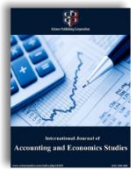
International Journal of Accounting and Economics Studies, 12 (SI-1) (2025) 303-307

International Journal of Accounting and Economics Studies

Website: www.sciencepubco.com/index.php/IJAES
https://doi.org/10.14419/gcqys750
Research paper



The Role of Fintech in Reshaping Traditional Banking and Financial Services

Dr. Babita [1] *, Dr. Sadaf Hashmi [2], Dr. Minaketan Sarangi [3], Dr.M. Soundarya [4], Dr.R. Murugan [5], Tannmay Gupta [6], Mohan Garg [7]

[1] Assistant Professor, Maharishi School of Business Management, Maharishi University of Information Technology, Lucknow, Uttar Pradesh, India.
[2] Associate Professor, ISME, ATLAS SkillTech University, Mumbai, India.
[3] Associate Professor, Department of Humanities and Social Sciences, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India.
[4] Assistant Professor, Master of Business Administration, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India.
[5] Professor, Department of CS & IT, Jain (Deemed-to-be University), Bangalore, Karnataka, India.
[6] Centre of Research Impact and Outcome, Chitkara University, Rajpura, Punjab, India.
[7] Centre for Research and Development, Chitkara University, Himachal Pradesh, India.
**Corresponding author E-mail: babit.dubey@muit.in*

Received: May 28, 2025, Accepted: June 4, 2025, Published: August 28, 2025

Abstract

The link between the quality of fintech services and customer satisfaction makes this area of research incredibly important. We've seen time and again that service quality directly influences customer satisfaction, which then plays a crucial role in customer retention. Therefore, it's essential to delve into how effective fintech services are and their impact on customer loyalty. While many countries have explored this topic, there's been relatively little focus on the Indian context. As India aims to transition into a digital, cashless economy, understanding consumer perceptions and expectations regarding cashless transactions through fintech becomes vital. Bankers need to grasp the key aspects of service quality in electronic channels that customers deem important when deciding whether to embrace or reject technology-based banking, like e-banking. This research aims to shed light on the various dimensions of fintech service quality and how they affect customer satisfaction. With all banks in India now offering e-banking services and their growing popularity among customers, this report not only identifies the key dimensions of e-banking service quality but also adopts an exploratory and descriptive approach based on survey methods. Primary data was collected from fintech users through a standardized and structured questionnaire, while secondary data was sourced from magazines, publications, newspapers, periodicals, research articles, and previous theses on financial technology.

Keywords: *Fintech; Reshaping; Traditional Banking; Financial Services; Customer Satisfaction.*

1. Introduction

The rise of various technological products has really transformed the banking experience for both banks and their customers (Santhanaraj et al., 2015). With the convenience of ATMs, mobile banking, and other remote banking options, consumers are enjoying a whole new level of ease. It's also made it simpler for banks to use secure debit and credit cards. One of the biggest perks is how these advancements have streamlined client services (Aljabbri et al., 2024; Pur et al., 2018). Payment and settlement systems, which are vital for the financial system to function smoothly, have seen significant improvements thanks to technology. The influence of tech on banking is reshaping everything from organizational structures to the roles of employees, as well as how banks meet customer needs (Nummi, 2025). Nowadays, banks can analyze client demands more effectively, allowing them to offer innovative and efficient financial services. Customers expect their banking experiences to be quick, accurate, and reliable. It's been about thirty years since banks started embracing modern technologies, and the journey has been gradual. All banks have now built the essential infrastructure for core banking solutions, which include various delivery channels like Internet banking, ATMs, and mobile banking (Akrami et al., 2024). Essentially, these systems manage a massive volume of transactions and cater to the increasing demands of consumers and businesses alike. Core banking systems enable banking from virtually anywhere, creating a centralized online real-time banking environment (Sajna & Dharmaraj, 2024). This means that bank customers can access their accounts and check their balances at any branch, freeing them from being tied to just one location (Golubev & Ryabov, 2020). This process relies on centralized transaction processing. All transactions from various branches are managed at a single hub known as the Central Data Centre (CDC), which stores all the data related to branches that can handle core banking. Consequently, the first step in implementing core banking is to link the branches to the CDC. A core banking solution consists of robust software components designed to meet the needs of today's banking landscape. Initially, basic banking solutions can be set up with essential modules like

savings accounts, current accounts, fixed deposits, loans, and cash credit, among others. After that, new distribution channels such as ATMs and online banking can be rolled out. This phase is critical for professionals in the financial services sector and has been meticulously planned. With the rapid advancements in technology reshaping commerce, money transfers, and everyday transactions, the financial technology industry has seen explosive growth, supported by policymakers worldwide. Investment expectations in the financial sector are projected to soar into the billions, driven by the sector's potential to spark a technological revolution and the surge in creativity and efficiency as it strives for wealth and growth (Chauhan, 2020). To create more advanced financial technology services that truly meet the growing needs of customers, we need to take some important steps. Access to top-notch financial services has been thoughtfully designed, and it plays a vital role in tackling poverty and inequality, ultimately helping us achieve fairness. Many countries view this as a key driver for building inclusive financial systems. In every industry, customer service metrics are used to measure success, and these metrics can ultimately shape the future of any company or organization (Prabhu & Sujai, 2022; Paynevandy, 2014).

2. Statement of The Problem

The world of banking has come a long way, shifting from traditional methods to a more modern approach that encompasses e-banking, internet and mobile banking, electronic cash transfers, electronic clearing services, and ATMs, among others (Choudhury et al., 2025; Farhad Touski & Seyfideli, 2024). Yet, a significant hurdle remains: many clients simply aren't aware of these advancements, which can hinder the effective use of modern banking technologies. To tackle this issue, it's essential to conduct a demographic analysis to see if customers are familiar with the range of financial services available to them. Previous studies have identified five key areas to assess the quality of financial services: accessibility, responsiveness, empathy, assurance, and dependability. However, as time and technology evolve, so too do the methods for evaluating service excellence in banks. Keeping this in mind, the study aims to explore and pinpoint new dimensions of service quality in the banking industry, focusing on customer satisfaction with the latest banking technologies.

While there have been numerous studies and investigations into service quality in the past, surprisingly little attention has been given to how aware clients are of the cutting-edge technologies being utilized in banking. This study aims to bridge that gap by measuring customer satisfaction with service quality, exploring customers' perceptions and expectations regarding the new dimensions of service quality in the banking sector, and assessing their awareness of these innovations. Essentially, the research seeks to understand how well-informed clients are about the various banking services provided by financial institutions (Pramudito et al., 2025). Additionally, this study delves into the factors that influence customers' overall satisfaction with the services they receive from their banks, ultimately helping managers in the banking sector make better-informed decisions when developing new policies and strategies.

3. System Design

The current study takes an exploratory and descriptive approach, relying entirely on survey methods. We gathered primary data from users of financial technology through a well-structured and standardized questionnaire.

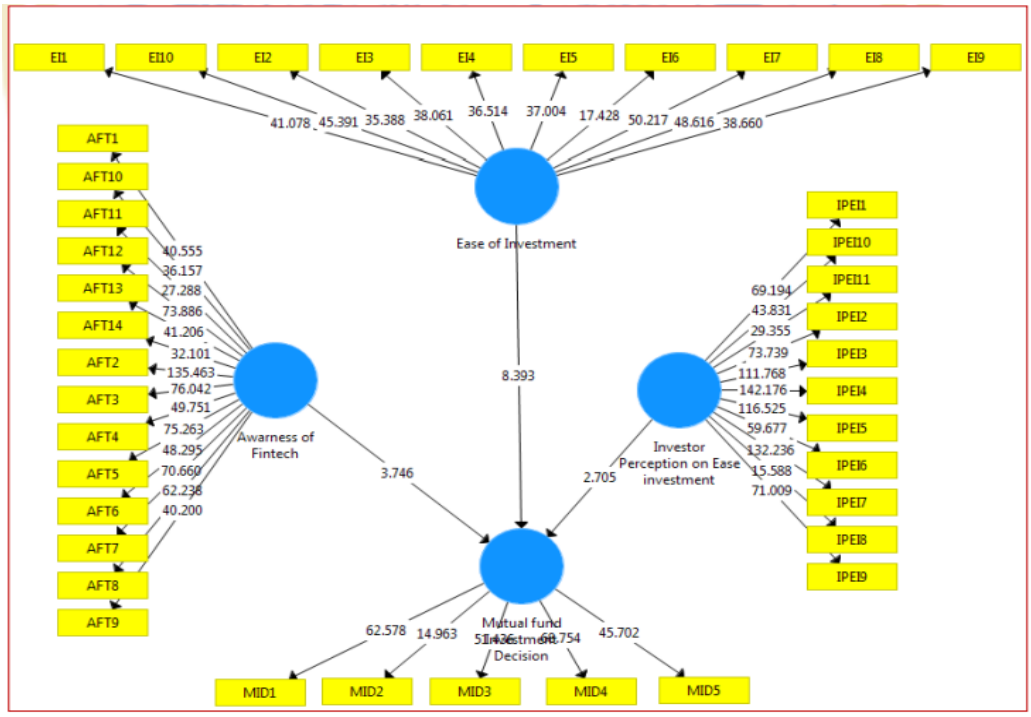


Fig. 1: Flow Diagram

For our secondary data, we collected information from various sources, including magazines, publications, newspapers, periodicals, research articles, and previous theses related to financial technology. The data was specifically collected from users of financial technology in banking applications using a non-random sampling method, particularly stratified sampling. It's worth noting that nearly all banking sectors are experiencing a significant rise in electronic banking adoption. This research will focus on the banking industry in India. Our goal is to fill a gap left by earlier studies that primarily examined customer satisfaction and service quality in traditional banking, rather than exploring the quality of fintech services and their impact on customer satisfaction. This study aims to investigate how the quality of fintech services influences the satisfaction of e-service users in banking. Ultimately, the findings will provide valuable insights for banks and policymakers to improve the quality of fintech services they deliver to their customers (Mittal et al., 2024).

Descriptive statistics focus on the key aspects of the data in a study. They provide insights about the sample and its measurements, along with concise summaries. One common approach in statistics is percentage analysis, which helps to outline the characteristics of a sample or population. This involves calculating the sizes of the variables selected for the study, making the results straightforward for readers to grasp. The key variables that indicate the importance level for bank fintech users have been analyzed using factor analysis. This method is both suitable and reliable for organizing the hidden underlying variables through effective data reduction. Factor analysis can condense many variables into dominant factors, based solely on the relative correlations among the importance levels of bank fintech user variables. Ten variables representing the importance level of bank fintech users were assessed using extraction methods through factor analysis techniques. These ten variables were then factorized using the Principal Component Analysis technique and the Rotated Method of Varimax with Kaiser Normalization (Komandla & Perumalla, 2017; Agarwal, 2024).

4. Experimental Results and Discussion

Fintech has really expanded its reach among consumers, offering a range of services that would have seemed unimaginable just a century ago. Over the past decade, the rise of smartphones and the widespread adoption of the internet have skyrocketed, leading to a wave of innovative ideas aimed at making our lives easier. Nowadays, fintech allows us to do things like deposit checks through mobile apps, pay bills, raise funds for startups, and manage investments with the help of artificial intelligence (Josyula & Expert, 2021). The journey of money and innovation began in the late 19th century, marking the start of the first era of monetary globalization, which continued until the outbreak of World War I. During that time, advancements in technology—like telegraphs, railroads, trenches, and steamships—facilitated cross-border financial connections and enabled the rapid transfer of financial information and payments around the world. The financial system played a crucial role in supporting these breakthroughs. Although financial globalization faced challenges for several years after World War II, technological advancements, particularly those spurred by the war, continued to progress rapidly, especially in exchanges and data technology. This period, often referred to as fintech 1.0, represents the shift from analog to digital.

Table 1: Communalities and MSA of Website Attribute Variables

Website Attribute variables	MSA	Communalities
Locating specific information is simple on the bank's website.	0.901	0.537
Since using the website, I can now purchase in a quick time.	0.771	0.649
This site has an excellent structure for presenting information.	0.858	0.626
Web pages on this site are quick to load.	0.877	0.815
Using this website is a breeze.	0.863	0.685
Debit and credit cards made of plastic are simple to use.	0.861	0.601
The bank's mobile banking app is simple to use.	0.911	0.575
Banking via mobile device has never been simpler than with these helpful apps.	0.797	0.496
Transactions can be completed swiftly and precisely thanks to the Apps.	0.876	0.569
Technological implementations help in increasing customer service efficiency in the banking sector.	0.876	0.470
Transactions can be made at any time on this website.	0.937	0.470
This website starts up and functions instantly.	0.924	0.493
There will be no crashes on this site.	0.912	0.448
Once enter the needed service into the site, the pages don't freeze.	0.922	0.569
It's simple to enter and exit an online banking account.	0.864	0.563
No restrictions are placed on the use of plastic cards (debit or credit).	0.901	0.545
Cank's apps are very simple to acquire.	0.915	0.640
When processing a payment, the applications (apps) don't wait around.	0.898	0.564
Inconsistent service due to technical difficulties,	0.810	0.599
When promised, the website's services are delivered without fail.	0.892	0.591
The website guarantees service availability throughout a convenient time range.	0.904	0.483

Table 1 showcases the communalities and MSA values for the website attribute variables. The MSA values indicate how suitable each sample is for running factor analysis, with values ranging from 0.901 to 0.841, suggesting that all samples are indeed adequate for this analysis.

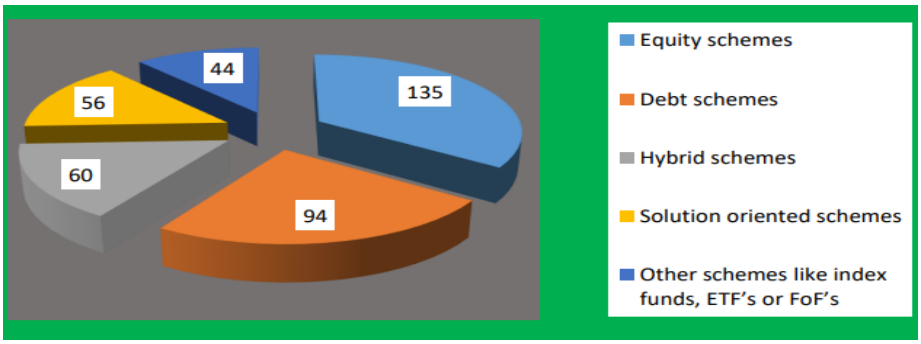


Fig. 2: Type of Mutual Fund Preferred by the Investors

The communalities reflect the variance contributed by each variable to the total variance of the factors that define the overall variance of the website attributes. These communalities range from 0.448 to 0.815, demonstrating a solid explanation of variance by each variable.

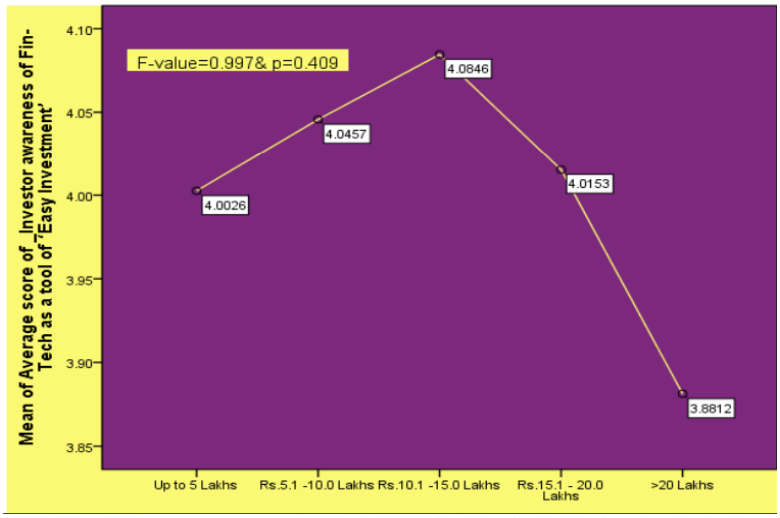


Fig. 3: F-test for Awareness of Fin-Tech as a Tool

Since both MSA and communalities exceed the threshold limits, we can confidently apply factor analysis to these 44 website attribute variables. Financial Technology, or fintech, has been around since finance first emerged. Essentially, any technology linked to finance falls under the fintech umbrella.

5. Conclusions

The platform companies are grappling with both a challenge and an opportunity as they try to establish regulations that promote the smart use of technological advancements while also avoiding any unexpected pitfalls. These questions underscore the need for more research into household finance in this FinTech age, as emerging technologies could lead to major shifts in how investors behave. The range of returns and risks associated with financial products is quite broad, covering everything from money market funds to peer-to-peer loans, and the role of platforms can vary greatly across these different offerings. The impact of platforms differs significantly between low-return, low-risk bond funds and high-return, high-risk equity funds. The 19th century marked the early stages of this sector, and since the advent of money following the barter system, we've witnessed the evolution of fintech. The year 1866 marks a significant milestone in the fintech 1.0 era, as it was during this time that the transatlantic cable was successfully laid. This achievement led to a remarkable enhancement in the fundamental infrastructure for global communication and transactions. It was the dawn of fintech globalization. During this period, the financial sector began to evolve, particularly with the advent of written records.

References

[1] Agarwal, M. (2024). The role of fintech in disrupting traditional banking models. Unified Visions, 260.
[2] Akrami, R., Chitsaz, H., & Ahmadi, Z. (2024). Effect of dietary dehydrated sour lemon peel (Citrus limon) powder on metabolic enzymes, serum biochemistry and stress status of rainbow trout (Oncorhynchus mykiss) juvenile. International Journal of Aquatic Research and Environmental Studies, 4(1), 91–99. http://doi.org/10.70102/IJARES/V4I1/8
[3] Aljabbri, N. A. S., Karim, A. A., & Majeed, F. H. (2024). Revisiting the versatility of seismic load-enabled reinforced concrete beam column linkage. International Academic Journal of Science and Engineering, 11(1), 332–350. https://doi.org/10.9756/IAJSE/V11I1/IAJSE1139
[4] Chauhan, R. (2022). The fintech revolution: Disruption of traditional banking models. In Media Education and National Educational Policy (p. 632).
[5] Choudhury, R. R., Ferrer, M. A., & Roy, P. (2025). Evolution of fintech and implications for traditional banking and finance sector. In Shaping Cutting-Edge Technologies and Applications for Digital Banking and Financial Services (pp. 147–160).
[6] Golubev, A., & Ryabov, O. (2020). Transformation of traditional financial companies into fintech. In Proceedings of the International Scientific Conference—Digital Transformation on Manufacturing, Infrastructure and Service (pp. 1–7).
[7] Josyula, H. P., & Expert, F. P. T. (2021). The role of fintech in shaping the future of banking services. The International Journal of Interdisciplinary Organizational Studies, 16(1), 187–201.
[8] Komandla, V., & Perumalla, S. P. T. (2017). Transforming traditional banking: Strategies, challenges, and the impact of fintech innovations. Educational Research (IJMCER), 1(6), 1–9.
[9] Mittal, S., Tayal, A., Singhal, S., & Gupta, M. (2024). Fintech's transformative influence on traditional banking strategies and its role in enhancing financial inclusion. Journal of Informatics Education and Research, 24(1), 86–107.
[10] Nummi, V. (2025). Traditional banks vs. fintech: Analyzing the challenges and opportunities for banks in the fintech era.
[11] Paynevandy, S. G. (2014). The role of empowerment in Organization Development. International Academic Journal of Organizational Behavior and Human Resource Management, 1(2), 1–8.
[12] Prabhu, V., & Sujai, S. (2022). Sentimental analysis of product rating. International Academic Journal of Innovative Research, 9(2), 18–21. https://doi.org/10.9756/IAJIR/V9I2/IAJIR0912
[13] Pramudito, D. K., Gata, W., & Hadikristanto, W. (2025). The rise of fintech: Transforming traditional banking through digital platforms, automation, and big data. The Journal of Academic Science, 2(3), 892–901.
[14] Pur, J. T., Multafu, N. K., Mustapha, B. & Mustapha, S. B. (2018). Determinants of Diversification of Livelihood Activities among Rural Women in Bade Local Government Area of Yobe State, Nigeria. International Academic Journal of Social Sciences, 5(2), 121–131. https://doi.org/10.9756/IAJSS/V5I2/18100032
[15] Sajna, V., & Dharmaraj, A. (2024). Determinants of loan repayment behaviour: An exploratory study among PMEGP beneficiaries of MSME in Kerala. Indian Journal of Information Sources and Services, 14(3), 6–15. https://doi.org/10.51983/ijiss-2024.14.3.02
[16] Santhanaraj, M., Prasanth, S., Sarath Kumar, K., Vishnu Chander, R., & Vijayaragavan, T. (2015). Segmentation and detection of magnetic resonance image based on K-Mean algorithm. International Journal of Advances in Engineering and Emerging Technology, 6(1), 133–138.
[17] Touski, F. O., & Seyfideli, A. (2024). Exploring the transformation of traditional financial services by fintech. Modern Research in Performance Evaluation, 3(1), 43–59.

[18] Sathish Kumar, T. M. (2025). Comparative analysis of Hatha Yoga and aerobic exercise on cardiovascular health in middle-aged adults. Journal of Yoga, Sports, and Health Sciences, 1(1), 9–16.
[19] Velliangiri, A. (2025). Reinforcement Learning-Based Adaptive Load Forecasting for Decentralized Smart Grids. National Journal of Intelligent Power Systems and Technology, 1(1), 21-28.
[20] Prasath, C. A. (2025). Adaptive filtering techniques for real-time audio signal enhancement in noisy environments. National Journal of Signal and Image Processing, 1(1), 26–33.
[21] Rahim, R. (2025). Lightweight speaker identification framework using deep embeddings for real-time voice biometrics. National Journal of Speech and Audio Processing, 1(1), 15–21.
[22] Kurma, K. (2022). Prediction of solar energy generation from the weather data using machine learning. Journal of Green Energy and Transition to Sustainability, 1(1), 15–24.
[23] Vandrangi, S. K. (2022). An overview on heat transfer and the evolution of thermal stress in solid oxide fuel cells. Journal of Artificial Intelligence in Fluid Dynamics, 1(1), 31–40.
[24] YASIN, M., AZIZURROHMAN, M., RIFQI, H. M., SETIAWAN, H., & HELMI, S. (2025). Factors Influencing Technology Adoption in Islamic Banks: The Role of Organizational Support. Quality-Access to Success, 26(206).