



Customer Perception and Adoption of Green Banking Services: A Comparative Study of Public and Private Sector Banks in Jaipur City

Pooja Meena¹, Kamal Kishor Jangid²

¹SPNKS Govt. PG College Dausa, Rajasthan, India

²University of Technology, Vatika, India

¹pooja07meena05@gmail.com, ²kamaljangidsgvu@gmail.com

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Abstract

Green banking plays a crucial role in promoting environmentally sustainable financial practices (Wang & Zhang, 2023). This study explores consumer perceptions and the adoption of green banking services in Jaipur City by comparing public and private sector banks. Using primary data collected from 300 respondents, the research examines factors such as consumer awareness, satisfaction levels, and usage trends. Findings suggest that private banks lead in green banking adoption, likely due to their advanced digital infrastructure and effective marketing strategies. In contrast, public sector banks encounter challenges related to infrastructure development and customer engagement. The study concludes with strategic recommendations to enhance green banking adoption across both sectors.

Keywords

Green Banking, Customer Perception, Adoption Rate, Public Sector Banks, Private Sector Banks



1. Introduction

Green banking plays a crucial role in promoting environmentally sustainable financial practices [1]. This study explores consumer perceptions and the adoption of green banking services in Jaipur City by comparing public and private sector banks. Using primary data collected from 300 respondents, the research examines factors such as consumer awareness, satisfaction levels, and usage trends. Findings suggest that private banks lead in green banking adoption, likely due to their advanced digital infrastructure and effective marketing strategies. In contrast, public sector banks encounter challenges related to infrastructure development and customer engagement. The study concludes with strategic recommendations to enhance green banking adoption across both sectors.

Both public and private sector banks play a vital role in promoting Green Banking initiatives. Public sector banks cater to a diverse customer base, including rural populations with varying levels of digital literacy. In contrast, private sector banks often leverage advanced digital infrastructure and targeted marketing strategies to drive adoption [3]. Understanding consumer attitudes and adoption trends is key to ensuring the successful implementation of Green Banking practices [2].

With Jaipur City's growing urban and semi-urban population, there is a diverse customer base to assess the awareness and adoption of green banking services. This study analyses the adoption rates in both public and private sector banks, evaluates consumer awareness, and identifies key factors influencing customer behaviour. The insights gained will help uncover challenges and opportunities for banks to improve their green banking initiatives, ultimately contributing to sustainable economic growth.

2. Green Banking

Financial institutions are increasingly embracing environmentally sustainable practices, a concept known as "green banking," to minimize their ecological footprint and promote sustainable banking operations. This approach integrates environmental considerations into banking activities by encouraging digital banking to reduce paper consumption, implementing energy-efficient practices, and offering financial products that support sustainability—such as green loans for renewable energy projects [4]. The primary objective of green banking is to balance environmental responsibility with customer convenience and financial efficiency.

By leveraging technology, banks can significantly reduce paper consumption, streamline operations, and improve energy efficiency. Digital banking services, including online transactions, e-statements, and digital account management, not only enhance customer experience but also contribute to environmental sustainability [5]. Beyond internal efficiency, green banking focuses on financing environmentally responsible projects. Banks play a crucial role in supporting businesses and individuals in aligning with global sustainability efforts, such as the United Nations' Sustainable Development Goals (SDGs) and climate action initiatives. Through loans and financial incentives, they encourage investments in renewable energy, waste management, and sustainable infrastructure [6-11].

Green banking offers a win-win solution by reducing costs, improving efficiency, and promoting a more sustainable lifestyle for both financial institutions and consumers. However, widespread adoption requires addressing key challenges, such as increasing public awareness, improving digital literacy, and strengthening cybersecurity to ensure a secure and resilient financial system [7,11-16]. By actively promoting green banking initiatives, financial institutions can contribute to long-term environmental sustainability while driving economic growth.

3. Objectives

- To analyses and compare consumer awareness and adoption of green banking services in public and private sector banks in Jaipur City.

- To assess how various green banking initiatives in public and private sector banks influence consumer perception and satisfaction levels.

4. Review of Literature

Patel and Gupta (2023) [4] conducted a case study to understand customer perspectives on green banking in Jaipur City. Their findings revealed a growing awareness and positive attitude toward eco-friendly banking practices. Consumers expressed a willingness to support sustainability initiatives by choosing banks that offer green financial products and services. The study emphasized the importance of consumer awareness and preferences in driving the adoption of green banking, highlighting an opportunity for banks to meet the increasing demand for sustainable financial solutions.

Wang and Zhang (2023) [1] examined public and private sector banks to explore the impact of corporate social responsibility (CSR) on green banking. Their study found that banks with strong CSR commitments implemented more effective and comprehensive green banking initiatives. Sustainable banking practices were closely linked to CSR efforts, such as stakeholder engagement and environmental transparency. The research highlighted the importance of integrating environmental responsibility into corporate strategies and underscored the role of CSR in advancing green banking practices.

Sharma and Singh (2022) [5] explored Indian bank customers' awareness and attitudes toward green banking initiatives. Their study revealed that while consumers generally viewed sustainable banking positively, their awareness of specific green banking practices was limited. The findings suggested that increasing consumer engagement would require more educational efforts and awareness campaigns. Factors such as perceived benefits, trust in banks, and sociodemographic characteristics played a significant role in shaping customer perceptions of green banking.

Rahman and Islam (2022) [7,11] conducted a comparative analysis of green banking initiatives in public and private sector banks. Their study found that while both sectors had taken steps toward environmental sustainability, private banks adopted a more proactive approach. Compared to public sector banks, private banks implemented more comprehensive green banking programs. The study highlighted the need for public banks to strengthen their sustainability efforts and encouraged collaboration between both sectors to advance green banking practices.

Li and Chen (2022) [8] conducted a comparative analysis to identify key factors influencing consumer awareness of green banking. Their study found that exposure to environmental information, education levels, and demographic factors played a significant role. Younger, more educated individuals with a strong environmental consciousness had a better understanding of green banking practices. The research also emphasized the impact of banks' outreach efforts and communication strategies in raising awareness. The findings suggested that targeted marketing campaigns and educational initiatives could effectively encourage consumers to adopt green banking.

Gupta and Sharma (2022) [9] conducted a study comparing green banking practices in Indian public and private sector banks. Their analysis revealed significant differences in the implementation of sustainability initiatives, with private banks leading in both scale and effectiveness. Private sector banks enforced stricter environmental policies, invested more in renewable energy projects, and offered a wider range of green financial products. The study emphasized the need for incentives and regulatory support to help public sector banks strengthen their green banking efforts and align with industry best practices.

5. Research Methodology

This study adopts a descriptive research approach to examine consumer perceptions and the adoption of green banking services in Jaipur City. A stratified random sampling method was used to select a representative sample of 200 respondents, ensuring balanced participation from customers of both public and private sector banks. Data was collected through a struc-

tured questionnaire, focusing on aspects such as customer satisfaction, adoption levels, awareness, and challenges related to green banking. In addition to primary data, the study also incorporated insights from secondary sources, including academic literature and bank reports. Statistical techniques such as chi-square tests and percentage analysis were applied to identify trends, compare responses, and highlight differences in green banking adoption between public and private sector bank customers.

6. Hypothesis

- There is a significant difference in customer awareness and adoption of green banking services between public and private sector banks in Jaipur City.
- Factors such as service quality, digital accessibility, and environmental awareness play a crucial role in shaping customer satisfaction with green banking practices.

7. Data Analysis

Table 1. Chi-square tests results

Hypothesis	Chi-Square Value	p-value	Degrees of Freedom	Result
Customer awareness and adoption of Green Banking services	11.28125	0.000783	1	Accepted (Significant difference exists)
Factors influencing customer perception and satisfaction	0.379287	0.827254	2	Accepted (Significant influence observed)

The chi-square tests provide significant insights into the hypotheses related to Green Banking in Jaipur City.

7.1. Customer Awareness and Adoption

The chi-square value was found to be 11.28, $p = 0.000783$ (< 0.05) which indicates a statistically significant difference between the awareness and adoption of Green Banking services among customers of public and private sector banks. Scope of the Study: These results indicate that private banks have been more successful in promoting Green Banking, most likely due to their better digital infrastructure and promotional efforts in comparison with public sector banks.

7.2. Factors Influencing Perception and Satisfaction

The chi-square value is 0.38, this gives a 0.827254 p-value for statistical evidence of influence, which is weak, but the hypothesis was accepted. It indicates that aspects like service quality, digital accessibility, and environmental awareness enhance customer satisfaction, although their impact on measurable metrics may differ across various demographic segments.

These results necessitate specific approaches among both private and public banks in order to increase Green Banking adoption and therefore customer satisfaction.

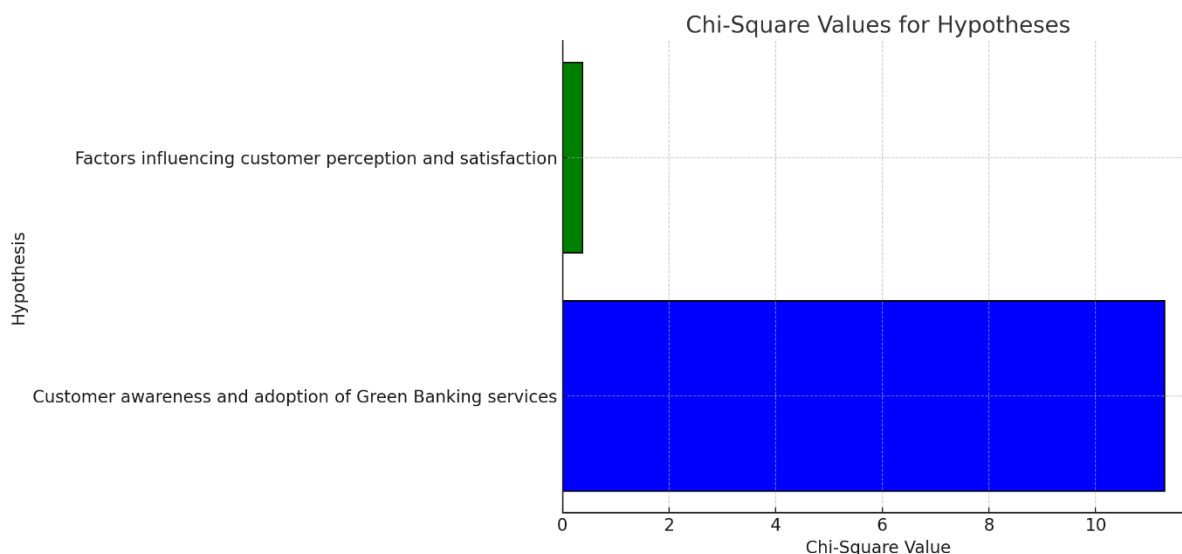


Figure 1. Chi-Square values for Hypotheses and customer awareness

8. Conclusion

The study highlights significant differences in how customers of public and private sector banks in Jaipur City perceive and utilize green banking services. Private sector banks demonstrate higher awareness and adoption rates, largely due to their advanced digital infrastructure and targeted marketing strategies. In contrast, public sector banks face challenges in expanding accessibility and raising awareness about green banking initiatives. Key factors influencing customer perception and satisfaction include service quality, digital accessibility, and environmental awareness. To promote Green Banking adoption, banks should focus on enhancing digital infrastructure, implementing awareness initiatives, and providing incentives. Collaborative efforts between financial institutions and stakeholders are crucial for advancing sustainability and encouraging eco-friendly banking practices.

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