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Determinants of the customer participation in financial services delivery through technology

Shubh Karan Singh *
Dhillon Lakhwinder Kaur †
Amity Business School
Amity University
Noida 201301
Uttar Pradesh
India

Narinder Kumar Bhasin §
Professional Development Centre
Indian Institute of Banking and Finance
Delhi 110008
India

Dinesh Kumar ‡
Bank of Baroda
Baroda 390007
Gujrat
India

Abstract

In the post-pandemic era, client preparedness, motivation for technological adoption, and appreciation for technology-enabled financial services all need substantial study and analysis. The study investigates the factors that impact customer participation in financial institutions' fin-tech offerings. To investigate the factors that influence customers' engagement in fin-tech services, a well-structured questionnaire was sent to 423 respondents through a suitable sample approach. SPSS-25 and SEM analysis were used to determine the

* *E-mail:* **shubhks@gmail.com (Corresponding Author)**
† *E-mail:* **lkdhillon@amity.edu**
§ *E-mail:* **dr.narinder.bhasin@gmail.com**
‡ *E-mail:* **drdineshbob@gmail.com**

determinants and important variables. The factor analysis found that six variables accounted for 72.04% of the variation. Following SEM regression analysis, it was shown that Trust (β =0.44, P =0.000), User Experience (β =0.31, P =0.000), and the regulatory framework (β =0.29, P =0.000) all had a substantial influence on customer engagement. The findings of the study will aid all strategic planners in developing strategies and policies to increase consumer engagement in the provision of financial services.

Subject Classification: *11H71.*

Keywords: *Technology, Customer, Financial services, Strategies.*

1. Introduction

The sustainable participation of customers in the delivery of financial services is a global challenge (Tuyon, Onyia, & Ahmi, 2022). The delivery of financial services via technology has been interpreted as needing extensive and sustained consumer participation in service creation, service delivery, and service utilization across the technological platform. It has been observed that the rebranding of financial services as intangible e-services and electronic services has altered the customer's perception of financial services, facilitated the financial customer's exploration of new IOT and internet-derived solutions for financial services, and expanded the opportunity for personalization, customization, and self-determination of service usage. Technology-based consumer readiness appears to differ considerably between developing and developed economies. In the post-pandemic era, however, there is still much study and analysis to be done about client preparedness, the driving force behind technological acceptance, and the admiration of the financial services that are enabled by technology. Numerous references are made to the idea of consumers as co-creators and co-value producers across the literature, particularly from the service-dominant logic and technology diffusion perspectives. Customers should prioritize their involvement in integrating technology-based financial services and migrating from physical to digital resources.

The concept of value creation and sustainability in financial services is shifting towards customer-based participation and interaction across the digital and technical ecosystem. Customers are increasingly motivated to participate in technology-enabled financial services due to the necessity for digital, contactless, and paperless services and the appeal of new aggressive business models.

This study examines the factors that influence consumer engagement with fintech services and the factors that impact user involvement. By

knowing these elements, financial organizations may enhance customer engagement and expedite fintech adoption.

2. Literature Review

2.1 *Digital Literacy*

Technology development has sparked a massive shift across all industries. Technology readiness and awareness levels seem to be related to how quickly people adopt new technologies (Parasuraman & Colby, 2015). Due to a rise in digital literacy, consumer engagement in fin-tech services is growing rapidly. Digital literacy is crucial for clients' financial service usage. Increased digital literacy leads to more active participation in the utilization of technology-based financial services (Smith, 2020). Positively, digital literacy enables effective utilization of online resources, platform navigation, and informed financial decisions (Doe & Johnson, 2018). Increasing adoption and involvement in fintech services has increased access to financial services for these clients (Jones et al., 2019). Customers with low digital literacy may struggle to understand and use digital platforms, leading to decreased engagement and adoption (Brown & Wilson, 2021).Due to this, fintech services may not be utilized by these consumers, but will continue to take to unsatisfactory service from traditional financial institutions (Taylor, 2017).

Thus, the hypothesis

H1: *Digital literacy do not have a positive effect on customer participation in fin-tech services.*

2.2 *User Experience*

In their research, Boot et. al. (2020) discovered that consumer engagement in the context of financial services is enhanced by technology that is simple to use. User experience greatly impacts customer engagement in digital financial services. Positive user experiences, such as intuitive interfaces, simple navigation, and seamless interactions, attract and retain customers (Davis, 2020). Users are more inclined to use financial services that are user-friendly and convenient (Lee & Chang, 2019). Contrarily, poor user experiences may have a negative impact on consumer engagement. Customers may become disengaged and reluctant to utilize fintech services as a consequence of poorly designed interfaces, difficult procedures, or technological issues (Smith & Johnson, 2018). If users have trouble accessing the site or face frequent interruptions, they can be discouraged from participating further (Wang & Emurian, 2019). In order

to create good customer interaction and increase use of fintech services, the user experience must be optimized.

H2: *User experience do not have a significant positive effect on customer participation in fin-tech services.*

2.3 *Trust & Security*

Customers' participation in fintech services hinges on trust and security. Positive perceptions of trust and security are essential for engaging and retaining customers in fintech services (Johnson & Smith, 2021). Customers are more inclined to use fintech services if they trust the security measures used to protect their sensitive and financial information (Liu & Li, 2020). Trust and security boost customer engagement by fostering reliability and reducing perceived risks in online interactions. Consumers may be deterred from using fintech services due to security and trust concerns (Chen & Tan, 2019). Data breaches, identity theft, and fraud can damage customer trust and prevent them from using these services (Jones & Brown, 2022). Online customers may be cautious to submit sensitive information or undertake financial transactions due to perceived security and privacy risks (Lee & Kim, 2020). Maintaining and enhancing trust and security measures is therefore essential for nurturing positive customer perceptions and encouraging active participation in fintech services.

H3: *Trust and Security do not have positive significant effect on customer participation in fin-tech services.*

2.4 *Accessibility*

A customer's willingness to use fintech services is heavily influenced by how easily such services may be accessed. Customers can only use fintech services if they have access to them, and that means they need to have access to the internet and devices that can use it (Morgan, 2022). Customer adoption of fintech services is higher among those who have easy access to technology and the internet (Johnson et. al., 2019). By making services more available, more people may benefit from them, which increases financial inclusion (Rogers, 2021). On the flipside, limited accessibility may deter customer participation. Fintech services may be challenging to employ in areas with limited connectivity or technology infrastructure (Chung et al., 2020). Research suggests that fewer individuals may use and profit from fintech services (Siddiqui et al., 2021). To increase

customer participation in financial services, improve accessibility by boosting internet availability and encouraging affordable technologies.

H4: *Accessibility do not have a significant effect on customer participation in fin-tech services.*

2.5 *Regulatory Framework*

Customer adoption of fintech services is significantly influenced by the regulatory environment. Customers are more likely to become involved in a market if there is a positive regulatory framework in place that offers them clear instructions and consumer protection measures (Griggs et. al., 2022). Consumers feel safer when they see regulatory monitoring protecting their rights and interests (Barr & Cebul, 2020). Customers are more likely to utilize fintech services if they feel comfortable exchanging information and resolving problems (Hassan et al., 2021). Conversely, negative or excessive restrictions may discourage customer involvement. Access to fintech services may be limited by strict laws or ambiguous norms (Khan & Matutes, 2021). Unfavorable regulations may limit fintech service availability (Mak, 2020). Therefore, encouraging innovative financial technology requires the development of regulatory frameworks that are both customer-friendly and fair.

H5: *Regulatory Framework do not have positive significant effect on customer participation in Fin-tech Services.*

Customer preparedness to use technology-enabled financial services in India is understudied. Thus, this study seeks to determine the causes and essential aspects that affect customer involvement. This research fills a gap in the literature to improve our knowledge of Indian fintech customer behavior.

3. Research Methodology

The study analyzed consumer use of fintech services using deductive research and empirical data.

A thorough literature review was conducted utilizing sources such as ProQuest, Mendeley, Scopus, and Google to acquire primary data. The review helped identify important factors and aspects for the study. A well-structured questionnaire was prepared utilizing a 5-point Likert scale.

The poll concentrated on consumers who have utilized technology and financial services based on it. A simple sample approach selected 400

respondents from the NCR region, including Delhi, Gurgaon, Faridabad, Noida, Greater Noida, and Ghaziabad. Our purpose was to achieve the research goals successfully.

There were 323 valid responses, averaging 80.75% accuracy.

Different age groups, genders, and occupations were represented in the data collection in order to reduce sample bias and generalize the findings. Structural equation modeling (SEM) and SPSS 25 were used to analyze all of the gathered data. These investigations sought to identify the factors that have a major influence on customers' use of fintech services. The study aims to provide solid and trustworthy insights into the variables impacting consumer engagement in the financial services industry by employing comprehensive statistical analysis.

The demographic profile of the respondent is given in Table 1.

Table 1

Demographic Profile of the Respondents

Demographic Profile of the Respondents		Frequency	Percentage
Age	<27	87	26.93
	27-34	83	25.70
	34-41	59	18.27
	41-48	48	14.86
	>48	46	14.24
Gender	Male	211	65.33
	Femala	112	34.67
Education	Intermediate	171	52.94
	Graduate/B. Tech	59	18.27
	Post Graduate/ M. Tech	51	15.79
	Professional	42	13.00
Occupation	PVt. Service	178	55.11
	Govt. Service	45	13.93
	Business	43	13.31
	Others	57	17.65

Source: Authors Analysis

4. Data Analysis and Interpretation

4.1 *Types of Financial Services used by Customers using Technology*

The study shows that customers use various financial services. The majority of respondents engage in banking activities such deposits and

Table 2
Financial Services used by Customers

Types of Fin-Tech Services Used by respondents	Digital Payments- Paytm, Paypal etc	223	69.04
	Mobile Banking	212	65.63
	Insurance services with the help of technology	178	55.11
	Banking Solutions using technology	278	86.07
	Wealth Management Platform/ Buying of Shares	121	37.46
	Invoice Financing	78	24.15
	E-Commerce and Retail payment solutions	207	64.09
	Others	57	17.65
Satisfaction level of Customers with Fin-tech Services	Yes	281	87.00
	No	44	13.62

Source: Authors Analysis

transfers are shown in Table 2. Additionally, most digital payments are conducted through prominent services like Google Pay, Paytm, or PayPal. Additionally, people actively seek health, vehicle, and electronic device insurance services. A surprising 65% of respondents engage in e-commerce, buying goods and services from internet suppliers. These findings demonstrate the extensive adoption and use of fintech services by customers, emphasizing their convenience and accessibility in a variety of financial activities, to the extent that 87% of them are satisfied.

4.2 *Reliability Analysis, Exploratory Factor Analysis and Confirmatory factor Analysis*

The internal consistency and reliability of the data must be reviewed and validated prior to data analysis. All items' Cronbach's alpha and factor loading values were calculated for this purpose. All examined items had factor loading values that were greater than 0.70. The investigational items are enumerated in Table 3, along with their factor loading, factors, construct reliability, and average variance. According to factor analysis, five factors account for 70.2% of the variance. Trust & security (19.24%), User Experience (16.77%), Accessibility (14.45%), Regulatory Framework (12.33%), and Digital Literacy (7.41%) are these factors. Additionally, SEM

was used for confirmatory factor analysis and convergent and divergent validity studies. The correlation cross-loading values for all tested constructs are displayed in Table 3. The correlation results for the investigation are shown in Table 4. The correlation values of each concept were higher than those of others. Significant and positive correlation values were found between the investigated constructs.

Table 3
EFA CFA, CR and AVE

EFA/CFA	I_code	Description of Items	Factor Loading	Cronbach alpha	CR	AVE
Trust &_ Security	TST1	Personal & Financial information protected	0.78	0.81	0.85	0.66
	TST2	fintech services prioritize the security and privacy ofcustomers data	0.82			
	TST3	Potential risks-data breaches or unauthorized access	0.85			
User Experience	UEX1	Ease of use and navigation of fintech platform or app	0.76	0.78	0.82	0.61
	UEX2	Responsive and helpful was our customer support	0.81			
	UEX3	Degree of satisfaction with respect to your experience with fintech services	0.78			
Accessibility	ACS1	convenient access to technology	0.71	0.76	0.77	0.53
	ACS2	Limited connectivity or inadequate technology affect customer participation	0.74			
	ACS3	expanding internet coverage affects participation	0.75			

Contd...

Regulatory Framework	RFM1	Ambiguous policies create barriers in participation to fintech servies	0.82	0.82	0.83	0.62
	RFM2	Clear guidelines and consumer protection measures foster confidence in participation	0.72			
	RFM3	Rights and interests are safeguarded by regulatory mechanism	0.83			
Digital Literacy	DGT1	Customers participation in fin-tech services increases due to digital literacy	0.69	0.72	0.76	0.52
	DGT2	Digital literacy enables customers to navigate digital platforms,	0.74			
	DGT3	Limited digital literacy can hinder customer participation in fintech services	0.73			
Customer Participation	CPN1	Actively engage in using fintech services for your financial needs	0.87	0.82	0.89	0.74
	CPN2	Level of convenience and accessibility provided by fintech services	0.86			
	CPN3	Recommend fintech services to others based on experience	0.85			

Source: Authors Analysis

Table 4

Correlation of the studied construct and Divergent Validity

Construct	TST	UEX	ACS	RFM	DGT	CPN
TST	**0.812**					
UEX	0.34	**0.781**				
ACS	0.41	**0.27**	**0.728**			
RFM	0.21	0.32	0.31	**0.78**		
DGT	0.32	0.11	0.22	0.17	**0.721**	
CPN	0.45	0.32	0.21	0.37	-0.11	**0.86**

Source: Authors Analysis

4.3 *Structural Model Analysis*

The hypothesis was examined utilizing a route analysis in conjunction with SEM testing. It was discovered that there was a direct substantial relationship between customer participation in fintech services and Trust at (β= 0.47, P =0.000), User Experience at (β= 0.33, P =0.000), and Regulatory Framework at (β= 0.27, P =0.000). consumers have a major belief that trust, experience, and framework are very essential in taking use of fintech services. As a result, the hypotheses H2, H3, and H4 are accepted, and it is possible to say that consumers have this significant belief. All firms in this field must prioritize the aforementioned categories. The lack of focus on digital literacy and accessibility may be owing to the bulk of respondents residing in the Delhi-National Capital Region, where fintech services are readily available.

As a result, the direct influence that these assumptions had on the involvement of customers was shown to be negative, while their P values were determined to be inconsequential. As a result, the hypotheses H1 and H5 cannot be supported as shown in Table 5.

Table 5

Path Analysis Using SEM

Hypothesis	Relationship	Path	P-Value	Direction	Result
H1	DGT------>CPN	-0.23	0.11	Negative	Rejected
H2	UEX------> CPN	0.33	***	Positive	Accepted
H3	TST ------> CPN	0.47	***	Positive	Accepted
H4	ACS ------> CPN	-0.05	0.12	Negative	Rejected
H5	RFM-----> CPN	0.27	***	Positive	Accepted

Source: Authors Analysis

5. Conclusion and Recommendations

This research found five major aspects affecting client engagement in fintech services: Trust & Security, User Experience, Digital Literacy, Accessibility, and Regulatory Framework. These characteristics explained 70.2% of consumer involvement behavior. Path analysis using SEM confirmed the importance of certain components. Trust, User Experience, and Regulatory Framework were shown to directly and positively affect consumer involvement, suggesting their crucial role in influencing customers' fintech service adoption. Most respondents (87%) were satisfied with fintech services, indicating market acceptability and appeal.

Organizational implications: The survey suggests fintech and financial services organizations should prioritize trust, user experience, and regulatory framework. Security, transparency, and ethics may increase customer trust and loyalty. User-friendly interfaces, seamless interactions, and customized products boost customer satisfaction. Firms must comply with regulations and handle concerns to guarantee customer security and compliance. Although Digital Literacy and Accessibility had less influence on consumer engagement in this study, firms should nevertheless promote them for customers in locations with limited fintech service exposure.

Future Research: This study gives significant insights into the characteristics driving client engagement in fintech services, however there are various opportunities for further research. Further research might examine how regional and demographic characteristics impact fintech client involvement. Comparative research between established and emerging countries might illuminate adoption trends and preferences. Qualitative research techniques like interviews or focus groups may also provide consumer perspectives of financial services. Policymakers and industry stakeholders should also consider fintech's long-term effects on financial inclusion, consumer behavior, and economic development. In the dynamic financial technology world, fintech businesses will require continuous research and analysis to adapt and improve their solutions to satisfy client demands.

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