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Customer Perception and SWOC Analysis of Green Banking Initiatives in Selected Public Sector Banks

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Abstract:

Green banking played a crucial role in the recent generation by focusing on environmentally friendly practices such as paperless transactions, renewable energy financing, and digital banking, aiming to foster economic growth while minimizing environmental impact. This study examined customer perception and conducted a SWOC (strengths, weaknesses, opportunities, and challenges) analysis of green banking initiatives in selected public sector banks in India. Using primary data from 50 respondents and secondary sources, it evaluated customer awareness, satisfaction, and accessibility to green banking services. Key strengths included heightened environmental consciousness and innovative products like green loans and savings accounts. However, challenges such as limited awareness, inadequate infrastructure, high operating costs, and resistance to change persisted. Bridging these gaps through customer education and improved access was identified as essential for fostering financial sustainability and engagement, offering actionable insights to help banks refine their green banking practices and build a sustainable, inclusive ecosystem.

Keywords: *Green banking, Customer perception, SWOC analysis, Sustainability, Environment impact.*

Introduction

In today's world, environmental concerns had significantly influenced global policies and corporate strategies, and the banking sector was no exception. As India advanced toward becoming a major global economy, the emphasis on sustainable and environmental development had become increasingly vital. Green banking emerged as a transformative practice within the

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financial sector, incorporating environmental considerations into everyday banking operations. This concept promoted environmentally conscious practices and aimed to reduce the carbon footprint of banking activities. Public sector banks, as key contributors to the Indian economy, played a pivotal role in implementing green banking initiatives. These initiatives included paperless banking, green loans, energy-efficient branches, and financing eco-friendly projects. To gauge the success and acceptance of these efforts, understanding customer perception was crucial. Customers' willingness and awareness regarding green banking services largely determined the effectiveness of such initiatives. Additionally, conducting a SWOC (Strengths, Weaknesses, Opportunities, and Challenges) analysis provided insights into the factors influencing the adoption of green banking practices. It offered a comprehensive understanding of both internal and external elements impacting these initiatives. This research paper focused on customer perceptions and a SWOC analysis of green banking initiatives within selected public sector banks. The study aimed to shed light on the factors affecting the implementation and adoption of green banking, examining customer attitudes, satisfaction levels, and awareness. The SWOC analysis further highlighted benefits, constraints, and opportunities for public sector banks in promoting sustainable banking practices.

Green Banking

Green banking was a revolutionary approach within the financial sector, emphasizing the integration of environmental concerns into banking operations to minimize carbon emissions in daily activities. **Rugimbana et al. (2008)** defined green banking as banking practices that incorporated environmental considerations into financial decisions, fostering sustainability in operations and services. This approach underscored the need to balance profitability with social responsibility. Similarly, **Suma and Kiran (2020**) highlighted green banking as a strategic initiative by banks to promote sustainable development by financing renewable energy projects and other eco-friendly investments. It reflected the banking sector's role in cultivating an environmentally responsible economy through policies and practices.

History of Green Banking

The origins of green banking dated back to the 1980s and 1990s, with international agreements such as the Brundtland Report (1987) emphasizing sustainable development. The 2003 launch of the Equator Principles encouraged financial institutions to account for environmental and social risks in their lending and investment decisions. By the mid-2000s, the Reserve Bank of India (RBI) began actively promoting green banking by urging banks to adopt environmentally conscious practices. These included green loans, renewable

energy financing, and paperless banking systems, all aimed at reducing the sector's environmental impact and fostering sustainability.

Core Elements of Green Banking

1. Carbon Footprint Reduction: Banks adopt energy-saving practices, minimize paper usage, and promote digital banking solutions.
2. Sustainable Investments: Resources are allocated to environmentally friendly projects, including renewable energy, clean technologies, and sustainable agriculture.
3. Ethical Financing: Banks avoid funding projects or businesses that harm the environment, such as those causing deforestation or pollution.

Major Green Banking Products and Services

The Indian banking industry has introduced a variety of green banking products and services to enhance customer convenience while promoting environmental sustainability. These include Green Mortgages designed for energy-efficient buildings and Green Bonds to support eco-friendly projects. Green Car Loans are available for purchasing electric vehicles, while Green Financing facilitates investments in sustainable ventures. Online banking and Mobile banking reduce paper use and enhance accessibility. Green Savings Accounts, Green Debit Cards, and Green Credit Cards provide eco-conscious financial solutions. Other innovations include Green Home Equity Loans, Green ATMs offering paperless statements, and Electronic Fund Transfers. Additionally, Green Certificates of Deposits and Green Insurance further expand the spectrum of sustainable banking offerings.

SWOC Analysis of Green Banking

Strengths: Green banking reduced transaction times, costs, and reliance on paper, promoting environmental sustainability. It offered customers the convenience of anytime, anywhere banking while enhancing efficiency and fostering technological literacy.

Weakness: High implementation costs and limited customer awareness hindered the adoption of green banking. Additionally, the narrow range of green products restricted banks from catering to diverse customer needs.

Opportunities: Green banking could capitalize on the rising demand for eco-friendly financial services by expanding offerings and leveraging technological advancements. Collaboration with governments and stakeholders could further drive innovation and sustainability.

Challenges: Significant initial investments, complex risk assessments, and adapting traditional systems to green practices posed challenges. An underdeveloped market for green projects and a shortage of skilled professionals in green finance further limited implementation.

Review of Literature

Sahi (2017) observed significant demographic variations in green banking awareness, with educated youth displaying a more favorable perception of these initiatives. Tejaswini (2019) further highlighted that literate clients tend to have a positive attitude towards green banking products, underlining the critical role of education in shaping customer perceptions. Sharma, Goyal, and Sharma (2014) identified a lack of comprehensive awareness about green banking products, including green loans, online banking, and eco-friendly services, as a primary barrier to customer engagement with sustainable banking practices. Similarly, Malliga and Revathy (2016) and Deka (2012) emphasized the need for targeted campaigns and educational initiatives to improve consumer understanding of green banking benefits. Sharma et al. (2014) also noted that while many customers were aware of some green banking initiatives, they often lacked detailed knowledge of the full spectrum of available services, which hindered adoption. Ganesan and Bhuvaneswari (2016) explored the correlation between educational qualifications and green banking awareness, concluding that enhanced financial literacy could significantly boost customer participation. Madhumathi and Nagadeepa (2020) identified limited consumer awareness as a deterrent for banks to invest in sustainable initiatives due to high initial costs. Chandrasekaran (2024) suggested leveraging digital platforms to increase accessibility and engagement with green banking services. Finally, Pawar, Deepthi, Sridharan, and Rao (2022) proposed that collaborations with environmental organizations and government programs could enhance the effectiveness of green banking, creating a robust framework for sustainability.

Scope

As the number of customers increased daily and their awareness of green banking initiatives and technology-based products grew, their concern for saving future resources proved beneficial in various situations. This research aimed to provide a comprehensive understanding of customer perceptions regarding green banking initiatives within selected public sector banks in India. It assessed customer awareness of various green banking products and services, including online banking, green loans, and mobile banking facilities, while also evaluating customer satisfaction with these environmentally friendly services, focusing on service quality, security, and user experience. A detailed SWOC (Strengths, Weaknesses, Opportunities, and Challenges) analysis was conducted to explore the impact of demographic factors such as age, gender, education, and income on customer perception and satisfaction. Based on the findings, strategic recommendations were provided to improve customer engagement with green banking initiatives and promote sustainable banking practices in the economy.

Research Gap

While previous studies have highlighted the positive attitudes of educated individuals toward green banking, there has been limited exploration of issues such as cybersecurity concerns and resistance to change, especially within the context of public sector banks undergoing digital transformation. This study aimed to address these gaps by examining not only customer perceptions but also the tangible barriers affecting the acceptance and implementation of green banking initiatives.

Research Objectives

1. Assessed customer awareness levels regarding green banking initiatives.
2. Analysed customer perceptions of the benefits and drawbacks of green banking products and services, including their willingness to adopt these initiatives.
3. Conducted a SWOC analysis of green banking initiatives based on customer perceptions.
4. Identified specific barriers hindering the adoption of green banking practices.

Research Design and Methodology

This study employed both primary and secondary data sources. Primary data were collected using a structured questionnaire administered to respondents, while secondary data were obtained from banking journals, annual reports, books, newspapers, and relevant websites. The collected data were tabulated and analysed using non-parametric methods. A sample size of 50 respondents was chosen due to constraints in accessibility and time. Banks were selected based on their rankings in annual reports.

Data Analysis

Table 1: Cross Tabulation of Awareness by Age, Gender, and Occupation

Age Group	Gender	Occupation	Aware (Yes)	Not Aware (No)	Total Respondents
Below 25	Female	Student	15	4	19
	Male	Student	13	5	18
	Female	Private Sector	2	0	2
	Male	Private Sector	4	1	5
26–35	Female	Public Sector	1	0	1
	Male	Private Sector	1	0	1
36–45	Male	Public Sector	0	1	1
Above 45	Male	Self-employed	0	1	1
Total			**38**	**12**	**50**

Source: Primary data collection.

Table 2: Cross Tabulation of Satisfaction by Age, Gender, and Occupation

Age Group	Gender	Occupation	Very Satisfied	Satisfied	Neutral	Total Respondents
Below 25	Female	Student	3	14	15	32
	Female	Private Sector	0	1	2	3
	Female	Public Sector	0	0	1	1
	Male	Student	2	7	10	19
	Male	Private Sector	0	2	1	3
	Male	Public Sector	0	1	0	1
26–35	Female	Private Sector	1	1	0	2
	Male	Public Sector	0	0	0	0
36–45	Male	Private Sector	0	0	1	1
Above 45	Male	Self-employed	1	0	0	1
Total			**7**	**26**	**30**	**50**

Source: Primary data collection.

Table 3: Gap Analysis of Strengths, Weaknesses, Opportunities, and Challenges

Category	Aspect	F	%	Aggregate %
Strengths	Promotes environmental sustainability	40	80	
	Convenient and paperless transactions	34	68	
	Cost-efficient services	28	56	
	Other	2	4	
Challenges	Lack of awareness	30	60	
	Technical issues	33	66	
	Security concerns	19	38	**+44**
Opportunities	Increasing environmental awareness	14	28	
	Expanding digital infrastructure	29	58	
	Offering more incentives for green banking	7	14	
Threats	Cybersecurity threats	42	84	
	Resistance to change	22	44	
	Lack of infrastructure	18	36	**-64**

Source: Primary data collection.

Table 4: Cross Tabulation of Security and Challenges

Security Level	F	%	Related Challenges
Very Secure	5	10	Security Concerns (38%)
Secure	24	48	Security Concerns (38%) Technical Issues (66%)
Neutral	20	40	Security Concerns (38%), Lack of Awareness (60%)
Insecure	1	2	Security Concerns (38%)
Total	**50**	**100**	

Source: Primary data collection.

Table 5: Chi-Square Test Between Demographics and Awareness

Variable	Category	Aware (Observed)	Not Aware (Observed)	Total
Age	Below 25	35	11	46
	26–35	2	0	2
	36–45	1	0	1
	Above 45	0	1	1
Gender	Male	19	6	25
	Female	19	6	25
Occupation	Student	30	7	37
	Self-employed	1	0	1
	Private Sector	5	5	10
	Public Sector	2	0	2
Total		**38**	**12**	**50**

Source: Primary data collection.

Hypotheses

- **H_0:** There is no association between Age, Gender, and Occupation with Awareness of Green Banking.
- **H_1:** There is an association between Age, Gender, and Occupation with Awareness of Green Banking.

The Chi-Square test statistic ($X2$ = 9.2914), measures the discrepancy between the observed and expected frequencies under the assumption of independence between awareness and the categories (age, gender, and occupation). With 9 degrees of freedom and a p-value

of 0.4108 (greater than the common significance level of 0.05), the test fails to reject the null hypothesis, indicating no significant association between awareness and the categorical variables. However, the low p-value suggests that the observed differences could reasonably occur by chance

FINDINGS

1. Younger respondents (<35) predominantly demonstrated higher awareness of green banking initiatives, indicating a need for targeted outreach among older demographic groups.
2. No significant disparity was observed between genders, as awareness campaigns were found to be equally effective for both.
3. Private sector employees and students exhibited the highest levels of awareness, while the self-employed group required focused interventions to improve their understanding.
4. Older respondents (26+) reported higher levels of satisfaction, whereas younger respondents (<25) tended to remain neutral.
5. Gender differences in satisfaction were negligible, with both males and females displaying moderate satisfaction levels alongside a high degree of neutrality.
6. Private sector employees emerged as the most satisfied group, while students and other demographic segments required enhanced engagement.
7. A positive gap of +44% indicated that respondents perceived the advantages of green banking more prominently than its challenges, reflecting strong public support for its core benefits.
8. A negative gap of -64% highlighted those perceived threats significantly outweighed opportunities, suggesting limited confidence in overcoming major barriers to adoption.
9. Most respondents expressed feeling secure using green banking services; however, significant challenges such as security concerns and technical issues persisted.
10. A lack of awareness further contributed to neutral or insecure perceptions, emphasizing the need for enhanced security measures, improved technical reliability, and user education to build trust and promote adoption.

Suggestions

The following suggestions were given by respondents, which are considered beneficial:

1. Public sector banks could enhance their green banking initiatives by adopting sustainable financing, investing in eco-friendly technologies, and promoting awareness of green financial products.
2. Educate customers and employees about sustainable practices, such as reducing plastic use, conserving water, and minimizing waste.

3. Create awareness campaigns.
4. Ease usage and resolve technical issues.
5. Embrace technology, collaboration, and partnerships.

Conclusion

This research provided valuable insights into customer perception and the SWOC analysis of green banking initiatives in selected public sector banks in India. Based on the research and SWOC analysis, the banks were suggested to increase their outreach efforts in education and training to update customers about existing green banking initiatives. This would help promote greater engagement and satisfaction among customers and ultimately contribute to a more sustainable banking environment. The implications of this research were not only to guide public sector banks in improving their green banking strategies, but also to inspire future researchers to explore the broader dimensions of sustainable practices in the banking sector.

References

- Abishek N, Abdul Khadar Aneesh A, Abdul Rasheed K.M, Mubeena M. (2023). A study of perception of self-employed professionals towards green banking initiatives on major public sector banks at Belthangady Dakshina Kannad. Retrieved from https://irjems.org/irjems-v2i1p121.html
- Anu Sahi and Anurag Pahuja. (2017). Changing scenario of banking: An empirical study on customers' perspective on green banking. Retrieved from https://amity.edu/abs/abr/pdf/Vol%2018%20No.1/5.pdf
- HMAK Herath & HMSP Herath. (2022). Impact of green banking initiatives on customer satisfaction. Retrieved from https://www.researchgate.net/publication/361944965_Impact_of_Green_Banking_Initiatives_on_Customer_Satisfaction
- Jayadatta S & Nitin S N (2017). Opportunities, challenges, initiatives, and avenues for green banking in India. Retrieved from https://www.ijbmi.org/papers/Vol(6)2/version-3/B0602031015.pdf
- Narayanan M (2022). A study on customer perception towards green banking initiatives with special reference to State Bank of India (SBI) in Tirunelveli District. Retrieved from, https://ijcrt.org/papers/IJCRT2201282.pdf
- Pawar, D. S., Sridharan, & Rao. (2022). Collaborations with environmental organizations and government programs for enhanced green banking. Retrieved from https://financialservices.gov.in/beta/en/public-sector-banks

- Sarath Chandran M.C. & Dr. B. Sathiyabama. (2020). Perception on green banking practices in selected commercial banks in Kerala. Retrieved from https://media.neliti.com/media/publications/426422-consumer-education-on-green-banking-for-90e4c454.pdf
- Somya Gupta (2024). Green Banking Initiatives in India: A study of selected Banks. Retrieved from, https://shodhgangotri.inflibnet.ac.in:8443/jspui/bitstream/20.500.14146/15928/1/synopsis.pdf