

Reconfiguring Banking through Fintech: An Empirical Examination

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Abstract

India has been marked as one of the fastest-growing economies of the world post Covid-19 which inspired India to take up the Aatma- Nirbhar Bharat or in other words Self-Reliant Scheme in India. This gave a surge for facilitating India's quest towards technologies and become a Tech savvy country turning it into a global fin-tech superpower. Above all, the Government of India has launched numerous schemes and initiatives, particularly in Eastern India. Kolkata, the metropolitan city of West Bengal has been able to allure techniques across the globe by being an epitome of emerging India. This paper highlights on the technical trends instilled and the acceptance of Fintech services in the city. The paper examines the stages of Fintech development and integration in Kolkata and the pace of Fintech adoption by the consumers in the banking sector. The methodology includes preparation of structured questionnaires for data collection from around 130 SBI customers in an attempt to study their experiences of Fintech solutions offered by the country's largest commercial public sector bank. The findings include the quality of Fintech services offered, preferences, experiences and challenges faced in usage of services from consumers' point of view.

Keywords: Fintech, Fintech Unicorns, Fintech Adoption, Banking Sector.

Introduction

Fintech mainly pertains to emerging businesses in the financial sector that incorporates finance with technology and offers customized version of the prevailing financial products and services of renowned financial institutions like asset management firms, banks and insurance companies. (Karthika, 2022). Fintech can be stated as the digital transformation of financial services available within the financial sector or alternatively a technology that is tailored to provide banking and finance in a simple style. According to the Financial Stability Board (FSB), of the Bureau of Indian Standards (BIS), "Fintech is technologically enabled financial innovation that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services". This interpretation aims at incorporating the wide range of creativity in banking and financial services empowered by technologies, irrespective of the nature, magnitude and regulatory status of the visionary firm. (Goyal, 2022).

Evolution of Fintech

Financial services have a persistent record of integrating cutting-edge technology into their core operations. The conceptualization of Fintech sowed its seed way back from 1865- 1966 when submarine communication cable was designed. Fedwire, in 1918 founded Electronic Fund Transfers through telegraphic and Morse code which recorded the initiation of digital conversion of money. The first global

credit card was introduced back in 1950 by the Diners' Club to facilitate the customers to make digital payments succeeded by setting up of ATM by Barclay in 1967. Computers emerged as an indispensable unit in the back offices since 70's which with time moved to middle and front offices of the institutions dealing with financial products and services. Eventually, to revamp the procurement procedure, NASDAQ was set up as the first digital stock market in 1971. The Society for Worldwide Interbank Financial Telecommunications (SWIFT) was set up in 1973 to facilitate the financial institutions to transfer information and instruction confidentially using a set of codes (Fayen, 2023). During 1980s, in order to cope up with the digital transformation across the globe, electronic companies entered the market to help banking and financial industry that included core banking system providers like Fidelity National Information Services (FIS) and Fiserv along with payment networks like Mastercard. After the financial crisis of 2008, Fintech sector experienced a paradigm shift, with the emerging technologies like Bitcoin and P2P followed by the blockchain model. (Ramakrsihnan, 2022).

Why Fintech?

Digital technology has remodeled the financial services by eradicating the hindrances in reaching out to the customers. Due to availability of internet facility at a cheaper rate since a decade, the internet and mobile technology have connected the consumers with the financial service providers throughout the country. Minimum access to the services with the help of a smartphone is available to billions of individuals throughout the corners of the globe. This has encouraged the financial institutions to digital adoption making them more approachable and accessible on online mode compared to traditional methods. Compared with orthodox services, financial technology yields revenue at a faster rate, provides exemplary service and curtails costs that restructure the financial sector. (Huparikar, 2022)

Fintech – SWOT Analysis

Strengths

- Reconfiguration of banking systems through innovative, technology-centric, and pervasive Fintech solutions.
- Fostering Experimental Development
- Enhanced adaptability with optimized spending
- Prudent risk mitigation by incorporating customer friendly solutions
- Empowering the marginalized set of customers

Weaknesses

- Legacy inertia of the prevalent banking practices
- Awareness gap amongst consumers
- Lack of proper infrastructure
- Skepticism amongst the consumers
- Monetary uncertainty

Opportunities

- Mitigation of risks
- Mainstream adoption
- Strategic Alliance between traditional and Digital Financial sector

- Financial inclusion
- Sustainability

Threats

- Customer attrition
- Inadequate regulations
- Evolving technologies
- Negligent Data Governance
- Cyber crimes

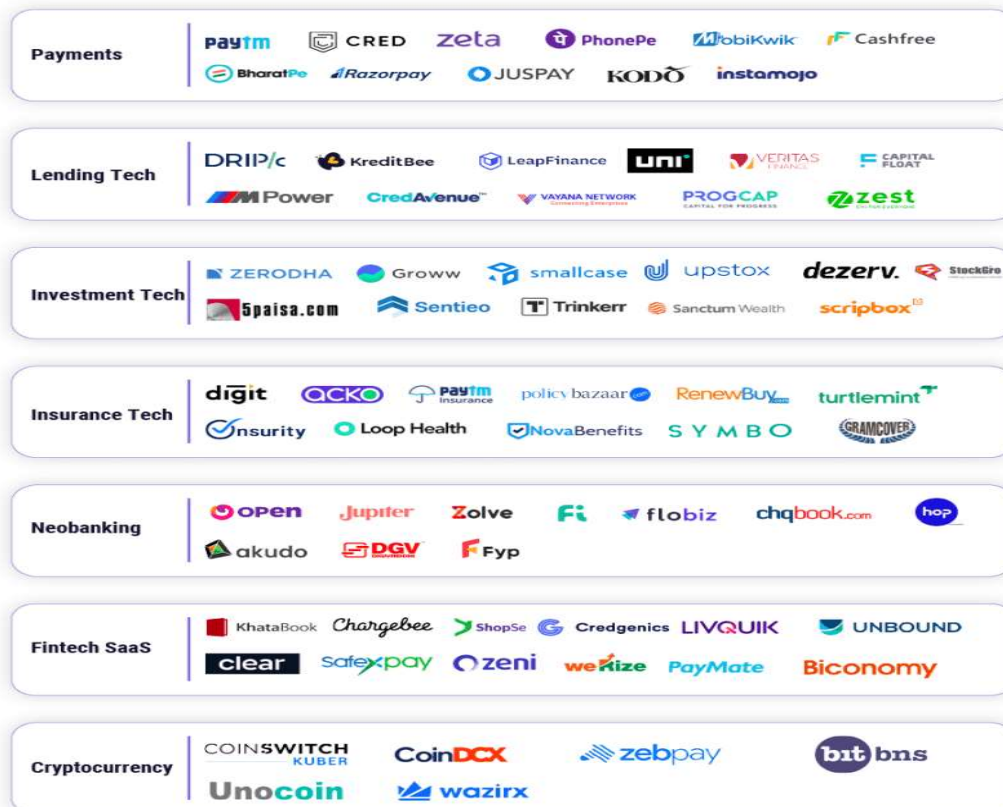
Indian Fintech Start-ups

India is a fulcrum of Fintech markets across the globe. The financial democratization and Digital Bharat initiated by the Indian Government has catalyzed for Fintech companies to flourish and become top Fintech unicorns. Converting the economic landscape into cashless is definitely a great challenge in our country. The exponential growth of smartphone usage and the societal resonance towards electronic transactions through digital wallets have marked the initiation of Fintech adoption. In India, there are approximately 9000 Fintech startups with 21 Fintech unicorns. Few major Fintech companies of India are as follows:

- Bharat Pe
- Computer Age Management Services (CAMS)
- CRED
- Lending kart
- Niyo
- Paytm
- Phone Pe
- Pine Labs
- Policy bazaar
- Razor pay

Some of the top Fintech companies of India in various fields are as follows:

Areas of Fintech	Fintech Companies					
Investment Tech	Zerodha	Groww	Smallcase	Dezerv	Scripbox	Upstox
Insurance Tech	Policybazaar	Paytm insurance	Insurity	Acko	Nova Benefits	Digit
Neobanking	Jupiter	Fi	Open	Zolve	Chqbook.com	Akudo
Lending Tech	Capital Float	Leap Finance	Zest	Cred Avenue	Kredit Bee	Uni
Fintech Saas (Software apps)	Khata Book	Unbound	Charge Bee	Pay Mate	Zeni	Safexpay
Cryptocurrencies	CoinDCX	Zeb Pay	Unocoin	Bitbns	Coinswitch Kuber	Wazirx



Source: <https://digest.myhq.in/Fintech-startups-in-india/>

Digital Banking

Digital finance systems in the banking sector are delivered through a variety of channels. SBI in India, was the forerunner to offer different customized financial tools and technologies to their customers. Some common financial technology offered by SBI are YONO LITE, YONO SBI, BHIM SBI Pay, SBI Quick, SBI Secure OTP, SBI e-Pay, YONO Business and SBI Anywhere. The bank offers these services through various channels like Internet banking (website), ATMs, Mobile Banking Apps., Telebanking and Point of Sales (POS).

Adoption of Fintech by Consumers

The most important factor affecting Fintech adoption is the quality of information. (Aggarwal, 2023). So, it is very important to take into consideration the demographic parameters like gender, age, education, and income that influences the decision making of the customers about the usage of Fintech. (Dhanalaxmi, 2022). The general perception about digital payment methods has an important impact on the mode of payment. There are several situations where digital payments may be next to impossible and cash payment may turn out to be the only feasible option. To recognize the steps involved in the use of digital technology in the banking sector the key determinant of the users' intention to adopt Fintech is trust. Customers feel that reputed online companies adopt safe encryption technology and assurances whenever there is a disagreement, which decreases the sense of danger while using Fintech. (Peong, 2021). The inter relationship between various demographic parameters, the acceptance of digital services and the perception, patterns of usage and hindrances the customers face to use Fintech services. (Roy, 2021). Every Indian citizen through AADHAR is registered to national digital biometric identification, which

effectively authorizes them to the financial system. Retail consumers and small-scale transactions now operate more effectively with the establishment of a real-time payment system platform. The structure of the Indian payment system threatens the economic situation for separate commercial payment systems by providing affordable and immediate payment services to regular individuals. (D'Silva, 2019).

Context of the Study

Banks have undergone through significant technical transformation to subjugate the challenges in the sector. Growth of Fintech has introduced a threat to the traditional banking services enforcing most of the banks to adopt the digital technology to survive in the banking sector. However, most banking customers lack sufficient awareness of financial technology and its associated services. Here the study focuses to overcome the gap between adoption of digital technology by banks and its adoption by the customers. (Savitha, 2022).

Significance of the Study

The banking sector of India went through multiple phases of reform, encompassing nationalization, liberalization, globalization, privatization, and digitalization. To go by the evolving market forces and preference of customers, banks also had to pass through a challenging phase to meet and retain their customers' expectations. (Aggarwal, 2023). Technology has been instrumental in supporting banks' continuous efforts toward inclusion of the unbanked, market expansion, risk management, and overcoming sectoral challenges. From this perspective, financial technology has picked up over the past few years by enhancing the banking services by overcoming geographical constraints. The study investigates the role of financial technology in the banking industry and inspects the factors for adoption of fintech services by the SBI customers.

Purposes of the Study

- To inspect the determinants influencing SBI customers in adoption of Fintech in Kolkata.
- To evaluate customers' awareness and their usage experience of SBI's Fintech services.
- To determine the problems faced by SBI customers at the time of using digital services.

Limitation of the Study

- Due to time constraints, a convenience sampling technique was practiced, which does not include respondents from every corner of Kolkata.
- The study is based on SBI customers only, so it does not depict a true picture of digital services across all financial institutions.

Methodology

Sample Size- To have a knowhow about customer satisfaction on Fintech services, around 130 SBI customers from Kolkata have been considered for the study.

Sampling technique- Convenience sampling technique has been adopted for the study.

Source of data- The study is based on primary data collected through structured questionnaires distributed amongst the SBI customers. Secondary data sources include research papers, articles from newspapers and journals and official websites.

Technique of data analysis- Chi-square test and percentage method are used for data analysis. To calculate p-value in the chi square test, Chi Square calculator has also been used.

Social Implications- The study encompasses on investigating the knowhow and experience of the residents of Kolkata in adoption of digital services by banks. The outcome of the study will enable us to determine the pace of digital adoption by the customers of banks and update the services offered by banks and services received by customers.

Table 1: Respondents' Profile

Demographic Factors	Parameters	Number of respondents	Percentage
GENDER	Male	77	59.7%
	Female	53	40.3%
AGE GROUP	18 to 28 years	75	57.4%
	29 to 39 years	37	28.7 %
	40 to 59 years	11	8.5%
	60 and above	7	5.4%
OCCUPATION	Student	49	37.2%
	Salaried	54	41.9%
	Start-up/ business owner	04	3.1%
	Professional	13	10.1%
	Unemployed	05	3.9%
	Retired	05	3.9%
QUALIFICATION	HS	10	7.6%
	Graduate	55	42.3%
	Post Graduate	65	50%

Source: Primary Data

Age and Onboarding of Fintech Services

H0: The onboarding of Fintech services is independent of age.

H1: The onboarding of Fintech services is dependent of age.

While examining the relation between age and onboarding of Fintech services, it is found that the age group of 18 to 28 years are the highest facilitators followed by 29 to 39 years. However, the matured age groups opine that they prefer to avail the services carefully, rather than using without knowing the outcomes of cyber fraud. Therefore, the higher age groups have shown disagreement towards drastic change to Fintech services. While trying to test the hypothesis, to find out the relation between age and Fintech service usage, $p = 0.647$ which is greater than 0.05 reflects that age and onboarding of Fintech services are independent of each other, i. e. there is no association between them. Hence, null hypothesis is accepted at the 5% level of significance (Table 2).

Table 2: Age and Adoption of Fintech services

Age group (in years)	Users of Fintech Services	Non-users of Fintech Services	Total	Chi square statistic	p-value
18-28	60	15	75	1.6529	0.647
29-39	29	08	37		
40-59	07	04	11		
60 and more	05	02	07		
Total	101	29	130		

Source: Primary Data

Gender and Onboarding of Fintech Services

H0: The onboarding of Fintech services is independent of gender.

H1: The onboarding of Fintech services is dependent of gender.

While examining the association between gender and onboarding of Fintech services, it is observed that out of 57 male respondents, 20 are non-users of Fintech services. However, out of 44 female respondents only 9 are non-users. This projects that gender does not play a significant role in onboarding of Fintech services. This is also evident from the chi square test, where p value is 0.2261 which is greater than 0.05 reflecting that gender and onboarding of Fintech services are independent of each other, i. e. there is no association between them. Hence, null hypothesis is accepted at the 5% level of significance (Table 3).

Table 3: Gender and Adoption of Fintech services

Gender	Users of Fintech Services	Non-users of Fintech Services	Total	Chi square statistic	p-value
Male	57	20	77	1.46	0.2261
Female	44	09	53		
Total	101	29	130		

Source: Primary Data

Occupation and Onboarding of Fintech Services

H0: The onboarding of Fintech services is independent of occupation.

H1: The onboarding of Fintech services is dependent of occupation.

While testing the hypothesis to note whether any association exists between occupation of respondents and Fintech service usage, p value is 0.518 i.e. greater than 0.05 which shows occupation and onboarding of Fintech services are independent of each other, i.e. there is no association between them. Hence, null hypothesis is accepted at the 5% level of significance (Table 4).

Table 4: Occupation and Adoption of Fintech services

Occupation	Users of Fintech Services	Non-users of Fintech Services	Total	Chi square statistic	p-value
Students	35	14	49		

Salaried	44	10	54	3.243	0.518
Startup/ Business Owners	03	01	04		
Professional	12	01	13		
Retired	08	02	10		
Total	102	28	130		

Source: Primary Data

Education and Onboarding of Fintech Services

H0: The onboarding of Fintech services is independent of education.

H1: The onboarding of Fintech services is dependent of education.

Education plays a significant role as lack of technical knowledge and redressal measures results to limited use of services for the HS passed respondents. This is evident from the hypothesis tested where p value is 0.000038 i.e. less than 0.05, which reflects that education and onboarding of Fintech services are dependent on each other, i.e. there is association between them. Thus, null hypothesis is rejected at the 5% level of significance (Table 5).

Table 5: Education and Onboarding of Fintech services

Education	Users of Fintech Services	Non-users of Fintech Services	Total	Chi square statistic	p-value
H S Passed	06	04	10	20.343	0.000038
Graduate	53	02	55		
Post Graduate	41	24	65		
Total	100	30	130		

Source: Primary Data

Awareness, Determinants of Fintech Onboarding, Preferences and Challenges

Based on the primary data, it is noted that 76% of the respondents are aware about the Fintech services in the recent times through the promotional advertisements by SBI. In order to determine the main factors that influence the respondents to adopt Fintech services, it is noted that time management, fast services and automation of services plays the major role. Whereas, technical glitch is the main cause for avoiding Fintech services. Cyber Risk and digital privacy risk associated with digital services accompanied by lack of operational knowledge are the other reasons mentioned by respondents for avoiding Fintech services. 80% of the respondents uses ATMs as channels of Fintech services followed by mobile banking apps (69%) and internet banking (56%). Most of the respondents have availed Fintech services in the form of money/ fund transfer/ payment services. Regarding use of new digital services of SBI, majority of the respondents have not yet responded to any of it, only approximately 10.7% have used SBI Buddy till date. About 87% of the respondents prefer SBI's Fintech services over the traditional services of SBI due to rapid user friendly operation. Whereas, only 13% were reluctant in using such services. While investigating, it was noticed that the respondents faced few hindrances. 50.4% of the respondents were unaware about the newly launched SBI Fintech services and 38.2% could not keep faith on the security

issues like hacking. Overall 27.5% of the respondents lack the knowledge to use online services of SBI (Table 6).

Table 6: Knowhow, Factors behind Fintech Adoption, Preferences and Challenges

Parameters	Sub Parameters	Total	%
Knowhow about SBI's Fintech Services	Recently came to know	100	76.3
	Know since long time	30	23.7
Origin of information about Fintech Services	Official website of SBI	35	26.7
	Advertisements and Promotions	39	29.8
	Peers	21	16
	Others	36	27.5
Determinants behind onboarding of Fintech services	Digitization of services	57	48
	Hassle free and prompt services	67	56.3
	Saves time without visiting bank	86	72.3
	Chatbot and AI assisted information	19	16
	Others	20	17.4
Factors behind avoiding Fintech services	Technological Risk	30	46.9
	Data Privacy Risk	22	34.4
	Cyber Risk	23	35.9
	Operational Risk	12	18.8
	Lack of Knowledge	15	23.4
	Others	14	21.9
Channels of Fintech services experienced	Internet Banking	73	55.7
	ATM	105	80.2
	Mobile Banking Apps	90	68.7
	Telebanking	13	9.9
	Point of Sale	25	19.1
Fintech services of SBI availed	Fund Transfer/ Payment	101	77.1
	Crypto & Stock Market	09	6.9
	Other Investment	14	10.7
	Credit & Loan	12	9.2
	Other Banking and related services	47	35.9
Digital Banking Platforms used	YONO SBI	99	75.6
	YONO LITE SBI	33	25.2
	BHIM SBI Pay	32	24.4
	YONO Business	05	3.8
	SBI Quick	09	6.9
	SBI Secure	05	3.8
	SBI ePay	04	3.1
	SBI Anywhere	06	4.6
	SBI Net Banking	43	32.8
	None	15	11.5

SBI Digital Products used	State Bank Buddy	14	10.7
	State Bank Scribe	02	1.5
	SBI Digi Voucher	05	3.8
	SBI Video Statement	02	1.5
	SBI Smart Watch	04	3.1
	SBI Mingle	02	1.5
	None	104	79.4
Preference of Fintech services over Traditional services	Yes	114	87
	No	17	13
Challenges associated with Fintech services	Lack of Awareness	66	50.4
	Operating Cost (storage and infrastructure issues)	20	15.3
	Lack of Skill	36	27.5
	Security Issues	50	38.2
	Resistance to shift to Online Banking	21	16
	Low Personal Contact	32	24.4

Source: Primary Data

Preference of Fintech Services of SBI

Mobile Banking apps are most preferable SBI Fintech services followed by ATMs and internet banking. Mobile banking apps are user friendly with easy access to everyone which enables the customers to operate easily. ATMs act as lifesavers for people in urgent need of money and it is one of the oldest practices in India to opt for ATMs in emergency.

User Experience of Fintech Services

Most of the respondents prefer SBI's Fintech services for its ability to offer services without visiting the banks thereby saving valuable time. Also, they feel that the services offered are convenient to use and have greater accessibility. The respondents are however concerned with the associated risks of Fintech services which have turned a handful of hesitant customers to use these services.

Findings and Discussions

The findings based on the response received from around 130 SBI customers from Kolkata are as follows:

- The young adults approximately 42% in the age group of 18 to 28 years prefers in using Fintech services, compared to other age groups. Respondents of the remaining cluster opines to use the services with precautions, rather than using without knowing the consequences of cyber fraud. So, the elderly respondents have shown reluctance towards abrupt change in usage of Fintech services
- However, gender does not play any significance in adoption of Fintech services. This is evident from the chi square test, where $p > 0.05$ which shows that gender and adoption of Fintech services are independent of each other, i. e. there does not exist any relation between them.
- The working class are detected to be the highest users of SBI Fintech services succeeded by students with 37.2%.

- The post graduate respondents i.e., 50% are noted to use Fintech services followed by 42% graduates. Education here plays a significant role as lack of technical knowledge and redressal measures have led to limited use of services for the HS passed respondents.
- It is detected that the majority of 76% of the respondents have been aware about the Fintech services recently through advertisements and promotional measures by SBI.
- Time management, fast services and digitization of services are the major factors that motivated the respondents to adopt Fintech services.
- Technical glitch, cyber fraud and data privacy risk associated with Fintech services followed by lack of operational knowledge are the reasons cited by respondents for avoiding Fintech services.
- 80% of the respondents uses ATMs as channels of Fintech services followed by mobile banking apps (69%) and internet banking (56%).
- Majority of 76% of respondents have availed Fintech services in the form of fund transfer.
- Most of the respondents have not yet availed SBI's new digital services, only approximately 11% have used SBI Buddy till date.
- 87% of the respondents prefer Fintech services of SBI over the traditional services of SBI as it is automated, easy to operate and saves time.
- 13% of the respondents have shown reluctance to use services Fintech services due to lack of operational knowledge and unawareness. While examining the challenges faced by the respondents, 50.4% are unaware about the new SBI Fintech services and 38% fear cyber fraud issues like hacking. Approximately 27% of the respondents lack the knowledge to use online services of SBI.
- Mobile Banking apps are most preferable financial services of SBI followed by ATMs and internet banking. Mobile banking apps are hassle free and easy access to the users.
- It has been observed that respondents prefer SBI's Fintech services as they can continue the banking process any time from remote area without visiting banks thereby saving their valuable time. Also, the respondents are of the opinion that the services offered are convenient to use and have greater accessibility. But the respondents are concerned with the associated risk with Fintech services which have resulted to few reluctant customers to use these services.

Suggestions

The suggestions based on the detailed study from the primary data are as follows:

- The findings indicate that the primary challenge faced by respondents in using SBI's Fintech services are their inadequate technical knowledge and lack of awareness regarding recent digital financial products. This lacuna restricts effective utilization of the available services. To address this issue, banks may undertake structured awareness initiatives to educate existing customers about newly introduced Fintech services, while also attracting potential users. Additionally, the dissemination of instructional content, such as demonstration videos through email and WhatsApp, can assist technologically less proficient customers in understanding and using digital platforms effectively. Such measures would help bridge the gap between service availability and customer adoption.
- Concerns regarding data privacy breaches and cyber fraud have emerged as significant barriers to the onboarding of Fintech services. Such apprehensions reduce customers' trust in electronic financial platforms. To address this issue, it is mandatory for banks to strengthen their cybersecurity infrastructure and proactively communicate the potential risks associated with digital transactions. Enhancing transparency in security measures can help build customer confidence. Furthermore,

customers should be clearly informed about the grievance redressal mechanisms available in the event of fraudulent activities, enabling them to respond promptly and effectively. These measures can contribute to increased trust and greater onboarding of Fintech services.

- To retain the position of dominant market leader amongst Indian banks, SBI needs to possess a user-friendly platform, advanced server management system, efficient and easy user interfaces, faster activation process of contactless payments and prompt response.
- Maximization of operational efficiency by SBI could encourage the use of Fintech services for tasks like payment processing, risk assessment and client onboarding.
- Regular tracking and upgrading the SBI website shall keep the clients updated and also tackle several issues or services which are otherwise excluded in normal course of business.
- The study focuses on the need for digital banking platforms, including mobile applications and internet banking interfaces, to be made available in native languages. Such localization would increase the reach to the customers who are not comfortable with the existing available languages. Furthermore, reluctance amongst the older demographic has been identified as an important barrier to the adoption of Fintech services. This hesitation is often rooted in cultural factors, including established attitudes, beliefs, and behavioural patterns that influences on the adoption of new technological change. In this backdrop, SBI may initiate to foster an environment to encourage novelty and flexibility. Such initiatives could increase digital literacy, enhance adaptability amongst customers, and contribute to the bank's sustainability in the long run.
- Trustworthiness to chatbot interaction is a determining factor for adoption of Fintech services. Transparency should be maintained so that the users or clients are able to get the required information or the chatbot is working effectively and solving their problem or not.
- For an effectively working module, SBI should build a comprehensive unified single-button platform which would enable the specially-abled segment to access the digital financial services with ease and convenience

Conclusions

From the study it is noted that banks have increasingly mainstreamed Fintech services to overcome the limitations of conventional banking, particularly in reaching unbanked populations affected by topographical barriers. The widespread use of smartphones and internet connectivity has prominently enhanced access to digital banking services. The findings indicate that a large proportion of respondents in Kolkata are informed about the Fintech services offered by SBI. Most of the customers prefer digital platforms over traditional banking due to convenience, automation, cashless transactions, and faster service delivery, including loan processing.

However, concerns such as technical issues, data privacy risks, cyber threats, and limited technical knowhow continues to obstruct the adoption among certain segments. Additionally, lack of awareness regarding newly incorporated Fintech products has also curtailed the usage among prevailing customers. To reach out more customers, it is mandatory for the banks to concentrate on customer education, strengthen grievance redressal mechanisms, and go through awareness initiatives to promote new digital offerings.

References

1. Pejkovska, M. (2018) Potential Negative Effects of Fintech on the Financial Services Sector, Thesis

of Helsinki Metropolia University of Applied Sciences

2. Report of the Working Group on Fintech and Digital Banking of Reserve Bank of India. dated 8th February 2018. <https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=892>
3. D'Silva, D. (2019). The Design of Digital Financial Infrastructure: Lessons from India. BIS Papers.
4. Vijai, Dr. C. (2019). Fintech in India – Opportunities and Challenges, South Asian Academic Research Journals, 8(1) DOI NUMBER: 10.5958/2319-1422.2019. 00002. <https://digest.myhq.in/Fintech-startups-inindia/> assessed on 3 rd October 2023.
5. Nawayseh, M. (2020). Fintech in COVID-19 and Beyond: What Factors Are Affecting Customers' Choice of Fintech Applications? Journal of Open Innovation: Technology, Market and Complexity, 6(4), 153. <https://doi.org/10.3390/joitmc6040153>
6. Das, A & Das, D (2020). Perception, Adoption, and Pattern of Usage of Fintech Services by Bank Customers: Evidences from Hojai District of Assam. Emerging Economy Studies. 6(1). <https://doi.org/10.1177/2394901520907728>
7. Peong, K.K et al (2021). Behavioural Intention of Commercial Banks' Customers towards Financial Technology Services. Journal of Finance and Banking Review, 5(4). 10-27. [https://doi.org/10.35609/jfbr.2021.5.4\(2\)](https://doi.org/10.35609/jfbr.2021.5.4(2)).
8. Roy, D. et al. (2021) Digital Financial Inclusion: Policies and Business Models National Institute of Bank Management Working Paper.
9. Savitha, B. et al. (2022) Continuance Intentions to Use Fintech Peer-to-Peer Payments Apps in India, Heliyon. <https://doi.org/10.1016/j.heliyon.2022.e11654>.
10. Ramakrishnan S. et.al. (2022). Fintech Innovations in the Financial Service Industry. Journal of Risk and Financial Management, 15, 287. <https://doi.org/10.3390/jrfm15070287>
11. Karthika. M. (2022). Impact of Fintech on the Banking Sector. Integrated Journal for Research in Arts and Humanities. 2(4), 109-112.
12. Goyal M. (2022). Fintech in Indian Banking Sector: Overview and Challenges. International Journal of Advanced Research in Commerce, Management and Social Science, 5(4). 197-200.
13. Huparikar A., Shinde N. (2022). A Study on Influence of Fintech on Customer Satisfaction of Banks in Pune. Journal of Positive School of Psychology, 6(5). 989-995.
14. Dhanalakshmi, A. (2022). An Empirical Study on the Adoption Intention of Financial Technology (Fintech) Services among Bank Users. AMBER – ABBS Management Business and Entrepreneurship Review. <https://www.researchgate.net/publication/361890269>
15. Aggarwal, M. et al (2023). Examining the Factors Influencing Fintech Adoption Behaviour of Gen Y in India. Cogent Economics & Finance, 11(1), 2197699, DOI: 10.1080/23322039.2023.2197699.
16. Fayen E., et al. (2023). Fintech and the Future of Finance; Market and Policy Implications. Study Report of World Bank Group.
17. Sharma J., et al. (2024). Fintech Adoption in Banking Sector: An Empirical Study. Business Studies, XLV(1). 108-123. <https://www.caluniv.ac.in/dj/BS-Journal/V-45-I/JS-BS.pdf>