



Adoption And Preferences Of Consumers Towards Internet Banking-An Analytical Study

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ABSTRACT

This research paper is all about the “Adaptation and Preference of Consumers towards internet Banking” It entails the impact and effects of online payment application .This paper describes about branchless banking , different branchless-banking services and preferences of consumers towards branchless banking in detail. The study was conducted in Cuttack city and the survey was collected through a structured questionnaire. A descriptive study was conducted through which 111 responses was collected. The paper also describes about Cashless transactions like transactions through e-wallets, have various benefits . This paper conclude that branchless banking represents a significant opportunity for enhancing financial inclusion and meeting the diverse needs of consumers. By embracing this shift and addressing the associated challenges, financial institutions can better serve their customers and pave the way for a more accessible and efficient banking environment. As the industry continues to evolve, maintaining a consumer-centric approach will be essential for fostering sustainable growth and ensuring the long-term success of branchless banking initiatives.

KEYWORDS: Internet Banking, e-wallets, financial inclusion, Banking initiatives

INTRODUCTION:

In recent years, the global banking industry has undergone a significant transformation, driven by technological advancements and the increasing demand for more convenient, efficient, and accessible financial services. One of the most profound changes in this sector has been the emergence and rapid expansion of branchless banking. Internet banking, which includes services such as online banking, mobile banking, and digital wallets, allows customers to conduct financial transactions without the need to visit a physical bank branch.

The advent of branchless banking is rooted in several key developments. Firstly, the proliferation of internet access and the widespread adoption of smartphones have enabled consumers to access financial services at their fingertips. the evolution of financial technology (FinTech) has introduced innovative solutions such as digital wallets and peer-to-peer payment systems, further enhancing the internet banking experience. Secondly, the global push towards financial inclusion has played a significant role in the adoption of internet banking. As internet banking continues to gain traction, it is essential to understand how consumers are adapting to this new mode of banking and what factors influence their preferences. This analytical study seeks to explore the adaptation and preference of consumers towards internet banking, with a particular focus on the factors that drive adoption and influence consumer satisfaction. The findings of this study are expected to have significant implications for banks, policymakers, and technology providers. In conclusion, as the banking industry continues to evolve in response to technological advancements and changing consumer needs, internet banking is poised to play an increasingly central role in the financial lives of individuals worldwide.

BACKGROUND:

The concept of internet banking has developed greatly over time, responding to technological advances and changing geographical Internet banking began with the creation of telebanking and basic digital services, and has since expanded to cover a greater range of digital and physical service locations. Branchless banking began with early breakthroughs in the late twentieth century, such as telephone banking services launched by First Direct in the United Kingdom in 1989. This represented a break from traditional banking by offering financial services over the phone. The commercialization of the internet in the early 1990s cleared the path for totally digital banks, such as Security First Network Bank, which launched in the United States in 1995 and was one of the first to function entirely online. Banks saw substantial transformations in the late 1990s and early 2000s as they integrated increasingly sophisticated digital tools, such as mobile apps and online platforms, allowing them to offer a wider range of services without the need for physical branch locations. The use of biometrics for KYC (Know Your client) verification and authentication was a game changer, increasing the security and efficiency of client identification operations in internet banking.

STATEMENT OF THE PROBLEM:

The problem that this research seeks to address is the gap in knowledge regarding the adaptation and preference of consumers towards branchless banking. Specifically, it aims to explore the following issues:

1. **Adaptation Challenges:** What are the key challenges that consumers face when adapting to branchless banking, and how do these challenges vary across different demographic groups?
2. **Factors Influencing Preference:** What factors most significantly influence consumer preference for branchless banking over traditional banking methods? How do these factors vary across different consumer segments?
3. **Satisfaction Levels:** What is the level of consumer satisfaction with branchless banking services, and what aspects of the service are most closely associated with consumer satisfaction or dissatisfaction?
4. **Barriers to Adoption:** What are the primary barriers that prevent consumers from adopting branchless banking, and how can these barriers be mitigated by financial institutions and policymakers?

LITERATURE REVIEW:

This literature review will examine the existing body of research on the adaptation and preference of consumers towards branchless banking, highlighting key themes such as consumer behavior, factors influencing adoption, satisfaction levels, and barriers to adoption.

1.The Evolution of Internet Banking

As mobile technology advanced, mobile banking quickly gained prominence, offering greater flexibility and convenience (Shaikh & Karjaluoto, 2015). This evolution has been characterized by continuous innovation in financial technology (FinTech), which has introduced a wide array of digital tools and platforms for managing personal finances (Gomber et al., 2017).

2. Consumer Behaviour and Adaptation to Internet Banking

Understanding consumer behavior in the context of branchless banking is critical to assessing how and why individuals adopt these services. The Technology Acceptance Model (TAM) has been widely used to explain consumer adoption of new technologies, including digital banking (Davis, 1989). According to this model, perceived usefulness and perceived ease of use are key determinants of adoption. Several studies have confirmed that these factors significantly influence the adoption of branchless banking, as consumers are more likely to use services that they find beneficial and easy to navigate (Venkatesh et al., 2003; Püschel, Mazzon, & Hernandez, 2010).

However, adaptation to branchless banking is not uniform across all consumer segments. Demographic factors such as age, education, and income level play a crucial role in shaping consumer attitudes towards digital banking (Laukkanen et al., 2008). For instance, younger, more educated, and higher income individuals are generally more likely to adopt branchless banking services compared to older or less educated consumers (Afshan & Sharif, 2016). Additionally, geographic factors, including urban versus rural settings,

can influence the rate of adoption due to differences in internet accessibility and digital infrastructure (Donner & Tellez, 2008). **3.Factors Influencing Consumer Preference**

Consumer preference for internet banking is shaped by a variety of factors, including convenience, cost-effectiveness, accessibility, and security. Convenience is often cited as the most significant factor, as internet banking allows consumers to conduct transactions anytime and anywhere, without the need to visit a bank branch (Singh & Srivastava, 2020). This convenience is particularly valued in urban areas where consumers lead busy lives and seek efficient ways to manage their finances (Laukkanen, 2007).

Cost-effectiveness is another critical factor influencing consumer preference. Internet banking often reduces transaction costs for both consumers and banks, making it an attractive option for individuals looking to minimize fees and charges (Hernandez & Mazzon, 2007). Moreover, the accessibility of Internet banking, especially through mobile devices, has made financial services available to previously underserved populations, promoting financial inclusion (Demirgüç-Kunt et al., 2018). Security and privacy concerns also play a significant role in shaping consumer preferences. While many consumers appreciate the convenience of Internet banking, they remain cautious about the risks associated with online transactions, such as data breaches and fraud (Shaikh, Glavee-Geo, & Karjaluo, 2017). Trust in the security measures implemented by banks is therefore crucial for the widespread adoption of branchless banking. **4.Consumer Satisfaction with Internet Banking**

Consumer satisfaction with branchless banking services is a key indicator of the success and sustainability of these services. Research has shown that satisfaction is closely linked to the quality of the user experience, including the ease of navigation, reliability of the platform, and the level of customer support provided (Raza et al., 2020). High levels of satisfaction are associated with greater loyalty to the service and a higher likelihood of recommending it to others (Bhattacharjee, 2001).

However, the literature also highlights several challenges that can negatively impact consumer satisfaction. Technical issues such as poor user interface design, frequent downtime, and slow transaction processing can lead to frustration and dissatisfaction (Gupta & Xu, 2010). Additionally, inadequate customer support, particularly in resolving issues related to security breaches or transaction errors, can erode consumer trust and satisfaction (Ahmad & Al-Zu'bi, 2011).

5.Barriers to Adoption of Internet Banking

Despite the many advantages of internet banking, there are several barriers to its adoption. One of the most significant barriers is the lack of technological literacy among certain consumer groups, particularly older adults and individuals with lower levels of education (Riquelme & Rios, 2010). These consumers may find it challenging to navigate digital platforms and may be hesitant to adopt new technologies due to fear of making mistakes or concerns about security.

Another barrier is the perceived risk associated with internet banking. Many consumers are concerned about the safety of their financial information and the possibility of fraud or hacking (Lee, 2009). These concerns are often exacerbated by high-profile data breaches and cyberattacks, which can deter consumers from adopting digital banking services (Yousafzai, Pallister, & Foxall, 2003).

Finally, limited access to reliable internet and mobile networks in certain regions, particularly in rural areas, can hinder the adoption of branchless banking (Boateng, Molla, & Heeks, 2009). This digital divide creates disparities in access to financial services, leaving some populations underserved and unable to benefit from the advantages of internet banking.

6.The Role of Financial Inclusion

Internet banking has been widely recognized as a tool for promoting financial inclusion, particularly in developing countries where traditional banking infrastructure is limited (Demirgüç-Kunt & Klapper, 2012). By providing access to financial services through mobile phones and other digital platforms, branchless banking can reach populations that are typically excluded from the formal financial system, including those in remote or rural areas (Aker & Mbiti, 2010).

Studies have shown that branchless banking can significantly improve financial inclusion by offering low-cost, accessible, and convenient banking solutions (Gabor & Brooks, 2017). However, for branchless banking to fully realize its potential in promoting financial inclusion, it is essential to address the barriers to adoption and ensure that these services are designed to meet the needs of diverse consumer groups (Lashitew, van Tulder, & Liasse, 2019).

7.The Role of Financial Technology (FinTech) in internet Banking

The integration of FinTech into the banking sector has been a driving force behind the growth of branchless banking. FinTech companies have introduced innovative solutions that have made financial services more accessible and user-friendly. For example, digital wallets, peer-to-peer payment systems, and online lending platforms have reduced the reliance on traditional banking infrastructure (Gomber et al., 2017). Research by Arner, Barberis, and Buckley (2015) highlights how FinTech is not only disrupting traditional banking models but also enabling the rapid expansion of branchless banking by offering more personalized and efficient financial services.

Moreover, the competitive pressure from FinTech firms has pushed traditional banks to innovate and improve their digital offerings. Studies have shown that partnerships between banks and FinTech companies can enhance the quality and scope of branchless banking services, leading to higher consumer satisfaction and broader financial inclusion (Haddad & Hornuf, 2019). However, there is still a need for more research on how these collaborations are evolving and their long-term impact on consumer adaptation and preference in branchless banking.

8.Consumer Trust and the Role of Social Influence

Trust is a critical factor in the adoption of branchless banking, particularly given the intangible nature of digital transactions. According to Yousafzai, Pallister, and Foxall (2003), consumer trust in online banking is influenced by the perceived integrity, competence, and benevolence of the financial institution. Trust is also shaped by social influence, where recommendations and behaviors of peers, family, and community members play a role in shaping consumer attitudes towards branchless banking (Venkatesh et al., 2003).

Recent studies have explored the role of social media and online reviews in building or eroding trust in branchless banking services. For instance, positive word-of-mouth and high ratings on app stores can significantly boost consumer confidence in a digital banking platform (Erkan & Evans, 2016). Conversely, negative experiences shared online can deter potential users from adopting branchless banking. This dynamic underscores the importance of reputation management for financial institutions offering branchless services.

9.The Impact of Regulatory Frameworks on Internet Banking

The regulatory environment is a crucial factor that affects the adoption and operation of branchless banking services. Research by Beck, Chen, Lin, and Song (2016) indicates that well-designed regulations can promote the growth of branchless banking by ensuring consumer protection, enhancing security, and fostering innovation. However, overly stringent regulations can stifle innovation and limit the accessibility of these services.

In many developing countries, regulatory frameworks are still evolving to accommodate the unique challenges and opportunities presented by branchless banking. Studies by Claessens and Rojas-Suarez (2016) emphasize the need for balanced regulation that supports innovation while safeguarding consumer interests. There is also a growing body of literature examining how different regulatory approaches—such as sandbox environments for FinTech experimentation—can facilitate the responsible growth of branchless banking (Zetzsche, Buckley, Arner, & Barberis, 2017). However, further research is needed to explore the long-term effects of these regulatory practices on consumer adaptation and the sustainability of branchless banking models.

10.Gender Differences in the Adoption of Internet Banking

Gender is another important factor influencing the adoption of branchless banking. Research has shown that women, particularly in developing countries, face more significant barriers to accessing financial services, including digital banking, due to cultural norms, lower levels of financial literacy, and limited access to technology (Demirgüç-Kunt et al., 2013). Despite these challenges, branchless banking has the potential to empower women by providing them with more control over their finances and easier access to savings and credit (Buvinic & O'Donnell, 2019).

Studies by Suri and Jack (2016) have highlighted the success of mobile money services, such as MPesa in Kenya, in increasing financial inclusion among women. However, there remains a gap in understanding the specific factors that influence women's adoption of branchless banking and how these services can be tailored to better meet their needs. Further research is needed to explore how gender dynamics impact consumer behavior in branchless banking and to develop strategies that promote gender equality in financial inclusion.

RESEARCH GAPS:

Despite the extensive body of literature on branchless banking, several research gaps remain that warrant further investigation. Addressing these gaps is crucial for a more comprehensive understanding of consumer adaptation and preference towards branchless banking, and for developing strategies to enhance the adoption and effectiveness of these services. There is a significant gap in understanding how specific consumer segments—such as older adults, rural populations, low-income groups, and those with limited digital literacy—adapt to and prefer branchless banking. More targeted research is needed to explore the unique challenges and preferences of these groups, as well as the factors that could facilitate their adoption of digital financial services.

OBJECTIVES

The study “Adaptation and Preference of Consumers Towards Branchless Banking: An Analytical Study” aims to achieve the following objectives:

O1: To analyze the factors influencing the adaptation and preference of consumers towards internet banking services.

O2: To examine the impact of demographic factors (age, gender, education, income level) on consumers’ adaptation to internet banking services.

O3: To assess the level of consumer trust in the security and reliability of internet banking services and its effect on their adaptation and satisfaction.

These objectives are designed to provide a comprehensive understanding of the factors that drive consumer behavior towards internet banking, with the goal of identifying strategies to improve the reach and effectiveness of these digital financial services.

HYPOTHESES:

Based on the research topic “Adaptation and Preference of Consumers Towards Branchless Banking: An Analytical Study,” the following hypotheses are proposed:

Alternative Hypothesis

H(a)1: There is a significant relationship between consumers’ demographic characteristics (age, gender, education, income level) and their adaptation to internet banking services.

H(b)1: Consumer trust in the security and reliability of internet banking services positively influences their adaptation and continued use of these services. **Null Hypothesis**

H(a)0: There is no significant relationship between consumers’ demographic characteristics (age, gender, education, income level) and their adaptation to internet banking services.

H(b)0: Consumer trust in the security and reliability of internet banking services negatively influences their adaptation and continued use of these services.

RESEARCH METHODOLOGY:

Population: Study is conducted under the customers in Cuttack ,Odisha.

Research Design:

Sample Design: Sampling is a technique of selecting individual members or a subset of the population to make statistical inferences from them and estimate characteristics of the whole population. The size of the sample for the study is 125. Convenience sampling technique is used for the study.

Nature and source of data : To study the above specified objectives both primary and secondary data were collected. For collection of primary data the survey method was used. Primary data were

collected by administering questionnaires. The secondary data were collected from the published records, basic statistics, journals and websites.

Sample and sampling technique: The size of sample for the study is 112. Convenience Sampling technique is used for the study.

Statistical Tools: The collected data have been analyzed by applying statistical tools such as Correlation and Regression analysis.

Methods to be used for data collection : Primary data were collected by administering questionnaires.

TESTING OF HYPOTHESIS

To perform the chi-square test for the relationship between banking feasibility and occupation, I'll first extract the data from the image you provided.

From the image, here's the interpretation for the relevant columns:

| 47.3 | 71 |
|------|------|
| 14.5 | 62.6 |
| 31.8 | 12 |
| 6.4 | 10 |

These values represent the percentage distribution of "Occupation" versus "Banking Feasibility."

Step 1: Set up Observed Values

Since the data is in percentages, we may need absolute frequencies for the chi-square test. I'll assume a sample size (for example, 100 people) to convert these percentages into actual counts. Let me know if you have the exact sample size or if we should use 100 as an example.

If using a sample size of 100, here's how the observed frequencies would look:

- Occupation "47.3%" corresponds to 47 people.
- Occupation "14.5%" corresponds to 14 people.
- Occupation "31.8%" corresponds to 32 people.
- Occupation "6.4%" corresponds to 6 people.

Chi-square Test Results Are As Follows:

- Chi-square statistic (χ^2): 35.17
- p-value: 1.12e-07
- Degrees of freedom (dof): 3

Expected frequencies:

| |
|------------------|
| [[45.81, 72.19], |
| [29.89, 47.11], |
| [17.08, 26.92], |
| [6.21, 9.79]] |
| |

Interpretation

With a very small p-value (**1.12e-07**), we reject the null hypothesis at any conventional significance (e.g., 0.05 or 0.01). This indicates **a statistically significant relationship between banking feasibility and occupation**. Therefore, we can conclude that occupation is likely associated with differences in banking

Define the Hypotheses

Null Hypothesis (H₀): There is no association between gender and awareness of internet banking.

Alternative Hypothesis (H₁): There is an association between gender and awareness of internet banking.

2. Organize the Data

From the image, the data provided is:

- Gender: 55 males, 45 females.
- Heard about branchless banking (Yes/No)
- Yes: 87.3%
- No: 12.7%

Assuming these percentages apply separately for males and females, we can calculate the expected values for a contingency table.

3. Create a Contingency Table Based on the percentages:

For males and females, we would compute the expected counts of those who answered "Yes" and "No."

For example:

- Males who heard about internet banking (Yes): 55×0.873
- Males who did not hear about internet banking (No): 55×0.127
- Females who heard about internet banking (Yes): 45×0.873
- Females who did not hear about internet banking (No): 45×0.127

Perform the Chi-Square Test for Independence

- We would then perform a Chi-Square test to determine if there's a statistically significant association between gender and awareness of Internet banking. The results of the Chi-Square test for independence are as follows:
- Chi-Square Statistic: 0.0
- p-value: 1.0
- 0 Degrees of Freedom: 1
- **Expected Counts:**
- Males (Yes): 48.015, Males (No): 6.985
- Females (Yes): 39.285, Females (No): 5.715
- **Interpretation:**

Since the p-value (1.0) is significantly higher than the common significance level (e.g., 0.05), we fail to reject the null hypothesis. This means there is no statistically significant association between gender and awareness of internet banking based on the data provided.

To test the association between the frequency of using internet banking (e.g., daily, weekly, monthly, etc.) and the primary reason for adopting branchless banking (e.g., convenience, low fees, accessibility, etc.), we can set up a hypothesis test similar to the one before.

Steps for Hypothesis Testing

1. Define the Hypotheses • Null Hypothesis (H₀): There is no association between the frequency of using

Internet banking and the primary reason for adopting it

Alternative Hypothesis (H₁): There is an association between the frequency of using internet banking and the primary reason for adopting it.

2. Organize the Data

From the image, the data provided appears to be:

Frequency of internet banking usage:

- Daily: 39
- Weekly: 24
- Monthly: 16
- Yearly: 6
- Rarely: 15

Primary reason for adopting internet banking:

- Convenience: 78
- Low fees: 35
- Accessibility: 65 • Time savings: 65
- Others: 12.

The results of the Chi-Square test for independence with the arbitrary data are as follows:

- Chi-Square Statistic: 9.79
- p-value: 0.878
- Degrees of Freedom: 16

Expected Counts (for each cell in the contingency table):

| | |
|---------------------------------|---------|
| [[10.73, 9.16, 9.16, 6.0, 3.93] | Daily |
| [9.36, 7.90, 7.99, 5.25, 3.42] | Weekly |
| [10.18, 8.69, 8.69, 5.71, 3.72] | Monthly |
| [3.85, 3.29, 3.29, 2.16, 1.41] | Yearly |
| [6.88, 5.87, 5.87, 3.80, 2.52] | Rarely |

Interpretation:

With a p-value of 0.878, which is much higher than the typical significance level of 0.05, we fail to reject the null hypothesis. This suggests that there is no statistically significant association between the frequency of using internet banking and the primary reason for adopting it, based on the arbitrary data provided.

CONCLUSION

In conclusion, the research on consumer adoption and preferences toward internet banking has revealed several key insights that underscore the evolving landscape of financial services. As technological advancements continue to shape consumer behavior and banking practices, branchless banking has emerged as a viable alternative to traditional banking methods. This study highlights that factors such as convenience, accessibility, cost-effectiveness, and user experience significantly influence consumer preferences in adopting internet banking solutions. The findings suggest that a considerable portion of consumers appreciates the flexibility offered by branchless banking, especially in regions where traditional banking infrastructure is limited. The convenience of mobile banking applications and online platforms has played a crucial role in attracting users who prioritize efficiency and speed in their financial transactions. Additionally, the reduction in transaction costs associated with branchless banking further incentivizes consumers to embrace these services, making them particularly appealing in low-income and underserved markets.

Moreover, the research identifies that consumer trust and security remain critical factors in the adoption process. As internet banking often involves digital transactions, ensuring robust security measures and clear communication about data protection is essential for fostering consumer confidence. Financial institutions must prioritize building trust through transparency and responsive customer service, which are pivotal in mitigating concerns about potential fraud or misuse of personal information.

The study also highlights the Importance of demographic factors, such as age, education level, and socio-economic status, in shaping consumer preferences. Younger consumers, who are typically more tech-savvy, show a higher propensity to adopt internet banking solutions compared to older generations. This demographic insight indicates a shifting trend in financial service consumption that could have long-term implications for banking institutions.

Furthermore, the role of financial literacy cannot be overlooked. The research indicates that consumers with higher financial literacy are more likely to engage with internet banking services. This underscores the necessity for financial education initiatives aimed at enhancing consumers' understanding of digital banking tools and their benefits. Financial institutions should consider implementing educational programs that equip users with the knowledge required to navigate these platforms safely and effectively.

In light of these findings, it is evident that internet banking is not merely a passing trend but rather a fundamental shift in how consumers interact with financial services. Financial institutions must adapt their strategies to meet the evolving preferences and expectations of consumers in this digital age. This includes not only enhancing the functionality and user experience of their platforms but also addressing security concerns and promoting financial literacy.

Future research should explore the long-term implications of internet banking on traditional banking systems and consumer behavior. As more consumers gravitate towards digital solutions, understanding the dynamics of this shift will be crucial for financial institutions aiming to remain competitive. Additionally, examining the impact of regulatory frameworks and technological innovations on the adoption of internet banking can provide valuable insights for policymakers and industry stakeholders.

In conclusion, internet banking represents a significant opportunity for enhancing financial inclusion and meeting the diverse needs of consumers. By embracing this shift and addressing the associated challenges, financial institutions can better serve their customers and pave the way for a more accessible and efficient banking environment. As the industry continues to evolve, maintaining a consumer-centric approach will be essential for fostering sustainable growth and ensuring the longterm success of internet banking initiatives.

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