption of UPI transactions, Debit cards, E-wallets, RTGS and IMPS will make transactions and payments in a customer friendly mode.

Now a days a person to buy a book using credit card, a milkman or vegetable vendor gives his paytm number and makes use of OR code. Digitally empowered financial transaction will improve customer satisfaction and brings loyalty among the consumers. And bring more customer experiences through big data and artificial intelligence. Digital India campaign was launched to improve India to a sustainable economic development. Cashless, paperless and faceless are the buzzwords in inclusive economy. The emergence of fintech companies like paytm, phonepe, razorpay, policy bazaar will meet the customer expectations through their innovative services (Navleen kaur, supriya lamba sahdev 2021)

Massive adoption of digital transactions with the support of central bank will improve financial services with customer satisfaction. Major factors like risk free, secure, trust and transparent accountability of services will bring the gratification of customers. Government has to build strong trust among customers in digital payments, it will ensure in improving customer satisfaction (Narinder Kumar Bhasin, Anupama Rajesh 2021). The customer is the king of the market, so the banks have to adopt the innovative business models to increase the satisfaction level of customers. Fintech is meeting the customer gratitude and responsiveness to a higher extent (Aditee Huparikar, Neeta Shinde 2022)

2.3 Artificial Intelligence and Machine learning as an enabler of Fintech

AI techniques are altering the lending, banking, asset and portfolio management. AI provides continuous payment monitoring and user verification.

AI and machine learning techniques will reduce the chance of human mistakes in finance. AI increases financial security through speech, and finger print and face authentication. Compared to standard passwords, this extra security provided by AI will make more difficult to digital hackers to exploit financial transactions (Yun Joo An, Paul Moon Sub Choi, and Seth H. Huan 2021).

Machine learning has evaluate enormous data sets in real time financial transactions. ML is mainly used by fintech companies foe fraud detection and prevention. It uses computer algorithms and analytics for building an predictive model that can solve financial problems. The machine learning uses both the structured and the unstructured data and the information gathered from it will used to predict the future of financial segment. Figures and streams of data in fintech companies are in response to market fluctuations, opinions of millions of customers are analysed through machine learning(Mats Lewan).

2.4 Fintech Ecosystem in India

India will be emerging economy and is the future for Fintech and its innovative solutions. Fintech has totally transformed the financial service industry. India with its highest adoption of fintech ecosystem of 87% and it is higher than the world average of 64%.

India is the third largest Fintech market, following the United states and UK. There are 7300 startups in the fintech segment of India and its total worth around \$30.2 billion. It is also noted that the Indian fintech market will expected to gain \$200 billion revenue by 2030. The tremendous growth in Indian fintech ecosystem will leads to the implementation of top growth strategies like expanding new markets, more improvement in operational systems and technology based investment services. India's digital services is expected to be a exponential growth of \$800 billion by 2030 including the digital public infrastructure and the development of UPI services.

Large number of neobanking services are raising consistently in India and it attracts the global investors to this fintech market. The continuous funding received from global investors since 2017 reflects the growth of fintech sector.

InsurTech fundraising has been increased over the last few years. Fintech companies can facilitate the online transactions, which helps to prevent digital fraud through better technologies. Reg techs are helping the fintech industry players for their improved performance. The Indian fintech ecosystem will break the language, location and literacy barriers. Jan Dhan and neobanking are helping every citizen to access the banking services.

India's home grown innovations like UPI and India stack have become reached the global benchmark. Financial institutions of India have reached its maturity, by collaborating deeply with the fintech industry and providing their services through open banking. India is now portrayed as a global leader in the technological innovations in financial sector. Open digital infrastructure and the regulatory framework have shaped the fintech as "Tech-Fin-State" ecosystem. Fintech has transformed India's financial geography into two dimensions, first locational patterns and investment networks and it is also reaching its potential growth.

3. Research design

3.1 Research model

According to various research studies, the attributes of fintech services will be considered to give significant results of customers usage motive. Therefore the attributes, accessibility, satisfaction, safety and pliability of digital fintech services are chosen as variables. In this study, we empirically analyse the factors that influence the customers motive and to which extent the digital fintech services was reaching to them. The research design was shown in [Figure.1]

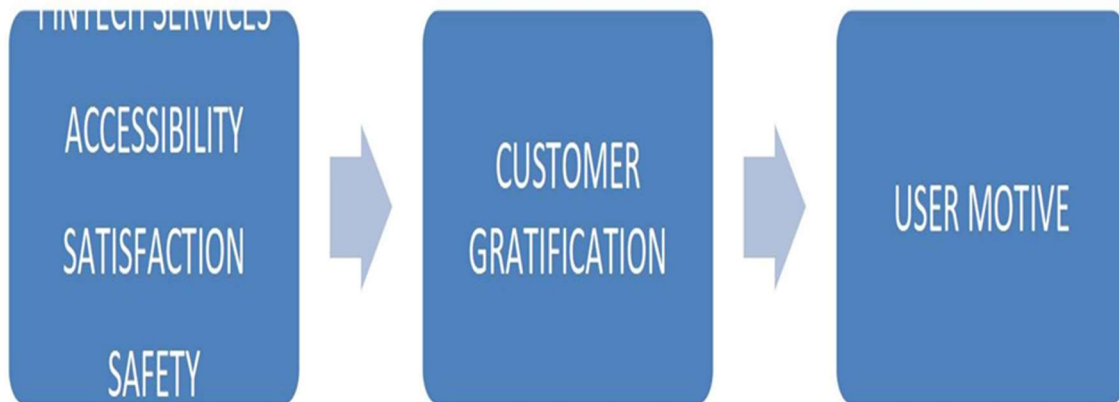


Figure 1.1 Research Model

3.2 Research hypothesis

According to various research results, the digital fintech services are providing higher level of customer gratification and it will be easy for customers, to get their financial information through digitalization of financial services. And the fintech companies to satisfy the customer expectations through their fast and timely performance (Navleen kaur, supriya lamba sahdev 2021)

Risk free and the transparent financial services provided by fintech companies provides the user friendly environment for customers. Government also supporting the fintech companies for their service providence and it builds strong trust among customers (narinder kumar bhasin, anupama rajesh 2021). Because of their effective use of artificial intelligence and machine learning, fintech will provides all customer oriented financial services in a very flexible and transparent mode. Other traditional banks in India also adopt these innovative and digital business models, hence then customers in the bottom line of our economy will get financial informations through mobile safety (aditee huparikar, neeta shinde 2022). Focused on proceeding studies hypothesis was formed.

Hypothesis H1: Financial services attributes have will provide significant influence on increasing customer gratification.

Hypothesis H1-1: Among Financial services attributes, accessibility will provide significant influence on increasing customer gratification.

Hypothesis H1-2: Among Financial services attributes, satisfaction will provide significant influence on increasing customer gratification.

Hypothesis H1-3: Among Financial services attributes, safety will provide significant influence on increasing customer gratification.

Hypothesis H1-4: Among Financial services attributes, pliability will provide significant influence on increasing customer gratification.

Hypothesis on customer gratification and user motive: In previous studies, user motives in digital banking, user gratification will show a positive impact on accepting motive (Navleen kaur, supriya lamba sahdev 2021). Many other studies also shows that, higher the customer gratification, higher will be the user motive. Therefore the following hypothesis was formed.

Hypothesis H2: The increase of customer gratitude will have positive impact on improving user motive.

3.3 Empirical Analysis and Results

A survey was conducted with 58 respondents in India using Fintech services.

This was conducted for 26 days starting from march 8, 2023. The survey was conducted with the basic statistics of 68.26% respondents are male and 31.74% respondents are female. And the different age groups involved in the survey are 24.65% were in their 19 – 30s, 36.51% in their 31-39s, 26.85% in their 40- 49s and 11.99% were more than 50 years old. Regarding the job and education qualification of the people involved in the survey are 11.05% of the respondents are college students, 29.17% of the respondents are involved in white collar jobs, 21.87% of the respondents are blue collar job employees, 22.01% of the respondents are housewives and 15.9% of the respondents are self employees.

Data Analysis and Interpretation: For the analysis of data SPSS 22.0 and Smart PLS 2.0 are used for statistical analysis and structural equation analysis. Convergent validity is tested mainly with the help of Factor loading value, Composite Reliability (CR) and Average Variance Extracted (AVE) from one another. Mainly the factor loading value, Composite Reliability (CR) and Average Variance(AV) are higher than 0.8, 0.6 and 0.5 based on these data convergent validity was verified. Discriminant validity test is performed by comparing the square root of Average Variance Extracted (AVE) and correlation coefficient.

Since the square root value of AVE is higher than correlation coefficient, the discriminant validity test is also performed.

Table 1: Reliability and Internal Consistency test values

Variables	Factor loading	AVE	C.R.	Cronbach's α
Accessibility	0.871	0.819	0.920	0.778
	0.923			
Satisfaction	0.875	0.765	0.868	0.709
	0.920			
Safety	0.912	0.852	0.918	0.824
	0.931			

Pliability	0.928	0.857	0.921	0.386
	0.934			
Customer Gratification	0.886	0.716	0.873	0.713
	0.869			
User motive	0.915	0.833	0.901	0.782
	0.894			

Table 2: Correlation and Discriminant Validity

Variables	AVE	1	2	3	4	5	6	7
Accessibility	0.819	0.898						
Satisfaction	0.765	0.516	0.862					
Safety	0.852	0.512	0.587	0.921				
Pliability	0.857	0.454	0.669	0.632	0.933			
Customer Gratification	0.776	0.638	0.737	0.708	0.724	0.869		
User motive	0.833	0.461	0.643	0.764	0.731	0.742	0.912	

3.4 Verification of Research Design

Smart PLS 2.0 software was used for the structural model (casual modelling). The path coefficient and coefficient of determination between the variables of the research design are derived out using the structural model. The coefficient of determination(R2) for customer gratification(0.756) and user motive(0.543) was high.

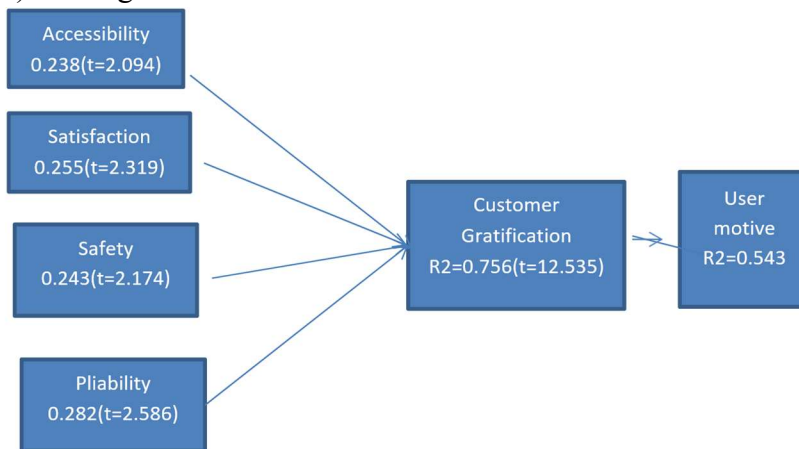


Fig. 2: Verification of Research Design

Hypothesis H1-1, “Among financial service attributes, accessibility will give positive impact on the increasing of customer gratification,” was statistically significant at a significance level of 97.5% of (H1-1; $\beta = 0.238$, $t = 2.094$, $p < 0.05$). Therefore, Hypothesis H1-1 was adopted. Hypothesis H1-2, “Among financial service attributes, satisfaction will give positive influence on the increasing of customer gratification,” was statistically significant at a significance level of 97.5% of (H1-2; $\beta = 0.255$, $t = 2.19$, $p < 0.05$). Hypothesis H1-2 was also adopted. Hypothesis H1-3, “Among the attributes of financial services, safety will give positive impact on the increasing of customer gratification” was statistically significant at a significance level of 97.5% (H1-3; $\beta = 0.243$, $t = 2.174$, $p < 0.05$), “Among the attributes of financial services, pliability will give positive impact on the increasing of customer gratification” was statistically significant at a significance level of 97.5% of (H1-4; $\beta = 0.282$, $t = 2.586$, $p < 0.05$), and therefore was adopted. Customer satisfaction is significant in use intention.

Table 3: Hypothesis Test Results

Hypothesis Path	Standardized Coefficient (β)	t-value	Decision
H1-1: accessibility → Customer gratification	0.238	t=2.094	Accept
H1-2: satisfaction → Customer gratification	0.255	t=2.19	Accept
H1-3: safety → Customer gratification	0.243	t=2.174	Accept
H1-4: pliability → Customer gratification	0.282	t=2.586	Accept
H2: Customer gratification → User motive	0.756	t=12.535	Accept
t=1.97*, p < 0.05			

4. Conclusion

India’s fintech segment was rapidly growing with the overall development in the Information and Communication system. Fintech’s not only help us for payment services, it will be a major lending platform for the majority of SME’s and Retailers in India. The overall fintech adoption rate was increased and it stands next to china in the world. Customers also very much satisfied for its secure transaction system.

These fintech’s not only provide lending and payment services, people will reserve hotel accommodation, buy movie tickets, ordered food, monthly payment of their bills, get their hospital bills and total wealth and asset management services. Fintech and their services attract people with its innovative products, flexibility and with convenient mode. Therefore the study was carried out

with an empirical analysis on how much extent the fintech products and its services will reach the overall Indian market and how far the people will be benefited with the services provided by fintech's. The results of the study shows, Hypothesis 1 on the attributes of fintech services and customer gratification was adopted. In other words, among the attributes of financial services, accessibility, satisfaction, safety and pliability influenced by customer gratification. Hypothesis 2 about customer gratification and user motive was adopted. In other words customer gratification gives positive impact on user motive. Focused on the results of this paper, the following suggestion was given to the fintech companies. First accessibility will have positive impact on increasing customer gratification, in this competitive environment other financial service providers will need to increase their accessibility of their innovative products and services, including easy lending facilities and withdrawal options and management of wealth and assets. Secondly, satisfaction, safety and pliability will have greater impact on increasing customer gratification. Financial service providers will also focus on customer satisfaction and safety in the transaction systems, will come from traditional banking system and adopt technology oriented financial services then it will develop technological oriented strategies to attract largest number of customers. Third thing is to secure customer gratification. It was found that customer gratification will have greater impact on use motive. Therefore financial service providers will develop financial products based on customer gratification.

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