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Fintech Adoption in Banking Sector: An Empirical Study

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Abstract

India has evolved as one of the fastest growing economies of the world, especially after the prolonged macro-economic factor of Covid-19 which stimulated India to take up the Umbrella scheme of Aatma-Nirbhar Bharat i.e. Self-Reliant India. This gave a boost to India's quest to pave more towards technologies and become a Tech advanced country turning it into a global fin-tech superpower. Furthermore, India has launched varied schemes and initiatives, particularly in North-eastern India.

Guwahati, a city of Assam has been able to attract modalities from many parts of India and the world in its place by being an epitome of emerging India. This paper throws a light on the trends of the technologies inculcated in the city and the awareness and experiences relating to the adoption of such fintech services. The paper examines the stages of fintech development and instillation in the city and the pace of fintech adoption by the consumers in the banking sector. The methodology includes preparation of structured questionnaires for data collection from 130 SBI customers in an attempt to study their experiences of fintech solutions offered by banks. 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.

1. Introduction

Fintech mostly refers to start-up businesses that combine technology with finance and offer specialised versions of the existing products and services of established financial institutions like banks, asset management firms, and insurance companies. (Karthika, 2022). Fintech can be generally explained as digitization of financial services within the finance industry or it can be stated as a technology that is designed to provide financial services in an easy manner. According to the Financial Stability Board (FSB), of the 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 definition aims at encompassing the wide variety of innovations in financial services enabled by technologies, regardless the type, size and regulatory status of the innovative firm. (Goyal, 2022).

Evolution of Fintech

The use of technology in finance is not new to the industry. Fintech development started in between 1865-1966 when transatlantic cable was set up. In 1918, Fedwire invented Electronic Fund Transfers using telegraph and Morse code which marked the beginning of the money's conversion to digital form. In 1950, the first universal credit card was introduced by the Diners' Club to make cashless payments followed by the introduction of Barclay's first ATM in 1967. In 1970, computers became an integral part in the back offices which gradually shifted to middle and front offices of the financial institutions. Later to modernise the bidding procedure, NASDAQ was established as the first electronic stock market in 1971. In 1973, Society for Worldwide Interbank Financial Telecommunications (SWIFT) was used by financial organisations to transfer instructions and information securely using a set of codes (Fayen, 2023). During 1980s, digital technology companies emerged to serve financial institutions that included core banking system providers like Fidelity National Information Services (FIS) and Fiserv as well as payments networks like Mastercard. The fintech sector witnessed a major shift after the financial crisis of 2008, when new technologies like Bitcoin and P2P were introduced followed by the blockchain model. (Ramakrsihnan, 2022).

Why Fintech?

Digital technology has been reshaping financial services by eliminating many barriers in delivery of services. The internet and mobile technology have connected the consumers with the financial service providers with reduced the cost of information transfer and remote interactions. Minimum access to the services at least with a smartphone is available to billions of individuals across the globe. This has encouraged the financial service providers like banks to engage in digital technology making them more approachable and accessible online than through traditional methods. In comparison to traditional services, fintech generates fast revenue, delivers quality service and reduces expenses that reconfigure the financial industry. (Huparikar, 2022)

Fintech – SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats
▪ Innovation in the banking sector with dynamic and pervasive banking models	▪ Resistance to shift to modern banking practices	▪ De-risking solutions	▪ Lack of customer loyalty
▪ Contribution to the growing Research and Development	▪ Lack of awareness among consumers	▪ More penetration	▪ Lack of effective regulations
▪ Increased flexibility and decreased cost	▪ Lack of infrastructure	▪ New partnerships between traditional and fintech sector	▪ Fast changing and obsolete technologies
▪ Effective risk management with provision of customer-friendly solutions	▪ Lack of consumers' trust	▪ Financial inclusion	▪ Data Breach
▪ Penetration and serving of under-served customers	▪ Financial risk	▪ Sustainability	▪ Cyber frauds

Source: Researcher's analysis

Fintech Start-ups in India

India is a hub of fintech markets in the world. The drive of financial inclusion and Digital India by the Government has paved the way for fintech companies to grow and become top fintech unicorns. Turning the entire economy completely cashless is yet a challenge but with the rapid use of smartphones, people have resorted to cashless transactions through digital wallets marking the first step in fintech adoption.

There are around 9000 fintech startups in India with 21 fintech unicorns. Some of the major fintech companies of India are discussed below:

BharatPe: BharatPe headquartered in Delhi was established in the year 2018. It provides QR code-based payment solutions for consumers and businesses. Users can use it to pay for groceries, restaurants, cabs, salons, mobile businesses and energy bills, among other things. It is an app-based platform that allows merchants to take payments from customers.

CAMS: Computer Age Management Services (CAMS) established in 1988 in Chennai, is an online platform focused on mutual fund investments that allows users to invest in multiple public market securities through app-based platforms. It provides tools for managing portfolios, alerts & news updates to assist in developing investment strategies. App can be accessed on iOS and Android devices.

CRED: CRED was established in 2018 in Bangaluru and serves in the B2C space in the FinTech market segments. It supports managing different credit cards, real-time monitoring of credit scores, and the use of calculators for home loans, EMIs, PPFs and other financial products.

Lendingkart: Lendingkart, established in the year 2014, Ahmedabad, is an online lending platform providing business loans that offers loans such as working capital loans, SME loans and business loans for women.

Niyo: Niyo Key Metrics, established in 2015 in Bangaluru is an online platform for wealth management and offers a savings and investments platform. It allows users to make investments in the financial market, offers in-built Robo-advisory, mutual fund management, goal-based advisory and a banking platform for business.

Paytm: Established in 2009, Noida, Paytm is an app-based wallet for individuals and businesses. It provides a web-based and mobile-based platform for mobile recharge, money transfer, bill payments, travel bookings, hotel and ticket booking, booking cylinders, gold purchases and donations. It offers banking services, credit cards, loans, and investment platforms for insurance, mutual funds, and more.

PhonePe: PhonePe, established in 2012 with headquarters in Bangaluru, serves as a card-linked wallet solution for consumers and businesses and offers UPI-based options for bill splitting, online shopping, paying postpaid and utility bills, mobile and DTH recharging, money transfers, online payments at retail shops, paying mobile and DTH bills, checking account balances and other allied services.

Pine Labs: Pine labs is a fintech unicorn established in the year 1998, headquartered in Noida and serves in the B2B, SaaS space in the Retail, Fintech market segments. Pine Labs provides payment solutions for businesses and merchants, offers hardware and software-based payment terminals, point-of-sale financing and working capital loans.

Policybazaar: Policybazaar, found in the year 2008 in Gurgaon, is an app-based comparison platform for life and non-life insurances. It offers quotes for life insurance, health insurance, auto insurance, health insurance, retirement plans, travel insurance, provides claims processing and policy renewal services and also offers quotes for different investment plans.

Razorpay: Razorpay, located in Bangaluru was set up in 2013 and serves in the B2B, SaaS space in the Retail, Fintech market segments as a Developer of payment processing solutions for businesses. It offers solutions such as payment gateways and link-based payment solutions for accelerating and automating banking operations, working capital loans and corporate credit cards.

Some of the top fintech companies of India in various fields are-

Areas of Fintech	**Fintech Companies**					
Investment Tech	Zerodha	Groww	Smallcase	Dezerv	Scripbox	Upstox
Insurance Tech	Policybazaar	Paytm insurance	Insurity	Acko	Digit	Nova Benefits
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/

Fintech in Banking Sector

Fintech solutions in banking sector are offered through various channels. The SBI is a pioneer in offering different customer tailored fintech services to its customers. Some common fintech services offered by SBI are YONO SBI, YONO LITE, BHIM SBI Pay, SBI Quick, SBI Secure OTP, SBI e-Pay, YONO Business and SBI Anywhere. The SBI offers these services through various channels like Internet banking (website), ATMs, Mobile banking (apps), telebanking and POS (point of sales).

Some of the new fintech products offered by SBI are discussed below-

- **State Bank Buddy:** The mobile wallet for smartphones from State Bank of India is called State Bank Buddy. It is a prepaid, semi-closed wallet that enables anytime, anywhere money transfers to bank accounts and wallet users. The State Bank of India (SBI) launched an e-wallet called SBI Buddy in August 2016 to encourage citizens to use cashless transactions. SBI Buddy does not require an SBI account.
- **State Bank Scribe:** SBI offers this service to assist clients who are blind or visually impaired with accessing financial services by providing them with scribes which help them complete different banking activities. It helps in completing forms, reviewing papers, performing transactions and other crucial duties.
- **SBI Digi Voucher:** The State Bank of India has developed a new green programme that makes it simple to fill out coupons on smartphones. Access to numerous challans, transactions slips, and forms is made possible via SBI Digi Voucher. People can save money by pre-completing transaction paperwork online so they can have immediate access to the bank teller counter. One may check the history of their digital coupons using the SBI Digi Voucher app.
- **SBI Mingle:** The bank's effort to integrate social media with banking is called SBI Mingle. Customers of SBI may use this special software to access a variety of financial services through the bank's Facebook page and Twitter account. The SBI Mingle app for smartphones is available to all SBI

customers. Once they have enrolled, they may use of a variety of services, including balance inquiries, money transfers, mini statements, etc., especially with their Facebook and Twitter connections.

Fintech Adoption by Consumers

One of the key factors influencing fintech adoption behaviour is information quality. (Aggarwal, 2023). It is important to consider how demographic aspects like gender, age, education, and income affect the decision to use fintech. (Dhanalaxmi, 2022). The people's perceptions about digital payment methods have a big influence on how they decide to pay. There are several situations when digital payments might not be accepted, leaving only cash payments as an alternative. To identify the steps involved in the use of financial technology in the financial services sector, a key component of users' intentions to adopt Fintech is customer trust. Customers feel that an online company with a high reputation might adopt safe encryption technology and assurances whenever there is a disagreement, which decreases the sense of danger while utilising Fintech. (Peong, 2021). Also, the connections between various demographic characteristics, the acceptance of fintech services, and the perception, usage patterns and barriers that bank customers must be considered in order to use fintech services. (Roy, 2021). Everyone who lives in the country now has access to a national digital biometric identification, which effectively gives them full access to the financial system. Retail consumers and small-scale transactions now operate more efficient with the establishment of a real-time payment system platform. The structure of the Indian payment system undermines the economic case for separate commercial payment systems by offering affordable and immediate payment services to regular individuals. (D'Silva, 2019).

2. Background of the Study

Banks have undergone several reforms in the past years to overcome various challenges in the sector. Evolution of fintech has posed another threat to the traditional banking services which compelled a lot of banks to adopt fintech services to retain customers. However, the customers of the banks are not yet familiar with the concept of fintech and the services available under it. Here the study aims to bridge the gap between adoption of fintech by banks and its acceptance by the customers. (Savitha, 2022).

3. Significance of the Study

Indian Banks have undergone numerous reforms over the years comprising nationalisation, liberalisation, globalisation, privatisation and digitalization. With the changing market dynamics and preference of customers, banks have had a challenging phase to meet the expectations of customers and retain them. (Aggarwal, 2023) In the continuous efforts of banks to include the unbankable masses in its ambit, tap the potential segments, mitigating risks and countering various challenges, technology has been playing a catalytic role. In this context, fintech has gained momentum in recent years in expanding the banking services beyond physical barriers. The present study explores the role of fintech in the banking sector and also examines factors behind the adoption of fintech services of SBI by its customers.

4. Objectives of the Study

- To examine the factors behind adoption of Fintech services by customers of SBI.
- To study the awareness and user experience of Fintech services offered by SBI.
- To find out the challenges that arise for SBI customers in using Fintech Services.

5. Limitation of the Study

- Due to time constraint non probabilistic convenience sampling has been adopted for the study which would not cover all the areas of Guwahati.
- Only SBI has been taken for the study which would not reflect the rate of adoption of Fintech services by all commercial banks.

6. Methodology

Sample Size- In order to know the experience of customers of banks as users of Fintech services, a total of 130 customers of SBI from Guwahati have been selected for the study.

Sampling technique- To determine the sample size, the convenience sampling technique has been adopted for the study.

Source of data- The primary data have been collected through structured questionnaires distributed among the customers of SBI. The secondary data sources include research papers, articles from newspapers and journals and official websites.

Technique of data analysis- Data is analysed using chi-square test and percentage method. To calculate *p-value* in the chi square test, Chi Square calculator has been used.

Social Implications- The study focuses on examining the awareness and experience of the citizens of Guwahati towards adoption of Fintech services by banks. The outcome of the study shall help to know the pace of Fintech adoption by the customers of banks and fill the gap between the services offered by banks and those received by customers.

7. Data Analysis

Profile of Respondents

A total of 130 respondents have been interviewed for the study through a structured questionnaire and data have been collected from customers of SBI. A brief description about the profile of respondents is given below-

Around 60% of the respondents are male users of fintech services in comparison to female users of 40%. The young generation belonging to the age group of 18 to 28 years have shown interest in using fintech services with approximately 42%, compared to other age groups. In-service employees are seen to be the highest users of SBI fintech services followed by students with 37.2%. The respondents who are post graduates i.e. 50% are seen to use fintech services followed by 42% graduates.

Generally, the age, occupation and education of respondents play an important role in determining the adaptability towards new technology. In this context, the relationships between age, gender, occupation and education of respondents and adoption of such services can be traced and the following hypotheses have been formed (Table 1).

Table 1: Profile of Respondents

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: Field survey

Age and Adoption of Fintech Services

H_0: There is no association between age and adoption of fintech services.

H_1: There is an association between age and adoption of fintech services.

While examining the association between age and adoption of Fintech services, it is found that the age group of 18 to 28 years are the highest users followed by 29 to 39 years. However, the other age groups are of the opinion that they prefer to use the services with precautions, rather than using without knowing the consequences of cyber fraud. Therefore, the higher age groups have shown reluctance towards abrupt usage of fintech services. While trying to test the hypothesis, to determine the association between age and fintech service usage, p= 0.6 which is greater than 0.05 which shows age and adoption 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	Users of Fintech Services	Non-users of Fintech Services	Total	Chi square statistic	*p value*
18 to 28 years	60	15	75	1.6529	0.647
29 to 39 years	29	08	37		
40 to 59 years	07	04	11		
60 and above	05	02	07		
Total	101	29	130	—--	—--

Source: Field Survey

Gender and Adoption of Fintech Services

H_0: There is no association between gender of respondents and adoption of fintech services.

H_1: There is an association between gender of respondents and adoption of fintech services.

While examining the association between gender and adoption of Fintech services, it is found that out of 57 male respondents, 20 of them are non-users of fintech services. However, out of 44 female respondents only 9 of them are non-users. This shows gender does not play any significance in adoption of fintech services. This is also evident from the chi square test, where p value is 0.22 which is greater than 0.05 which shows that gender and adoption 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	100	30	130	—--	—--

Source: Field Survey

Occupation and Adoption of Fintech Services

H_0: There is no association between occupation and adoption of fintech services.

H_1: There is an association between occupation and adoption of fintech services.

While testing the hypothesis to see if there is any association between occupation of respondents and fintech service usage, p value is 0.51 i.e. greater than 0.05 which shows occupation and adoption 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	3.243	0.518
Salaried	44	10	54		
Start up/ Business owner	03	01	04		
Professional	12	01	13		
Retired	08	02	10		
Total	102	28	130	—--	—--

Source: Field Survey

Education and Adoption of Fintech Services

H_0: There is no association between education and adoption of fintech services.

H_1: There is an association between education and adoption of fintech services.

Education here is significant as lack of technical knowledge and redressal measures have led to limited use of services for the HS passed respondents. This is evident from the hypothesis tested where p value is 0.00 i.e. less than 0.05, which implies that education and adoption 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 Adoption of Fintech Services

Education	**Users of Fintech Services**	**Non-users of Fintech Services**	**Total**	**Chi square statistic**	***p value***
HS passed	06	04	10	20.343	0.000038
Graduate	58	02	55		
Post graduate	41	24	65		
Total	100	30	130	—--	—--

Source: Field Survey

Awareness, Factors behind Fintech Adoption, Preferences and Challenges

76% of the respondents have come to know about the fintech services in the recent past and their source about fintech services is mainly from ads and promotions by SBI. In order to determine the factors that influenced the respondents to use/ adopt fintech services, it is revealed that time management, prompt services and automation of services are the major reasons while technical failure is the major reason for not using fintech services. Cyber and data privacy risk associated with fintech services followed by lack of operational knowledge are the other reasons cited by respondents for non-adoption of fintech services. 80% of the respondents have used ATMs as channels of fintech services followed by mobile banking apps (69%) and internet banking (56%). Majority of respondents have availed fintech services in the form of money/ fund transfer/ payment services. Regarding use of new digital services of SBI, most of the respondents have not yet availed any of it, only approximately 11% have used SBI Buddy till date (Table 6).

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

Awareness about Fintech services of SBI	Recently came to know	100	76.3%
	Known since a long time	30	23.7%
Source of information about fintech services	SBI official website	35	26.7%
	Ads and Promotions	39	29.8%
	Peers	21	16%
	Others	36	27.5%
Factors behind adoption of fintech services	Automation of services	57	48%
	Hassle free and prompt services	67	56.3%
	Saves time without visiting branches	86	72.3%
	Chatbot and AI assisted information	19	16%
	Others	20	17.4%
Factors behind non-adoption of fintech services	Technological risk (technical failure)	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%

	POS (point of sale)	25	19.1%
Fintech services of SBI availed	Money/fund transfer/ payment	101	77.1%
	Crypto and stock market	09	6.9%
	Other Investment	14	10.7%
	Credit and 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%
	Lack of awareness	66	50.4%

Challenges associated with fintech services	Operating cost (storage and infrastructure issues)	20	15.3%
	Lack of skill to use	36	27.5%
	Risk of hacking/ security issues	50	38.2%
	Resistance to shift to online banking	21	16%
	Low personal contact	32	24.4%

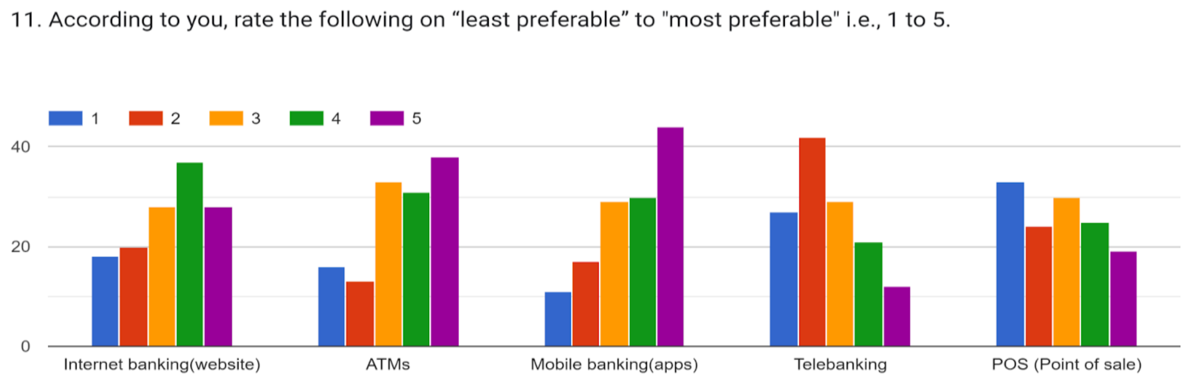
Source: Field Survey

87% of the respondents prefer fintech services of SBI over the traditional services of SBI due to ease of operation and time saving feature. Only 13% have shown reluctance in using such services. 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.

Preference of Fintech Services of SBI

Out of the different fintech services offered by SBI, Mobile Banking apps are most preferable followed by ATMs and internet banking. Mobile banking apps are hassle free with easy access to everyone which makes it a favourable service to use. 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. Internet banking is considered as one of the safe platforms of fintech service in comparison to other payment gateways and online wallets thus making it the third preferable fintech service (Chart 1).

Chart 1: Preference of Fintech Services of SBI

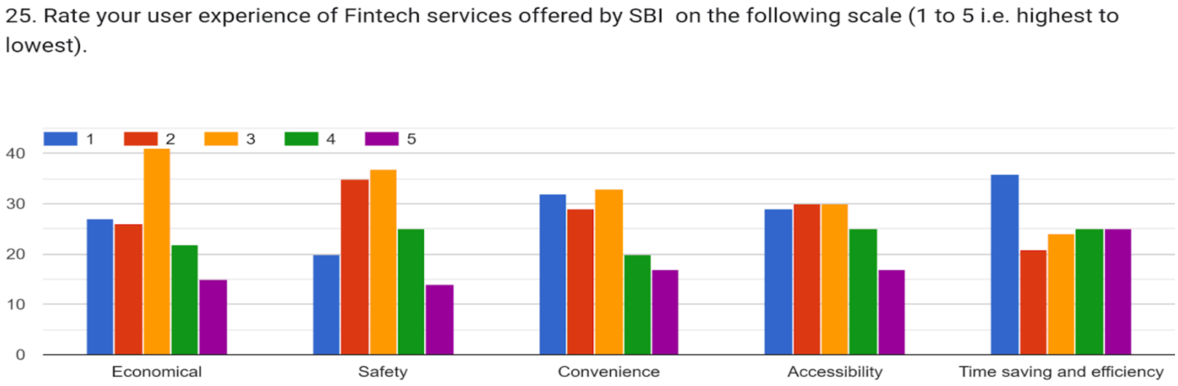


Source: Field Survey

User Experience of Fintech Services

The respondents prefer fintech services of SBI for its ability to offer branchless services thereby saving ample time. Also, they are of the opinion that the services offered are convenient to use and have greater accessibility. The respondents are however concerned with the risks associated with fintech services which have turned few of them hesitant to use these services (Chart 2).

Chart 2: User Experience of Fintech Services



Source: Field Survey

8. Findings and Discussions

- The young generation belonging to the age group of 18 to 28 years have shown interest in using fintech services with approximately 42%, compared to other age groups. Rest of the age groups are of the opinion that they prefer to use the services with precautions, rather than using without knowing the consequences of cyber fraud. Therefore, the higher age groups have shown reluctance towards abrupt 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 is no association between them.
- In-service employees are seen to be the highest users of SBI fintech services followed by students with 37.2%.
- The respondents who are post graduates i.e., 50% are seen to use fintech services followed by 42% graduates. Education here is significant as lack of technical knowledge and redressal measures have led to limited use of services for the HS passed respondents.
- It is to note that the majority i.e 76% of the respondents have come to know about the fintech services in the recent past and their source about fintech services is mainly from ads and promotions by SBI.
- The factors that majorly influenced the respondents to use/ adopt fintech services are time management, prompt services and automation of services.
- On the other hand, technical failure, cyber and data privacy risk associated with fintech services followed by lack of operational knowledge are the other reasons cited by respondents for non-adoption of fintech services.
- 80% of the respondents have used ATMs as channels of fintech services followed by mobile banking apps (69%) and internet banking (56%).
- Majority i.e. 76% of respondents have availed fintech services in the form of money/ fund transfer/ payment services.
- Regarding use of new digital services of SBI, most of the respondents have not yet availed any of it, 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.
- Being a major factor in fintech adoption, 13% have shown reluctance in using such 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.
- Following the above, the different fintech services offered by SBI, Mobile Banking apps are most preferable followed by ATMs and internet banking. Mobile banking apps are hassle free with easy access to everyone which makes it a favourable service to use.
- Finally, it can be observed that respondents prefer fintech services of SBI for its ability to offer branchless services thereby saving ample time. Also the respondents are of the opinion that the services offered are convenient to use and have greater accessibility. The respondents are however concerned with the risk associated with fintech services which have turned few of them hesitant to use these services.

9. Suggestions

- One of the common challenges faced by the respondents while availing fintech services of SBI was the inability to use the services due to lack of technical knowledge along with lack of awareness about recent fintech products. Organising awareness campaigns by the bank would help the existing customers to know about the new services as well attract potential customers who would be interested in using the fintech services offered by SBI. Circulation of videos via emails and WhatsApp platforms demonstrating the method of using digital services would help the technically challenged customers to learn the mechanism, thereby, filling the gap between services offered and targeted customers.
- Fear of breach of data privacy and cyber fraud is another reason for not adopting fintech services. To combat this challenge and instil confidence in the customers, communicating to them the potential risks/threats associated with transactions and improving the background infrastructure i.e. SBI's security system is important. Also the customers should be communicated about the grievance redressal mechanism of SBI in case of any fraud so that the customers could act promptly.
- To retain the position of SBI among other competing banks, SBI needs to upgrade the services according to the needs of the customers which include being user friendly, better server management system, efficient and easy user interfaces, faster activation process of contactless payments and prompt response.
- For improved operational efficiency, the SBI could optimise operations and cut costs by encouraging the use of fintech services for tasks like payment processing, risk assessment and client onboarding.
- Regular monitoring and updating of SBI website shall not only provide timely information to clients but also address several issues or services which are otherwise excluded in normal course of business.
- There is a need for an app or internet banking website in local or regional language where the population which finds it inconvenient to interact in English/Hindi or any other language provided find it feasible to interact, get informed and most importantly access the digital banking services.
- Reluctancy is a major reason among the older demographic population for not adopting fintech services provided by the banks. Factor of reluctance comes under the culture of a population which is formed by attitudes, beliefs and behaviours of a particular group which greatly influence the willingness regarding the use of digital technologies and services. Thus, SBI should make an attempt to promote a culture that values innovation and openness to change. This will not only promote digital literacy but also help in the contribution of SBI in the field of sustainability.
- Reliability with regards to chatbot interaction is a decisive factor when it comes to adoption of fintech services. Transparency needs to be maintained in this regard so that users or clients are able to get informed whether the chatbot is working effectively and solving his problem or not.
- For an effectively working module, SBI should build a comprehensive unified single-button platform which enables the specially-abled segment to access the digital financial services with ease and convenience.

10. Conclusions

Banks have included fintech services within their ambit as traditional banking services failed to reach the unbankable due to geographical constraints. Technology in the form of smartphones and internet connectivity boosted the penetration of digital banking among the customers as they have unlimited access to banking services. It is evident from the findings of the study that most of the people of Guwahati are aware about the fintech services provided by SBI and majority of them prefer online fintech services over traditional banking services which require frequent visits. Automated services, cashless transactions, ease of availing loans with prompt services at a click are some of the reasons as to why SBI customers of Guwahati have adopted fintech services. However, technical failure, privacy risks, cyber-attacks and lack of technical knowledge to utilise the services are the few reasons behind non adoption of fintech services by customers. In addition, the existing customers of SBI are unaware about the new fintech products due to which the majority of them have not yet used them. To ensure optimum penetration of fintech services among common masses, it is important to educate about the operational mechanism, redressal measures in case of cyber frauds and conduct awareness drives about introduction of new fintech products.

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