

Research Article



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Customer Practices in SBI's Green Initiatives: Societal Impacts in Central and Northern Regions of Kerala

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The banking industry is increasingly recognizing the imperative for sustainable and environmentally responsible practices, fostering the rise of “green banking” (GB) as a key component of financial operations. The State Bank of India (SBI) has demonstrated a proactive approach in implementing GB principles, underscoring its commitment to corporate social responsibility and sustainable development. This study investigates the factors that influence customer adoption of green banking services (GBS) and explores the relationship between customer awareness and the adoption of these services within SBI's customer base. By leveraging a robust data set, this research identifies key determinants that impact customer engagement with GBS, providing insights into behavioral patterns and awareness levels that affect the utilization of green banking products. The findings offer strategic implications for SBI, guiding the design of targeted marketing and educational initiatives to enhance awareness and adoption in the central and northern districts of Kerala. These insights not only support SBI in refining its outreach and engagement strategies but also contribute to the broader discourse on sustainable banking practices in emerging economies.

INTRODUCTION

Study Background

The financial sector has a significant effect on the economic growth of a nation (Younsi & Bechtini, 2020). The Indian banking sector plays a role in promoting sustainable development (Kumar & Prakash, 2019). In recent years, there has been a significant surge in the popularity of green banking (GB) due to growing environmental concerns, leading to the urgent necessity for sustainable development (Herath & Herath, 2019; Prabhu, 2021). The Institute for Development and Research in Banking Technology stated that GB refers to the promotion of sustainability in banks through practices and guidelines across

economic, environmental, and social aspects (Aubhi, 2016; Neeraja & Joseph, 2021). The SBI (State Bank of India) is a public sector bank and financial services organization owned by the Indian government. The Corporation has its headquarters in Mumbai, Maharashtra (Mahalakshmi). Recently, SBI has greatly increased its digital presence by continuously incorporating new technologies into its services (Vidani, 2024).

SBI has initiated various practices to reduce its impact on the environment, including promoting digital banking, incorporating solar energy at branches and ATMs, and offering environmentally friendly banking services such as green loans, deposits, mortgages, credit cards, and checking accounts

(Rodrigues, 2019). In addition, it provides online and mobile banking services and offers loans for environmentally friendly projects (Basumatary). This demonstrates SBI's commitment to sustainability and its recognition of banks' ability to support a greener economy (Rahman et al., 2023). SBI became the pioneer in India by launching GB initiatives and implementing the GB Policy in 2007 and green channels to promote environmental sustainability (Panse & Sharma, 2023). The institution is making strides toward becoming a green bank by offering services such as electronic banking, self-service kiosks, and eco-friendly debit and credit cards such as Vishwa Yatra cards, Ez Pay Cards, and Smart Payout Cards (Fatima et al., 2019).

Customer awareness is an essential element that influences the use of environmentally friendly banking services (Afridi et al., 2024). It comprises customer understanding of GB's purpose, benefits, and specific bank offerings (Ellahi et al., 2023). Increased awareness can lead to higher levels of acceptance and utilization of these services, which are essential for achieving sustainability goals. While SBI has made efforts to encourage GB, there is a lack of research on how aware customers in certain regions, such as Malabar, are of these initiatives. Comprehending the perceptions of customers is crucial for banks to effectively enhance their eco-friendly initiatives and ensure that they resonate with the preferences of their target market (Taneja & Ali, 2021).

Problem Statement

Increasing environmental concerns have led the financial sector to implement sustainable practices, such as the introduction of green banking services (GBS) (Park & Kim, 2020). SBI, one of the leading banks in the country, has implemented various environmentally friendly initiatives to reduce its carbon footprint and promote sustainable practices (Rahman et al., 2023). However, there is a clear lack of understanding regarding customer awareness and usage rates of eco-friendly banking services in certain geographical locations, particularly in the Central and Northern Regions of Kerala, despite their importance for sustainability. This study seeks to address this gap

by investigating the connection between customer awareness and the adoption of SBI's environmentally friendly banking services by Malabar customers. Further investigation is necessary to understand the motivations behind customers' opinions and acceptance of environmentally friendly banking services. This research will not only contribute to the existing understanding of sustainable banking practices but also provide actionable recommendations to SBI for enhancing the effectiveness of its GB initiatives and boosting customer engagement.

Significance of the Study

The current study has the potential to contribute to the understanding and enhancement of GB practices at the SBI in the Central and Northern Regions of Kerala. This study delves into several important factors as environmental sustainability becomes increasingly crucial in the banking sector. The level of awareness among customers regarding GBS is vital for SBI to design marketing strategies effectively. This study will identify key factors that influence customers' perceptions and choices of eco-friendly banking products. Assessing the perceived efficiency and excellence of SBI's environmentally friendly banking services will provide a valuable understanding of customer contentment and service quality. This information is crucial for the persistent improvement of service options. Gaining insight into customers' opinions on GB practices will help SBI in determining how customers view its efforts. The findings from this study will aid not only SBI but also broader efforts to encourage sustainable banking in India. Enhancing customer participation in eco-friendly banking is crucial in supporting both national and global sustainability goals, as banks are required for financing environmentally friendly projects.

Research Questions

What is the level of awareness of green banking services (GBS) provided by SBI among customers in the Central and Northern Regions of Kerala?

- Which factors influence customer perceptions and the adoption of GBS in the Central and Northern Regions of Kerala?

- How do consumers perceive the efficiency and quality of GBS provided by SBI in the Central and Northern Regions of Kerala?
- What are the perceptions and attitudes of customers toward the GB initiatives of SBI?
- What is the relationship between the GB products and services provided by SBI and the level of customer adoption of those banking amenities?

Study Objectives

The main purpose of this research is to discover the associations among customer awareness and acceptance of GBS at the SBI in the Central and Northern Regions of Kerala. The key objectives are described as follows:

- To evaluate the level of awareness among customers regarding GBS offered by the SBI in the Central and Northern Regions of Kerala.
- To identify the factors that influence customer perception and adoption of GBS.
- To measure the perceived quality and efficacy of GBS provided by SBI in the Central and Northern Regions of Kerala.
- To assess customers' perceptions and attitudes toward the GB practices of SBI.
- To explore the relationships among the green banking products and services offered by SBI and the level of customer adoption of those banking amenities.

Paper Organizations

The proposed study is organized in a structured manner. An outline of the GBS of SBI in the Central and Northern Regions of Kerala is described in the introduction section. Section 1 also describes the problem statement, the research's significance, objectives, and hypotheses. The existing studies, along with their drawbacks, are reviewed in section 2. The methodology adopted for the data collection and analysis of the current research is described in section 3. Furthermore, in the results section, the achieved outcomes will be revealed with their relevant inferences. The results of the current study and existing studies are discussed and compared in the discussion

section. In section 6, the limitations of the proposed study are addressed. Finally, the conclusions and future recommendations are highlighted in section 7.

LITERATURE REVIEW

GB refers to practices and guidelines that aim to ensure that banks are environmentally, economically, and socially sustainable by promoting eco-friendly initiatives and reducing the carbon footprint in their operations. SBI was the first in India to champion GB by implementing GB policies and backing environmental initiatives. The conventional research (Ganapathy & Amarjothi) has investigated the awareness of customers toward GBS in SBI in the Thirunelveli district. The data were collected from a total of 80 SBI customers in that district via a primary data collection approach. Furthermore, the respondents were chosen through a convenience sampling technique for the purpose of the research. The weighted average and simple percentage techniques have been utilized for evaluating the data. The results revealed that most of the customers were aware of the Cash Deposit Machine (CDM), which comprises a mini statement, pin change, withdrawal, and deposits. Afterwards, the customer becomes aware of the Automatic Teller Machine (ATM), followed by online banking and mobile banking.

A traditional study (Bhaskaran & Rajesh) has examined the degree and dimensions of customer mindfulness toward GBS among commercial banks in Kerala. Both primary and secondary data collection techniques were utilized for the process of data collection. Districts such as Kannur and Kozhikode from the north, Ernakulam and Idukki from central Kerala, and Alappuzha and Thiruvananthapuram from southern Kerala have been considered. Among the 1481 public (IOB, Canara, and SBI) and private (HDFC, South Indian Bank, and Federal Bank) sector bank branches, 150 branches were chosen randomly for the research. A total of 300 customers of the bank were selected as respondents through Cochran's formula. The results revealed that customers have a low level of awareness about the GBS of commercial banks located in Kerala. Customers were highly aware of GBS, such as electronic fund transfers, debit cards,

internet banking, and ATMs. On the other hand, the awareness of customers toward solar ATMs and RTGSs was very low.

The prevailing research (Sunil & Durgalashmi, 2022) has determined the perceptions, awareness, and attitudes of customers toward SBI's GBS in southern Kerala. Furthermore, factors that influence customers' adoption of GBS and their satisfaction level are analyzed. This research utilized both primary and secondary data collection techniques. The primary data were congregated from 200 customers from various branches of SBI. The secondary data were derived from research papers, websites, and journals. The analytical outcomes revealed that a large number of respondents were aware of the GB practices of SBI. The majority of participants gain knowledge about SBI's green banking products through family and friends, followed by newspapers and magazines, advertisements and social media, and bank officials.

Furthermore, the main barriers to not assessing GBS are unawareness, lack of knowledge, complexity, and access concerns. Many respondents were highly satisfied with the GBS offered by SBI in southern Kerala. Additionally, the results revealed that cost savings, time savings, 24X7 access, physical security, minimal paperwork, a clean and hygienic bank environment, the utilization of solar power, the installation of energy-saving equipment, contributions to environmental sustainability, and the reduction of air pollution and the carbon footprint are benefits of GB practices.

Raising awareness about the advantages of GB products and services is crucial for motivating customers to make use of them. The text should be understood; condemning it is not helpful. Customers are still reluctant to participate in GBs because they are worried about the security of online transactions, which can be targeted by hackers. Moreover, they are hesitant due to their lack of trust in online services and fear that their information could be misused.

Research Gap

However, prior studies have attempted to address customer awareness and customer decisions regarding GB products and services of SBI in the Central and

Northern Regions of Kerala. There are significant pitfalls for further development, which are as follows:

- For example, Sunil and Durgalashmi 2022 disregarded the aspect of the mixed method research technique.
- Research by Bhaskaran and Rajesh has ignored the influential factors that cause customers to adopt the GBS of SBI.
- Ganapathy and Amarjothi overlooked the relationship between GB products and services provided by SBI and the level of customer adherence to those banking amenities.

Therefore, there is scope to extend the research in these aspects, as these features can support banks in attaining customer loyalty and satisfaction. Overall, only a limited number of studies have focused on the Kerala and Malabar areas. Thus, the current study explores customer awareness and usage of GB products and services in Malabar.

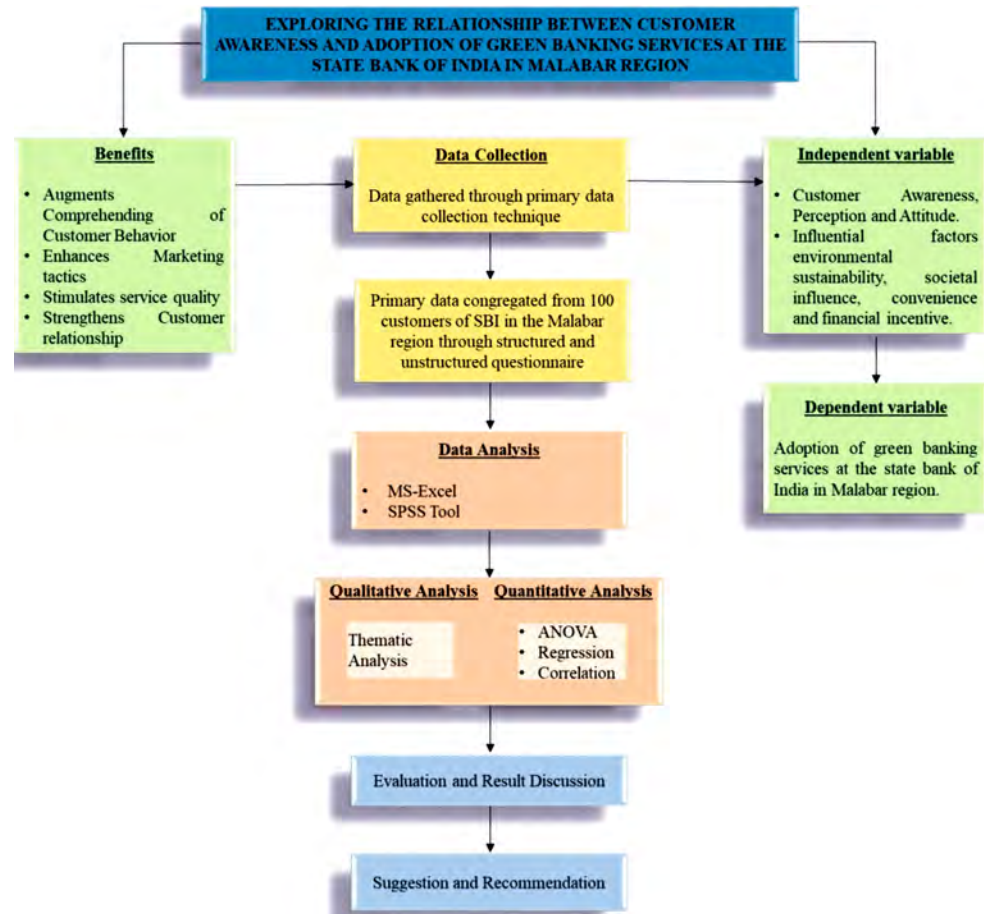
RESEARCH METHODOLOGY

Research Design

The current study employs an empirical and descriptive research design. It embraces a mixed-method technique, which involves both quantitative and qualitative approaches for collecting and analyzing the data. The mixed-methods approach allows the collection of comprehensive data and provides a more nuanced understanding of multifaceted research questions (Knappertsbusch et al., 2021). The amalgamation of both methods enables the data to be triangulated and ensures that the results are accurate. The mixed-method technique is valuable because it explores complex concerns for multifaceted research design. It permits more robust and rigorous analysis and provides more accurate and valid research outcomes (Dawadi et al., 2021). Owing to its significant features, the proposed study adopts mixed methods to analyze the relationships among customer awareness and the embrace of GBS at the SBI in India.

Figure 1 shows the research flow of the proposed study. The study takes a mixed-method approach to understanding the perceptions and attitudes of

Figure 1: Research Design



customers towards the green banking products and services offered by SBI across Kerala, with a primary focus on the Central and Northern Regions of Kerala. Data were collected from a sample of 300 SBI customers spread over key districts to provide a representative understanding of green banking awareness and usage. The sample was stratified based on 50 respondents from Kozhikode, 45 from Malappuram, 40 from Kannur, 30 from Wayanad, and 25 respondents from Kasaragod in the main districts. For the purpose of the study, 35 respondents were selected from Thrissur, 30 from Ernakulam, 20 from Palakkad, 15 from Kollam, and 10 from Thiruvananthapuram so that necessary comparative insights from other prominent districts could be gathered. This sampling method enables an even and all-round view of what customers in Kerala think about green banking. This mixed-method approach allowed for the use of both structured and unstructured

questionnaires to hold an inclusive in-depth analysis that combines quantitative data with qualitative perspectives to form a comprehensive view of customer attitudes toward SBI's green banking services within the region.

Concurrently, the reasons for adopting the GBS of SBI were detected through customer awareness, influential factors, and their perceptions. In the following, the hypotheses of the research are examined. Afterwards, the gathered data are investigated through qualitative and quantitative analysis. The qualitative data are analyzed with the aid of thematic analysis, and the quantitative data are analyzed with the support of statistical techniques such as one-sample t-tests, ANOVA, and correlation. Ultimately, the results of the current research are attained and discussed. In accordance with the results, relevant suggestions and future directions are provided.

Study Area

The proposed research considers the Central and Northern Regions of Kerala as study areas. It involves people from these areas to congregate data. This approach will increase the significance of the research objectives. In addition, it also makes the data collection process simpler.

Sampling Techniques

The sampling methods are significant for deriving definite data from the population. The exact sample size selection is necessary for augmenting the reliability of research results. The current study employs a stratified sampling technique to choose relevant samples from the entire population (customers of SBI in the Central and Northern Regions of Kerala). The stratified sampling technique divides a group into similar subsets that are more homogeneous than the population (Reddy & Khan, 2023). The sample is derived from each stratum that is more identical; hence, precise results are attained from each stratum. The stratified sampling approach is more reliable than any other sampling technique. Thus, the present research utilizes this technique to extract appropriate samples from the entire population.

Research Instruments

The proposed research collected responses from the participants through both structured and unstructured questionnaires. A questionnaire is the simplest technique among various research instruments, such as in-depth interviews and direct interviews. The data were collected from customers of SBI on the basis of their observations, practices, and experiences with GBS in SBI in the Central and Northern Regions of Kerala.

Data Collection

The current study collects data from defendants through a primary data collection method. The data gathered through this approach are regarded as reliable because they are directly collected from the selected respondents. Primary data provide detailed and context-centric insights, increasing the credibility and

validity of the research results. Owing to its significant aspects, the proposed research adopts a primary data collection technique to gather data from a total of 300 SBI customers about GB products and services in the Central and Northern Regions of Kerala.

Data Analysis

The proposed research includes a rigorous and systematic analysis of both numerical and textual data in the data analysis procedure. It is conducted to achieve beneficial insights and attract robust outcomes. The quantitative data comprise numerical data, and the quantitative analysis implements statistical, mathematical, and computational techniques (Mohajan, 2020). The outcomes of the quantitative investigation are illustrated numerically. The collected numerical information is loaded into Ms-Excel to ensure that the study variables are selected. Afterwards, the data are transferred from Ms-Excel to SPSS to perform data analysis. Various statistical techniques, such as regression, correlation, and ANOVA, are used to measure the congregated data.

In addition, the qualitative data will undergo thematic investigation to identify patterns and concepts in the textual data. This allows us to gain a detailed understanding of the experiences and perceptions of respondents. To investigate the data, the following steps, such as data familiarization, initial code generation, theme creation from codes, review of themes, definition of themes, and report writing, are performed - In the data coding step, the data are coded manually by assigning initial codes to each response in accordance with the research questions and objectives. In the theme creation step, the data are consolidated via the detection of significant insights, patterns, and themes. Furthermore, the data are amalgamated via the recognition of associations among patterns and themes. Moreover, the key themes and patterns are detected, and the underlying meaning and implications are analyzed. The final step is data presentation; in this step, the findings are depicted in a clear and concise manner. Through these steps, the current study aims to offer a comprehensive understanding of the associations among customer awareness and adaptation of GBS at the SBI.

Ethical Consideration

The current research adhered to several principles before the process of data collection. The primary data are collected by obtaining informed consent from the respondents who took part in the survey. Demographic details such as age, gender, qualifications, and other personal data are collected from the defendants. The congregated data are strictly for academic purposes and will be kept confidential. Moreover, the ethical consideration process verifies the validity and reliability of the data collection and outcomes of the study.

RESULTS

Demographic analysis

The present research considers 300 customers of SBI in Central and Northern Regions of Kerala as respondents. The demographic information of the participants is presented in Table 1.

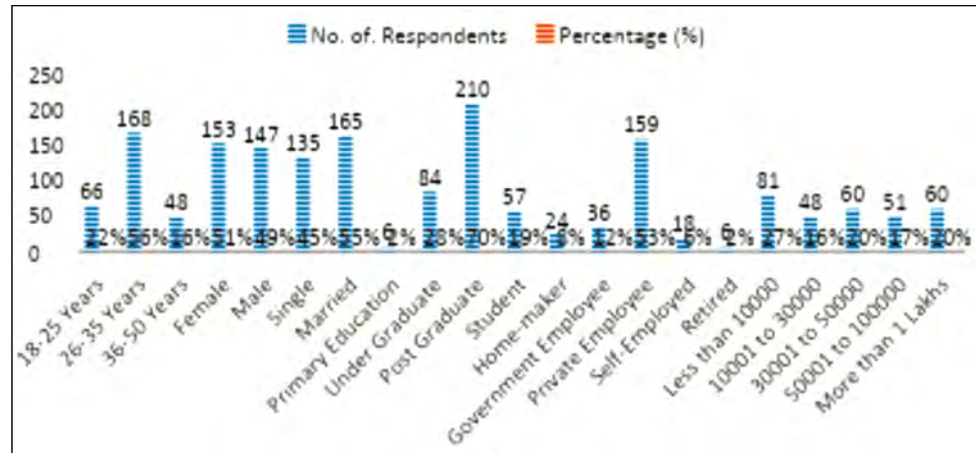
Table 1 and Figure 2 present the demographic profiles of the respondents who participated in the research survey. According to the data, 22% of the respondents are in the 18–25 age group (66 individuals), while the majority fall within the 26–35 age range, accounting for 56% (168 individuals). A smaller proportion, 16%, are aged 36–50 (48 individuals), and only 6% are above 50 (18 individuals).

In terms of gender distribution, 51% of respondents are female (153 individuals), while 49% are male (147 individuals). Marital status analysis reveals that 55% of respondents are married (165 individuals), which is higher than the 45% who are single (135 individuals).

Regarding education levels, only 2% of respondents have a primary education (6 individuals), while a significant portion of the sample holds postgraduate qualifications, representing 28% (84

Table 1: Demographic Data

Demographic Factor	Parameter	No. of Respondents	Percentage
Age	18-25 Years	66	22%
	26-35 Years	168	56%
	36-50 Years	48	16%
	Above 50 Years	18	6%
Gender	Female	153	51%
	Male	147	49%
Marital Status	Single	135	45%
	Married	165	55%
Qualification	Primary Education	6	2%
	Under Graduate	84	28%
	Post Graduate	210	70%
Occupation	Student	57	19%
	Home-maker	24	8%
	Government Employee	36	12%
	Private Employee	159	53%
	Self-Employed	18	6%
	Retired	6	2%
Monthly Income	Less than 10000	81	27%
	10001 to 30000	48	16%
	30001 to 50000	60	20%
	50001 to 100000	51	17%
	More than 1 Lakhs	60	20%

Figure 2:
Demographic
Information

individuals). Additionally, 19% of respondents have undergraduate degrees (57 individuals), highlighting the relatively high educational attainment in Kerala.

Employment status shows diversity among respondents, with 12% working in government jobs (36 individuals) and 18% in the private sector (54 individuals). Additionally, 8% are self-employed (24 individuals), while students and homemakers account for 9% (27 individuals) and 8% (24 individuals), respectively. Retirees form a smaller percentage, at 3% (9 individuals).

Income distribution reveals that most respondents (27%) earn less than 10,000 INR (81 individuals). In the range of 10,001–30,000 INR, there are 16% (48 individuals), and in the range of 30,001–50,000 INR, there are 20% (60 individuals). Finally, 17% (51 individuals) have incomes between 50,001- and 100,000 INR, while 20% (60 individuals) earn more than 1 lakh INR.

This demographic analysis highlights the varied characteristics of SBI customers in the Central and Northern Regions of Kerala who participated in the survey, offering insights into the customer base's diversity in terms of age, gender, education, occupation, and income levels.

Quantitative Analysis

Reliability analysis

Tables 2 and 3 summarize the case processing and the $C\alpha$ values of the reliability test. The attained $C\alpha$ value of the current research variables is 0.740,

Table 2: Case Summary

		Number	Percentage
C	V	300	300.0
	Excluded ^a	0	.0
	T	300	300.0

Table 3: Reliability Statistics

$C\alpha$	N
.740	24

indicating that all the data are acceptable. This reveals greater internal consistency within the dataset, further indicating that the proposed research is reliable within a definite sample.

One-sample test

H₁₁: Customers have a significantly high level of awareness of SBI's GBS in the central and northern regions of Kerala.

H₀₁: Customers have no significant level of awareness of SBI's GBS in the central and northern regions of Kerala.

Tables 4 and 5 present the results of the one-sample t-test. The tables represent the awareness of customers about GBS in SBI in the Central and Northern Regions of Kerala. The achieved p-value is 0.00, which is below the threshold value of 0.05. The results reveal that customers are aware of SBI's eco-friendly banking services, greatly appreciate the significance of these services for environmental sustainability, and have a favorable view of SBI's communication strategies,

Table 4: One-Sample Statistics

	N	M	SD	SEM
The level of your awareness about the GBS offered by SBI.	300	2.86	1.073	.107
How often do you receive information about SBI's GB initiatives?	300	2.66	1.066	.107
GBS are important for augmenting environmental sustainability.	300	4.10	.798	.080
SBI effectively communicates regarding their GBS to their customers.	300	3.62	.962	.096

Table 5: One-Sample Test

	t	df	Sig. (2-tailed)	M Difference	95% Confidence Interval of the Difference	
					Lower	Upper
The level of your awareness about the GBS offered by SBI.	8.013	99	.000	.860	.65	1.07
How often do you receive information about SBI's GB initiatives?	6.193	99	.000	.660	.45	.87
GBS are important for augmenting environmental sustainability.	26.325	99	.000	2.100	1.94	2.26
SBI effectively communicates regarding their GBS to their customers.	16.845	99	.000	1.620	1.43	1.81

suggesting areas for enhancement. The impressive statistical results for all the measures show a favorable response to SBI's environmentally friendly initiatives, which can be used to increase customer engagement and usage by improving communication strategies and running educational promotions about the available services. The results of the one-sample t-test verify that customers have a significantly high level of awareness of SBI's GBS in the Central and Northern Regions of Kerala. Therefore, the first hypothesis is accepted, and the null hypothesis is rejected.

ANOVA test

H₁₂: Factors such as environmental sustainability, societal influence, convenience, and financial incentives significantly impact customer perceptions and adoption of GBS.

H₀₂: Factors such as environmental sustainability, societal influence, convenience, and financial incentives do not significantly impact customer perception and enactment of GBS.

Table 6 shows the results of the ANOVA used to identify the factors that impact customer perceptions of and approval from GBS. Factors such as environmental sustainability, societal influence,

convenience, and financial incentives are considered independent variables. Customer perception and adoption of GBS are regarded as dependent variables. The achieved p-value is less than the threshold value of 0.05. Financial incentives such as better interest rates and lower fees encourage customers to adopt these services. The words of family and friends also influence people to embrace GBS. Moreover, the convenience and contribution of SBI to the environment influence individuals' opinions of adopting SBI's GBS. The ANOVA confirmed that factors such as environmental sustainability, societal influence, convenience, and financial incentives significantly impact customer perceptions and acceptance of GBS. Thus, the second hypothesis is accepted, and the null hypothesis is ignored.

Correlation test

H₁₃: There is a positive relationship between the GB products and services offered by SBI and the level of customer adoption of those banking amenities.

H₀₃: There is a negative relationship between GB products and services offered by SBI and the level of customer adoption of those banking amenities.

Table 6: ANOVA

		Sum of Sq	df	M Sq	F	Sig.
The optimistic contribution of GBS toward environmental sustainability makes people to adopt these amenities.	Between Groups (BG)	4.028	3	1.343	3.645	.015
	Within Groups (WG)	35.362	96	.368		
	T	39.390	99			
Societal influence, the opinion of friends and family influences the decision of individual to adopt GBS.	BG	5.428	3	1.809	4.417	.006
	WG	39.322	96	.410		
	T	44.750	99			
The convenience offered by SBI GBS impacts people to adopt GBS.	BG	6.503	3	2.168	6.403	.001
	WG	32.497	96	.339		
	T	39.000	99			
Financial incentives such as lower fees, better interest rates of SBI motivates public to use GBS.	BG	6.638	3	2.213	4.872	.003
	WG	43.602	96	.454		
	T	50.240	99			

Table 7 illustrates the outcome of the correlation analysis to determine the associations among the customer adoption level and SBI's GB products and services. The achieved p-value is lower than the significant value of 0.05. Furthermore, the correlation value is 1 (positive), which indicates that customer acquisition and GBS of SBI are associated. Customers in the Central and Northern Regions of Kerala highly adopt SBI GB amenities, which make them feel socially responsible and contribute to the environment. The outcome of the correlation test verifies that there is a positive relationship between customer adoption and GB products and services of SBI. Therefore, the third hypothesis is accepted, and the null hypothesis is ignored.

Qualitative Analysis

The perceived quality and efficacy of GBS provided by SBI in the Central and Northern Regions of Kerala

The participants in the Central and Northern Regions of Kerala shared their perceptions regarding the efficiency and quality of GB amenities offered by SBI. Most of the respondents reported that GBSs of SBI are accessible and easy to handle. The convenience, customization features, and eco-friendly financing options have attracted customers to SBI's GBS. Customers perceive that SBI provides high security measures and high-quality services. In addition, SBI has facilitated paperless transactions,

green bond issuance, and rigorous monitoring, which are beneficial for customers in the Central and Northern Regions of Kerala.

The respondents revealed their overall experience with SBI's GBS. The majority of the respondents reported that SBI provides good services, good quality, and excellent amenities. A large number of respondents felt more comfortable and convenient with the GB initiatives of SBI; these individuals also stated that green services are easy to manage. Ultimately, customers of SBI were highly satisfied with the GBS of SBI in the Central and Northern Regions of Kerala. They perceive that SBI provides quality services and is highly effective in these areas.

Themes: Accessibility, convenience, quality of service, easy access, excellent services, and highly satisfied.

Perceptions and attitudes of customers toward GB practices of SBI

The respondents shared their outlook about GB initiatives of SBI. The participants felt that these SBI services significantly saved time and cost. Many individuals have expressed that SBI GBSs are convenient and easy to access. The respondents felt satisfied with CDM services, as they reduced bank visits. Many individuals consider SBI GB amenities to be flexible and eco-friendly and to have an impact on the environment. Several customers have stated that GBS positively impacts the environment by reducing

Table 7: Correlations

		The level of your awareness about the GBS offered by SBI.	SBI's green deposits influence my choice to bank with them over other banks.	Using SBI's green credit cards makes me feel that I am contributing to environmental protection.	The green practices of SBI like green loans is an important aspect of its social responsibility and these initiatives are genuine.	The optimistic contribution of GBS toward environmental sustainability makes people to adopt these amenities.
	Pearson Correlation (PC)	1	.223*	.392**	.385**	.278**
The level of your awareness about the GBS offered by SBI.	Sig		.026	.000	.000	.005
	PC	.223*	1	.498**	.569**	.304**
SBI's green deposits influence my choice to bank with them over other banks.	Sig	.026		.000	.000	.002
	PC	.392**	.498**	1	.598**	.258**
Using SBI's green credit cards makes me feel that I am contributing to environmental protection.	Sig	.000	.000		.000	.010
	PC	.385**	.569**	.598**	1	.299**
The green practices of SBI like green loans is an important aspect of its social responsibility and these initiatives are genuine.	Sig	.000	.000	.000		.003
	PC	.278**	.304**	.258**	.299**	1
The optimistic contribution of GBS toward environmental sustainability makes people to adopt these amenities.	Sig	.005	.002	.010	.003	
	PC	.329**	.220*	.423**	.344**	.482**
Societal influence, the opinion of friends and family influences the decision of individual to adopt GBS.	Sig	.001	.028	.000	.000	.000
	PC	.303**	.451**	.287**	.401**	.518**
The convenience offered by SBI GBS impacts people to adopt GBS.	Sig	.002	.000	.004	.000	.000
	PC	.388**	.242*	.383**	.276**	.504**
Financial incentives such as lower fees, better interest rates of SBI motivates public to use GBS.	Sig	.000	.015	.000	.005	.000

paper usage and promoting digital transactions. In addition, a few defendants have stated that it reduces the carbon footprint and waste generation. Customers are positively influenced by the 24/7 services provided by SBI, and individuals are highly satisfied with SBI's GBS. Overall, customers have a positive perception of SBI's GB practices.

Themes: Flexible, convenient, eco-friendly, saves time and costs, easy banking, and environmental contributions.

DISCUSSIONS

The inference of the proposed study was offered through investigating the collected respondents' data. The outcome of the present research confirmed that customers in the Central and Northern Regions of Kerala have significant awareness of the GBS provided by the SBI. The results of the ANOVA test confirmed that societal influence, incentives, environmental sustainability, and convenience of SBI's GBS have significantly influenced their decisions to adopt these amenities. The correlation analysis revealed that customer endorsement and GBS are positively associated. Customer awareness of GBS also plays a role in the adoption of these services. With respect to the GBS offered by SBI, SBI is effective. Most customers consider SBI's GBS to be accessible and convenient. Moreover, customers are highly satisfied with the quality and service of SBI's GB products. The participants had positive perceptions and attitudes toward the GB products and services of SBI. Customers were positively influenced by the 24/7, flexible, and eco-friendly services provided by SBI.

The conventional study (Neeraja & Joseph, 2021) has analyzed the various green products and services offered by SBI and their benefits to customers. Furthermore, this study investigated the level of customer awareness of and satisfaction with GBS in SBI. The outcomes revealed that most individuals are aware of and highly satisfied with SBI's GB initiatives. The results also revealed that, through SBI's GBS, customers significantly saved time and cost. Similarly, the current study also scrutinized the awareness level of customers. The outcomes revealed that customers

are highly aware of the GBS provided by SBI in the Central and Northern Regions of Kerala. In addition, the proposed study also detected the influential factors and customer perceptions and attitudes and, finally, the relationships among user adoption and SBI GB amenities.

Previous research (Sunil & Durgalashmi, 2022) has examined the perceptions and awareness levels of customers about the green banking services of SBI in southern Kerala. In addition, the influential factors for adopting these services and their satisfaction level are scrutinized. The results revealed that the majority of the customers were aware of GB services and that awareness was gained through family and friends, social media, and advertisements. Furthermore, customers tend to show a higher level of satisfaction with these amenities. Similarly, the proposed research analyzes customer awareness of GBS and the factors influencing customers' adoption of these amenities. In addition, it also determines the quality and efficacy of the green products and services of SBI and customer perceptions and attitudes toward these services. The results revealed that customers are highly aware of and satisfied with SBI's GBS in the Central and Northern Regions of Kerala. The outcome also revealed that societal influence, convenience, eco-friendliness, and time savings are the factors influencing customers' adoption of these services. The current study scrutinizes important aspects in a more comprehensive way than conventional studies do. In addition, the present study serves this purpose in an efficient manner.

Suggestions of the Study

Banks dealing in green banking can adopt the following customer-reassuring measures concerning the safety of online transactions. Involving multi-layered encryption, biometric verification, and two-factor authentication would provide greater confidence among the customers in the safe nature of their data. Moreover, direct communication with respect to security policies and periodic information about new protections provides adequate confidence among the customers. Additionally, banks can undertake awareness campaigns educating the customers about

safe online practices and can have a special helpline for security-related issues. Regular security audits and certifications, along with user-friendly security features, will further enhance the confidence and non-hassle experience. In aggregate, such efforts would encourage many customers to turn to green banking services with more confidence in digital security.

To overcome the hurdle of limited customer understanding of green banking services, banks can implement targeted communication strategies. Firstly, they can leverage digital platforms and social media to create awareness through engaging content, such as videos and infographics that explain the benefits of green banking in simple terms. Secondly, in-branch awareness programs and personalized consultations can be offered to educate customers on how green banking products contribute to environmental sustainability. Additionally, banks can partner with educational institutions and community organizations to host workshops and seminars, promoting green banking as part of a larger societal effort toward eco-friendly financial practices. Finally, offering incentives or rewards for customers who adopt green banking services, such as reduced fees for paperless statements, can enhance engagement and encourage a shift toward sustainable banking habits.

Limitations of the Study

The current study has several limitations in terms of sample size. Furthermore, it concentrates only on the Central and Northern Regions of Kerala, which are specific geographic areas in Kerala, India, and may reduce the generalizability of the research results. The present research considers only the GBS offered by SBI, which limits a comprehensive understanding of that landscape. However, the inferences provided in the research will be beneficial for banks to enhance GB initiatives and strengthen relationships with customers.

CONCLUSION

This study provides valuable insights into the impact of customer awareness on the acceptance of eco-friendly banking services at the SBI in the Central and Northern Regions of Kerala. The outcome of the study revealed that customers are significantly aware

of the GBS offered by SBI in the Central and Northern Regions of Kerala. Furthermore, societal influence, financial incentives, environmental concerns, convenience, and customers' consciousness are the factors that cause individuals to adopt SBI GBS. Customers have a positive outlook and attitude toward these services of SBI. The implications of this study are far-reaching. SBI can increase the utilization of eco-friendly banking services by enhancing customer awareness via targeted marketing strategies and educational campaigns. Moreover, this study highlights the importance of continuous engagement with customers to understand their evolving perspectives and emotions related to eco-friendly banking. Ultimately, promoting a culture that prioritizes sustainability within the banking sector is essential, as this impacts not only financial institutions but also responsible consumer habits and environmental conservation.

Future Directions of the Study

This study further proposes future research directions based on suggestions that explore, in more detail, how the long-term effects of green banking initiatives might be accomplished in terms of customer loyalty and environmental sustainability. In this context, future studies may come across how continued engagement with green banking influences customer retention toward sustainable development goals. This would further enhance the generalizability of green banking findings by analyzing differences in customer awareness and response between regions as well as demographic groups.

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Conflict of Interest

There are no conflicts of interest.

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