



A Study On The Challenges Faced By Customers Using Digital Banking Services In West Tripura District

Bebilon Debbarma Ph.D. Research Scholar, Department Of Commerce, Annamalai University, Annamalai Nagar, 608002, Tamil Nadu, India. Email: Bebilondebbarma04@Gmail.Com

Dr. M. Somasundaram Research Supervisor, Professor Of Commerce, Annamalai University, Annamalai Nagar, 608002, Tamil Nadu, India.

ABSTRACT

The advent of Digital India has spurred significant growth in digital banking services across India, including West Tripura District. This study explores the challenges faced by customers in utilizing these services, aiming to enhance understanding and propose solutions tailored to local needs. Through a structured survey of 385 respondents using convenient sampling, data were gathered on issues ranging from security concerns to technical hurdles and service accessibility. Statistical analyses, including t-tests and ANOVA, were conducted to evaluate differences across gender and age groups in perceptions of these challenges. Key findings reveal common concerns such as data security, technical complexities with digital channels, and inadequate service infrastructure. While most challenges are perceived similarly across genders and age groups, notable differences highlight specific areas for targeted improvement, particularly concerning data security perceptions among female customers and higher confusion levels among older age groups. The study underscores the importance of enhancing security measures, improving digital literacy through educational initiatives, and optimizing service accessibility and customer support to enhance the overall digital banking experience in West Tripura District. These findings provide actionable insights for financial institutions to better align their services with customer expectations and regulatory advancements in the digital banking landscape.

Keywords: Digital banking, Online, Transaction, Security, challenges, Financial Service.

INTRODUCTION

The Indian government coined the phrase "Digital India" with the aim of transforming India into a digitally empowered society and economy. One of Digital India's stated goals is to be "faceless, paperless, and cashless." Digital banking services include banking cards, USSD, AEPS, UPI, mobile wallets, bank pre-paid cards, point of sale, Internet banking, mobile banking, and micro-ATMs. The e-commerce industry's global growth has piqued the interest of researchers all over the world who want to know how people act in digital banking. It is critical to comprehend the security concerns and obstacles associated with using digital banking services for financial transactions or for a variety of reasons

(Kumar, A., and Debnath, N., 2018). ICT (Information and Communication Technology) encompasses all aspects of computing and digitalization. Quick reaction, flexibility, and information are the essential aspects to deal with, and ICT plays a crucial role in these areas for quality enhancement (Arora, B., and Kaushik, N., 2018). Alternative finance has evolved in recent years, incorporating new technology and providing new business models for financial service providers. Alternative finance has flourished due to the interconnectedness of four key technologies. Artificial intelligence, blockchain, cloud computing, and data are examples of these technologies. Banks have accumulated and generated a massive amount of data. These details include a bank customer's personal information, transaction activity, net worth, and even their relationship and location. However, in the past, customers and bank employees filled out paper forms to acquire much of this information, which posed significant challenges for analysis. Simultaneously, computerized form filling and tracking of online customer behaviour allow both online platforms and digital banking services to scale faster with less physical labour and space resources. Financial institutions established IT systems to manage their operations, utilizing a variety of enterprise-level software, which they developed or licensed over time at a significant expense and hosted on large-scale on-premises servers. Since the emergence of cloud computing, organizations have managed servers in data centres to house software, offering value-added services like cyber security. This means that emerging businesses, such as alternative financial providers, can focus on improving customer experiences rather than investing heavily in infrastructure. Blockchain is a cutting-edge internet-based technology that improves the visibility and openness of supply chain transactions (Pilkington, 2016). A blockchain functions as a distributed ledger, storing transaction data in blocks that members can share. By adding these blocks in chronological order, we can link them together in a chain. Blockchain is ideal for record-keeping due to its inability to erase stored data after confirmation by shared members (Underwood, 2016). Face and voice recognition, biometric identity management, and chatbots that can deliver personalized suggestions are all examples of how AI is fast transforming alternative digital banking service user interfaces, and these technologies benefit the banking industries. Digital banking services can not only provide enormous benefits to customers in terms of ease and cost of transactions, but they can also pose new challenges for banks in supervising their financial systems and designing and implementing necessary security measures and controls. In doing so, understanding security communication in digital banking service issues is important for senior management because it would help them improve their approach to digital banking security (Kumari, A., and Rani, S., 2022).

CHALLENGES IN DIGITAL BANKING SYSTEM

1. In recent years, the sector of digital banking, or online digital payments, has evolved. In the last year, banks have seen a growth in customer connection through online platforms such as mobile channels, as well as the incorporation of UPI and other services in Indian banking platforms. Currently, overcoming a number of obstacles to digital banking remains unattainable. Even a perfect digital

banking system is still a long way off. As a result, there are major points to consider when it comes to digital banking services.

2. New technology raises security and privacy concerns. Many customers are becoming increasingly concerned about the data and cybersecurity risks associated with digital banking services, which are not effectively controlled. National-state cyberthreats from both organized technology-fueled thieves and rogue action are on the rise. On the other hand, people are concerned about their privacy because every transaction leaves a digital trail, whereas cash is more anonymous. That can be off-putting for consumers who are concerned about their financial institution recording their activities, and that's putting it nicely.
3. Unwilling customers: Regardless of how effective public education campaigns are, some consumers remain sceptical of technology in general, and there will always be a segment of the population that is resistant to change—often for legitimate reasons. These are sometimes thought of as older residents who are less tech-savvy than their younger counterparts.

STATEMENT OF THE PROBLEM

Customers are facing challenges due to a lack of knowledge about digital banking service usage, inadequate training, outdated technology, security and transaction issues, increased customer confusion, hidden costs, limited ATM service availability, withdrawal restrictions, network disruptions, insufficient product information for customers, and inadequate problem resolution procedures. The study examines the challenges faced by customers when using digital banking services.

REVIEW OF LITERATURE

Kesharwani and Bisht (2012) Kesharwani and Bisht (2012) applied the Technology Acceptance Model (TAM), focusing on the security and privacy risks associated with internet banking in India. The study revealed that perceived risk and perceived trust have a negative effect on the behavioral perceptions of Internet users. They concluded that a bank website with a robust design would facilitate usability and reduce the perceived risks associated with internet banking.

Angelakopoulos and Mihiotis (2011) The study examines the current use of e-banking, its potential future development, and the associated risks for both banks and customers when utilizing e-banking technology and services. Because customers don't seem to use m-banking, security issues are rare. The most important reasons for banks to offer e-banking services are strategic ones, like gaining a competitive edge and cutting expenses.

Alarif et al. (2017) The researchers found that only a few banks offer enough information regarding dangers, assaults, general internet safety guidelines, security warning concerns, and password security advice. Each of the banks used an enhanced Secure Sockets Layer (SSL) validation certificate and the Secure Sockets Layer protocol. The findings demonstrate that, depending on the customer's choice, all five banks provide SMS or tokens for two-factor authentication at sign-in. While most banks ask customers to update their passwords online using their ATM card number, ATM PIN number, and/or

national ID number, other banks have more stringent verification requirements. To reduce the risk of fraudulent transactions, banks offer extra security measures. As an illustration, all banks include an automatic timeout option for inactivity that can last anywhere between 2 and 15 minutes. The researchers anticipate that the study approach will assist developers in resolving security-usability issues at an early stage by iteratively improving the quality of e-banking systems.

RESEARCH GAP

The literature review revealed a thorough understanding of the many digital banking studies carried out from diverse angles that had a significant impact on the banking industry. From an Indian and international perspective, identify both the positive and bad aspects of digital banking. However, a noticeable gap exists within the West Tripura district. Research on the challenges of digital banking services remains unexplored in the West Tripura context. Therefore, the current study focused on customers' challenges with the digital banking services of private and public sector banks in the west Tripura district.

OBJECTIVES OF THE STUDY

1. To analyse the challenges faced by customers while using the Digital Banking Services in West Tripura district.

HYPOTHESES

H₀ - There is no significant difference between the mean scores regarding problems faced while using the digital banking services concerning the gender groups and age groups of the customers in West Tripura district.

METHODOLOGY

The study used a convenient sampling method to collect the 385 respondents from west Tripura district. The primary data were collected by using a well-structured interview schedule, providing customers' more accurate understanding of challenges in digital banking services. The primary data were analyzed using statistical tools, including the T test, mean, and one-way ANOVA.

RESULTS AND ANALYSIS

Table 1: Problems faced while using the digital banking services among different Gender groups of customers

Problems	Gender (Mean Score)		T statistics
	Male	Female	
Digital banking channels are creating more confusion for customers	2.1404	2.2293	0.179

Digital banking services have more hidden charges	2.2368	2.2166	0.195
Smart card sometimes creates technical hurdles to making payments	2.1798	2.2866	0.840
Lack of ATM services, Crowd in peak hours, and restriction in withdrawal	2.3816	2.4968	0.249
Lack of infrastructure and unsuitable location of ATMs	2.5746	2.6624	0.017
Unauthorized access within the network and loss or damage of data by hackers	2.1535	2.3694	7.052
Inability to manage information properly and to deliver products or services	2.2807	2.3248	0.688
Inadequate information to customers about product use and problem resolution procedures	2.3684	2.4076	0.56
Inaccurate processing of transactions and transactions have not been uploaded	2.3684	2.4076	0.56
Significant problems with networks connection	2.3070	2.4204	0.000
Lack of knowledge regarding the use of e channels	2.4868	2.5350	1.620

Source: Primary Data

Table 1: The data provides an in-depth comparison of how male and female customers perceive various problems associated with digital banking. The mean scores and t-statistics help to determine if there are statistically significant differences between the perceptions of males and females for each issue. Below is a detailed interpretation of the findings.

Digital Banking Channels Creating More Confusion for Customers

Mean Scores: Males: 2.1404, Females: 2.2293, **T-Statistic:** 0.179

The mean scores indicate that females perceive slightly more confusion with digital banking channels compared to males. However, the t-statistic (0.179) shows that this difference is not statistically significant. Thus, both genders experience similar levels of confusion regarding digital banking channels.

Digital Banking Services Have More Hidden Charges

Mean Scores: Males: 2.2368, Females: 2.2166, **T-Statistic:** 0.195

The mean scores for hidden charges are very close between males and females, with a t-statistic of 0.195 indicating no significant difference. This suggests that both genders have similar perceptions about hidden charges in digital banking services.

Smart Card Sometimes Creates Technical Hurdles to Making Payments

Mean Scores: Males: 2.1798, Females: 2.2866, **T-Statistic:** 0.840

Females report more technical hurdles with smart cards than males, as reflected in their higher mean score. However, the t-statistic of 0.840 indicates that this difference is not statistically significant, implying similar experiences across genders.

Lack of ATM Services, Crowd in Peak Hours, and Restriction in Withdrawal

Mean Scores: Males: 2.3816, Females: 2.4968, **T-Statistic:** 0.249

Females perceive a greater lack of ATM services and more issues with crowding and withdrawal restrictions than males. Despite this, the t-statistic of 0.249 shows that this difference is not statistically significant, indicating that both genders face these issues similarly.

Lack of Infrastructure and Unsuitable Location of ATMs

Mean Scores: Males: 2.5746, Females: 2.6624, **T-Statistic:** 0.017

The mean scores indicate that females find the infrastructure and location of ATMs less suitable than males. The t-statistic of 0.017, although very small, still indicates no significant difference, suggesting comparable experiences across genders.

Unauthorized Access within the Network and Loss or Damage of Data by Hackers

Mean Scores: Males: 2.1535, Females: 2.3694, **T-Statistic:** 7.052

Females express significantly greater concern about unauthorized access and data security than males. The high t-statistic of 7.052 indicates a statistically significant difference, highlighting a gender-specific concern where females are more worried about these issues.

Inability to Manage Information Properly and to Deliver Products or Services

Mean Scores: Males: 2.2807, Females: 2.3248, **T-Statistic:** 0.688

Both genders report similar levels of difficulty in managing information and delivering products or services, with a t-statistic of 0.688 indicating no significant difference in their perceptions.

Inadequate Information to Customers about Product Use and Problem Resolution Procedures

Mean Scores: Males: 2.3684, Females: 2.4076, **T-Statistic:** 0.56

The mean scores and t-statistic (0.56) suggest that both genders perceive the information provided about product use and problem resolution procedures similarly, with no significant difference between them.

Inaccurate Processing of Transactions and Transactions Have Not Been Uploaded

Mean Scores: Males: 2.3684, Females: 2.4076, **T-Statistic:** 0.56

Similar to the previous issue, the perceptions of inaccurate transaction processing are almost identical between males and females, as indicated by the close mean scores and a t-statistic of 0.56.

Significant Problems with Network Connection

Mean Scores: Males: 2.3070, Females: 2.4204, **T-Statistic:** 0.000

Females report slightly more issues with network connections than males. However, the t-statistic of 0.000 indicates no statistically significant difference, suggesting that both genders experience network connection problems similarly.

Lack of Knowledge Regarding the Use of E-Channels

Mean Scores: Males: 2.4868, Females: 2.5350, **T-Statistic:** 1.620

The mean scores for lack of knowledge about e-channels are slightly higher for females, but the t-statistic of 1.620 indicates that this difference is not statistically significant. Therefore, both genders have comparable levels of knowledge regarding the use of e-channels.

The analysis reveals that, for most digital banking issues, there are no significant differences in perceptions between male and female customers. Both genders report similar experiences with confusion, hidden charges, technical hurdles, ATM services, information management, and transaction processing. However, a notable exception is the concern over unauthorized access and data security, where females exhibit significantly greater concern than males. This finding suggests that digital banking services should focus on enhancing security measures and communication to address the specific concerns of female customers while continuing to improve overall user experience for both genders.

Table 2: Problems faced while using the internet banking services among different age groups of the customers

Problems	Age Group (Mean Score)				F statistics
	Up to 24 Years	25-39 Years	40-54 Years	55 Above	
Digital banking channels are creating more confusion for customers	2.0976	1.9771	2.3647	2.7674	9.613*

Digital banking services have more hidden charges	2.1951	2.0229	2.3765	2.8372	4.671*
Smart card sometimes creates technical hurdles to making payments	2.1220	2.1257	2.2941	2.6744	0.844
Lack of ATM services, Crowd in peak hours, and restriction in withdrawal	2.4146	2.3429	2.4000	2.8605	0.051
Lack of infrastructure and unsuitable location of ATMs	2.7195	2.4914	2.5882	2.9302	0.169
Unauthorized access within the network and loss or damage of data by hackers	2.2195	2.1257	2.2706	2.6977	2.455
Inability to manage information properly and to deliver products or services	2.3293	2.1600	2.3412	2.709	2.927
Inadequate information to customers about product use and problem resolution procedures	2.4024	2.1886	2.4706	2.9767	2.517
Inaccurate processing of transactions and transactions have not been uploaded	2.4024	2.1886	2.4706	2.9767	2.517
Significant problems with networks connection	2.2927	2.28574	2.3176	2.8140	0.352
Lack of knowledge regarding the use of e channels	2.2805	2.4514	2.5764	3.0233	1.887

Source: Primary Data

Table 2: The ANOVA analysis performed on the data examines the differences in perceptions across four age groups (Up to 24 Years, 25-39 Years, 40-54 Years, and 55 Years and above) regarding various problems associated with digital banking. The results highlight areas where significant differences exist and where they do not, based on the F-statistics.

Significant Differences

1. **Internet Banking Channels Creating More Confusion for Customers:** The F-statistic (9.613) indicates a significant difference between the age groups. Younger users (Up to 24 Years and 25-39 Years) report less confusion compared to older users (40-54 Years and 55 and above). This suggests that older customers find digital banking channels more confusing, potentially due to a lack of familiarity with technology.

2. **Digital Banking Services Have More Hidden Charges:** With an F-statistic of 4.671, there is a significant difference in perceptions among the age groups. Younger users (Up to 24 Years and 25-39 Years) perceive fewer hidden charges compared to older users (40-54 Years and 55 and above). This difference may reflect varying levels of financial literacy and experience with Digital banking.

No Significant Differences

For several issues, the F-statistics indicate no significant differences in perceptions across the age groups. These include:

1. Smart Card Sometimes Creates Technical Hurdles to Making Payments (F = 0.844)
2. Lack of ATM Services, Crowd in Peak Hours, and Restriction in Withdrawal (F = 0.051)
3. Lack of Infrastructure and Unsuitable Location of ATMs (F = 0.169)
4. Unauthorized Access within the Network and Loss or Damage of Data by Hackers (F = 2.455)
5. Inability to Manage Information Properly and to Deliver Products or Services (F = 2.927)
6. Inadequate Information to Customers about Product Use and Problem Resolution Procedures (F = 2.517)
7. Inaccurate Processing of Transactions and Transactions Have Not Been Uploaded (F = 2.517)
8. Significant Problems with Network Connection (F = 0.352)
9. Lack of Knowledge Regarding the Use of e-Channels (F = 1.887)

These results suggest that for most digital banking issues, the perceptions are consistent across different age groups. The lack of significant differences implies that factors such as technical hurdles, ATM service issues, data security concerns, and inadequate information about products and services are perceived similarly regardless of age.

The ANOVA analysis reveals that while some digital banking issues are perceived differently across age groups, many problems are universally recognized regardless of age. Specifically, older age groups find internet banking channels more confusing and perceive more hidden charges compared to younger users. These insights highlight the need for targeted interventions to enhance the user experience for older customers, potentially through improved user interfaces and clearer communication about fees. For other issues, the uniform perception across age groups suggests that solutions can be broadly applied without needing age-specific adjustments. These findings can guide banks in prioritizing areas for improvement and tailoring their services to meet the diverse needs of their customer base.

SUGGESTIONS

Based on the analysis, interpretation, and findings of the study on the challenges faced by customers using digital banking services in West Tripura District, here are some suggestions:

- 1) **Enhance Security Measures and Communication:**
 - a) **Focus on Data Security:** Address concerns about unauthorized access and data security, especially among female customers who perceive these issues significantly more than males. Implement robust security measures such as two-factor authentication, encryption, and regular security updates.
 - b) **Improve Communication:** Enhance transparency and communication regarding security protocols and measures taken by banks to safeguard customer data. This can help build trust and alleviate concerns among all customer segments.
- 2) **Educational Initiatives:**
 - a) **Increase Digital Literacy:** Provide comprehensive training and educational resources to improve customers' understanding of digital banking services. Focus on both the technical aspects of using digital channels and awareness about potential risks and how to mitigate them.
 - b) **User-Friendly Guides:** Develop user-friendly guides and tutorials, possibly in multiple languages, that explain how to use digital banking services effectively. This can reduce confusion and technical hurdles reported across different demographics.
- 3) **Improve Accessibility and Infrastructure:**
 - a) **ATM Services and Infrastructure:** Address the concerns related to the lack of ATM services, inconvenient locations, and issues during peak hours. Consider expanding ATM networks and improving infrastructure to provide seamless access to banking services.
 - b) **Network Connectivity:** Resolve issues related to network connectivity that customers face. This could involve upgrading infrastructure or exploring alternative solutions to ensure reliable service across different regions of West Tripura District.
- 4) **Customer Service and Information Provision:**
 - a) **Enhance Customer Support:** Improve problem resolution procedures and customer service capabilities. Ensure that customers receive adequate information about product use, troubleshooting methods, and problem resolution channels.
 - b) **Feedback Mechanism:** Implement a robust feedback mechanism to continuously gather insights from customers about their digital banking experiences. Use this feedback to identify pain points and areas for improvement promptly.
- 5) **Tailored Services Based on Age Groups:**
 - a) **Targeted Solutions:** Recognize that younger customers may have different needs and expectations compared to older customers. Tailor digital banking services and interfaces to cater to varying levels of digital literacy and comfort with technology across different age groups.
 - b) **Simplify Processes:** Simplify processes where possible to accommodate customers who may find digital banking interfaces and procedures challenging.
- 6) **Continuous Monitoring and Adaptation:**

- a) **Monitor Trends:** Stay updated on emerging trends and technological advancements in digital banking. Continuously adapt services to meet evolving customer expectations and industry standards.
- b) **Benchmarking:** Compare your findings with industry benchmarks and best practices to identify areas where your bank can excel and lead in customer satisfaction.

By implementing these suggestions, banks in West Tripura District can enhance the overall customer experience with digital banking services. Addressing security concerns, improving digital literacy, enhancing accessibility, and providing excellent customer support are critical steps toward fostering trust and satisfaction among customers using digital banking services.

CONCLUSION

The advent of digital banking services in West Tripura District has brought convenience and efficiency to financial transactions, yet it has also introduced various challenges that impact customer experience. This study aimed to explore these challenges comprehensively, providing insights into the perceptions of customers across different demographics.

The findings reveal several key challenges faced by customers, including concerns about data security, technical complexities with digital channels, inadequate service infrastructure such as ATM accessibility and network connectivity, and insufficient customer support and information provision. These challenges are consistent across genders and age groups to a large extent, reflecting common issues experienced by customers regardless of demographic factors.

However, the study also highlights specific areas where differences exist among customer segments. For instance, female customers exhibit heightened concerns about data security and unauthorized access compared to male customers. Similarly, older age groups tend to find digital banking channels more confusing and perceive more hidden charges compared to younger age groups. These variations underscore the importance of tailored solutions and targeted interventions to address diverse customer needs effectively.

In response to these findings, several recommendations are proposed to enhance the digital banking experience in West Tripura District. These include enhancing security measures through robust authentication protocols and improved communication, increasing digital literacy through educational initiatives, improving infrastructure and accessibility of banking services, enhancing customer service capabilities, and tailoring services to different age groups based on their specific needs and preferences.

Implementing these recommendations can significantly improve customer satisfaction and trust in digital banking services. By addressing the identified challenges and continuously adapting to evolving customer expectations and technological advancements, financial institutions in West Tripura District can achieve the goals of Digital India while ensuring a seamless and secure banking experience for all customers.

REFERENCE

1. Kumar, A. and Debnath, N. (2018). "Factors affecting Mobile Banking Adoption Behavior in North-Eastern States of India". International Journal of Mechanical Engineering and Technology. Volume 9, Issue 4, April 2018, pp 479-483, Article ID: IJMET_09_04_045, <http://www.iaeme.com/ijmet/issues.asp?IType=IJMET&VType=9&IType=4>
2. Arora, B and Kaushik, N. (2018). "Cashless Economy: A key to Digital Proliferation in Indian Banks". International Journal of Creative Research Thoughts. Conference on recent innovation in emerging technology and science, pp 142-148, ISSN: 2320-2882. www.ijcrt.org
3. Pilkington, M. (2016), "Blockchain technology: Principles and applications", In Xavier Olleros, F. and Majlinda, Z. (Eds) Research Handbook on Digital transactions, pp 1-38 Edward Elgar, Glos.
4. Underwood, S. (2016), "Blockchain beyond bitcoin", Communications of the Acm, Vol. 59 No.11, pp 15-17.
5. R. Anitha Kumari and R. Shoba Rani 2022, 'Study On Satisfaction, Awareness, And Problems Experienced By The Customers While Availing Internet Banking Services In Kanyakumari District', International Journal of Food and Nutritional Sciences, vol. 11, no. 8, pp. 1034-1043, ISSN No. 2319-1775
6. Sheel, A and Nath, V. (2018), Effect of blockchain technology adoption on supply chain adaptability, agility, alignment and performance. Management of Research Review Emerland Publishing Limited 240-8269, DOI 10.1108/MRR-12-2018-0490
7. Kesharwani, A., & Singh Bisht, S. (2012, June 8). The impact of trust and perceived risk on internet banking adoption in India. International Journal of Bank Marketing, 30(4), 303–322. <https://doi.org/10.1108/02652321211236923>
8. Angelakopoulos, G., & Mihiotis, A. (2011, March 3). E-banking: challenges and opportunities in the Greek banking sector. Electronic Commerce Research, 11(3), 297–319. <https://doi.org/10.1007/s10660-011-9076-2>
9. Alarifi, A., Alsaleh, M., & Alomar, N. (2017, March 9). A model for evaluating the security and usability of e-banking platforms. Computing, 99(5), 519–535. <https://doi.org/10.1007/s00607-017-0546-9>