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Green Banking Practices and Customer Perspectives: An Empirical Analysis in the Delhi-NCR Region of India

Prof. (Dr.) Gayathri Sivasubramanian[1*] Prof. (Dr.) Bhupendra Kumar[2]

Prof. (Dr.) Pramod Gupta[3]

[1]Professor Indus Business Academy, Bangalore, India.

[2] Accounting & Finance, Amity Business School, Amity University, Gwalior, M.P. India.

[3]Professor, Department of Management Studies, Modern Institute of Technology & Research Centre - Alwar (Raj.)

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***Corresponding Author:** gayathrisivaphd@gmail.com

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Abstract

The Banking Sector is the lifeblood of the modern economy. In terms of economic development, the bank plays a crucial role. The Banking Sector's key functions include payment system operation, deposit mobilization, credit distribution, and investment in diverse sectors such as industry, agriculture, and trade. It has major responsibilities and duties to promote and protect the environment before lending money. To meet its environmental responsibilities, the banking industry has adopted the notion of green banking. Green banking entails paperless banking and investing in green projects, all of which contribute to minimize operational costs, time, and convenience while also assisting in the transition to environmental sustainability. A green bank is similar to a traditional bank and additionally examines all Environmental and Social (E&S) considerations with the goal of preserving natural resources and protecting the environment. The goal is to make better use of resources by implementing cost-cutting measures, recycling procedures, paperless banking, electronic banking, technology equipment, and green industries. In emerging economies, customers are very conscious about ecofriendly products, as well as, services. Banking is one such service, where customers are keen towards sustainable solutions. This paper intends to study the customer perspectives of the green banking initiatives adopted by the banks in India, with respect to Delhi-NCR region. This study presents a compelling cause, as India's financial ecosystem is striving towards the broader Sustainability goal, SDG 13: Climate Action.

Keywords: *Green banking; Sustainability; Customers; Environmental Management System (EMS).*

1. Introduction

1.1. Green banking-the current scenario

Environmental pollution and climate change, driven by human activities, significantly impact global warming, the economy, and public health. In 2015, pollution caused over 9 million deaths worldwide, with India recording the highest fatalities from air and water pollution. These challenges have reduced India's GDP(Gross domestic Product) by up to 2% and led to a global welfare loss of $4.6 trillion (6% of global GDP). Health issues like cancer, heart disease, and obesity are also linked to pollution. Banks and financial institutions can support greener initiatives through lending, investments, and operations, despite the challenges of aligning climate strategies with banking frameworks. Green banking, aimed at protecting the environment and conserving resources, is gaining traction globally. Foreign banks adopting the Equator Principles (EPs) and UNEP-FI (The United Nations Environment Programme-Finance Initiative) are implementing environmental and social risk policies, cutting paper use, and reducing energy and water consumption. The banking sector can drive a low-carbon economy by leading transformative economic policies and investment strategies. As the major engine of growth, they can make a significant difference by the kind of projects they finance and by their operational efficiency.

1.2. Green Banking-Ata Glimpse

The concept of *green banking* originated in Western countries, with the primary objective of safeguarding the environment and conserving natural resources. The *Environment Protection Scheme*, introduced in July 2010, facilitated the identification, evaluation, and management of environmental and social (E&S) risks in banking projects. Early adopters of the Equator Principles (EPs), which focus on sustainable financing, included major institutions such as the Royal Bank of Scotland, Citigroup Inc., Westpac Banking Corporation, HSBC, and Shore Bank. Notably, Shore Bank, operational for nearly three decades, introduced the *Triple Bottom Line (TBL)* approach, which emphasizes balancing financial profitability with community welfare and environmental sustainability. Furthermore, the *Green Bank Act* of March 2009 aimed to establish a government-regulated green bank in the United States.

Green banking primarily focuses on reducing paper consumption in banking operations to mitigate deforestation, thereby lowering carbon dioxide emissions and preserving atmospheric oxygen levels. It encompasses two key practices: in-house management and performance in business operations. In-house practices involve eco-friendly initiatives such as green buildings, rooftop solar installations, digital banking services, e-statements, solar-powered ATMs, fuel-efficient transportation, waste management, and reforestation. Additionally, green banking extends to financing sustainable projects, including renewable energy ventures (solar, wind, and biogas), bio-fertilizer plants, energy-efficient technologies, and effluent treatment facilities. Effective implementation requires banks to address environmental challenges within their operational domains, ensuring the responsible utilization of natural, human, renewable, and non-renewable resources.

1.3. Green Banking-Importance

Green banking is crucial for both economic stability and environmental protection by mitigating risks in the banking sector. Environmental changes, such as carbon emissions and natural resource depletion, heighten credit risks, leading to customer defaults due to unaccounted costs in manufacturing, third-party claims, and market losses. Real estate loans are also vulnerable when property values decline from environmental damage. Regulatory non-compliance exposes banks to legal risks and lender liabilities for pollution-related claims. Green banking enhances brand image, reduces risks and costs, and boosts revenue. The *Environmental Management System* (EMS) supports cost savings, though implementing environmental standards across diverse sectors remains challenging.

1.4. Advantages of Green Banking

The Banking Sector plays a critical role in environmental protection and natural resource conservation. The concept of green banking encourages environmentally responsible business practices. It is inextricably linked to the benefits of information technology. Reduced operational cost and credit risk, Online banking, paperless offices, better risk management, improved asset quality, cost consciousness, competitive edge are some of the areas where green banking has an

edge over traditional banking. Green banking practices and their associated benefits must be made known to customers by banks. Green banking perception is strong at the top echelons of management, according to a review. This understanding is diminished at the lowest levels of management that contact with clients on a daily basis.

1.5. Disadvantages of Green Banking

High Operating Cost, reputational Risk, diversification problem, Start-up Face and credit risk are worth mentioning disadvantages. The lack of Reserve Bank of India (RBI) and government directives is the biggest impediment to implementing environmental sustainability. One of the reasons has been the scarcity of skilled workers. Inadequate training or public awareness campaigns Stakeholders' lack of interest in the project, Insufficient funds for lending and investing in environmentally beneficial projects. Other roadblocks include a complicated reporting environment and operational complexity (Gopi, Sinu 2016).

2. Statement of the problem

As per the World Resource Institute (WRI), India is the fourth most polluted country in the world. Banks play a critical role in a country's economic progress by forming the backbone of its financial sector. According to US estimates, paperless banking would save nearly 16.5 million trees per year, 3.96 million tons of CO2, 4.95 million tons of air pollution, and nearly 21.45 million tons of oxygen per year. Any business's long-term success is dependent on its ability to develop sustainably. Green banking adoption by banks has a long way to go in emerging economies like India. Green finance is a novel technique for combating climate change and reducing negative environmental effect. To carry out Banking Sector's green banking practices in Delhi-NCR, a complete analysis of awareness, goods, services, technology and solar resource use, and recommendations for investing in eco-friendly initiatives is required. The services given by banks are admirable in today's economy, where consumers don't have time to wait in lines to make payments. As a result, this study was undertaken to ascertain the opinions of respondents who use green banking on the issues they confront in their use, as well as their perspectives on the acceptance and satisfaction with green banking technology.

3. Need for the Study

Delhi, the capital city of India, continues to grapple with alarmingly high levels of air pollution, frequently ranking among the most polluted cities globally Delhi was the most polluted capital city, with an annual PM2.5 concentration of 92.7 μg/m³, far exceeding the WHO's safe limit of 5 μg/m³ (IQAir, 2024). The Central Pollution Control Board (CPCB) also routinely records AQI levels in the "Very Poor" and "Severe" categories, especially during winter months due to a combination of vehicular emissions, industrial discharge, stubble burning in neighboring states, and suspended particulate matter from construction activity (CPCB, 2023). These hazardous conditions have had direct consequences on public health, contributing to an estimated 30,000 premature deaths annually in Delhi due to air pollution-related illnesses (Lancet Planetary Health, 2022).

Given this critical environmental backdrop, a study on consumer awareness of green banking initiatives in Delhi is highly relevant. Green banking practices—such as promoting paperless transactions, investing in green projects, offering carbon-conscious loans, and reducing branch-based emissions—are strategic interventions in reducing the ecological footprint of the banking sector. In a city where pollution mitigation is a policy priority, understanding how consumers perceive and engage with such initiatives can inform both awareness campaigns and institutional strategies.Thus, Delhi provides a concrete case for examining the intersection of urban pollution and eco-conscious financial behavior. Customers of selected public and private sector banks were considered for this study.

4. Objective of the study

- To know the demographic profile of the green banking customers of Banking Sector
- To Highlight the green banking practices on environmental strategies introduced by Banking Sector
- Toclassifythelevelofawareness/familiarityofthecustomerstowardsgreenproducts offered by Banking Sector
- To identify the problems in the usage of green banking products of Banking Sector based on the Region, Locality and Occupation of the customers.

- To study the customer satisfaction of the green banking initiatives of Banking Sector
- To analyze the Level of comfortability of the customers at Banking Sector in Green banking.

5. Green Banking – Review of literature

Green banking plays a vital role in fostering economic growth while ensuring environmental sustainability. Various studies have examined the adoption, challenges, and impact of green banking practices, providing insights into customer perceptions, regulatory compliance, and institutional initiatives. There is still a dearth of literature, as green banking is a nascent concept in many emerging economies and under developed nations.

Shrivastava et al. (2019) explored demographic factors influencing green banking adoption, revealing that marital status and gender significantly impact usage. Married customers are more inclined to use green banking services compared to unmarried customers, while male customers show higher adoption rates than females across all marital categories. This indicates that demographic segmentation can guide banks in tailoring green banking initiatives.

Srilatha (2018) highlighted that although green banking is a relatively new concept in India, both banks and the government are making concerted efforts to raise public awareness. Similarly, **Nath et al. (2017)** applied the Technology Acceptance Model (TAM) to analyze the adoption of green banking in India. Their findings suggest a positive shift in customer perceptions as banks successfully address adoption challenges, thereby promoting environmental sustainability.

Shanaya et al. (2017) identified various opportunities for green banking, emphasizing the need for sound policy frameworks to achieve short- and long-term sustainability goals. **Jayadutta and Nitin (2017)** further noted that Indian banks are leveraging green banking as a tool to align the national economy with global sustainability standards. However, they argue that substantial untapped opportunities remain.

Shaumya and Arulrajah (2017) conducted an empirical study in Sri Lanka, demonstrating a significant positive impact of green banking practices on banks' environmental performance. Their research underscores the importance of policy-related, employee-related, and operational practices in enhancing environmental outcomes.

In Bangladesh, **Masukujjaman et al. (2016)** examined bankers' perceptions in Islamic banks, revealing that green banking aligns well with Shariah principles and plays a crucial role in addressing environmental concerns. **Azad and Samamlou (2016)** identified five critical factors influencing green banking's competitive edge: green competitive strategy, investment, banking processes, models, and advantages.

Focusing on customer awareness, **Malliga and Revathy (2016)** studied private banks in Theni district,TN,India concluding that green banking practices can significantly reduce energy consumption and support global environmental efforts. Similarly, **Sahoo and Singh (2016)** found that younger customers in India exhibit higher adoption rates of green banking practices, largely due to greater awareness compared to middle-aged and senior customers.

Ganesan and Bhuvaneswari (2016) echoed these findings, highlighting that while banks are progressively adopting eco-friendly practices, customer awareness—especially among older demographics—remains limited. **Brar (2016)** conducted a comparative study on public and private banks, showing that private banks outperform public institutions in promoting green banking, although both sectors still rely heavily on paper-based processes.

Bihari and Pandey (2015) underscored the importance of green banking in preserving natural resources and enhancing India's position relative to global counterparts. **Gupta (2015)** focused on commercial banks in Himachal Pradesh, finding that although banks are introducing green products, much progress remains to be made. **Singh (2015)** argued that green banking can significantly improve environmental performance and create long-term business value.

Garg (2015) emphasized the role of banks as responsible corporate citizens committed to the "Go Green" mantra. However, **Vafeeque and Unnipulan (2015)** pointed out that Indian financial institutions still lag behind international standards and require robust policy frameworks for widespread adoption.

Ramila and Gurusamy (2015) examined the profitability impact of paperless banking

solutions such as ATMs and electronic clearing systems (ECS), concluding that these innovations positively affect public-sector bank profitability.

Ratnaparkhe and Gajanan (2015) acknowledged the progress made by Indian banks in adopting green practices but stressed the need for further efforts.

Ritu (2014) called for increased public awareness to unlock new markets and product differentiation opportunities through green banking. **Moorthy and Pradeepa (2014)** evaluated customer satisfaction with green banking services, noting significant improvements in operational efficiency. Finally, **Rajput et al. (2014)** found that while public banks lead in green banking initiatives, regional rural banks have been quicker to adopt these practices despite facing policy and resource challenges.

Collectively, these studies highlight that while green banking adoption is gaining traction in India and other developing economies, considerable opportunities and challenges remain. Addressing awareness gaps, formulating robust policies, and leveraging technological advancements are critical to realizing the full potential of green banking for sustainable development.

6. Data Analysis

The study was conducted by administering a structured questionnaire to 400 respondents and 385 were completely filled. 212 (55.1 per cent) customers are from the Delhi and 173(44.9percent) are from NCR.

Table1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
0.959	0.967	144

Source: Primary data

Table2: Item Statistics

Green Banking practices at Banking Sector on Environmental Strategies	Mean	Std. Deviation	N	Cronbach's Alpha if Item Deleted
Familiarity	3.483117	1.1297818	385	0.96
Workplace Compulsion	2.732468	1.1358781	385	0.959
Better Service	2.727273	0.9794286	385	0.958
Availability of VariousScheme	2.919481	0.8393076	385	0.959
Computerized	3.685714	0.9423091	385	0.958
Cheap and Quick Service	3.896104	1.122502	385	0.958
Easy to Approach	2.506494	1.1549641	385	0.959
Internet Banking	2.618182	1.619279	385	0.959
Mobile Banking	3.301299	0.9029024	385	0.958
Green Credit Cards	3.093506	0.8046638	385	0.959
Debit Cards	2.864935	0.7341673	385	0.959
Green Mortgage and Loans	2.735065	0.7234477	385	0.959
Automated Teller Services (ATMs)	3.737662	0.6176735	385	0.959
CDM (Depositing/Withdrawing cash)	2.566234	0.7044521	385	0.959
Green Insurance	2.335065	0.859652	385	0.959

Kisan CC	4.350649	0.9008999	385	0.959

Source: Primary data

The item statistics in Table 2 clearly show that all the respondents of green banking practices have consistently given a strong score on statements related to the understanding of green banking practices on environmental policies. In each element, the corresponding reliability coefficient is roughly equal to the overall 96.7 percent coefficient value, which is considered very high compared to the 70 percent benchmark. This shows that the whole statements applicable to the understanding of green banking practices on environmental policies at Banking Sector are important.

Table3: Anova with Tukey's Test for Non-Additivity

			Sum of Squares	df	Mean Square	F	Sig.
Between People			6212.238	384	16.178		
With in People	Between Items		30052.654	143	210.158	317.116	0
	Residual	Non-additivity	75.691a	1	75.691	114.449	0
		Balance	36315.523	54911	0.661	-	-
		Total	36391.215	54912	0.663	-	-
	Total		66443.869	55055	1.207	-	-
Total			72656.107	55439	1.311	-	-
Grand Mean = 3.536521							

a. Tukey's estimate of power to which observations must be raised to achieve additivity=0.470.

Source: Primary data; * - Significant

From the aboveTable3, The Anova with Tukey's Non- additivity Test clearly shows that the data obtained from the respondents are stable on the statements concerning the understanding of green banking practises one nvironmental policies, as the F value is 317.116 and the p value is 0.000, p value below 5. The answers of all statements on the Likert scale are further divided into three classes, based on the quartile value. When the average score is less than 3.372, the low influence will be handled and the average score between 3.372 and 3.575 will be put in the moderate impact and the averages core higher than 3.575 will be called high influence.

Table4: Profile of the Green Banking Customers

Category		Frequency	Percent
Region	Delhi	212	55.1
	NCR Region	173	44.9
	Total	385	100
Locality	Urban	74	19.2
	SemiUrban	174	45.2
	Rural	137	35.6
	Total	385	100
Education	Degree	89	23.1
	Post-Graduation	147	38.2
	Professional	149	38.7

	Total	385	100
Gender	Male	202	52.5
	Female	183	47.5
	Total	385	100
Occupation	Employee	123	31.9
	Businessman	120	31.2
	Professional	142	36.9
	Total	385	100
Information or Promoting Green Banking by Bank	Yes	321	83.4
	No	64	16.6
	Total	385	100
Opinion on Green Banking as a New System	Yes	385	100
	Total	385	100

Source: Primary data

In Table 4, the profile of the respondents is shown. 45.2 percent of the customers are from the Semi Urban locality and from the rural part 137 (35.6%) customers were present. The lion's share of the Respondents is male 202 (52.5 percent). It also evident from the study that 23.1% of the customers of Banking Sector are having educational qualification graduation and 38.2% of the customers are having the post-graduation degree. Professionally qualified customers accounted to 38.7%. Finally, in the study the total professional accounted to 142 (36.9%) and the percentage of employees and the businessman was 31.9% and 31.2% respectively. With regard to the information or promoting Green Banking by bank, 321 (83.4%) of the customers opened that there is such a mechanism being followed by the bank.

The next part of the analysis deals with the familiarity of green products by the customers of Banking Sector at Delhi-NCR region for which the Cluster Analysis was carried out by the researcher. Here the dependent variables are all the green products served by the Banking Sector at Delhi-NCR region to the customers. The objective of the said analysis is to classify the level of the awareness/familiarity of the customers into different sections namely low aware, moderate aware and high aware. Therefore, the third objective has been introduced.

- **Null Hypothesis(H_0):** The level of awareness/familiarity of the customers to wards green products offered by Banking Sector is equivalent (Cluster means are equal).
- **Alternative Hypothesis (H_1):** The level of awareness/familiarity of the customers towards green products offered by banking sector is not equivalent

Table5: Number of Cases in each Cluster-Level of Awareness

Cluster	**Low**	**30**
	Moderate	212
	High	143
Valid		385
Missing		0

Source: Primary data

Table 5 shows the cluster analysis, the number of cases in each Cluster for classifying the level of awareness/familiarity of the customers towards green products offered by Banking Sector. According to the table, there are 30 customers placed into the group of low familiarity, the number of customers who fall in the moderate awareness of green products offered by the Banking Sector are 212 and the customers who opined that their level of awareness is high include 143, out of the total customers of 385.

Table 5 reveals the statistical significance of the cluster effect on the various green products offered by the Banking Sector to the customers. It was further evaluated with the support of the Anova test. In all the

cases, the p value obtained is lower than 5% (level of significance).Hence the null hypothesis formulated is rejected. The level of awareness/familiarity of the customers to wards green products offered by Banking Sector is dis similar (Cluster means are unequal).

The cluster effect on the various green products offered by the Banking Sector to the customers was further evaluated with the support of the Final Cluster Centres . From the table. it is clear that the level of knowledge of the customer is treated as low when he has the following level of awareness towards green products offered by Banking Sector Level of awareness towards green products offered by Banking Sector is categorized as low, moderate and high based on the customers awareness on various electronic banking facilities.

Table-6: Anova - Level of Awareness

Anova	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Internet Banking	417.293	2	0.451	382	925.24	0
Mobile Banking	96.689	2	0.313	382	308.642	0
Green Credit Cards	20.698	2	0.543	382	38.152	0
Debit Cards	55.335	2	0.252	382	219.483	0
Green Mortgage And Loans	58.349	2	0.221	382	264.476	0
Automated Teller Services(ATMs)	17.13	2	0.294	382	58.296	0
CDM(Depositing/ Withdrawing cash)	33.236	2	0.325	382	102.313	0
Green Insurance	23.294	2	0.621	382	37.516	0
Kisan CC	24.232	2	0.689	382	35.169	0
Green Channel Counter	7.956	2	0.369	382	21.569	0
Online saving A/C	82.774	2	0.509	382	162.595	0
Green Reward Checking A/C	34.731	2	0.247	382	140.893	0
Green Deposits	23.572	2	0.232	382	101.636	0
Green Remit Card	115.581	2	0.432	382	267.452	0
Green CDs	94.154	2	0.172	382	547.811	0
RTGS	107.721	2	0.319	382	337.258	0
NEFT	35.897	2	0.556	382	64.588	0

Source: Primary data

Table7: Final Cluster Centers (Average)-Level of Awareness Cluster

Final Cluster Centres	Level of Familiarity		
	Low	Moderate	High
Internet Banking	Somewhat Known	Known	Very well Known
Mobile Banking	Somewhat Known	Known	Fairly Known
Green Credit Cards	Somewhat Known	Known	Known
Debit Cards	Somewhat Known	Known	FairlyKnown

Green Mortgage And Loans	Somewhat Known	Some what Known	Known
Automated Teller Services (ATMs)	Known	Fairly Known	Fairly Known
CDM (Depositing/ Withdrawing cash)	Known	Some what Known	Known
Green Insurance	Known	Some what Known	Known
Kisan CC	Fairly Known	Fairly Known	Very well Known
Green Channel Counter	Fairly Known	Very well Known	Very well Known
Online saving A/C	Known	Fairly Known	Very well Known
Green Reward Checking A/C	Known	Very well Known	Very well Known
Green Deposits	Known	Fairly Known	Very well Known
Green Remit Card	Unknown	Fairly Known	Fairly Known
Green CDs	Somewhat Known	Fairly Known	Very well Known
RTGS	Known	Known	Fairly Known
NEFT	Known	Very well Known	Very well Known

Source: Primary data

According to the above Table 6, out of 385 respondents, 376 customers opined that they used the Green Remit Card. Similarly, the internet banking isused by 344(89%). The total number of supports attributed to the Credit cards/Debitcardsis345(90%). Green insurance product is taken by 339 (88%).Green Mortgage and Loans are availed by 314(82%) and Automated Teller is highly useful for the 323 (84%).Likewise, all the green products get their support from the customers of Banking Sector The opinion was tested based on the Binomial Test. It noted from the table that app the p values are lower than the 5% (Level of significance). Hence the null hypothesis is rejected . The usage of the green products by the customers of Banking Sector is not equal.

Table8:BinomialTest-FamiliarityofGreenBankingProducts

Binomial Test		Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Internet Banking	Group1	Yes	344	0.89	0.5	0
	Group2	No	41	0.11	-	-
	Total	-	385	1	-	-
Mobile Banking	Group1	No	329	0.85	0.5	0
	Group2	Yes	56	0.15	-	-
	Total	-	385	1	-	-
Credit Cards/ Debit Cards	Group1	Yes	345	0.9	0.5	0
	Group2	No	40	0.1	-	-
	Total	-	385	1	-	-
Green Mortgage And Loans	Group1	Yes	314	0.82	0.5	0
	Group2	No	71	0.18	-	-
	Total	-	385	1	-	-
Automated Teller	Group1	Yes	323	0.84	0.5	0
	Group2	No	62	0.16	-	-
	Total	-	385	1	-	-

Services (ATMs)	Group1	No	299	0.78	0.5	0
	Group2	Yes	86	0.22	-	-
	Total	-	385	1	-	-
CDM	Group1	No	150	0.39	0.5	0
	Group2	Yes	235	0.61	-	-
	Total	-	385	1	-	-
Green Insurance	Group1	Yes	339	0.88	0.5	0
	Group2	No	46	0.12	-	-
	Total	-	385	1	-	-
Kisan CC	Group1	No	88	0.23	0.5	0
	Group2	Yes	297	0.77	-	-
	Total	-	385	1	-	-
Online SavingA/C	Group1	No	96	0.25	0.5	0
	Group2	Yes	289	0.75	-	-
	Total	-	385	1	-	-
Green Reward Checking A/C	Group1	No	294	0.76	0.5	0
	Group2	Yes	91	0.24	-	-
	Total	-	385	1	-	-
Green Deposits	Group1	No	284	0.74	0.5	0
	Group2	Yes	101	0.26	-	-
	Total	-	385	1	-	-
Green Remit Card	Group1	Yes	376	0.98	0.5	0
	Group2	No	9	0.02	-	-
	Total	-	385	1	-	-
Green CD's	Group1	No	49	0.13	0.5	0
	Group2	Yes	336	0.87	-	-
	Total	-	385	1	-	-
RTGS	Group1	Yes	260	0.68	0.5	0
	Group2	No	125	0.32	-	-
	Total	-	385	1	-	-

Source : Primary data

Table 9: Report - Frequency of use of Green Banking Service

Region		Frequency of ATM service/month	Frequency of Mobile banking service/month	Frequency of Internet banking service/month
Delhi	Mean	2.06	6.19	6.48
	N	212	212	212
	Std . Deviation	0.792	2.604	1.685
NCR	Mean	2.11	5.92	6.4
	N	173	173	173
	Std . Deviation	0.803	2.648	1.674
Total	Mean	2.08	6.07	6.44
	N	385	385	385
	Std . Deviation	0.796	2.624	1.678

Source: Primary data

Table10: Anova Table – Frequency of use of Green Banking Service

Anova Table			Sum of Squares	D f	Mean Square	F	Sig.
Frequency of ATM service/month*Region	Between Groups	(Combined)	0.224	1	0.224	0.353	0.553
	With in Groups		243.116	383	0.635	-	-
	Total		243.34	384	-	-	-
Frequency of Mobile Banking service /month*Region	Between Groups	(Combined)	6.87	1	6.87	0.998	0.318
	With in Groups		2637.094	383	6.885	-	-
	Total		2643.964	384	-	-	-
Frequency of Internet Banking service/ month * Region	Between Groups	(Combined)	0.601	1	0.601	0.213	0.645
	With in Groups		1081.02	383	2.823	-	-
	Total		1081.621	384	-	-	-

Source : Primary data

From the Table 10, as per the score assigned for the independent variables based on the frequency of use of green banking service at Banking Sector, no statistical difference was noted, as the p value based on the Anova test is more than the 5%. Thus, the null hypothesis is failed to reject.

7. Findings of the study

The Following are the findings of the study based on the analysis.

7.1. Demographic Profile of the Customer

- With regard to the information or promoting Green Banking by bank, 83.4 % of the customers opined that there is such a mechanism being followed by the bank. Also, all the customers opined that green banking is a new system of the Banking Sector at Delhi-NCR region.
- Region with Locality of the bank customers is dependent to each other, as the Pearson Chi-Square value is 11.219 and p value is 0.004 (p value below 5
- There is no association between the Region with Education of the bank customers as the Pearson Chi-Square value is 0.208 and p value is 0.901; p value above 5 %.
- The average age of the green banking customers of the Banking Sector at Delhi-NCR is 43 years and they have a monthly income of Rs.57873 and they have been associating with the Banking Sector for the last 8 years.
- It is found from the study that 81 % support the cheque book collection from the bank, followed by Withdrawal, whose support is 47.7%. Money transfer and Deposit received the support of 36.6 per cent and 17.6 per cent respectively.

7.2. Awareness and Familiarity of the Customer

- The study showed that the level of customer awareness of the green products offered by Banking Sector are different. (Anova -Level of awareness/).
- The study shows that the familiarity in usage of green products by Banking Sector customers is not the same.
- Level of awareness towards green products offered by Banking Sector is low = Green Remit card- Unknown + (Internet Banking, Mobile Banking, Green Credit Cards, Debit Cards, Green Mortgage and Loans Green CDs) – Somewhat Known + (Automated Teller Services (ATMs), CDM (Depositing/Withdrawing cash), Green Insurance, RTGS, NEFT, Online saving A/C, Green Reward Checking A/C, Green deposits) - Known + Kisan CC, Green channel counter – Fairly Known.

- Level of awareness towards green products offered by Banking Sector is Moderate = Green Credit Cards - Unknown + (Green Mortgage and Loans, CDM (Depositing/Withdrawing cash), Green Insurance) – Somewhat Known + (Mobile Banking, Internet Banking, Debit Cards, RTGS) - Known + (Automated Teller Services (ATMs), Kisan CC, Online saving A/C, Green deposits, Green Remit card, Green CDs) – Fairly Known + (Green Reward Checking A/C, Green channel counter, NEFT) – Very well Known.
- Level of awareness/ towards green products offered by Banking Sector is High = (Green Credit Cards, Green Mortgage and Loans, CDM (Depositing/Withdrawing cash), Green Insurance) - Known + (Mobile Banking, Debit Cards, Automated Teller Services (ATMs), Green Remit card, RTGS) – Fairly Known + (Internet Banking, Kisan CC, Green channel counter, Online saving A/C, Green Reward Checking A/C, NEFT, Green deposits, Green CDs) – Very well Known.

8. Conclusion

The study provides comprehensive insights into the adoption and perception of green banking practices among customers in the Delhi-NCR region. A significant majority (83.4%) acknowledge the promotional mechanisms implemented by banks, though all respondents consider green banking a relatively new initiative in the region. Demographic analysis indicates that while the region and locality of customers are interdependent, educational background shows no significant correlation with regional adoption patterns.

Despite a general awareness of green banking, familiarity with specific green products varies considerably. Awareness levels are highest for commonly used services like ATMs, NEFT, and online savings accounts, while products such as green remit cards and green credit cards exhibit lower familiarity. Comfort levels with green banking practices are influenced by factors such as age, income, and environmental awareness, highlighting the need for targeted engagement strategies. Moreover, customer preferences lean heavily toward traditional services like cheque book collections, indicating areas where green banking alternatives could be further promoted.

Overall, while green banking practices are gaining traction, a more nuanced approach focusing on enhancing product familiarity, improving customer comfort levels, and addressing regional dynamics is essential for maximizing the potential of green banking in fostering sustainable financial ecosystems in emerging economies.

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