**Shifting Consumer Attitudes towards Online Banking: Evidence from Rural Kerala**

### ***ABSTRACT:*** The adoption of e-banking has transformed the financial landscape, offering convenience, accessibility, and cost-effective services. However, consumer perceptions of online banking, particularly in rural regions, remain underexplored. This study examines the factors influencing customer attitudes toward e-banking in Cherthala Taluk, Alappuzha district, through primary and secondary data analysis. The study employs statistical tools, including ANOVA, to evaluate demographic influences on online banking adoption. Findings indicate that while transaction-based services like fund transfers and bill payments are widely used, concerns about security, technical issues, and a lack of awareness hinder broader adoption. The study highlights the growing preference for mobile banking and digital payment platforms like UPI while emphasizing the need for enhanced security measures and user-friendly banking interfaces. Policy recommendations include improving digital literacy, addressing security concerns, and optimizing e-banking platforms to encourage wider adoption and financial inclusion.

*Keywords: E-banking, consumer perception, online banking, rural banking, digital*

*transactions, financial inclusion, UPI*

# **INTRODUCTION**

E-banking has revolutionized the financial sector by providing cost-effective and convenient digital transaction channels, including internet and mobile banking. As an integral component of e-finance, it enhances accessibility and efficiency in financial services, enabling seamless operations for both retail and corporate clients. Services such as electronic payments, fund transfers, lending, and account management offer users increased flexibility and convenience. Despite these advantages, e-banking introduces regulatory challenges and security concerns, necessitating stringent oversight to maintain financial stability. Nonetheless, its continuous growth underscores its escalating importance in contemporary banking.

Financial institutions actively assess customer perceptions to improve service quality and address issues like fraud and technical difficulties. Secure online platforms facilitate a variety of transactions, including bill payments, fund transfers, and digital account management, thereby enhancing operational efficiency and customer satisfaction. Features such as ordering cheque books and reporting lost cards bolster customer engagement and trust. Consequently, e-banking has become a cornerstone of the financial industry, integrating technological advancements with user-centric solutions to elevate banking experiences.

**STATEMENT OF THE PROBLEM**

Despite the rapid growth of e-banking, its adoption in rural areas remains limited due to various barriers, including security concerns, lack of digital literacy, and technical challenges. While previous studies have primarily focused on the adoption of online banking, limited research has examined the factors contributing to its underutilization. This study aims to bridge this gap by analyzing consumer perceptions of e-banking in Cherthala Taluk, a densely populated rural region in coastal Kerala's Alappuzha district, with a focus on identifying key drivers and barriers to adoption. The study investigates how demographic factors such as age, education, income, and occupation influence online banking usage. It also explores consumer preferences for specific banking services, such as fund transfers, bill payments, and mobile banking, while assessing challenges like security risks, technical issues, and customer support deficiencies. By understanding these factors, the research aims to provide insights into enhancing digital banking accessibility, improving security measures, and increasing consumer confidence in online banking services.

**OBJECTIVE OF THE STUDY**

The general objective is to study the consumers perception towards online banking in a progressing regional economy like India. More specifically, the present study focussed on the following objectives.

1. To trace factors in fleecing to opt this technology
2. To analyse the consumers perception on online banking
3. To know the facilities provided in online banking and analyse issues and concerns faced by users
4. To suggest suitable policy measures for a secure e-banking system

**RESEARCH METHODOLOGY**

The present study was conducted on the basis of primary and secondary data. A random sample of size 100 was collected in a scientific manner from the study area. The study relied on primary data, which was collected using structured questionnaires distributed through Google Forms. In addition, secondary data was sourced from journals and official publications of banks and government institutions. The sampling method employed for the study was convenience sampling. For data analysis, the collected information was classified and analyzed in alignment with the objectives of the study. The analysis utilized comparative methods, along with graphical and tabular presentations and statistical tools, employing the percentage method and testing procedures to interpret and present the findings effectively.

ANOVA: In order to ascertain whether there is a statistically significant difference between two or more categories, it is frequently utilized to compare means across them. To determine this, an ANOVA is used to evaluate the variation within each group in comparison to the variation between groups. A one-way ANOVA uses one independent variable, while a two-way ANOVA uses two independent variables. The assumptions of ANOVA are Normality of population, Homogeneity, Randomness and Independence of error.

# **REVIEW OF LITERATURE**

**Marimon, F., Petnji Yaya, L. H., & Casadesus, M. (2011)** examined the influence of service recovery on customer loyalty within Spain's electronic banking sector. Their findings indicate that elements of the revised E-S-QUAL framework, the multi-dimensional scale used to measure electronic service quality, significantly contribute to enhancing customer satisfaction and loyalty, offering key insights into the determinants of positive customer perceptions in online banking environments. This study provides a foundational framework for measuring e-service quality and can be adapted for comparative studies across different cultural or national contexts.

**Chawla, S., & Sehgal, R. (2012)** conducted an empirical investigation into customer awareness and satisfaction related to internet banking. The study underscores the role of demographic variables. particularly age and gender, in shaping customer experiences and preferences in digital banking adoption. Its relevance lies in highlighting the need for banks to tailor their communication and user interfaces to suit diverse customer segments.

**Bashir, I., & Madhavaiah, C. (2015)** explored consumer attitudes and behavioral intentions concerning internet banking adoption in the Indian context. The research identifies trust, security, and ease of use as major factors influencing users’ willingness to adopt online banking, aligning with broader themes in consumer perception research. The study's insights are particularly useful for designing strategies to increase digital banking adoption among hesitant or first-time users.

**Sivathanu, B. (2019)** analyzed the uptake of digital payment systems following India’s demonetization. The study highlights how trust, security, and perceived technological competence affect customer adoption, offering a comprehensive view of digital banking behavior during policy-induced change. It also sheds light on the long-term shifts in consumer behavior triggered by financial reforms and digital initiatives.

**Philip, P. (2020)** investigated customer perceptions of internet banking services provided by the State Bank of India. The research emphasizes operational efficiency and cost-effectiveness as crucial aspects for ensuring customer retention and satisfaction in public sector banking. This work underscores the competitive pressure on public banks to match private sector standards in service quality and innovation.

These studies collectively provide a comprehensive understanding of the factors influencing customer perceptions of online banking, including satisfaction, loyalty, demographic factors, and the technological and economic context in India and globally.

**THEORETICAL BACKGROUND**

The theoretical framework for understanding customer perception of online banking combines various elements derived from established models and studies. Central to this framework is the Technology Acceptance Model (TAM), highlighting perceived usefulness and ease of use as critical determinants of adoption. Service quality dimensions, such as reliability, responsiveness, efficiency, and privacy, significantly influence customer satisfaction and loyalty. Demographic factors, including age, gender, education, and income, shape perceptions and preferences for online banking. Additionally, perceived risk, trust, and website usability emerge as key factors that can either enhance or hinder customer acceptance. This integrated approach offers a comprehensive perspective on the factors shaping customer perceptions and their willingness to adopt online banking services.

### **Online Banking Methods and Procedures in India**

Online banking has transformed India's financial sector, enabling seamless digital transactions across various demographics. Its rapid adoption is driven by technological advancements and government initiatives like Digital India (RBI, 2022). This section outlines the methods, services, and features of online banking in India, emphasizing their impact on financial inclusion and economic growth.

#### **Services Offered by Online Banking**

Online banking caters to diverse needs through the following services:

1. E-Ticketing: Facilitates electronic travel bookings with unique confirmation codes, streamlining check-ins (Indian Railways, 2023).
2. Online Tax Payments: Platforms like FedNet simplify tax compliance by enabling the payment of various taxes digitally, ensuring accuracy and timeliness (RBI, 2022).
3. Fund Transfers: Secure mechanisms, such as multi-factor authentication, support intra- and inter-account fund transfers.

**UPI: Digital payments for masses**

The Unified Payments Interface (UPI), launched in 2016, is a real-time, interoperable payment system built on India’s Immediate Payment Service (IMPS) infrastructure. Developed by the National Payments Corporation of India (NPCI) and regulated by the RBI, UPI allows 24/7 money transfers through mobile devices. Initially launched with 35 banks, the number of participating banks grew to 382 by 2022. The market share of UPI increased from 2% in 2016-17 to 52% in 2021-22, with over 300 million unique users and 50 million merchants onboard by mid-2022. Despite this growth, UPI transactions account for only about 3.3% of the digital payments market, with NEFT and RTGS dominating high-value transactions.

**Table 1: Growth of Online Banking Coverage and Services in India**

| Financial Year | No. of Banks Live on UPI | No. of Third-Party App Providers (TPAPs) | PPI Apps  (Prepaid Payment Instrument Apps) |
| --- | --- | --- | --- |
| 2016-17 | 35 | NA | NA |
| 2017-18 | 67 | NA | NA |
| 2018-19 | 129 | NA | NA |
| 2019-20 | 143 | 19 | NA |
| 2020-21 | 207 | 21 | NA |
| 2021-22 | 282 | 22 | NA |
| 2022-23 | 382 | 23 | 5 |

*Source: National Payments Corporation of India (NPCI)*

**PERCEPTION TOWARDS ONLINE BANKING – AN ANALYSIS**

The Cherthala Taluk in the Alappuzha district served as the Study’s location. Several statistical tools and techniques were used to analyse consumer behaviour. Both quantitative and qualitative data are present in the gathered information. For this reason, the study's data analysis includes both quantitative and qualitative methods.

**Results and Discussion**

**A. User Preferences for Online Banking Services**

The data outlines the popularity of various online banking services based on the number of respondents and their preferences.

**Table 2: User Preferences in Online Banking**

|  |  |
| --- | --- |
| **Services available** | **Percentage of Respondents** |
| Fund transfer | 89.0 |
| Bill payments | 64.0 |
| Account statements | 18.0 |
| Online shopping | 43.0 |
| Others | 4.0 |

The results indicate that the most widely used service among respondents is **fund transfer**, with 89% utilizing this feature. **Bill payments** also show significant usage, with 64% of respondents using it, while **online shopping** is moderately used by 43%. However, services like **account statements** (18%) and **other services** (4%) are less frequently utilized, suggesting that respondents prioritize more transactional or immediate services over informational or less commonly used options. This pattern may reflect a preference for services directly tied to financial transactions rather than those offering auxiliary information or additional features.

Digital banking adoption is driven by age, education, and income. Younger users favor online shopping, while older demographics focus on essential services like fund transfers and bill payments. Educational qualifications enhance service utilization, while occupation and income shape service preferences. Banks should target segments with customized offerings to maximize engagement

1. **Influence of Socio-demographic factors on Service Preferences for Online Banking Services**

This study employs a **Two-Way ANOVA** to examine the relationship between service preferences and demographic factors. The analysis aims to investigate how various services, such as **Fund Transfer**, **Bill Payments**, **Account Statements**, **Online Shopping**, and **Others**, are influenced by demographic characteristics like **Age**, **Academic Qualification**, **Occupation**, and **Income**.

The primary objectives of this analysis are:

1. To identify significant differences in service preferences across different demographic groups
2. To detect variations in preferences among the types of services

### **Table 3: Age and Banking Activity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age Group** | **Fund Transfer (%)** | **Bill Payments (%)** | **Account Statements (%)** | **Online Shopping (%)** | **Others (%)** | **Average (%)** |
| Up to 18 | 75 | 50 | 0 | 25 | 0 | 38 |
| 18-25 | 80 | 54 | 14 | 57 | 9 | 51 |
| 26-30 | 79 | 68 | 5 | 42 | 0 | 49 |
| 31-40 | 82 | 86 | 18 | 41 | 0 | 57 |
| Above 40 | 100 | 70 | 45 | 35 | 0 | 63 |
| **Average** | **83** | **66** | **17** | **40** | **2** | -- |

The data reveals varying online banking habits across age groups. Fund transfers are widely used, peaking at 100% among those above 40, while bill payments are highest among the 31-40 group (86%). Younger users (up to 18) have the lowest engagement in most categories, especially account statements (0%). Online shopping is most popular among the 18-25 group (57%), but declines with age. Checking account statements is more frequent among older users, with 45% usage above 40. Overall, fund transfers and bill payments dominate, while online shopping and account statements show varied engagement across different age groups.

The null hypothesis is formulated as

**H11:**There is no significant difference in the means of the dependent variable (preferences) across the types of services.  
H12: There is no significant difference in the means of the dependent variable across the age categories

**Table 4: ANOVA result on age and baking activity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Source of Variation* | *SS* | *df* | *MS* | *F* | *P-value* | *F crit* |
| Rows | 1247.44 | 4 | 311.86 | 2.839996 | 0.059113 | 3.006917 |
| Columns | 13425.44 | 4 | 3356.36 | 30.56516 | 2.6e-07 | 3.006917 |
| Error | 1756.96 | 16 | 109.81 |  |  |  |
| Total | 16429.84 | 24 |  |  |  |  |

The two-way ANOVA results show that the Columns factor (Banking Activity) has a significant impact on the dependent variable (F = 30.57, P < 0.0001), indicating substantial differences among banking activities. However, the Rows factor (Age Group) is not statistically significant (F = 2.84, P = 0.059), as its P-value slightly exceeds the 0.05, the significance level. This suggests that while banking activities vary significantly, there is no considerable difference in these activities across different age groups.

### **Table 5: Academic Qualification and Banking Activity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Academic Level** | **Fund Transfer**  **(%)** | **Bill Payments**  **(%)** | **Account Statements**  **(%)** | **Online Shopping**  **(%)** | **Others**  **(%)** | **Average (%)** |
| High School | 100 | 58 | 33 | 17 | 0 | 42 |
| Trade/Vocational/ Technical | 100 | 79 | 11 | 47 | 0 | 47 |
| Bachelor’s Degree | 79 | 69 | 14 | 38 | 3 | 41 |
| Master’s Degree | 85 | 62 | 23 | 69 | 8 | 49 |
| Professional Degree | 90 | 70 | 20 | 40 | 10 | 46 |
| Doctorate | 100 | 50 | 0 | 25 | 0 | 35 |
| **Average** | **92** | **65** | **17** | **39** | **4** | -- |

Higher education levels correlate with diverse banking activity. Trade/vocational and professional degree holders demonstrate notable engagement (averages: 47% and 46%), while master’s degree holders lead in online shopping (69%). Surprisingly, doctorate holders exhibit the least overall usage (35%), potentially due to lower transactional needs. The average usage (49%) for master’s degree holders highlights their balanced approach to using various services.

The null hypothesis is formulated as

**H21:**There is no significant difference in the means of the dependent variable (preferences) across the types of services.  
H22: There is no significant difference in the means of the dependent variable across the academic qualification categories

**Table 6: ANOVA result on Academic Qualification and Banking Activity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Source of Variation* | *SS* | *Df* | *MS* | *F* | *P-value* | *F crit* |
| Rows | 426.96 | 4 | 106.74 | 1.029663 | 0.422087 | 3.006917 |
| Columns | 11893.76 | 4 | 2973.44 | 28.68316 | 4.04e-07 | 3.006917 |
| Error | 1658.64 | 16 | 103.665 |  |  |  |
| Total | 13979.36 | 24 |  |  |  |  |

The two-way ANOVA results indicate that the Columns factor (Banking Activity) has a statistically significant impact on the dependent variable (F = 28.68, P < 0.0001), showing notable differences among banking activities. Conversely, the Rows factor (Academic qualification) is not significant (F = 1.03, P = 0.422), as its P-value is well above the 0.05, the significance level. This implies that while banking activities differ significantly, there is no substantial variation in these activities across different academic qualifications.

### **Table 7: Occupation and Banking Activity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Occupation** | **Fund Transfer (%)** | **Bill Payments (%)** | **Account Statements (%)** | **Online Shopping (%)** | **Others (%)** | **Average (%)** |
| Student | 75 | 53 | 9 | 59 | 6 | 41 |
| Government Service | 100 | 75 | 20 | 35 | 0 | 46 |
| Private Sector | 93 | 75 | 18 | 25 | 4 | 43 |
| Business | 90 | 60 | 30 | 40 | 0 | 44 |
| Professional Practice | 89 | 67 | 22 | 44 | 0 | 44 |
| Retired | 100 | 0 | 100 | 0 | 0 | 40 |
| **Average** | **91** | **55** | **33** | **34** | **2** | -- |

Service-oriented occupations like government employees (46%) and private sector workers (43%) focus on fund transfers (100% and 93%), aligning with their transactional needs. Students prioritize online shopping (59%), reflecting their lifestyle preferences. Interestingly, retired individuals show selective usage, with a strong focus on account statements, indicating their need for financial monitoring. Professional practitioners and business owners use banking facilities moderately, balancing multiple services.

The null hypothesis is formulated as

**H31:**There is no significant difference in the means of the dependent variable (preferences) across the types of services.  
H32: There is no significant difference in the means of the dependent variable across the occupation categories

**Table 8: ANOVA result on Occupation and Banking Activity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Source of Variation* | *SS* | *df* | *MS* | *F* | *P-value* | *F crit* |
| Rows | 138.5667 | 5 | 27.71333 | 0.046541 | 0.998505 | 2.71089 |
| Columns | 26119.13 | 4 | 6529.783 | 10.96589 | 7.14e-05 | 2.866081 |
| Error | 11909.27 | 20 | 595.4633 |  |  |  |
| Total | 38166.97 | 29 |  |  |  |  |

The two-way ANOVA results indicate that the Columns factor (Banking Activity) has a significant effect on the dependent variable (F = 10.97, P < 0.0001), showing notable differences among different banking activities. However, the Rows factor (Occupation) is not statistically significant (F = 0.047, P = 0.999), as its P-value is much higher than 0.05. This suggests that while banking activities vary significantly, occupation does not have a significant impact on how individuals engage in these activities.

### **Table 9: Annual Income and Banking Activity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Income Range (₹)** | **Fund Transfer (%)** | **Bill Payments (%)** | **Account Statements (%)** | **Online Shopping (%)** | **Others (%)** | **Average (%)** |
| Up to 1.2 Lakh | 81 | 63 | 8 | 44 | 6 | 40 |
| 1.2-2.4 Lakh | 96 | 63 | 26 | 41 | 0 | 53 |
| 2.4-4.8 Lakh | 100 | 71 | 24 | 43 | 0 | 48 |
| Above 4.8 Lakh | 75 | 75 | 50 | 25 | 0 | 56 |
| **Average** | **88** | **68** | **27** | **38** | **2** | -- |

Higher-income groups (above ₹4.8 lakh) show the most diverse usage (average: 56%), with significant engagement in account statements (50%), reflecting their financial tracking needs. Lower-income groups primarily utilize fund transfers (81%) and have limited activity in other areas. Middle-income groups demonstrate balanced usage across services like bill payments (71%) and fund transfers (96%), reflecting their need for digital convenience while managing household expenses.

The null hypothesis is formulated as

**H41:**There is no significant difference in the means of the dependent variable (preferences) across the types of services.  
H42: There is no significant difference in the means of the dependent variable across the income categories

### **Table 10: ANOVA result on Annual Income and Banking Activity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Source of Variation* | *SS* | *df* | *MS* | *F* | *P-value* | *F crit* |
| Rows | 135.75 | 3 | 45.25 | 0.347187 | 0.791875 | 3.490295 |
| Columns | 18555.2 | 4 | 4638.8 | 35.59182 | 1.44e-06 | 3.259167 |
| Error | 1564 | 12 | 130.3333 |  |  |  |
| Total | 20254.95 | 19 |  |  |  |  |

The ANOVA results suggest that the row factor, which could represent annual income levels, does not have a statistically significant effect on the response variable (F = 0.347, P-value = 0.792). Since the P-value is much greater than the typical significance threshold (0.05), we fail to reject the null hypothesis, indicating that variations in annual income do not meaningfully impact the measured outcome. In contrast, the column factor does have a significant effect, suggesting that other categorical variables (such as different groups or conditions) play a more influential role in determining the response variable.

The two-way ANOVA results indicate that banking activity significantly impacts user engagement, as shown by highly significant F-values (ranging from 10.97 to 30.57) and P-values below 0.0001. This suggests notable differences among various banking activities. However, demographic factors such as age group, academic qualification, occupation, and annual income do not show a statistically significant influence on banking behavior, as their P-values exceed the 0.05 threshold.

These findings imply that while individuals engage in banking activities differently, these variations are primarily driven by the type of activity rather than personal attributes like age, education, occupation, or income level. This suggests that banks should focus on optimizing services based on activity type rather than demographic segmentation.

1. **User preferences in online banking service**

### **Table 11: User preferences of online banking services**

|  |  |  |  |
| --- | --- | --- | --- |
| Most used banks | Percentage | Facilities | Percentage |
| SBI | 51.0 | ATM | 30.0 |
| FEDERAL BANK | 13.0 | NET banking | 20.0 |
| ICICI BANK | 11.0 | Telephone banking | 5.0 |
| AXIS BANK | 7.0 | Mobile banking | 45.0 |
| HDFC BANK | 6.0 | SMS Banking | 0.0 |

The data reveals that **SBI** is the most preferred bank, accounting for 51% of usage, reflecting its widespread presence across India. Other banks, such as **Federal Bank (13%)**, **ICICI Bank (11%)**, and **Axis Bank (7%)**, have much smaller user bases, possibly due to their focus on specific customer segments or urban markets.. This trend highlights SBI's dominance and the competitive gap among other banks in reaching broader demographics.

In terms of banking facilities, **mobile banking (45%)** is the most used, showcasing a growing preference for digital convenience, especially among younger users. **ATMs (30%)** remain essential, indicating the continued relevance of cash transactions. **Net banking (20%)** follows as a favored digital option, while traditional methods like **telephone banking** and **SMS banking** are rapidly losing relevance. These trends underline the need for banks to focus on mobile-first strategies and digital innovation to meet the evolving preferences of modern customers.

1. **User Engagement and Satisfaction in Digital Banking Services**

The data reveals strong user satisfaction and engagement with the online banking services in the study area.

**Table 12: Engagement and Satisfaction in Digital Banking**

|  |  |  |
| --- | --- | --- |
| Aspect | Category | Percentage of users |
| Satisfaction level | Satisfied | 79.0 |
| Not satisfied | 1.0 |
| Neutral | 20.0 |
| Device used | Mobile phone | 99.0 |
| Computer/ Laptop | 1.0 |
| Frequency of usage | Daily | 61.0 |
| Weekely | 33.0 |
| Rarely | 6.0 |
| Online shopping purchases | Frequently | 90.0 |
| Rarely | 10.0 |
| Period of usage | Less than 1 year | 18.0 |
| More than 1 year | 82.0 |
| Recommendation | Positive | 84.0 |
| Negative | 1.0 |
| Neutral | 15.0 |

The data analysis revealed that 79% of the users are satisfied with the present online banking solutions reflecting a generally positive experience. The overwhelming use of mobile phones for accessing the service indicates the importance of mobile optimization. 61% of users engage with the service daily, showcasing high frequency, while 33% use it weekly, and a small group (6%) use it rarely.

The data also highlights the prominence of online shopping, with 90% of users shopping frequently, demonstrating the importance of integrating e-commerce capabilities. Additionally, 82% of users have been using the service for more than a year, suggesting strong retention. Finally, 84% of users would recommend the service positively, indicating a high level of trust and satisfaction among users. These insights suggest that mobile optimization and continued engagement could further enhance user experience and retention

1. **Trends and Challenges in Digital Banking**

**Table 13: Trends, Challenges and Policy Suggestions**

|  |  |  |
| --- | --- | --- |
| Aspect | Category | Percentage of users |
| UPI apps/ NetBanking/ Other channels | Gpay | 55.0 |
| Phonepe | 24.0 |
| Paytm | 14.0 |
| Net Banking | 6.0 |
| Others | 1.0 |
| Challenges Faced by Users in Digital Banking | Technical issues | 59.0 |
| Security concerns | 35.0 |
| Poor customer service | 3.0 |
| Complex processes | 2.0 |
| Others | 1.0 |
| Reasons for Using Digital Banking | 24-hour access | 30.0 |
| Easy to use | 29.0 |
| To save time | 27.0 |
| Cost effective | 7.0 |
| Convenience | 7.0 |
| Areas for Improvement in Digital Banking Services | Enhanced security measures | 32.0 |
| Better user interface | 32.0 |
| 24/7 customer support | 29.0 |
| More features | 6.0 |
| Others | 1.0 |

The data reveals key trends and challenges in digital banking, particularly UPI app usage. Gpay is the dominant platform with 55% of respondents, followed by PhonePe at 24%, and Paytm at 14%. Traditional banking through Net Banking still has a presence at 6%. The main challenge the users face is technical issues (59%), followed by security concerns (35%). Users primarily choose digital banking for its 24/7 access (30%), ease of use (29%), and time-saving (27%). Suggestions for improvement focus on enhancing security, improving the user interface, and providing 24/7 customer support.

**SUGGESTIONS**

We might conclude that the use of online banking plays a crucial role in our lives based on the study’s findings. We can better understand that recent trends in online banking by looking at the findings of the study, which focused on the rural e-banking users in the study area. The present study put forward the following policy suggestions:

1. The bank should make the e-channel (bank website) more accessible, convenient and secure from information loss.
2. Bank should disclose the full information regarding service charged, service tax, interest penalty etc. to the customers to win their confidence.
3. Give more information about online banking services among customers.
4. The online banking is developing day by day. So, the banks should enhance security measures and provide better user interface.
5. The online banks should solve the technical problems regarding the payments and ensure 24/7 customer support to the users.

**CONCLUSION**

The study reveals that consumers in rural areas have a generally positive perception of online banking and are satisfied with its efficiency and convenience. However, limited awareness of operational features, coupled with security concerns, hinders the full utilization of e-banking services. To enhance adoption, banks should focus on educating customers across all age groups and occupations, addressing knowledge gaps, and promoting trust through robust security measures. With sustained efforts, the future of e-banking in the region appears bright, promising greater accessibility and usage in the coming years

COMPETING INTERESTS DISCLAIMER:

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

Aggarwal, S., & Jain, A. (2011). Technological advancements in the banking sector in India: Challenges ahead. Abhinav Journal, 2(1).

Bashir, I., & Madhavaiah, C. (2015). Consumer attitude and behavioural intention towards Internet banking adoption in India. Journal of Indian Business Research, 7(1).

Chawla, S., & Sehgal, R. (2012). An empirical analysis of the awareness and satisfaction level of internet banking users with respect to demographic profile.

Indian Railways. (2023). Digital transformation initiatives. Indian Railways.

Kumar, S. (2012). Acceptance & emergence of internet banking: Indian customers' perspective. Asian Journal of Research in Business Economics and Management (AJRBEM, 2(7).

Marimon, F., Petnji Yaya, L. H., & Casadesus, M. (2011). Impact of service recovery on customer loyalty: A study of e-banking in Spain. Revista de Management Comparat International/Review of International Comparative Management, 12(1).

Ministry of Electronics and IT. (2023). Digital India: Progress and impact. MeitY.

Philip, P. (2020). Consumer perception towards internet banking in State Bank of India. International Research Journal of Management Science and Humanities (IRJMSH), 11(4).

Reserve Bank of India. (2022). Annual report 2021-22. RBI.

Sharma, N. (2012). An empirical study of rural customers’ satisfaction from e-banking in India. Journal of Internet Banking and Commerce, 17(3).

Sivathanu, B. (2019). Adoption of digital payment systems in the era of demonetization in India: An empirical study. Journal of Science and Technology Policy Management, 10(1).

Uprit, V. (2012). Satisfaction and effectiveness of virtual organization in excess of real organization: A study of selected commercial banks in India. Journal of Internet Banking and Commerce.

Woodside, A. G., Frey, L., & Daly, R. T. (1989). Linking service quality, customer satisfaction, and behavioral intention. Journal of Care Marketing, 5–17.