EFFECT OF CUSTOMER'S OVERALL OUTLLOOK TOWARDS GREEN BANKING PRACTICES

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ABSTRACT

The present research aims to explore the connection between the socioeconomic backgrounds of respondents and their awareness levels as bank customers. It will also investigate the relationship between their awareness and customer opinions, along with the various factors that shape customer perspectives on green banking practices. Primary as well as secondary sources of data are used in this research. In the Madurai district, information was gathered from customers of the three leading public sector banks: State Bank of India, Bank of Baroda, and Canara Bank. Convenience sampling is used to choose 200 respondents for the study, which fills a research gap. The RBI website, scholarly journals, and the annual reports of different banks were the sources of secondary data. The research employed statistical methods including reliability testing, frequency analysis, factor analysis, independent T-tests, and correlation analysis. The analysis identified seven factors influencing customer opinions on green banking: security, responsibility, sustainability, eco-consciousness, ease of use, accessibility, and availability.

Keywords: Green Banking, Public Sector Bank, Customers Opinion and Awareness Level



1. INTRODUCTION

To ensure that future generations can meet their demands, sustainable development takes into account the needs of the present generation. This strategy has caused "go green" practices to spread over several industries. A key part of India's financial system, the banking industry is also essential to the country's sustained growth. When it comes to strengthening environmental protection initiatives, financial institutions are essential. The idea of green banking has been adopted by banks to protect the environment. The term "green banking" sets itself apart from typical banking, which prioritizes security and profitability over ethical considerations. An inventive strategy that highlights the significance of socially conscious investing and environmental sustainability is green banking. Green banking is the promotion of ecologically friendly practices and the reduction of the carbon footprint of banking activities (Dr. Bibhu Prasad Sahoo, 2016). The Institute for Development and Research in Banking Technology defines "green banking" as a comprehensive term that encompasses policies and procedures that promote sustainability in the social, environmental, and economic aspects of the banking industry. To attain maximum efficiency and effectiveness, the goal is to optimize banking procedures and the use of physical and IT infrastructure while guaranteeing little to no environmental impact. The protection of the environment and natural resources is the main benefit of the green banking paradigm. Green banking reduces paperwork and prioritizes electronic transactions for daily activities, including using ATMs, mobile

banking, and online banking. Electronic transactions give banks and customers convenience while promoting sustainability. Decreased documentation leads to less deforestation. Banks should adopt environmental lending standards to create environmentally friendly business practices, as this improves the quality of their assets. Customers' environmental performance is greatly impacted by the bank's operations (Cholasseri Shakkeela, 2016). A substantial number of banks provide consumers with a wide range of environmentally friendly services, such as online and mobile banking, green auto loans, green remit cards, and green PIN creation tools (Neeraja T. S. & Dr. Raji Joseph, 2021). To find out what customers think about green banking, this study looks at the green banking policies of State Bank of India, Bank of Baroda, and Canara Bank.

2. LITERATURE REVIEW

Researchers concentrated on the main objective and reviewed many studies on this topic, among the few most relevant literature reviewed, those literature discussed in the following:

2.1. LEVEL OF AWARENESS TOWARDS GREEN BANKING PRACTICES BY GENDER

The assessment focuses on how environmentally sustainable technologies also provide economic advantages for the banking sector. Currently, it is widely accepted that embracing environmentally sustainable banking practices leads to cost and time savings, reduces risk, improves the reputation of financial institutions, and supports the broader goal of environmental sustainability. The results show that respondents who were male and female did not significantly differ in their awareness of green banking products. Consequently, the female respondents exhibit a greater awareness of green banking products. Additionally, the male respondents consistently show a 7.25 percent awareness level of the green banking solutions provided by the choose and commercial bank (C. Vijai 2018). The notion of green banking initiatives has recently emerged in India. However, in comparison to Western nations, India lags significantly in implementing these green banking practices. Despite having one of the most comprehensive traditional branch banking systems, we are not fully utilizing the potential of the green banking system. Customers from various gender groups encounter specific challenges related to green banking initiatives. Subsequently, there is no correlation between customers encountering issues in green banking initiatives and the gender cluster of customers (Sri. M. Narayanan and S. Chandrasekaran 2021).

H0: The mean response to level of awareness towards green banking practices from male and female bank customers does not differ significantly

2.2. LEVEL OF AWARENESS TOWARDS GREEN BANKING PRACTICES BY MARITAL STATUS

Research by Singh and Singh (2012) suggests that customer awareness significantly influences their willingness to adopt green banking services, including online banking, paperless transactions, and eco-friendly investments. Similarly, Rahman et al. (2017) highlight that higher awareness levels correlate with an increased likelihood of utilizing sustainable banking products. However, disparities in awareness exist among different customer demographics, including age, education level, and marital status (Islam et al., 2021). According to Malik & Garg, 2020 suggested that the single customers, particularly young professionals, may exhibit higher awareness of digital and green banking initiatives due to their greater reliance on technology. The researcher argue that younger and unmarried customers are more receptive to digital banking innovations, which are integral to green banking practices. However, the extent to which marital status significantly influences awareness remains inconclusive, warranting further empirical investigation.

H0: Single and Married bank customers mean response to level of awareness towards green banking practices does not differ significantly

2.3. FACTORS INFLUENCING THE LEVEL OF CUSTOMER OPINION TOWARDS GREEN BANKING PRACTICES

Tanima Saha Shampa and Md. Imrul Jobaid (2017) collected 246 responses from bank customers in Bangladesh to find out what influences their expectations about green banking practices. "Information availability and customer needs, spirit of ethics and high-yield savings, energy efficiency, product benefits, and integration and personalization" were the

five main criteria that were found in the analysis. Furthermore, by encouraging financial institutions to save costs, environmentally friendly banking practices enable them to offer larger returns, which will raise client expectations. The dependent variable in the model developed by Herath H.M.A.K. and Herath H.M.S.P. (2019) is "overall customer satisfaction on green banking." The model's primary independent variable, "features of green banking initiatives," is further subdivided into four sub-independent variables: qualities related to value generation, security and trust, simplicity of use, and environmental and social concern. A suitable selection technique was used to select 300 participants for a study by Deepak Shrivastava and colleagues (2019) that examined the factors impacting the adoption of green banking in Indore city. The eigenvalue is used to categorize the factors that have been identified into six groups. These include the green banking products and services' usefulness and accessibility, the bank's help desk's availability, the purpose to utilize them, the process for doing so, account security, their effectiveness, and the pressure to do so. The findings show that when it comes to using green banking products and services, people place a high value on usability and accessibility. The results of a survey conducted by Kishore Kumar et al. (2022) revealed that six criteria are important in influencing Indian commercial banks' adoption of green banking practices. The components include competitive positioning, customer needs and advantages, economic considerations, ethical standards, legal considerations, environmental concerns, and regulatory compliance. Environmental considerations and regulatory compliance are the main factors influencing Indian commercial banks' embrace of green banking. Green banking successfully handles several aspects of sustainability and contributes significantly to the reduction of carbon footprints.

H0: Level of awareness and customers opinion are not significantly correlated

3. OBJECTIVES

- To understand the factors influencing the level of customer opinion towards green banking practices in Madurai District.
- To examine the relationship between selected socio-economic variables and the level of awareness of bank customers.
- To find out the correlation between the level of awareness and customers opinion towards green banking practices.

4. METHODOLOGY

4.1. RESEARCH DESIGN AND TOOLS

The level of awareness and its effect on consumer perceptions of green banking practices are investigated in this empirical study. Both descriptive and quantitative approaches are used in the study. IBM SPSS 26 was used to evaluate the data gathered from a questionnaire survey. The internal consistency of the variables being studied—more especially, the customer opinion and awareness scales—is evaluated using statistical tools like Cronbach's alpha. The components of consumer opinion are grouped into discrete factors using exploratory factor analysis, and the study's hypotheses are assessed using the Pearson correlation coefficient and an independent sample t-test.

4.2. SAMPLING

The sampling unit is chosen from the population using a convenience sampling technique, which is categorized under non-probability sampling. Original data was the main focus of the inquiry. With an emphasis on their net profit, information was obtained directly from the clients of the top three public sector banks in Madurai district: State Bank of India, Bank of Baroda, and Canara Bank in Madurai district. The questionnaire was filled out by 215 respondents in total; 200 responses remained for the final data analysis after 15 responses were eliminated because they were not appropriate for statistical analysis.

4.3. MEASUREMENT SCALE

The survey is divided into three sections: customer attitudes, awareness level, and respondent demographics. Many internal and external eco-friendly initiatives are implemented by banks in compliance with sustainable banking principles. To find out what customers think about green banking practices, a measurement scale and questionnaire

were created. It included 32 statements that were scored on a five-point Likert scale, with 1 meaning strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly agree. Customer opinions, which were divided into seven parts according to an eigenvalue, were analyzed using the total score of these questions. A questionnaire based on definitions, concepts, theories, and elements impacting customer awareness was created to gauge bank customers' knowledge of green banking practices. The tool consists of 15 items that are scored on a five-point Likert scale, where 1 represents extremely low, 2 low, 3 moderate, 4 high, and 5 very high.

5. RESULT AND DISCUSSION

The section focused on the interpretation of the tables with a clearer presentation of the result. The result is shown in Table 1.

Table 1 Profile of the respondents

P	rofile	No. of Respondents	Percentage
Gender	Male	106	53.0
	Female	94	47.0
Marital	Single	126	63.0
Status	Married	74	37.0
Age	18 to 28 years	107	53.5
	29 to 39 years	51	25.5
	40 to 50 years	19	9.5
	Above 50 years	23	11.5
Educational	Upto school level	24	12.0
Qualification	Under graduate	71	35.5
	Post graduate	89	44.5
	Others	16	8.0
Total		200	100

Source Computed from Primary data

The demographic breakdown of 200 respondents is shown in Table 1: There are 47 percent females and 53 percent males. When it comes to marital status, 37% are married and 63% are single. Age distribution reveals that 53.5 percent fall within the 18 to 28 age group, 25.5 percent are aged 29 to 39, 9.5 percent are aged 40 to 50 years, and 11.5 percent are over 50 years. Educational qualifications indicate that 12 percent have completed school, 35.5 percent hold undergraduate degrees, 44.5 percent are postgraduates, and the remaining 8 percent possess diplomas.

5.1. EXPLORATORY FACTOR ANALYSIS

The 32-item customer opinion scales were reduced to a small number of elements using a principal components analysis that included Varimax rotation and Kaiser Normalization.

Table 2 Factors analysis of customers opinion scales

Customers Opinion Item	Factor Loading								
	1	2	3	4	5	6	7		
Factor 1: Security & Trust									
Green banking sends transaction alert message to protect customers	.727								
from unfair practices									
Green banking avoids pay in slip, withdrawal & remittance forms	.676								

Banks explain about green banking initiatives in a clear and	.665						
understanding manner							
Bank maintain accurate records of all customer transaction	.656						
Paperless statement reduces customer's risk of fraud	.623						
Banks make friendly relationship with customers	.563						
Green banking protects the personal information about customers	.547						
Factor 2: Responsibility							
Educate the customers about green banking benefits		.736					
Bank provides advertisement and pamphlet about green banking		.708					
Banks create awareness programs about green banking practices		.673					
Satisfying the customers by resolving their inquiries		.620					
Banks convey the benefits present in green banking		.591					
OTP system secures the electronic transactions		.467					
Bank provides proper response for customer queries regarding green		.464					
banking							
Factor 3: Sustainability							
Encourage the customer to use digital banking			.722				
Promote the use of energy efficiency product			.719				
Increase energy saving			.707				
Reduce the usage of non-renewable resources			.637				
Less paper usage			.620				
Factor 4: Eco-conscious							
Control air pollution				.788			
Encourage the eco-friendly business				.696			
Less harm to the environment				.660			
Factor 5: Easy to use							
Energy conservation					.720		
Easy to understand the green banking practices					.706		
Provide 24×7 services					.648		
Factor 6: Accessibility							
Reduce transportation cost						.640	
Reduce the carbon footprints						.620	
Easy and convenient to access						.607	
Saving time						.566	
Factor 7: Availability							
Bank provides various green banking products and service							.648
Bank offers accurate information about green banking through							.545
websites							
Green banking provides lower interest rates for green products							.417
Eigenvalue	9.866	2.451	2.061	1.376	1.265	1.258	1.090
Variance Explained (%)	30.833	7.659	6.441	4.300	3.955	3.930	3.405

	Cumulative Variance Explained (%)	30.833	38.492	44.932	49.232	53.186	57.117	60.522
Ì	Note. $N = 200$. The extraction method was principal components analysis	s with a ro	tation (Var	imax with	Kaiser Nor	malization). KMO = .8	93. Total
	variance explained = 60.522%.							

Source Computed from Primary data

In Table 2, the details of factor loading are shown. Seven factors, each with an eigenvalue greater than 1, were formed from the 32 elements that represented customer opinions. The sample size is deemed adequate for factor analysis due to its size, as indicated by the Kaiser-Meyer-Olkin (KMO) sampling adequacy measure of of.893. A statistically significant result was also obtained using a Bartlett's test of sphericity ($\rm K^2 = 3498.213$, df = 496, p > 0.05). From .512 to .751, the commonalities show that every item is appropriate for factor analysis. All 32 items were therefore kept, loading onto seven variables that explained 60.522 percent of the variation. Eigenvalues ranged from 9.866 to 1.090. Security was the name of Factor 1, which had seven elements and accounted for 30.833 percent of the variation. Factor 2, titled Responsibility, included seven items and accounted for 7.659 percent of the variation. Factor 3, Sustainability, was made up of five components and accounted for 6.441 percent of the variation. Factor 4, referred to as eco-conscious, had three items, accounting for 4.300 percent of the variation. Factor 5 consisted of three items labelled "Easy to use" that accounted for 3.955 percent of the variance. Four items, comprising 3.930 percent of the total variance, made up Factor 6, which was labelled "Accessibility." Availability was the label for three items that made up Factor 7, which accounted for 3.405 percent of the overall variation.

5.2. RELIABILITY ANALYSIS

The dependability metric Cronbach's alpha is used to evaluate the internal consistency of the consumer opinion and awareness level variables.

Table 3 Reliability of level of awareness

Factors	No. of Items	Cronbach's alpha
Level of awareness	15	.831

Source Computed from Primary data

Table 4 Reliability of seven factors of customers opinion

Factors	No. of Items	Cronbach's alpha
Security	7	.791
Responsibility	7	.793
Sustainability	5	.808
Eco-conscious	3	.831
Easy to use	3	.808
Accessibility	4	.827
Availability	3	.801
Customers Opinion (Overall)	32	.925

Source Computed from Primary data

Table 3 shows that the overall awareness scales have an outstanding and reliable dependability (internal consistency) of 0.831. Both the overall number of customer opinion scales and the internal consistency of the seven measures are shown in Table 4. The results demonstrate the reliability and quality of the items used to assess these aspects, as all scales are greater than 7.

5.3. LEVEL OF AWARENESS TOWARDS GREEN BANKING PRACTICES BY GENDER AND MARITAL STATUS

H0: The mean response to level of awareness towards green banking practices from male and female bank customers does not differ significantly

Table 5 Independent samples t-test by gender

	Gender	N	Mean	SD	t-value	Df	p-value
Level of	Male	106	49.7075	10.87765	1.103	198	.077
Awareness	Female	94	48.0957	9.63201			

Source: Computed from Primary data

Table 5 displays the findings of an independent-sample t-test. According to the results, there is no significant difference between male and female bank customers' mean responses to awareness levels (t (198) = 1.103, p > 0.05). The average for male bank customers was significantly higher (M = 49.7075, SD = 10.87765) than the average for female bank customers (M = 48.0957, SD = 9.63201).

H0: Single and Married bank customers mean response to level of awareness towards green banking practices does not differ significantly

Table 6 Independent samples t-test by marital status

	Marital status	N	Mean	SD	t-value	Df	p-value
Level of	Single	126	49.0397	9.72782	.160	198	.118
Awareness	Married	74	48.7973	11.31732			

Source Computed from Primary data

The results of an independent-sample t-test comparing the mean awareness level scores of married and single people are shown in Table 6. The results indicate that the means of the two groups do not differ significantly (t (198) = .160, p > 0.05). According to the findings, the mean for bank customers who were single (M = 49.0397, SD = 9.72782) was considerably higher than the mean for bank customers who were married (M = 48.7973, SD = 11.31732).

5.4 Correlation Between Level of Awareness and Customer Opinion Towards Green Banking Practices

H0: Level of awareness and customers opinion are not significantly correlated

Table 7 Descriptive statistics and correlations for study variables

1			,						
Variables	AW	SE	RES	SUS	EC	EU	ACC	AVA	СО
Awareness	1								
Security	.298**	1							
Responsibility	.346**	.663**	1						
Sustainability	.303**	.401**	.410**	1					
Eco-conscious	.297**	.317**	.225**	.391**	1				
Easy to use	.247**	.549**	.588**	.520**	.239**	1			
Accessibility	.334**	.272**	.255**	.245**	.454**	.204**	1		
Availability	.368**	.497**	.484**	.372**	.356**	.477**	.268**	1	
Customers opinion (Overall)	.435**	.824**	.820**	.697**	.535**	.750**	.461**	.679**	1

Correlation is significant at the 0.01 level (2-tailed).

Note. AW-Awareness, SE-Security, RES-Responsibility, SUS-Sustainability, EC-Eco-conscious, EU-Easy to use, ACC-Accessibility, AVA-Availability, CO-Customers opinion

Source Computed from Primary data

Table 7 demonstrates that the p-value is less than 0.05 for all analyzed variables. The null hypothesis has been rejected, demonstrating a significant correlation between awareness levels and customer perceptions of green banking practices. The highest r value is .750, indicating a strong positive correlation between the independent variable "security" and the dependent variable "customers' opinion." The minimum r value is .204, signifying a very low positive correlation between the independent variable "conveniency" and the dependent variable "accessibility."

6. CONCLUSION

In the present study seven important factors were found - security, responsibility, sustainability, eco-conscious, easy to use, accessibility and availability. These are the main factors influencing the customers opinion towards green banking practices. Security and trust are the important factors in customer opinion towards green banking practices. Green banking concepts are influenced the customers to move towards go green that reduces their carbon footprints and protect the earth. Nowadays several customers are adapting green banking, the green banking should put it sole into create good environmentally friendly practices internally and externally. The bank should also instruct the customers about various green banking activities and the benefits included in the green banking. The study was limited to the top three public sector banks in Madurai district. In future research the data is collected from their various banks from various areas the result might change. From the literature review, Researchers used only English language resource papers which might be another language also important contribution in this area. The study used percentage analysis, factor analysis, independent T test, correlation to identify the appropriate factors and significance relationship towards green banking concept. Further the researchers used these factors to check the statistical tests such as chi-square test, Anova, regression and structural equation modelling.

CONFLICT OF INTERESTS

None.

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REFERENCES

Dr. Bibhu Prasad Sahoo et.al (2016), "Green Banking in India: Problems and Prospects": International Journal of Research -GRANTHAALAYAH, Vol.4, Issue.8, pp.92-99.

https://doi.org/10.29121/granthaalayah.v4.i8.2016.2566

Deepak Shrivastava et al. "A Study on Factors Affecting the Usage of Green Banking in Indore City": International Journal of Research, July-2019, Vol.6, Issue.8, pp.229-236.

https://journals.pen2print.org/index.php/ijr/article/download/19170/18853

Dipika (2015), "Green Banking in India: A study of various strategies adopt by banks for sustainable development": Journal of Engineering Research & Technology (IJERT), Vol.5, Issue.10, pp.1-10. https://www.ijert.org/green-banking-in-india-a-study-of-various-strategies-adopt-by-banks-for-sustainable-development

Herath H.M.A.K. and Herath H.M.S.P (2019), "Impact of Green Banking Initiatives on Customer Satisfaction: A Conceptual Model of Customer Satisfaction on Green Banking" IOSR Journal of Business and Management (IOSR-JBM), Vol.21, Issue.1, pp.24-35.

Islam, M. R., Hossain, S., & Karim, M, Sustainable banking awareness among customers in emerging economies. Banking & Finance Review, 2021, 55(3), 65-82.

- Kishore Kumar et.al. (2022), "Factors influencing adoption of green banking practices: Evidence from commercial banks in India": Journal of Asia Entrepreneurship and Sustainability, Vol. XVIII, Issue.1, pp.41-57.
- https://www.researchgate.net/publication/362068825_Factors_influencing_adoption_of_green_banking_practices_Evidence_from_commercial_banks_in_India
- Sri. M. Narayanan & Dr. S. Chandrasekaran, "Effectiveness of green banking initiatives A special reference towards public sector and private sector banks in Tamilnadu": International Journal of Innovative Research in Technology (IJIRT), Vol.8, Issue.7, pp. 99-102.
- https://ijirt.org/Article?manuscript=153416
- Malik, A., & Garg, C, Digital banking and green finance (2019): A study on millennials. Journal of Sustainable Finance & Investment, 2020, 10(2), 315-332.
- Dr. M. Meganathan, "A study on green banking practices established by banks in India with special reference to Madurai region": Journal of Applied Science and Computations (JASC), Vol.VI, Issue.I, pp. 1768-1769.
- http://www.j-asc.com/gallery/228-january-2019.pdf
- Neeraja T S & Dr Raji Joseph, "Green Initiatives of SBI: A Customer-Centric Study": EPRA International Journal of Economic and Business Review, Vol.9, Issue.4, pp.14-19.
- https://eprajournals.com/IJES/article/4731/download
- Rahman, M. A., Sarker, B., & Hossain, T., Green banking: An emerging paradigm in sustainable finance. International Journal of Business and Management, 12(6), 87-98.
- Shakkeela Cholasseri (2016), GREEN BANKING -AN OVERVIEW, IJARIIE, 2017, Vol.1 Issue.4, pp.13-26.
- https://ijariie.com/AdminUploadPdf/GREEN_BANKING_%E2%80%93AN_OVERVIEW_1326.pdf?srsltid=AfmBOoprgbVQz06r24uSZ-aT9qbL-90DRJx2m_2BdrQDHdhX_gLZ1bf
- Singh, R., & Singh, P, Consumer awareness and green banking adoption. Indian Journal of Finance, 2012, 6(2), 35-47.
- Tanima Saha Shampa and Md. Imrul Jobaid (2017), "Factors Influencing Customers' Expectation Towards Green Banking Practices in Bangladesh": European Journal of Business and Management, Vol.9, Issue.12, pp. 140-152
- https://www.researchgate.net/publication/345313665_Factors_Influencing_Customers'_Expectation_Towards_Green_Banking_Practices_in_Bangladesh
- Dr. C. Vijai, "A study on customer's awareness on green banking initiatives in selected public and private sector banks with special reference to Cuddalore district": Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), Vol.7, Issue.11, pp.9362-9364.