

Determinants of Sustained Usage of FinTech Services: An Integration of Technology Acceptance Model (TAM) and Trust-Based Factors

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KEYWORDS

FinTech Services, Technology Acceptance Model, Perceived Security, User Satisfaction, Sustained Adoption Intention.

ABSTRACT

FinTech services have revolutionized digital financial transactions, enhanced convenience, accessibility, and transaction efficiency. The study examines how factors related to the Technology Acceptance Model (TAM) and trust-based factors impact influence the continuance usage of FinTech services. The study further examines perceived security, user satisfaction, service quality, and perceived reliability, as determinants of continuance intention toward FinTech application. The study adopts a mixed method approach using descriptive and analytical research design. Primary data were collected from 250 users of FinTech services in Bangalore North, Karnataka, India, through a structured questionnaire using stratified random sampling. Analysis of data is done statistically in MS Excel and SPSS—27. The results indicate a strong positive correlation between perceived security and continuance intention, as well as between user satisfaction and continued usage of FinTech services. Furthermore, service quality and perceived reliability significantly influence continuance intention. Technological convenience can't guarantee long-term retention without a sense of trust, reliability and secure digital transactions. The results deliver suggestions for those in the FinTech sector as well as for policy makers for improving the digital trust and quality of services. The study is limited to selected variables and Bangalore North, Karnataka, India. Future work could further develop geographic scope and incorporate sophisticated analytical models and further behavioural variables..

1. INTRODUCTION

FinTech is widely regarded as one of the most critical developments in the financial business. It's an innovative technology that seeks to operate conventional financial services through computer programs and information technology. Due to the sharing of knowledge and the circular economy, conducive policy and regulation, and information technology, it is currently undergoing a dynamic change (Al-Dmour, et al., 2020). It is said that the potential of FinTech can transform and redefine the financial sector by making it more accessible, cost-effective, better and reflecting more diverse and secure financial market as it can create more business opportunities, better employment opportunities, lower poverty levels due to lower transaction costs and lower finance costs. Fintech, in other words, is the new financial sector that integrates technology to enhance the different activities of the financial sector (Lutfi, et al., 2021).

Fintech is transforming conventional financial transactions. The essence of fintech is disruption, as its innovations in financial systems and infrastructure give rise to novel financial enterprises and ecosystems. Fintech is considered a catalyst for sustainable economic growth, distinguished by its unique qualities compared to the traditional financial sector. The Fintech sector has experienced a substantial increase in investments, driven by soaring expectations. The investment volume more than doubled, increasing from USD 18.9 billion to USD 111.8 billion between 2013 and 2018, compared to the preceding six years (KPMG 2019). Despite the gradual increase in acceptance and utilisation of Fintech among financial consumers, its actual expansion in the real world has not met expectations. Fintech is both new and unpredictable, akin to..

the dual facets of a single coin, leading to client reluctance in its adoption, which subsequently affects its growth. The fintech industry has been struggling to keep customers and encourage them to continue using its products and services. An extensive study to investigate the continuance intent for Fintech is needed to enable sustainable development and growth of Fintech (Aldaarmi, 2024)..

Apart from the user and business advantages it offers by making operations and transactions a lot simpler, FinTech can be expected to become a catalyst for the future growth of the developing economies. Some of the ways or potential effects of FinTech on limiting environmental impacts include facilitating increased “productivity, efficiency and cost savings; reducing product waste, chemicals and resources; measuring, analysing and tracking progress; and more” (Puschmann et al., 2020). Sustainability has moved from a niche issue to the mainstream affair in Business. If adequately accepted, FinTech can become a catalyst for a financial or banking collaborative innovation. This explains why SDG's serve as a shared platform for business and stakeholders to create long-term development. FinTech could provide a catalyst to accelerate the growth of green and inclusive financial markets and the realignment of capital towards long-term growth (Chueca Vergara, & Ferruz Agudo, 2021).

2. THEORETICAL BACKGROUND

Fintech Viewpoint

Technological change is accelerating at an ever more rapid and ever more profound rate. The financial service sector has seen the most significant process disruptions and service transformations in the past few years as part of an innovation in the IT domain (Gomber, et al., 2018). The Fintech term that puts IT-related business models comprising different business or financial activities that use IT to cut out intermediaries. In the Financial Sector, disintermediation is an important feature of Fintech, which involves circumventing or omitting the role of conventional financial organizations in financial transactions (Hwang, et al., 2021).

Fintech encompasses greater uncertainty and risks than conventional e-banking or e-commerce transactions, as its risks extend beyond privacy and security to include multifaceted aspects such as performance, transaction processes, and legal, social, financial, and temporal losses. Peering-to-peering (P2P) lending arrangements can lead to bankruptcy in economic downturns as the profitability of these loans tend to fluctuate and create a risk for P2P lending companies' balance sheets. Some cryptocurrencies, including Bitcoin, offer global accessibility, anonymity and speed that can anonymise and facilitate money laundering, tax evasion and even the funds for illegal activities (Ryu, & Ko, 2020). Many fintech companies catering to cross-border remittances are facing region-specific financial regulations. F1Teams therefore makes some users reluctant to use Fintech owing to the uncertainty of the transactions involved which takes place on the site. Because Fintech is so uncertain and fraught with risks, researchers have noted that it is less likely to pose to be a rival than a complement to the traditional financial institutions. Optimizing customer trust and minimising risk, at the same time, is the key to success in Fintech business (Hwang, et al., 2021).

Furthermore, a link between financial services and IT is initially employed for the backend of financial transactions within traditional financial institutions. Fintech has advanced financial innovations from the periphery to the forefront, incorporating cross-border transfers, retail banking, lending, and cryptocurrencies into financial solutions (Aldaarmi, 2024). In emerging Fintech, information technology is the primary innovator that disrupts and reinvent service offerings, transaction methods, and service delivery, leading to fundamental changes. The quality of IT appears to significantly shape users' overall view of Fintech, particularly in contrast to its impact on traditional e-banking. Despite the crucial significance of IT in the sustainable development of Fintech, insufficient emphasis has been devoted to its impact on continuous usage and other aspects within the Fintech context (Jangir, et al., 2022).

Security of Mobile Payment Services

The primary security issues facing MPS now and into the future are the inter-dependencies of mutual authentication, authorization, integrity, privacy, atomicity and availability. Consequently, a scenario of a secure environment should be addressed to continue the MPS development processes. Security aspects in fintech services can be considered a multidimensional aspect encompassing services, platforms, networks, and devices (Park et al., 2019). Services generate new value for IoT applications, while platforms serve a crucial function in the IoT value chain by acting as an interface to connect services and devices. Networks provide the requisite wired and wireless communications for fintech services, and devices are objects outfitted with various sensors (Lim, et al., 2019).

The study suggests that for the security facilitators the primary two dimensions of their platforms are platform security and technology security. The two major dimensions of the security facilitators for the platform security should be mainly that of the service element of MPS and technology element of MPS (Jangir, et al., 2022).

Platform security measures include user's perception of the security of their possessions and personal information during mobile transactions. If authenticated and authorized, the interaction between the user and e-commerce platform provides the user with several business services components including information services trading and completion of the transaction

process. The comprehensive business process comprises diverse services from many suppliers reliant on independent services, resulting in these service-oriented heterogeneous systems encountering several security threats and vulnerabilities (Fan, et al., 2018). In this aspect, mobile payment systems process the personal data in real time, work trouble-free and periodically update the systems to improve their level of security. Fintech services rely on the presence of wireless and wired networks that are secure, as users use a variety of non-secure wireless connections and download apps from free sources and can therefore expose their own systems to harmful viruses and malware (Zhang, & Luximon, 2021).

The study is of immense importance owing to the focus on investigating the factors that shape the continued adoption of FinTech services through an examination of the integration of factors of trust and the TAM. The study helps to understand the factors that impact continuous adoption behaviour, namely perceived usefulness, ease of use, security, reliability and user trust. The results help the study, policy and services sectors for FinTech to improve the satisfaction, trust and future use attitude of their customers in the dynamic digital financial working environment.

The study begins by introducing why the FinTech services are important, followed by theory and literature review. The research objectives, hypotheses, methodology, analysis and findings are discussed in the following sections. The study ends with discussion, implications, limitations, recommendations and conclusive remarks of the study.

3. RESEARCH MODEL AND HYPOTHESES

The theory of reasoned action (TRA) is developed to compensate for some of the shortcomings of it in 1986 and that is where TAM came in. It is proposed from the behavioural science point of view incorporating the expectation theory and self-efficacy theory and is most applied to researching the adoption of technology-related behaviours. TAM has three factors influencing individual behavioural attitudes, namely (1) perceived usefulness and (2) perceived ease of use, that have significant influence on the taking up of new technology (Hu, et al., 2019).

The study takes a user perception and user trust-based approach to examining the factors affecting users' usage of digital financial services. In this study, constructs like perceived security, service quality, reliability, user satisfaction, and trust are included to assess their effects on the continuation behaviours in relation to FinTech applications. Their impact on sustainable usage behaviours is then explored, including the variables of trust and satisfaction. Additionally, perceived benefits are part of the model to control their effect on users' future adoption decisions. The study also identifies the relation and comparative effect of said variables on continuance intention by employing suitable statistical methods. The concept of the proposed study is depicted in Figure 1.

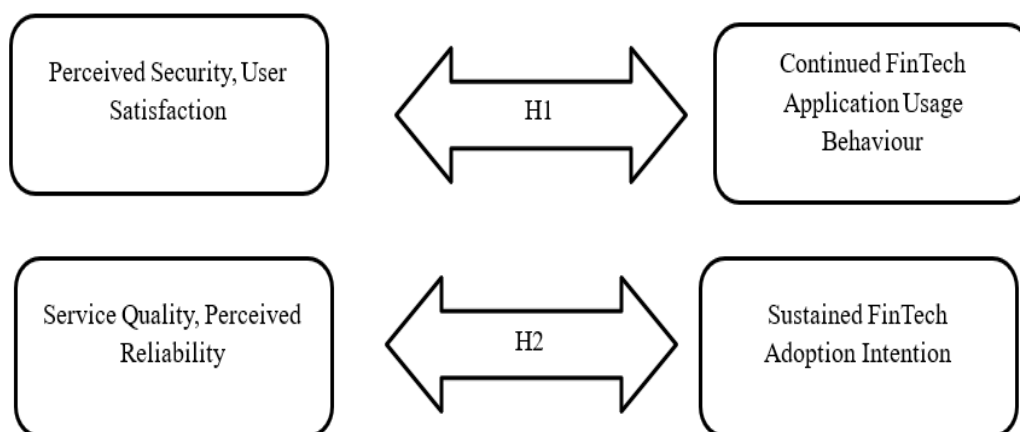


Figure 1: Conceptual framework

Source: Authors own compilation

The theory of perceived risk provides a basis that suggests that an individual's perceived risk negatively influences his/her behaviour towards different types of digital services. An emerging digital service like Fintech poses risks for customers, since the transactions may not actually work out as intended. Topics affecting users' financial transactions go beyond the privacy and security issues raised in traditional financial services because as a non-face-to-face financial service, Fintech offers different aspects of financial transactions from conventional financial services (Ismagilova, et al., 2020). When operating in the context of Fintech, trust is a critical factor to deal with the volatile and unpredictable nature. Trust is the result of users' trust in Fintech providers delivering high quality services for people are serving. For instance, if the Fintech provider could provide security and stability for people, up-to-date and precise information and all-inclusive services that would satisfy people's expectations, the user fears would be reduced and trust in the service would be created (Jangir, et al., 2022). Fintech companies can gain access to personal and financial information, such as details on a person's name,

phone, address, social security number, bank account and/or credit card details. In addition, customers who use the Fintech could also face financial damages due to wrong or unfulfilled financial actions or because it enables money laundering, tax evasion and financing of illegal activities. Fintech users consequently must be aware of the risks which could culminate in an undesirable ending; and these risks can make consumers less inclined to continue using Fintech (Al-Okaily, et al., 2021). Therefore, formulated the following hypothesis:

Hypothesis 1: There is a significant relationship between perceived security, user satisfaction, and continued FinTech application usage behaviour.

In recent IS studies, perceived security has been found as an important factor determining satisfaction and ongoing technology use by users. The concerns of users on financial transactions go beyond the traditional problems of privacy and security (Li, & Xu, 2021), as FinTech applications are not financial services in a sense of direct and face-to-face human interactions. In the FinTech sector, where concerns regarding security can be easily unravelled as a crucial aspect of fostering trust, it plays a significant part in alleviating uncertainty and boosting users' confidence in digital transactions. Users become satisfied when it feel that FinTech providers provide services that are not only secure and reliable but also of good quality, safeguarding their financial and personal data. For instance, if the onus is placed on FinTech companies to protect payment methods, user privacy, encrypt payments and accurately present financial products according to what it have expected, it can minimize users' fears and increase their satisfaction towards user applications (Johnson, 2023).

However, user satisfaction is also an important factor that affects using behaviour of FinTechs. Creating a FinTech service experience that leaves users satisfied helps to build their confidence and trust in the technology, and fosters continued use of the application (Fülöp, et al., 2022). If people feel that the FinTech apps are safe, reliable and efficient, are more likely to access them again for conducting their financial transactions in the future. Conversely, any lessons learned from making users feel insecure about potential security risks, privacy concerns, and less reliable services could result in diminished acceptance of FinTech products. Thus, a sense of security boosts users' confidence and improves satisfaction and usage intentions for FinTech applications(Dehnert, & Schumann, 2022).

Hypothesis 2: Service quality and perceived reliability significantly influence sustained FinTech adoption intention.

Service quality also has a direct positive impact on FinTech products usage, suggesting that a positive user experience because of good service quality strongly affects actual adoption of FinTech products. To build users' trust, high service quality is essential, which is another major factor that affects the use of FinTech. Users embrace FinTech services when it feel confident that the service provider can deliver accurate, secure and accessible financial services (Al-Hattami & Almaqtari, 2023). The quality of the FinTech service is assessed by users according to their encounter with the platforms provided by the FinTech service. To improve the quality of services can increase the satisfaction of users and their confidence in FinTech products and services. The more reliable, secure and user-friendly applications are perceived as, the more likely users are to adopt them in the form of FinTech solutions. High levels of customer satisfaction led to positive customer experiences, which can boost customer retention and positive word of mouth. Those who have favourable experiences at using the FinTech service are more inclined to recommend proper service to others (Corbet, et al., 2024).

The term perceived reliability is used to denote the level of trust, in the sense of being reliable, secure and accurately and consistently able to perform financial transactions, among users in relation to FinTech services. Users may have a fear of transaction failures, security issues, and technical glitches in the digital financial world. Therefore, a trusted FinTech service is crucial to establish user confidence and sustained behavioural patterns around its adoption (Amnas, et al., 2025). If users perceive FinTech platforms to offer trusted services, reliable performance and secure systems, more likely engage them in the financial activities of each day. Furthermore, the higher the satisfaction level of the service, the higher its quality becomes and the more it contributes to increased customers satisfaction and trust, impacting positively on sustained adoption intention. Customers who have high level and reliable service are more likely to continue to do business with FinTech services providers and return to them in the future. Hence the quality of the services and the perceived reliability have significantly influence on the intention to continue using FinTech (Kumar, et al., 2024).

4. RESEARCH METHODOLOGY

The study utilizes a qualitative method with quantitative method to understand the factors associated with non-discontinuous use of FinTech services. The study area is Bangalore North, Karnataka, India and targeted population are active FinTech users. A stratified random sampling procedure is employed to assure appropriate representation of respondents across the sample from different groups of respondents. The study is done by descriptive research and analytical research. The data are obtained by using primary and secondary sources research; questionnaire as the main research instrument is used in the data collection. The sample size is 250 FinTech service users. The independent variables are perceived security, user satisfaction, service quality, perceived reliability and use of mobile FinTech payment options, and the dependent variables are continued use behaviour, intended continued use and levels of trust. Data is analysed statistically by using MS Excel and SPSS 27.

5. ANALYSIS AND RESULT**Table 1: Demographic variable of the respondents**

S.NO	Demographic variable		N	%
1	Gender	Female	117	46.8
		Male	133	53.2
2	Age	Below 20 years	37	1.8
		21-30 years	47	18.8
		31-40 years	46	18.4
		41-50 years	59	23.6
		Above 50 years	61	24.4
3	Educational qualification	Undergraduate	61	24.4
		Graduate	65	26
		Postgraduate	67	26.8
		Professional qualification	57	22.8
4	Area of residence	Rural	96	38.4
		Semi-urban	77	30.8
		Urban	77	30.8
5	Fintech application used	BHIM	49	19.6
		Google pay	58	23.2
		Paytm	42	16.8
		PhonePe	51	20.4
		Others	50	20
6	Frequency of Fintech usage	Daily	76	30.4
		Monthly	51	20.4
		Occasionally	58	23.2
		Weekly	65	26
7	Purpose of using FinTech	Bill payments	50	20
		Fund transfer	54	21.6
		Investment	42	16.8
		Online shopping	54	21.6
		Recharge	50	20

Demographic profile and FinTech usage pattern of the respondents is given in Table 1. 250 people participated in the study, in which males (53.2%) were slightly more than females (46.8%). Most respondents belong to the age group above 50 years (24.4%) and 41–50 years (23.6%). It is interesting to note that in terms of education, while the postgraduate respondents (26.8%) comprise the highest percentage, graduates (26%) come in second. 38.4% of the sample comes from rural areas. Google Pay (23.2%) is the most favoured platform among all the FinTech applications. 30.4% reported being using FinTech services daily, primarily for transferring funds and online shopping activities.

Hypothesis 1: There is a significant relationship between perceived security, user satisfaction, and continued FinTech application usage behaviour.

Table 2: Descriptive statistics

Descriptive Statistics			
	Mean	Std. Deviation	N
Perceived Security, User Satisfaction	15.7600	3.97563	250
Continued FinTech Application Usage Behaviour	17.5680	3.83251	250

Table 2 provides descriptive statistics of perceived security, user satisfaction and continued FinTech application usage behaviour in relation to all respondents. Mean score scores for perceived security and user satisfaction were 15.76 and 3.98 with a standard deviation of 15.76 and 3.98 respectively, which suggest a level of agreement despite some differences of opinion amongst the respondents. The respondents indicate overall a positive intention to continue using FinTech applications as their continued FinTech application usage behaviour reach a higher mean value of 17.57 with a standard deviation of 3.83. Responses for the 250 participants are similar as the relatively low standard deviation values would suggest.

Table 3: Correlations

Correlations			
		Perceived Security, User Satisfaction	Continued FinTech Application Usage Behaviour
Perceived Security, User Satisfaction	Pearson Correlation	1	.428**
	Sig. (2-tailed)		.000
	N	250	250
Continued FinTech Application Usage Behaviour	Pearson Correlation	.428**	1
	Sig. (2-tailed)	.000	
	N	250	250
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 3 illustrates that the perceived security is correlated with user satisfaction and the continued use of the FinTech applications. A Pearson's correlation coefficient (0.428) shows that the variables are moderately related. An increase in the degree of its perceived security and user satisfaction leads to a corresponding increase in continued usage behaviour among the respondents handling the FinTech apps. A significance value ($p = 0.000$) of less than 0.01 is found, which means that the correlation is statistically significant at 1%. Hence, user's perceived security and user's satisfaction have a huge impact on the users' intention to use Fintechs further.

Hypothesis 2: Service quality and perceived reliability significantly influence sustained FinTech adoption intention.

Table 4: Model summary

Model Summary				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.195 ^a	.038	.034	3.57634
a. Predictors: (Constant), Service Quality, Perceived Reliability				

The model summary of the regression analysis that tests the relationships between the service quality and perceived reliability with the dependent variable is shown in Table 4. The correlation coefficient, $R = 0.195$, indicates a weak positive association between the predictors and the result variable. The R-squared score is merely 0.038, indicating that only 3.8% of the variation in the dependent variable is elucidated by service quality and perceived reliability. The model exhibits an adjusted R-squared of 0.034, further corroborating its minimal explanatory power. The standard error of estimate (3.57634) represents the mean error or variance of the values relative to the regression line.

Table 5: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	125.826	1	125.826	9.838	.002 ^b
	Residual	3171.970	248	12.790		
	Total	3297.796	249			
a. Dependent Variable: Sustained FinTech Adoption Intention						
b. Predictors: (Constant), Service Quality, Perceived Reliability						

Table 5 shows the ANOVA results of the regression model used to test the effects of service quality and perceived reliability on the intention of continued FinTech adoption. The regression model, the F value is 9.838 and the value of P is 0.002 which is less than the significance level of 0.05, so the regression model can be used as a statistical model. The findings in this result align others, in the sense that the independent variables have a significant impact on the respondents' intention to adopt FinTech in its entirety. The value of the regression sum of squares 125.826 accounts for some of the total variation, while the residual sum of squares of 3171.970 represents unexplained variation in the model.

Table 6: Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.488	1.019		13.238	.000
	Service Quality, Perceived Reliability	.186	.059	.195	3.137	.002
a. Dependent Variable: Sustained FinTech Adoption Intention						

Table 6 displays the coefficient analysis of the regression model used to examine the impact of service quality and perceived reliability on intention to adopt the FinTech system. The intercept constant, 13.488, indicates the adoption intention at the baseline when predictor variables are absent. The unstandardised coefficient ($B = 0.186$) indicates that a one-unit increase in service quality and perceived reliability results in a 0.186 rise in sustained FinTech adoption intention. The standardised beta coefficient is 0.195, indicating a positive correlation between the independent variable x and the dependent variable y. A t-value of 3.137 with a significance level of 0.002 indicates that the link is statistically significant.

6. DISCUSSION

Perceived usefulness and ease of use were identified to have a significant impact on continuous usage intention of digital financial services (Linh, T. T.). (2025). In the day-to-day business processes, users appreciate app ease-of-use, time-saving features or convenience, associated with ease of transactions and decreased effort. (Hassan, H. E., & Wood, V. R. 2020). According to Shao, Z. and his colleagues (2019), any technology with practical benefits tends to be more accepted, and more successful with the users. Singh (2020) and Sinha (2020) pointed out that digital platforms which are easy to use make users return to use them. Mohammeda, M. G. and Hassan, R. However, Mohammeda and Hassan, M. G. (2024) noted that convenience is not enough to keep users interested when have doubts about the safety of transactions. Indeed, technological efficiency is still of interest, but trust and assurance are equally expected by the users of digital financial services (Putri, A. A. K. S. et al., 2026).

Sustained usage behaviour is strongly influenced by dimensions related to trust, namely security and reliability. Turning to financial technology applications, users generally keep using them when feel that their personal and financial data are secure from risks and malicious use of technology (Lee, C. W., et al., 2026). Ryu, H. S., & Ko, K. S. (2020) highlighted the role of trust enhancing user confidence in online systems and boosting behavioural norms. Likewise, Somesanook, P. H. O. N. G. S. O. U. N. T. H. O. N. E. In electronic payment settings, Long-Term Customer Relationships in reliable digital services (2024) draw a connection between the two. But Durai, T. & Lallawmawmi, F. According to (2023), younger customers tend to focus more on usability and affordability over security concerns. Despite this conflicting perspective, the study found that trust, and more specifically reliability and security, remain key factors in digital financial services usage.

Among users, service quality also proved to be one of the factors influencing the continuous adoption of the system (Burchi, A., et al., 2025). Responsiveness, speed, and accurate transactions create a better customer experience and brings in repeat customers of the platform. Malik, M. F. Efficient electric service quality 2025 improves customer satisfaction and develops loyalty of customers to electronic platforms. Al-Hattami, H. M., & Almaqtari, F. A. According to Financial application experience, regular and stable service performance boosts user trust in financial applications. (2023) However, Somesanook, P. H. O. N. G. S. O. U. N. T. H. O. N. E. (2024) stated that people likely find an alternative application that provides better incentives and innovative applications and move to it. However, when considering revetment, the quality of service is not enough, as suggested by Hwang, Y., et al., (2021), because digital platforms can easily lose their advantages and enhance their features to strengthen customer loyalty.

Continued usage intention is positively correlated with user satisfaction, meaning that the more satisfied the user is, the more likely are to continue using financial technology services (Burchi, A., et al., 2025). Smooth transaction process, convenience and reliability of course play an important role for their good experiences. Putri, A. A. K. S., et al., (2026) described musicians who experienced positive user experiences tend to have stronger continuance intentions as satisfied users. Ryu, H. S., & Ko, K. S. Further, (2020) pointed out that satisfaction promotes emotional involvement with digital devices. Norbu, T., et al., (2024), mentioned that users can become dissatisfied very quickly due to privacy issues, ancillary fees, or technical troubles. Amid even the most opposing views, the word satisfaction is important as it contributes to retention behaviour.

Demographic factors also had effects on behavioral intention for the long-term use of digital financial products or services. Programmers were more accommodating to mobile financial transactions, and highly educated respondents had higher levels of acceptance to digital payment technologies were shown by Lee, C. W., et al., (2026). J.C.Durai and F. Lallawmawmi. (2023) gave an explanation that the concept of 'technological awareness' can be used to describe the willingness of individuals to rapidly embrace innovative services. Nurfadilah, N., et al. (2026) found that education has a positive impact on digital financial literacy and the confidence to use digital finance. However, in contrast, Khuong, N. V., et al., (2022) suggested that there were fears that older consumers may not want to put complete faith in technology due to trust and usability issues. Mohammeda, M G. & Hassan, R. (2024), demographic differences do exist and are still evident across the various consumer groups regarding adoption and continued usage behaviour.

7. CONCLUSION FOR THE STUDY

Technological and trust-based are the two key factors geared to drive the continuous usage of FinTech services. The intention to use digital financial applications is significantly influenced by perceived security, user satisfaction, service quality and perceived reliability. The results show that the users would like to use platforms that offer secure transactions, easiness, reliability, and efficient experiences. A mean that is close to "trust" and "satisfaction" is found to be important behavioural drivers for the intention of long-term use. Differences also reflect in the user's expectations of the use of new technology, for instance, between technologically savvy and educated users. The study merges the TAM-based and trust-based constructs to gain a more comprehensive grasp of the adoption of FinTechs in the rapidly spreading digital financial landscape.

As the tech-skills of digital financial trading grow among users, the study finds that security and reliability still hold a



critical place in their digital adoptability. Having a good service experience leads to higher customer confidence and continuance intention regarding FinTech services. The statistical results validate the link between perceived security, user satisfaction, and post usage behaviour, and service quality and perceived reliability do have a significant impact on sustained admission intent. The study points to the clear fact that the ease of use and convenience for using technology is not enough to secure retention if trustworthiness and stability of the digital financial services are not perceived to the users. The study helps build consumer understanding related to consumer behaviour and lasting engagement in the growing FinTech space.

Implication of the study

The findings have significant implications for FinTech companies, policy makers and digital financial service providers. The FinTech companies should offer safe transaction system, dependable services and efficient customer support to improve users' trust and long-term relationship. The quality of service and technical disruption can also encourage more customers to use service and purchase repeated services. Policymakers can design more comprehensive regulation, such as regulation on digital finance services and cyber security, for enhancing public confidence in online transactions. Academic contribution of the study is extending the Technology Acceptance Model by adding trustworthiness variables.

Limitation of the study

Respondents were chosen only from the Bangalore North, Karnataka, India region, which limits the applicability of the study results to other geographical regions and cultures. The sample size of 250 FinTech service users could be insufficient to represent the various groups of FinTech users in India. The study only examined selected variables: perceived security, quality of service, reliability, and satisfaction; it didn't consider behavioral or psychological factors. The use of cross-sectional data doesn't enable observing trends over time.

Recommendation for future study

Study could perhaps involve customers from different regions or even countries to enhance external validity. A more thorough investigation of behavioural usage could also be conducted with a larger sample and diversified demographic variables. Future study may incorporate other variables, like perceived risk, financial literacy, digital trust, resistance to innovation and social influence, to formulate more extensive research model. With advanced analytical approaches, like SEM, mediator analysis or multi-group analysis, the behaviour of the user might be explored in a deeper extent. It might be of use to track changes in the behaviour of adoption through longitudinal studies..

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