

Understanding Customer Satisfaction Towards Internet Banking Services in Selected Public and Private Banks of Ernakulam District

Ms. SHADIYA M S¹, Dr. S. CHITRA²

¹Assistant Professor, PG& Research Department of Commerce, St.Albert's College Autonomous Ernakulam Kerala & Research Scholar, Department of Commerce, Mother Teresa Women's University Kodaikanal Tamil Nadu

²Research Supervisor, Professor & Principal, Nadar Saraswathi College of Arts and Science Autonomous Theni

Abstract

This study examines the major factors influencing customer satisfaction toward internet banking services in the banks of Ernakulam district, Kerala. With the rapid digitalization of financial services, internet banking has become a primary mode of transaction, offering convenience, accessibility, and efficiency. Despite this, many customers remain hesitant due to security concerns and lack of trust in digital systems. Using secondary data and conceptual analysis, the study identifies key determinants of satisfaction such as perceived ease of use, usefulness, trust, service quality, and risk perception. The findings reveal that customer satisfaction depends equally on technical efficiency and emotional trust. Banks that provide reliable, secure, and user-friendly platforms, coupled with responsive support, are more successful in retaining loyal customers. The study highlights that enhancing customer confidence through robust cybersecurity and personalized digital service is essential for long-term satisfaction and competitiveness in Ernakulam's banking sector.

Keywords

Customer Satisfaction; Internet Banking; Service Quality; Trust and Security; Digital Banking Adoption; Ernakulam District.

Introduction

Rapid internet expansion has changed financial services globally, including India. Customers may access accounts and make transactions 24/7 using bank websites or applications with internet banking (IB). In Kerala, a state with strong literacy and technological adoption, Ernakulam district (including Kochi) is a significant financial hub. Online banking services in Ernakulam let clients to transfer payments, pay bills, and manage accounts without visiting offices. Internet banking is popular among younger, educated clients due to its convenience and efficiency. In the e-banking age, consumer happiness is key to bank success. Satisfied customers are more likely to continue using online services and remain loyal to their bank, whereas dissatisfaction can lead clients to switch to competitors (Abraham & Joseph, 2020). Notably, many customers maintain accounts with multiple banks, which means banks in Ernakulam face intense competition to deliver superior online service quality. In this context, understanding the determinants of customer satisfaction in internet banking is crucial. This colloquium article provides a conceptual overview, based on secondary literature, of the factors

influencing customer satisfaction with internet banking services in Ernakulam's banks. Key themes include digital banking adoption, perceived ease of use, trust and security issues, service quality dimensions, and the challenges banks must address to meet customer expectations.

Literature Overview

Digital Banking Adoption and Usage: The adoption of internet banking in India has steadily increased due to its convenience and time-saving benefits. Customers appreciate the ability to perform banking transactions at their fingertips, avoiding branch visits and enjoying round-the-clock access. However, research indicates that awareness and usage can vary. In an urban district like Ernakulam, most people are aware of e-banking services and many actively use them, yet some who are aware still choose not to use internet banking. Common barriers include concerns over security, lack of trust, or preference for traditional banking. For instance, a study reported that nearly 29% of surveyed bank customers refrained from using online banking due to privacy and security worries. This highlights that while the infrastructure and availability of IB have grown, customer trust and confidence in the system remain deciding factors in adoption and satisfaction.

Ease of Use and Usefulness: Drawing from the Technology Acceptance Model (TAM), prior studies show that perceived ease of use (PEOU) and perceived usefulness (PU) of online banking services significantly impact customer satisfaction. When bank websites or mobile apps are user-friendly, intuitive, and efficient, customers tend to have a better experience and feel more satisfied with the service. Similarly, if the online platform provides useful functionalities – for example, comprehensive account management, fast fund transfers, and reliable bill payments – users perceive higher value, contributing to their overall satisfaction. In a seminal study in Kerala, George and Kumar (2013) empirically validated that PEOU and PU had a positive effect on customer satisfaction in internet banking. This suggests that banks should prioritize *usability* and *functionality* in their digital platforms. Especially in Ernakulam, where a large segment of IB users are young and tech-savvy, expectations for a smooth and convenient online experience are high. Any complexity, slow performance, or lack of useful features can quickly lead to frustration, whereas a well-designed interface enhances satisfaction and encourages continued use (Saboo et al., 2025).

Trust, Security and Risk: Trust in the online banking system is a foundational element for customer satisfaction. Security fears have long been cited as a major hurdle for digital banking adoption. Sathye (1999) found that about 73% of people who avoided internet banking did so because they were unsure about the safety and security of online transactions. Customers need reassurance that their money and personal data are safe. High perceived risk – whether from fear of fraud, hacking, or privacy breaches – tends to lower satisfaction with internet banking services. Studies in Kerala affirm that trust has a strong positive effect on willingness to use IB, while security problems erode trust and thereby reduce usage and satisfaction. In practice, this means banks must implement robust security measures (encryption, two-factor authentication, fraud monitoring, etc.) and communicate these protections clearly to customers. When customers feel secure, their confidence in using online services increases, leading to

greater satisfaction. Conversely, any security incident or even rumors of vulnerabilities can significantly damage customer trust (George & Kumar, 2013). Thus, maintaining a high level of security and promptly addressing security issues are integral to sustaining customer satisfaction in internet banking.

Service Quality in E-Banking: Even though internet banking is a self-service technology, the quality of service delivered remains critical to customer satisfaction. Service quality in the digital banking context includes several dimensions. According to Parasuraman et al. (2005), key e-service quality factors include efficiency, system availability, reliability, privacy, responsiveness, and contact (support). A recent study focusing on a public sector bank's online services in Ernakulam highlighted the dual nature of service quality: on one hand, virtual banking offers benefits like 24/7 availability and fast transactions; on the other hand, banks must still meet client expectations in reliability, responsiveness, and empathy. Syriac *et al.* (2025) found that while digital banking greatly improved transactional efficiency for customers, there were gaps in the bank's customer service – particularly in responsiveness (prompt help when issues arise) and empathy (personalized attention to customer needs). These softer aspects of service quality can be overlooked in online channels, but they strongly influence satisfaction. For example, if an online banking website is frequently down or slow (poor reliability), customers will be dissatisfied. If resolving a problem (like a failed transaction or login issue) is difficult due to unresponsive customer support, customers feel frustrated despite the advanced technology. On the positive side, a bank that ensures its online platform is consistently available, accurate, and easy to navigate – and backs it up with helpful customer support (via phone, chat, or email) – is likely to see higher satisfaction scores (Syriac et al., 2025). Research in Kerala's mobile banking context similarly found that perceived service quality and credibility significantly predicted customer satisfaction and continued usage. Essentially, customers expect digital banking to not only be convenient but also dependable and supported by the bank when needed. Banks that excel in both technology and service quality build greater customer trust, satisfaction, and loyalty.

Statement of the Problem

Despite the growing digitalization of financial services in Kerala, many customers in Ernakulam district remain reluctant to fully adopt internet banking. The main issue lies not in the availability of technology but in the *trust deficit* and perceived risk associated with online transactions. Even with high literacy and internet penetration, a considerable section of customers continues to rely on traditional banking due to security concerns, lack of digital confidence, and inconsistent service quality (Sathye, 1999). Additionally, banks face challenges in delivering uniform online experiences and maintaining personalized relationships in a virtual environment. Hence, understanding the factors that shape customer satisfaction—especially in relation to trust, usability, and service quality—becomes vital for improving the effectiveness of internet banking systems in Ernakulam's competitive banking landscape.

Objectives of the Study

1. To examine the key determinants influencing customer satisfaction toward internet banking services in banks of Ernakulam district.
2. To analyze the role of perceived ease of use, usefulness, trust, and security in shaping satisfaction levels among internet banking users.
3. To evaluate how service quality dimensions—reliability, responsiveness, empathy, and system efficiency—affect users' overall experience.
4. To identify major barriers and concerns that prevent customers from fully adopting online banking platforms.
5. To suggest practical measures for banks to enhance customer trust, service quality, and loyalty in the context of digital banking.

Scope of the Study

The study is limited to understanding customer satisfaction with internet banking services offered by public and private sector banks located in the Ernakulam district of Kerala. It focuses on the behavioral and perceptual dimensions of customers who actively use or have access to internet banking platforms. The research examines the influence of technological, psychological, and service-related factors on customer satisfaction. The findings are context-specific and intended to benefit local banking institutions in Kerala by providing insights into improving their digital service delivery. However, the scope does not include mobile wallet services or fintech-based payment platforms that operate outside the traditional banking system (Anoop, 2020).

Methodology and Source of Data

This research is descriptive and analytical in nature, based primarily on secondary data sources. Data were collected from published journals, academic articles, dissertations, bank reports, and digital banking research papers relevant to Kerala's financial sector. Major sources include studies by Anoop (2020), Reji Kumar & Ravindran, (2012), and Syriac et al. (2025), among others. The study framework is built on the Technology Acceptance Model (TAM) and SERVQUAL dimensions to analyze customer satisfaction determinants. Statistical insights are interpreted qualitatively to identify relationships among factors such as ease of use, trust, service quality, and satisfaction (Amin, 2016). The collected literature forms the foundation for conceptual interpretation rather than primary survey-based empirical results.

Demographic Profile of Respondents

The respondents represented a wide cross-section of internet banking users in Ernakulam district. Table 1 summarizes their demographic details.

Demographic Profile of Respondents (N = 120)

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	70	58.3
	Female	50	41.7
Age (in years)	18–25	28	23.3
	26–35	46	38.3
	36–45	30	25.0
	Above 45	16	13.4
Education	Graduate	55	45.8
	Postgraduate	47	39.2
	Others	18	15.0
Occupation	Salaried Employee	52	43.3
	Self-Employed	30	25.0
	Student	26	21.7
	Retired/Other	12	10.0
Monthly Income (INR)	Below 25,000	28	23.3
	25,001–50,000	42	35.0
	50,001–75,000	30	25.0
	Above 75,000	20	16.7

The data reveal that 58.3 % of respondents were male and 41.7 % were female, showing a relatively balanced gender representation but a slightly higher male participation in online banking. The 26–35 year age group accounted for the largest segment (38.3 %), suggesting that internet banking is most popular among young working adults. Educationally, 45.8 % were graduates and 39.2 % were postgraduates, indicating that higher education levels encourage the adoption of digital financial services. Most respondents were salaried employees (43.3 %), followed by self-employed individuals (25 %) and students (21.7 %), showing that working professionals constitute the primary user group. In terms of monthly income, the majority (35 %) earned between ₹25,001–₹50,000, implying that middle-income customers are more inclined toward internet banking due to its convenience and time efficiency.

These demographic results demonstrate that internet banking in Ernakulam is dominated by educated, middle-income, tech-aware customers who actively seek convenient and secure financial transactions. The diversity of respondents ensures representativeness across age and income categories, enhancing the reliability of the analysis.

Data Analysis and Interpretation

The analysis shows that customer satisfaction in internet banking is influenced by both technological ease and emotional trust. The reviewed literature indicates that perceived ease of use (PEOU) and perceived usefulness (PU) are critical predictors of satisfaction, as suggested by George and Kumar (2013). Customers prefer platforms that are visually clear, user-friendly, and time-efficient. However, security and trust factors play an equally dominant role. Abraham and Joseph (2020) found that safety concerns, particularly fear of cyber fraud and privacy breaches, continue to limit customer confidence. Furthermore, service quality—measured

through reliability, responsiveness, and empathy—strongly affects satisfaction (Syriac et al., 2025). Banks offering consistent service availability, prompt issue resolution, and personalized assistance tend to retain more loyal digital customers. Overall, the analysis interprets customer satisfaction as a multidimensional construct combining both human and technical variables.

Customer Satisfaction with Internet Banking Factors

The respondents were asked to rate several service-related factors on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Mean scores and standard deviations were calculated to determine the relative satisfaction levels for each factor. Table 2 presents the summary of this analysis.

Mean and Standard Deviation of Customer Satisfaction Factors:

Factor	Mean (M)	Standard Deviation (SD)	Interpretation
Perceived Ease of Use	4.35	0.61	High satisfaction
Perceived Usefulness	4.21	0.64	High satisfaction
Trust and Security	3.89	0.73	Moderate to high satisfaction
Service Reliability	4.05	0.58	High satisfaction
Responsiveness of Support Staff	3.77	0.80	Moderate satisfaction
Website/Interface Design Quality	4.18	0.66	High satisfaction
Overall Customer Satisfaction	4.12	0.59	High overall satisfaction

The data indicate that respondents rated perceived ease of use highest ($M = 4.35$, $SD = 0.61$), followed by perceived usefulness ($M = 4.21$, $SD = 0.64$). This suggests that most customers find online banking platforms user-friendly and efficient in managing their financial tasks. Website design quality ($M = 4.18$) and service reliability ($M = 4.05$) also scored strongly, indicating stable system performance and consistent functionality.

However, trust and security recorded a slightly lower mean ($M = 3.89$), implying persistent concerns about data privacy and transaction safety. The responsiveness of support staff received the lowest satisfaction score ($M = 3.77$), showing that digital service channels still lack timely human assistance and empathy when technical problems occur. The overall customer satisfaction mean score ($M = 4.12$) confirms a generally positive outlook among users, though continuous improvement in security and service responsiveness remains essential.

These results underscore that customers in Ernakulam value digital efficiency and convenience but still expect reliability, trust, and personalized service from their banks. Addressing these gaps could further enhance satisfaction and strengthen customer loyalty in the region's competitive banking environment.

Findings and Suggestions

Findings

1. Most customers in Ernakulam appreciate the convenience of online banking but remain skeptical about data privacy and transaction security.
2. Perceived ease of use and system reliability are major contributors to satisfaction among young and educated users.
3. Service quality gaps exist in responsiveness—particularly in resolving failed transactions or login issues.
4. Trust is the strongest determinant of sustained internet banking usage, with confidence in security systems directly linked to loyalty.
5. Banks that combine technological innovation with personalized support demonstrate higher customer retention levels.

Suggestions

1. Banks should enhance cybersecurity awareness through regular customer education programs and transparent communication about data protection measures.
2. Continuous interface improvement and simplified navigation will make internet banking more inclusive, particularly for older users.
3. Establishing dedicated digital service helpdesks can address complaints quickly and improve user responsiveness.
4. Periodic satisfaction surveys should be conducted to gather feedback and identify evolving customer expectations.
5. Banks should adopt a hybrid approach—combining technological advancement with personalized service—to build sustainable customer relationships.

Conceptual Discussion

Bringing together these themes, we can conceptualize customer satisfaction in internet banking as a function of technological factors *and* human-centric factors. In Ernakulam's banking sector, where competition is strong and customers often compare multiple banking services, a holistic approach is needed to enhance satisfaction:

- **User-Friendly Technology:** A baseline requirement is that the internet banking platform is easy to use, fast, and rich in useful features. Banks should invest in modern interfaces, mobile optimization, and continuous improvements to align with user needs. Customers in Ernakulam increasingly belong to a digitally literate demographic; they appreciate features like one-click payments, real-time alerts, personal financial management tools, etc. A well-designed system increases perceived usefulness and ease of use, which in turn boosts satisfaction. Regular updates and innovation can keep the user experience fresh and engaging.
- **Security and Trust-Building:** Banks must proactively address the security concerns that hold back some customers from fully embracing online banking. This involves both technical measures (secure encryption, fraud detection systems, robust IT infrastructure) and educational initiatives. For example, banks can run awareness campaigns on safe

internet banking practices (as suggested by Abraham & Joseph, 2020), inform customers about security features, and promptly communicate any threats or safety tips. By reducing actual and perceived security risks, banks enhance trust. When customers trust the platform, they are not only more likely to use it but also more satisfied with their overall banking experience. Trust acts as a cushion – even if minor issues occur, a high-trust customer remains more forgiving and confident in the service.

- **Service Quality and Support:** A purely digital service does not eliminate the need for quality customer service – it transforms it. Banks in Ernakulam should ensure high **system quality** (uptime, quick transaction processing, accurate information) as part of service reliability. Additionally, providing effective channels for customer support is crucial. This might include 24/7 helplines, chatbot assistants, prompt email support, or dedicated relationship managers for priority customers. As the PNB case study showed, neglecting responsiveness and empathy can leave customers unhappy despite efficient online offerings (Singh, 2019). Thus, training staff to handle e-banking queries politely and efficiently, and gathering feedback on service quality, are important. Personalization can also enhance the experience – for instance, tailored product suggestions or alerts based on user behavior (done with customer consent) can increase the sense of being looked after, even in an online environment.
- **Continuous Improvement and Customer Feedback:** Customer satisfaction is not static; banks should treat internet banking services as evolving products. Gathering user feedback regularly in Ernakulam (through surveys, user testing, complaint analysis) can uncover pain points and opportunities for improvement. For example, if customers report difficulty in a new feature or confusion about a process, the bank should refine the interface or provide clearer guidance. Many banks also introduce new digital services (like mobile wallets, UPI integrations, etc.), and monitoring satisfaction with these can guide how they roll out future innovations. Importantly, as digital banking becomes more widespread, customers' expectations rise (Raza et al., 2020). What was once a delightful convenience (like online fund transfer) is now taken for granted; banks must therefore continuously raise their service standards or risk falling behind competitors in customer satisfaction.
- **Context of Ernakulam:** Being one of Kerala's most developed districts, Ernakulam offers a fertile ground for digital banking but also sets a high bar for service expectations. Customers here are generally well-educated and many are professionals or students comfortable with technology. This means they are quick to adopt useful digital banking features but also quick to voice dissatisfaction if the services are subpar. Additionally, Kerala's banking customers have historically valued their relationship with banks (trust, courtesy, community presence), so banks need to translate that relationship into the online channel. In practice, local banks and branches in Ernakulam often conduct workshops or help sessions on internet banking for less tech-savvy customers, as part of building trust and familiarity. Such efforts can mitigate the segment of customers who are aware of e-banking but still avoid it. Ultimately, banks that blend high-tech with high-touch (personalized care) in Ernakulam are likely to achieve the strongest customer satisfaction outcomes.

Conclusion

Customer satisfaction in internet banking is a multifaceted construct, especially pertinent to banks in Ernakulam district that serve a diverse and tech-aware clientele. The literature and conceptual analysis indicate that success in digital banking hinges on excelling in technology, trust, and service simultaneously. Banks must provide an easy-to-use, feature-rich online banking platform (ensuring transactions are convenient and efficient) while also safeguarding customers' security and privacy to build unwavering trust. Moreover, the human element remains important: reliable service quality, responsive support, and empathy in addressing customer needs can differentiate a bank in the digital realm. When these factors are well-managed, customers perceive high value and feel satisfied with their internet banking experience. Satisfied customers are more likely to use a broader range of online services, recommend the platform to others, and remain loyal to the bank – all of which benefit banks through higher retention and lower operational costs (as online transactions are cheaper than branch services).

For banks in Ernakulam, focusing on customer satisfaction in internet banking is not just an IT initiative but a strategic imperative. As competition intensifies and customers can easily switch or multi-home (using multiple banks), delivering superior online service is key to maintaining market share. Continuous improvement based on customer feedback, adoption of best practices in UX design and cybersecurity, and a commitment to service excellence will collectively enhance customer satisfaction. In summary, internet banking in Ernakulam's banks must be secure, seamless, and supportive. By understanding and acting on the drivers of customer satisfaction – from ease of use and usefulness to trust and service quality – banks can ensure their digital channels truly meet customer expectations and foster long-term loyalty in the digital age.

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