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Revolutionizing the Fintech Landscape: An Empirical Investigation into the Impact of Service Quality on Customer Satisfaction and Usage Intention in Uttarakhand

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Abstract
The Indian financial services sector has undergone significant transformation with the emergence of Fintech, which integrates financial services with advanced digital technologies. This shift has altered consumer expectations and behavior, creating a demand for more efficient and accessible financial solutions. This study investigates the role of Fintech innovations in enhancing customer satisfaction & intention to use Fintech services. Data was collected from 230 respondents across the Dehradun, Haridwar, Tehri & Pauri districts of Uttarakhand. The analysis was performed using Smart PLS to analyze the intricate relation of dimensions of service quality & customer satisfaction. The SERVQUAL model comprising of Reliability (REL), Responsiveness (RESP), Assurance (ASS), Empathy (EMP), and Tangibility (TAN) - was employed to measure the extent of satisfaction driven by perceived service quality with regard to fintech services among surveyed respondents in Uttarakhand. As per the findings, Reliabilityand Responsiveness are among the most significant attributes of service quality towards enhancing customer satisfaction. These elements, in turn, significantly contribute towards the intention to use fintech services in Uttarakhand**.** The study empirically justifies the significance of reliability, responsiveness & assurance in promoting customer satisfaction which in turn drives intention to use Fintech. Therefore, the Fintech service providers should prioritize these aspects to improve user satisfaction and expand their customer base in regional markets. Moreover, the results from the study bear significant practical implications for Fintech companies, policymakers, and financial service regulators. By focusing on key dimensions of service quality, stakeholders can boost user engagement, drive digital financial inclusion across vulnerable regions, and support the broader goal of a cashless and inclusive economy.

Keywords – Fintech, reliability, assurance, empathy, responsiveness, tangibility, intention to use, customer satisfaction

Introduction
The financial services industry has been witnessing a massive revolutionary trend owing to the interpolation of technology which has altered the entire scenario and functioning of the banking and other financial sector intermediaries. This has been made possible through

Fintech a term that is widely being used in the vicinity of finance sector innovations. Fintech has emerged to be a new entrant in the financial services industry specializing in offering highly customized digital financial services througheasy-to-use tech-based alternative financial solutions (Jerene & Sharma., 2021). The Fintech services refer to a wide variety of technology - enabled services incepted by start-up companies affecting payments, remittances, loans, investments (Dorfleitner et al., 2017). The main idea conceived by the Fin-Tech industry was to design highly customized financial services incorporating benefits of trust, ease of use, accessibility, affordability and quality as factors that have enabled the Fintech industry to grow and thrive (Arora & Madan, 2023). Fintech encompasses a wide range of services within its purviews such as pay tech and borrowing, wealth tech crowd funding platforms, asset management and investment apps insure tech, reg tech, stock trading, robo - advisory services etc (https://www.bcg.com). These transactions are effected through application programming interfaces (APIs), facilitating smooth exchange of funds. Thus, the Fintech industry have shown promising results for the tech - savvy financial services customers willing to fulfill their financial endeavors.

It is imperative to note that the success of Fintech is a mixed outcome of government policies particularly the Digitalization of the Indian economy, National Mission for Financial Inclusion, emergence of Artificial intelligence, promotion of digital payments, Start-up India, innovative and entrepreneurial mindset, seamless broadband internet connectivity and penetration of smart-phone and increased outreach of internet banking, demonetization policy followed by Covid-19 outbreak which have provided massive impetus to the Fintech industry (Verma & Chakrawarty., 2024). Fintech - led solutions technology readiness, regulatory support, a favorable business environment have created a strong base for its success and strategic implementation in the Indian economy.

Fintech has massive potential to deepen the financial inclusion of the previously excluded and unbanked populace. As per the World Bank, Fintech is critical to increasing financial inclusion and digital adoption. The JAM (Jan - Aadhar- Mobile) trinity, increased penetration of banking channels, the digitalization of Indian economy, inculcation of online payments ecosystem and increased outreach of internet banking are among the contributing factors towards facilitating financial inclusion through the Fintech.

The Fintech innovations have potential benefits for all users of financial services (BIS, 2019). The RBI governor has rightly said that tech based services & digital players could serve as the fourth segment of the Indian financial system inclusive of large banks, mid-sized banks, niche banks, small finance banks, regional rural banks and, cooperative banks. The banks and financial sector intermediaries are increasingly aligning their policies by the new tech-based innovations to improve accessibility of financial services to the ultimate customers.

The Fintech industry has emerged out of the need for attracting new customersand retaining existing ones**.** Over a couple of years, the Fintech industry has flourished in recent years and have been growing more extensively. As per the latest Fintech report, the Indian Fintech market is projected to achieve a growth rate of $150 billion, accounting for an annual growth rate of 31.2% for the period from 2021-25 reflecting a robust financial ecosystem (State of India Report, Q4, 2024). This has been attributable to factors such as India stack, financial inclusion initiatives, government regulatory mechanisms and supports New business models Startups and Unicorns, a well positioned digital payments market, favorable demographics

increased Fintech funding and increase in smart-phone and internet users and international collaborations which have provide massive impetus to this industry to flourish and grow.(https://Fintech.rbi.org.in)

The Fintech industry has brought about drastic change in how customers perceive the financial services sector thereby inducing benefits of customer satisfaction in the financial services sphere. Therefore, it becomes essential to devise effective ways for keeping track of the perceived benefits of this tech based financial services to the beneficiary resulting in enhanced customer satisfaction. Hence the SERVQUAL model was used for evaluating level of satisfaction driven by service quality of fintech. The underlying dimensions of the SERVQUAL model have proved to be effective and serve as a basis for improvising the service quality as this model is based on the contention that the existing demarcation line between expectation and customer's perception regarding the services being offered outcomes play an important role in redefining customer satisfaction with regard to the service being studied. Hence the SERVQUAL model was used for assessing the satisfaction of customers with regard the Fintech services in Uttarakhand. Following this brief introduction, the paper covers theoretical background of the study followed by development of hypothesis, research methodology, data analysis and results, discussions, & conclusion and, lastly implications and conclusions.

Theoretical Background

The service quality attribute has been regarded as of immense importance in recent years due to increased focus on maximizing customer satisfaction by way of improved quality of products and services in the financial services domain which has undergone massive transformation due to tech based innovations in the manner of delivery of financial services to the ultimate end user (Lee, 2005). Among recent developments, the emergence of Fintech in the financial services sector has been perceived as an important policy initiative which have played a pre-emptive role in driving customer satisfaction through improved quality of tech based financial services driven by new tech based innovations such as AI, Cloud computing and Big Data. The growing customer base and the increased pace of expansion of Fintech in respect of the Indian financial services market has led to its exploration in the (Fida et al., 2020 ; Baber, 2019). For this purpose, the concept of service quality propounded by Parasuraman et al., 1985 is the most widely used metric to establish relation between customer satisfaction and service quality (Brady et al.,2002 ; Fida et al., 2020 : Nguyen et al ,. 2021). The SERVQUAL model along with its core dimensions (tangibility, empathy assurance, responsiveness have proved to be the most extensive model covering aspects of service quality of Fintech and its perceived outcome making a significant contribution towards enhanced level of customer satisfaction associated with the services being studied (Yesmin, 2023). Moreover, use of SERVQUAL can help you to gain a better understanding of your customer's needs and expectations, identify your strengths and weaknesses in service delivery, prioritize your actions and resources to improve service quality, and increase customer satisfaction, loyalty, and retention. As far as Fintech enabled services are concerned, the literature on assessing the impact of different dimensions of service quality and its implications on customer satisfaction has shown mixed results. For instance, studies of Singh., 2015; Muley et al., 2024; Verma 2023 have shown that the underlying dimensions of tangibility, assurance & empathy have resulted in increased customer satisfaction of Fintech and ultimately intention to use. Another notable gap found in the literature is that majority of studies concentrated upon the intention to use their services thereby attracting

significant attention of investors and academicians (Millian et al., 2011). However majority of studies featuring study of behavioural intention to use aspect have been done through TAM & UTAUT approach (Sharma, 2023).

A thorough review of literature on Fintech, however, demonstrates that the literature on service quality of Fintech and customer experience however is still at its infancy stage. (Barbu et al., 2021). Another intriguing gap found in the literature associated with Fintech review of literature on Fintech services is that most of the studies have been restricted to the Indian periphery (Vijai, et al., 2023; Gupta 2021; Ozilli, 2024; Mainarder, 2023) resulting in denial of vulnerable states like that of Uttarakhand. Therefore, despite attracting significant scholarly attention, only few studies have explored nexus between multiple dimensions of financial inclusion & women empowerment with reference to both rural and urban areas employing primary data in regions like that of Uttarakhand. Moreover another intriguing gap found in the literature most of the studies have been restricted to Indian periphery (Vijai C et al., 2023; Gupta 2021: Ozilli., 2024; Mainarder, 2023) resulting in denial of like that of Uttarakhand

Following this discussion, this research endeavors to fill the existing knowledge gap & seeks to establish intricate nexus of service quality of Fintech and customer satisfaction and intention to use across 4 districts of Uttarakhand taking into consideration fundamental indicators service quality to measure their aggregate impact on customers satisfaction and intention to use with regard to Fintech services in Uttarakhand.

Hypothesis Development

In the contemporary digital financial ecosystem, **Fintech services** have gained immense traction by offering personalized, innovative, and efficient alternatives to traditional banking. The service quality dimensions assume immense importance in shaping consumer perceptions, trust, satisfaction, and continued use. Drawing from the SERVQUAL model, five primary service quality dimensions - **REL, ASS, TAN, EMP, and RESP**—are extensively studied for their impact on **customer satisfaction**, resulting in enhanced **intention to use** Fintech services.

In the rapidly evolving financial landscape, **Fintech services**—driven by innovation and digital transformation—have reshaped customer expectations and experiences. Service quality dimensions, derived from the SERVQUAL model, have become essential in understanding customer satisfaction and usage intent in Fin-tech platforms. These dimensions **act as** intervening factors influencing the perceived quality of services and consequently, customer satisfaction (Ali et al., 2021). Satisfied customers are more likely to continue using digital financial services, ensuring long-term engagement and loyalty (Barz et al., 2023; George & Sunny, 2023).

Ali et al. (2021) emphasize that these service quality dimensions act as intervening variables that help address the diverse and ever – growing needs of customers in the digital finance domain. Likewise, **Barz et al. (2023)** note, that incorporation of technology into financial services has led to a paradigm shift in consumer behavior, where service quality directly contributes to trust, satisfaction, and long-term loyalty. Moreover, **Moon (2013)** and **Aldaarmi (2024)** identify **reliability** and **tangibility** as key predictors of service quality, while **Mishra (2020)** highlights the importance of **empathy** and **assurance** in building strong

customer relationships. The works of **Khan et al. (2018)** and **Bhuvaneswari & Maruthamuthu (2024)** further reinforce the influence of **responsiveness** and **empathy** on satisfaction. Finally, **George and Sunny (2023)** and **Gautam and Sah (2023)** argue that a **positive perception of service quality** leads to sustained usage, satisfaction, and loyalty toward Fintech services.

H1: Reliability positively and significantly impacts customer satisfaction with regard to Fintech services

Reliability is the concerned service effectiveness to ensure smooth and hassle-free delivery.. In the context of Fintech, this includes consistent transaction processing, secure systems, error-free operations, and timely updates.

As **Moon (2013)** observed, "Reliability is the most critical dimension of service quality in digital financial systems, as it directly affects the perceived risk and trust of customers." A reliable Fintech service reduces the perceived risk of using technology-based platforms and enhances trust. **Aldaarmi (2024)** further supports this by establishing reliability as a dominant factor in driving satisfaction in mobile banking and digital payment systems.

H2: Assurance positively and significantly impacts customer satisfaction with regard to Fintech services

Assurance is the delivery of services bearing benefits of competence, credibility to induce trust and confidence pertaining to the service. In Fintech services - where human interaction is minimal—assurance is reflected through data security, privacy protections, and transparent policies. According to **Mishra (2020)**, "In a digital environment, where physical presence is absent, assurance becomes vital in securing customer confidence and fostering satisfaction." Strong assurance mechanisms such as encryption, two-factor authentication, and transparent customer communication contribute to enhanced customer satisfaction by reducing fears associated with online financial transactions.

H3: Tangibility positively and significantly impacts customer satisfaction with regard to Fintech services

Tangibility encompasses the physical facilities and digital interface quality in the case of Fintech. Though services are intangible, the look and feel of mobile apps, websites, and design elements constitute perceived tangibility. Barz et al (2023) state that "a visually appealing, user-friendly, and professional digital interface enhances users' trust and ease of use, thereby boosting satisfaction". Ali et al. (2021) suggest that tangible aspects such as easy navigation, clean app interfaces, and professional branding improve service quality perception, particularly for new users.

H4: Empathy positively and significantly impacts customer satisfaction with regard to Fintech services

Empathy refers to the individualized attention and care that service providers offer to customers. In digital services, empathy can be shown through chat support, personalized notifications, and customer-centric solutions. **Mishra (2020)** points out, "Empathy in digital banking is reflected in personalization and timely human support, which are essential to make customers feel valued." **Khan et al. (2018)** and **Bhuvaneswari & Maruthamuthu (2024)** found that empathy significantly contributes to building emotional connections and satisfaction among Fintech users, especially in resolving issues or providing tailored services.

H5: Responsiveness positively and significantly impacts customer satisfaction with regard to Fintech services

Responsiveness indicates how promptly and effectively a service provider responds to customer queries and problems. In Fintech, this may include instant transaction alerts, chatbot responses, and resolution of technical glitches. Khan et al. (2018) highlight responsiveness as

a "cornerstone of satisfaction in digital services, where delays can lead to frustration and service abandonment." Bhuvaneswari & Maruthamuthu (2024) affirm that faster response times and issue resolution positively influence satisfaction levels by minimizing service anxiety and enhancing user control.

H6: Customer satisfaction positively and significantly impacts intention to use with regard to Fintech services

Customer satisfaction is a key factor towards driving behavioral intention towards using and promoting use of Fintech services. When users perceive high service quality, they are more likely to exhibit loyalty and sustained usage. As per George and Sunny (2023), "Customer satisfaction is the most direct predictor of continued usage of digital financial platforms." Moreover, Gautam and Sah (2023) and Sultana et al. (2023) conclude that satisfied customers not only become loyal but also act as brand ambassadors, reinforcing trust through positive word-of-mouth, which sustains the adoption of Fintech services.

Research Methodology

The current research study is cross-sectional in nature aimed at exploring the dynamics of service quality and their impact on customer satisfaction and intention to use with regard to Fintech services employing data from 230 respondents across Dehradun, Haridwar and Udham Singh Nagar districts of Uttarakhand. The primary data was collected by employing a self-structured questionnaire approach in an offline mode whereby the targeted respondents were personally interviewed to extract relevant data from them in pen and paper mode. The questionnaire was divided intotwo sections**:** Section 1 captured the demographic profile of the respondents. While Section **2** focused on measuring customer perceptions regarding various dimensions of service quality, and their implications on customer satisfaction and intention to use Fintech services. The purposive cum judgmental non – probability sampling technique was used for eliciting responses from targeted customers.

The measurement scale consisted of 22 items to measure the variables which were adapted from studies of Baber, 2019; Yesmin et al., 2023, Khan et al., 2021, Ahmed et al., 2021). Both endogenous and exogenous constructs were used. The indicators of service quality such as tangibility, empathy, assurance, reliability and responsiveness served as endogenous variables whereas customer satisfaction and intention to use were modeled as exogenous constructs. The PLS SEM version 4 was used to quantify the extent of hypothesized relationship among the latent constructs. The analysis of data was performed in two phases whereby firstly measurement model was run, thereafter structural analysis was done to test the hypothesis.

Analysis & Results

Table 1 – Sampling profile of respondents

Gender		
Male	125	54.3%
Female	105	45.7%
		100%
Monthly Income of Respondents' Household (in Rs.)		
Less than 10000	71	30.9%

10001 – 25000	82	35.6%
250001 – 50000	48	20.9%
Above 50000	29	12,6%
		100%
Education		
Illiterate	25	10.9%
Primary level	13	5.7%
Secondary level	58	25.2%
Intermediate	50	21.7%
Higher Education (UG & PG)	84	36.5%
		100%
OCCUPATION		
Self employed	76	33.0%
Private employee	84	36.5%
Government Employee	45	19.6%
Others	25	10.9%
Duration of Fintech Usage		
Less than 6 months	62	27.1%
6 months - 1 year	78	34.1%
1 – 3 years	55	24.0%
Above 3 years	35	15.2%

Source: Author's self compilation

The demographic and usage profile of the respondents provides important insights into their background and interaction with fintech services. In terms of gender distribution, out of the total respondents, 54.3% are male (125 individuals) and 45.7% are female (105 individuals), indicating a relatively balanced representation with a slight male majority.

Regarding the monthly household income, the data reveals that a significant proportion of respondents belong to lower and middle-income groups. Specifically, 30.9% (71 respondents) have a household income of less than ₹10,000, while 35.6% (82 respondents) fall in the ₹10,001 – ₹25,000 range. Those earning between ₹25,001 – ₹50,000 make up 20.9% (48 respondents), and only 12.6% (29 respondents) have an income exceeding ₹50,000. This suggests that fintech usage is becoming increasingly common among economically modest sections of society.

In terms of educational attainment, the largest group comprises those with higher education qualifications (undergraduate and postgraduate degrees), accounting for 36.5% (84 respondents). Secondary-level education is held by 25.2% (58 respondents), and 21.7% (50 respondents) have completed intermediate-level studies. Meanwhile, 10.9% (25 respondents) are illiterate and 5.7% (13 respondents) have only primary-level education. This distribution shows that while a significant number of educated individuals use fintech, there is also considerable inclusion of users with limited formal education.

Occupation-wise, private sector employees form the largest group at 36.5% (84 respondents), followed closely by self-employed individuals at 33.0% (76 respondents). Government employees account for 19.6% (45 respondents), and the remaining 10.9% (25 respondents) fall under the 'others' category. This diversity in employment sectors reflects fintech's wide reach across different professional backgrounds.

As far as the duration of fintech usage is concerned , the majority of respondents are relatively new to these platforms. About 27.0% (62 respondents) have used fintech services for less than six months, and 34.1% (78 respondents) have used them for six months to one year. Those with one to three years of experience constitute 24.0% (55 respondents), while only 15.2% (35 respondents) have been using fintech for over three years. This trend indicates recent growth and adoption of digital financial technologies among the population

Measurement Model Results

In this study, a **reflective measurement model** was employed within the PLS-SEM framework to measure the relationship between latent constructs such as service quality dimensions (tangibility, reliability, responsiveness, assurance, and empathy), customer satisfaction, and intention to use Fintech services. The reflective model's validity was assessed by evaluating internal consistency reliability (using Cronbach's alpha and Composite Reliability), convergent validity, and discriminant validity. These assessments ensured that the observed indicators accurately captured the theoretical concepts being studied, providing a sound basis for subsequent structural model analysis.

The preliminary analysis for this study was performed in two stages wherein firstly an assessment of measurement model results was made followed by structural model analysis (Hair et al., 2019). The use of PLS SEM articulates that the measurement model and structuralmodel results. Accordingly the internal consistency of the model was measured through outer loadings to measure the extent of variance in indicators explained by latent contruct. As per this criterion Indicator loadings must be above 0.70 (Hair et al., 2021) for confirming presence of internal consistency reliability among indicators of a construct indicator reliability. The results for internal consistency reliability are shown in Table 2.

Table 2 – Outer loadings

	REL	ASS	TAN	EMP	RESP	CS	IU
REL 1	0.640						
REL 2	0.626						
REL 3	0.667						
ASS 1		0.778					
ASS 2		0.757					
ASS 3		0.850					
TAN 1			0.786				
TAN 2			0.758				
TAN 3			0.899				
EMP1				O.819			
EMP2				0.802			
EMP3				0.874			
RESP1					0.786		
RESP 2					0.800		
RESP 3					0.865		

CS 1						0.665	
CS 2						0.677	
CS3						0.807	
CS4						0.707	
IU1							0.777
IU2							0.677
IU3							0.899

(Source**:** Author's self-compilation)

As per results shown in Table 1, the indicators of both the exogenous as well as the endogenous constructs possessed a loading of value of above 0.50 thereby affirming internal consistency reliability among the constructs.

Reliability and Validity of the Model

The Cronbach alpha, rho a and rho c values served as criterions to measure the reliability of the model. Hence, Indicator reliability was measured through alpha, rho c and rho a for which the recommended value of 0.60 is considered satisfactory (Chin, 1998) and above 0.70 considered to confirm composite reliability (Hair et al, 2014). The construct validity of the model was measured through convergent validity and discriminant validity criterions. As a sub-type of construct validity, convergent validity takes into consideration Factor loading of the indicator, Composite Reliability (CR) and Average Variance Extracted (AVE).For good convergent validity, CR greater than 0.7 evaluated through Alpha, rho a and rho c values respectively is considered good (Fornell and Larcker, 1981). As these phenomenon, were validated earlier, convergent validity was satisfactory as per these criterions since loadings and values of composite reliabilities were higher than the minimum acceptable threshold values recommended for confirming convergent validity.AVE is the preferred metric for assessment of convergent validity which is mean of square of loadings associated with the construct (Fornell and Larcker, 1981; Yamin and Kurniawan, 2011; Hair et al., 2021). It is thus equivalent of communality arrived at through Exploratory factor analysis and serves as a check for uni-dimensionality of constructs as well. The minimum acceptable of AVE is 0.50 (Hair et al., 2022).The constructs along with their corresponding Cronbach's alpha, rho a, rho c and AVE values are summarized as in Table 2

Table 2 - Reliability and Validity of the model

	Cronbach's alpha	**Composite reliability (rho_a)**	**Composite reliability (rho_c)**	**Average variance extracted (AVE)**
REL	0.844	0.850	0.906	0.762
ASS	0.687	0.695	0.828	0.617
EMP	0.812	0.819	0.888	0.727
TAN	0.865	0.871	0.908	0.712
RESP	0.815	0.819	0.890	0.730
CS	0.797	0.814	0.865	0.617
IU	0.807	0.813	0.886	0.722

(Source**:** Author's self-compilation)

As evident from the Table 2, reliability values for all the endogenous (CS, IU) and exogenous latent variables (REL, ASS, EMP, TAN, RESP) employed in the study exceeded the minimum threshold value of 0.70, resulting in good internal consistency and reliability (Henseler et al., 2015: Hair et al., 2014). Moreover, the rho a values ranged

between those of Cronbach Alpha and rho c which substantiates the existence of satisfactory composite reliability levels. In a similar vein, the AVE values were above the threshold limit of 0.7 affirming good convergent validity of the model.

Discriminant Validity

It is prominently used metric for examining Discriminant validity in respect of PLS-SEM is the Fornell and Larcker criterion & the Hetrotrait - Monotrait (HTMT) criterion (Hensler et al., 2015). The discriminant validity ensures that a reflective construct bears a strong relationship with its own constructs. (Hair et al., 2022). Apparently, the Fornell – Larcker criterion, mandates that AVE shown by diagonal values must be greater than inter item correlation in order to affirm presence of discriminant validity. On the contrary, the HTMT Criterion considers average of Hetero-trait - Hetro-method correlations (across constructs) and average of hetero-method correlation (across indicators) taking their respective geometric mean. As per this method, it is desirable that the HTMT values should be below 0.90 or 0.85 for more conservative models (Henseler et al., 2015) for discriminant validity among the reflectively measured constructs to hold good. Accordingly, the Table 3 & 4 depicts the outcome of discriminant validity as per Fornell - Larcker criterion

Table 3 - Discriminant Validity (Fornell & Larcker Criterion)

	REL	ASS	TAN	EMP	RESP	CS	IU
REL	**0.873**						
ASS	0.815	**0.786**					
TAN	0.615	0.72	**0.844**				
EMP	0.603	0.644	0.811	**0.852**			
RESP	0.563	0.644	0.786	0.747	**0.855**		
CS	0.899	0.81	0.719	0.717	0.758	**0.785**	
IU	0.884	0.912	0.602	0.534	0.537	0.793	**0.850**

(Source**:** Retrieved from SMART PLS 4**)**

Table 4 – Discriminant Validity (HTMT Criterion)

	REL	ASS	TAN	EMP	RESP	CS	IU
REL							
ASS	0.731						
TAN	0.712	0.945					
EMP	0.724	0.868	0.963				
RESP	0.676	0.874	0.936	0.917			
. CS	0.712	0.821	0.872	0.895	0.973		
IU	0.652	0.770	0.717	0.654	0.663	0.955	

(Source: Retrieved from Smart PLS 4**)**

As evident from Table 3, the highlighted values representative of average variance extracted of each construct are higher in comparison to those of non - diagonals elements showcasing inter item correlation. Hence, the model exhibits discriminant validity as per the Fornell - Larcker criterion.

Likewise, as evident from Table 4, the HTMT ratio values expose the correlations between model constructs. Since the HTMT values for all the variables employed in the study are

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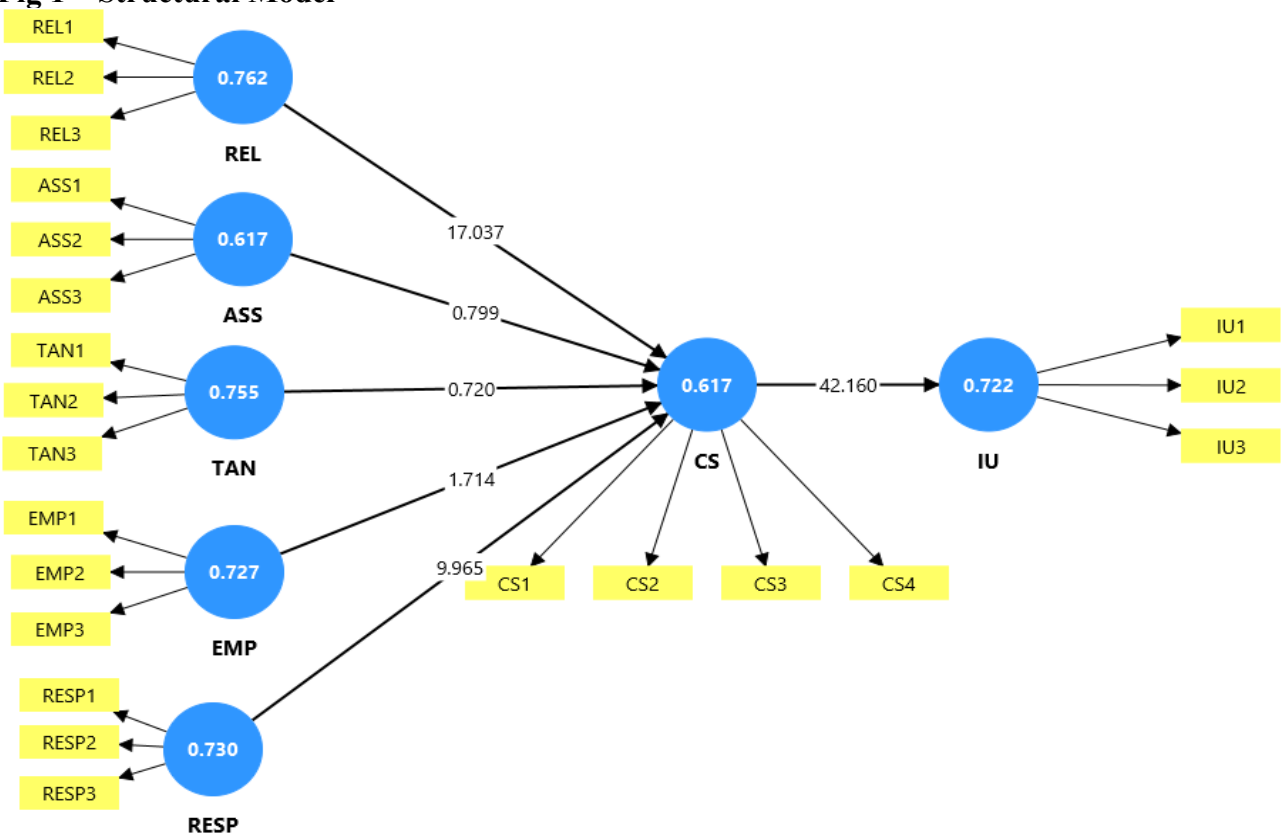
below 0.85, it proves that the model possesses discriminant validity as per the HTMT method of evaluation of discriminant validity.

Assessment of Structural Model

Subsequent to measurement model evaluation, the researcher proceeded with the structural model analysis to analyse the degree of association among constructs. A structural model gives way to a series of inter-relationships among exogenous and exogenous constructs in the proposed research framework in the form of multiple regression equations which are run simultaneously (Jr., Hair et al., 2018). Adequate and valid construction of structural model formulation between theoretical constructs is essential to derive meaningful, accurate and useful conclusions therefrom.

Structural Model Analysis

Fig 1 – Structural Model



(Source: Retrieved from SMART PLS 4)

Table 5 - RESULTS OF HYPOTHESIS RESTING

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
REL -> CS	0.660	0.657	0.039	17.037	0.000
ASS -> CS	0.073	0.035	0.040	0.799	0.003
TAN -> CS	-0.037	-0.038	0.052	0.720	0.472

EMP -> CS	0.032	0.075	0.043	1.714	0.087
.RESP ->.CS	0.340	0.340	0.034	9.965	0.000
CS -> IU	0.793	0.794	0.019	42.160	0.000

Source: Extracted from SMART PLS4

As per results, presented in Table 5 it was found that reliability, assurance and responsiveness as dimensions of service quality exert a significantly positive influence over customer satisfaction yielding values of ($\beta = 0.660$, t-value = 17.037 and p-value < 0.05), ($\beta = 0.073$, t-value = 0.040 and p-value < 0.05) and ($\beta = 0.340$, t-value = 9.965and p-value <0.05) at 5% significance level respectively leading to acceptance of **H_1,H_2** and**H_5** affirming positively significant relationship of the aforementioned indicators with customer satisfaction. In addition to this, the results reveal the customer satisfaction on intention to use is positive and significant leading to acceptance of H_6. On the contrary,H_3 and H_4 stands rejected as their p-value is less than 0.05 indicating no significant impact of tangibility & empathy on customer satisfaction among selected respondents in Uttarakhand as per the criterion recommended by Hair et al., 2011.

Implications of study

The results arrived at from the study holds special significance for policymakers and governments concerned with financial sector policy interventions functioning as financial interventionists. Insights derived from the interplay of SERVQUAL and customer satisfaction can guide strategic decision-making suggesting adequate policy implications towards improvising quality of Fintech services focusing on key areas responsible for better performance of Fintech in regions. For instance, the policymakers, government, and financial entities can tailor their strategies to align with broader outcomes effecting reliability and responsiveness thereby yielding better performance outcomes through effective financial interventions taken in the interest of Fintech firms, customers, beneficiaries, banks and financial institutions and other stakeholders at large. The findings encourage the integration of policies with a broader outlook of dimensions to ensure that the proposed user interface of Fintech to avail of financial benefits are well accustomed to fulfilling quality specific needs of customers interconnected with Fintech needs in an effective, efficient, and cost-effective manner.

Moreover, the study comprehends the apparent contradictions in the literature available on the topic for academicians, researchers and industry experts to attain a better understanding Fintech service and suggests policy implications for the government and policymakers to improve customer satisfaction driven by factors of fintech service quality in geographical regions like that of Uttarakhand.

Discussion & Conclusion

This study has provided with a comprehensive overview on the interplay between service quality dimensions of Fintech and their implications on customer satisfaction across surveyed districts of Uttarakhand. The results from the study have statistically highlighted the intrinsic worth of reliability, assurance and responsiveness in accentuating customer satisfaction and intention to use Fintech services. Reliability emerged as the most significant predictor with a beta value of 0.660, followed by responsiveness and assurance, which yielded beta values of 0.340 and 0.073 respectively.. Additionally, the results reveal that, empathy and tangibility are among the insignificant factors in their relation to customer satisfaction as their p-values

arrived at turned out to be less than 0.05. In addition to this as per the outcome, the results advocated that customer satisfaction bears a positive relationship with intention to use Fintech services in Uttarakhand. The findings corroborates that of (Singh et al., 2021; Verma, 2021; Abdulaziz; 2024) conducted across diverse geographical regions. Thus the study thereby adding new insights to the Fintech research stream.

This research article has a significant role to play in academic discourse adding new insights to theory. Moreover, it has emphasized the relative importance of factors which can serve as a benchmark to guide the future course of action towards promoting customer satisfaction and intention to use Fin-tech among the tech - savvy individuals across regions similar to that of Uttarakhand.

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