

A STUDY ON CUSTOMER PERCEPTION TOWARDS GREEN BANKING

¹Somasundaram R, ²Sanmathi S E, ³Narmadesvara V

¹Professors, ²Student, ³Student ¹Department of Management Studies, ¹Kongu Engineering College, Erode, India - 638060

Abstract: Green banking is a concept that integrates environmental and social considerations into banking operations, products, and services. It aims to promote sustainable development by encouraging banks to adopt environmentally responsible practices and support green initiatives. Green banking also involves promoting awareness and education about environmental issues among customers and stakeholders. Primary data were collected from 131 respondents using structured questionnaire and the respondents were the consumers of Green banking in Coimbatore city. The collected data were analysed using Descriptive statistics, Garrent Ranking and One Way Anova. The study indicates that majority of 50 percentage of the respondents are male and the remaining 50 percentage of the respondents are female. The study indicates that majority of 96 percentage of the students using the green banking. From the study 78 percentage of the below salary of 2 lakhs peoples using the green banking the most. The study indicates that Education can increase a usage of green banking. The study states that majority of respondents 82 percentage 108 are undergraduate. 97.7 percentage of the respondents are satisfied with the green banking is environment friendly, 2.3 of the respondents are not satisfied with environmental green banking. 32.8 percentage of respondents opined are only cashless economy of green banking. 68 percent of the respondents prefer internet banking. 71% agree that green banking makes customers feel insecure. 74% agree that green banking can sometimes be problematic for transactions. The results of the study depicts that consumers are satisfied and aware on Green banking. Key words: Green banking, Sustainable, Awareness, Environmental development.

INTRODUCTION

Green Banking is a generic term for practices and policies which make banks economically sustainable, environmental friendly and socially acceptable. It endeavors to make banking operations and application of IT and physical infrastructure as efficient and effective as possible with nil or negligible impact on the environment. Sustained development and environmental conservation are today universally accepted as overarching imperatives to save our world from the devastation that human activities have caused to it. Several international movements are being carried out to check the negative impacts of development that tend against day like global warming and climate change. One common link between all these endeavors is the emphasis placed on curbing the use of fossil fuels by adopting the green banking. Reduce, Reuse and Recycle. Banks and financial institutions can make a significant and crucial contribution to these international efforts in making our world a better place to live. As financiers, banks can see to it that companies adopt eco-friendly measures. Incentives in terms of providing lower-cost funds for adopting green technologies will have a positive long-term effect on the environment. Being large implementers of technology, banks themselves can follow green practices and thus become the

"Earth provides enough to satisfy every man's needs but not every man's greed"-Mahatma Gandhi

trendsetters for this global movement. And, product innovation and riding on the application of technology allow banks and their customers now to minimize the use of resources like paper, thus contributing towards the preservation of the environment. The argument for sustainable growth is proved beyond any reasonable doubt. Unimaginative and reckless promote this jeopardizing the earth and the negative effects are evident in global warming, climate change, erratic weather, floods, droughts, pollution, excessive green house gas emissions, etc. Although there is no collective agreement among the nations regarding burden sharing of ecological footprint, all the nations have been adopting aggressive steps to combat global warming and climate change. Banks also put direct and indirect contribution to ecological footprint while investing/lending in their customer businesses. Therefore, they must be involved in a crucial role in maximizing minimizing the carbon footprint. It is believed that only what is measured, can be managed.

1.1 DEFINITION OF GREEN BANKING

Green banking is a concept that brings environmental and social aspects into the sphere of banking operations, products, and services. It seeks to advance sustainable development through a call for banks to conduct environmentally sound practices and fund green activities. This involves extending loans and financial services that finance green projects, investing in renewable resources, and adopting energy-efficient processes in banking operations. Green banking also entails creating awareness and sensitization among

customers and stakeholders regarding environmental concerns. Through the integration of environmental sustainability into banking operations, green banking supports the shift towards a more sustainable and resilient economy.

1.2 CONCEPT OF GREEN BANKING

Green banking refers to encouraging environmentally friendly operations and minimizing carbon footprints from bank activities. It takes numerous forms viz., utilization of online banking over branch banking, online bill payment rather than sending them by mail, opening commercial deposits and money market accounts online etc., Green banking is the effective and efficient utilization of computers, printers and servers to reduce energy consumption and paper-less waste. One of the significant means of ensuring that banks apply green banking is encouraging clients to use online banking. Online banking reduces paperwork and the necessity to visit bank branches. This has a positive impact on the environment. This service is helpful for banks because it decreases operating costs and enhances efficiency.

1.3 GREEN BANKING PRACTICES

Society is being confronted with most complex issues of climate change. Individuals today are more familiar with global warming and the associated implications on human existence. Therefore, change is the demand of the hour for the existence and relentless efforts should be utilized for the environmental management in a sustainable way. It is not just the responsibility of the government and the direct polluters alone but also of other stakeholders such as financial institutions such as banks, who are playing a root role in the growth of the society. The activities of banking have no physical link with the environment, but the external effect of their customer activities is huge. Therefore there is a requirement for banks to implement green practices into their operations, buildings, investments and finance strategies. The aim of this paper is to emphasize the rating criteria provided by RBI, the World Bank's environmental and social standards, the steps initiated by public and private sector banks in India towards adopting practices and to list the major strategies for adoption Banking.

1.4 ENVIRONMENTAL SUSTAINABILITY THROUGH GREEN BANKING

A Study of Private and Public Sector Banks in India Industrialization across the world has led to the quest for ever growing requirements and demands of the population and it has become synonymous with prosperity and development of the economy. However, it has also led to the exploitation of the natural world which has further disrupted the balance of nature. The ecosystem balance has created a disturbance that negatively affected the human and its environment. The latest industrial catastrophes and natural disasters that happened during the last three decades were either directly or indirectly related to the unbalanced industrialization. This, in turn, has created a vital concern of environmental conservation among environmentalists, governments, and organizations throughout the globe. Environmental sustainability and sustainable development have become the vital agenda in the global community. Different conferences and programs like Earth Summit and United Nation Environmental program were being initiated to make people realize about this alarming problem. Realizing the significance of human health & well being governments along with the organizations began taking different steps for the cause of environmental protection and sustainability. Environmental sustainability is extremely important in sustainable growth and development, as the incorporation of social, economical and environmental sustainability make the development sustainable. Environmental protection is now included in strategy of most organizations of the developed world and began providing environment friendly or green services and products to the consumers. Following the examples from the western world, the Indian firms have also incorporated green practices in the organization. However, the idea of environmental sustainability and green services and products is a new concept in the developing nation like India

1.5 ROLE OF GREEN BANKING SYSTEM IN INDIA

The chief concept of Green banking is to offer a chain of services to the customers via the internet, and make the customer feel convenient in calling out simple procedures quicker rather than making a visit to the banks time and again. Nowadays, one of the most certain most convenient and low risk faced by the banking sector is the use of electronic commerce. Increasingly individuals are adopting this method and the banking sector is sure to expand. The revolution of green banking began with automatic teller machines and has progressed through telephone banking, direct payment of bills, electronic transfer of funds and internet banking. This transition from the formal banking to electronic banking has been a phenomenal 'leap change' in the history of Indian banking. Therefore, green banking now is a powerful innovative weapon in providing sophisticated and enhanced services to customers. This research evidently indicates that the various roles played in Indian economic development.

1.6 GREEN BANKING PRODUCTS

From the empirical study, it is found that following are some of the steps that can be taken for going green in banking:

Green Loans

The Ministry of Non-renewable Resource in association with some nationalized and scheduled banks undertook an initiative to go green by paying low interest loans to the customers who would like to buy solar equipment. The rate of interest is as low as 4% p.a. Before you undertake a major home improvement project, study if the project can be done in an eco-friendly manner and if you might qualify for a green loan from a bank Green loan are perfect for energy-saving project around the house. The new Green Home Loan Scheme from SBI, for instance, will support environmentally friendly residential projects and offer various concessions. These loans will be sanctioned for projects rated by the Indian Green Building Council (IGBC) and offer several financial benefits –a 5 percent concession in margin, 0.25percent concession in interest rate and processing fee waiver.

Green Credit Cards

Some of the banks introduced Green Credit Card. The benefit of using a green credit card is that banks will donate funds to an environment-friendly nonprofit organization from every rupee you spend on your credit card to a worthwhile cause of environment protection.

Save Paper

Bank should purchase recycled paper products with the highest postconsumer waste content possible. This includes monthly statements, brochures, ATM receipts, annual reports, newsletters, copy paper, envelopes etc. Whenever available, vegetable-based inks are used instead of less environmentally friendly oil based inks.

Solar and Wind Energy

Using solar and wind energy is one of the noble cause for going green. State Bank of India (SBI) has become the first bank in the country to venture into generation of green power by installing windmills for captive use. As part of its green banking initiative, SBI has installed 10 windmills with an aggregate capacity of 15 MW in the states of Tamil Nadu, Maharashtra and Gujarat.

Online Banking

Internet Banking is the nothing but online banking. This is the most prominent product, which is contributing a lot in the conserving environment. It is an e-payment arrangement, by which banking customers can perform n number of transactions related to banking. It is the nearby replacement of the branch banking; utmost benefit is the reduction in footfalls in the bank. It also lessen down the paper wastage, carbon release, costs of printing and expenses of postage etc.

The bank customer needs the separate login and password for the access. The transaction or activity done through bank's website is most secured one with bifurcated user password, transaction password, secured OTP for access etc. It is required to change the passwords every quarter for safety purpose. Below are the exhaustive tasks and facilities under the Internet Banking:

- ➤ Look at the Account Balances
- Get the Account Statements of any term duration
- View the recently occurred transactions
- Images of Cheques issued
- Apply online
- Cheque books on a single click
- Third Party Payment i.e. instant transfer of funds.
- Transfer of funds between our own accounts of other banks linked.
- Online Fixed or term deposits
- Applying for Credit or debit cards
- Purchases or sales of Investments
- Making bills payments of utilities like electricity etc.

Solar ATM

Automated Teller Machine (ATM) is again a product of green initiatives saving the footfalls, papers and alternative of branch banking for deposits and withdrawals of cash at any point of time. Solar ATM is also new venture in this field, where in the machine requiring the energy to run the operations can be accumulated from solar panels which captures solar rays' throughout the day.

Mobile banking

Mobile Banking is again a system of banking used for fund transfers, payments, view balances etc. It nearby performs similar kind of functions like internet banking. It is again created with approach of going paper less.

Green Mortgages & Loans

Green Mortgages is also known as Energy Efficient Mortgages (EEMs). It provides very low rates to the customers against the market prevailing rates of mortgages, provided the client go for such houses which are energy efficient ones, having energy efficient appliances viz energy-efficient windows, geothermal heating or water heaters, solar panels etc. Green Loans are also called "reduced rate loans" motivating the customers to install technologies based on renewable energy. Banks have also being 28 associated with such Environmental NGOs or such Vendors of such technology, in order to offer such product.

Green Car Loans

In order to motivate the customers for high fuel efficiency cars, such green car loans are launched, having lower interest rates. There is a legitimate increase in such products and countries like Australia and Europe are first in this league

Green Cards

Green cards are the one which associates the environment conservation with Debit or Credit cards of customers. The Credit Card companies offering Green Cards commits to donate ½ % of purchases, cash advance done by owner

Green Insurance

Green Insurance includes two product areas:

Insurance products which distinguish insurance premiums on the basis of ecologically related features and those precisely custom-made for clean technology. For example, there is Green Auto Insurance, where the environmental foot print and the use of the vehicles determines the premiums. Another example is of Green Home insurance where the distinct rates are given for the energy competent buildings (Roa and Mayur, 2018).

1.7 ADVANTAGES OF GREEN BANKING

Environmental sustainability:

Green banking encourages investment in green projects, and this results in lower carbon emissions and environmental footprint.

Cost savings:

Through investment in energy-saving technologies and green energy projects, banks can assist individuals and businesses in reducing costs on energy consumption in the long term.

Competitive advantage:

Banks which implement green banking normally enjoy a competitive advantage through engaging environmentally responsible customers as well as investors. Green banking inspires banks to evaluate and control environmental risks of their investments, minimizing the risk of loss from natural disasters or environmental regulations.

Improvement in reputation:

Adopting green banking can enhance the reputation and image of a bank, resulting in more customer loyalty and confidence.

Compliance with regulation:

Governments are developing regulations to ensure sustainability, and green banking assists banks in complying with the changing environmental regulations.

1.8 CHARACTERISTICS AND FEATURES OF GREEN BANKING:

Depending on the state, a green bank can take many different forms, leverage numerous public funds, and produce a diverse range of financial products. Banks can use financial tools like long-term and low interest rate loans, revolving loan funds, insurance products and low-cost public investments or it can develop new financial products. Every green bank, finally, will share some of the following attributes:

- > Stimulate demand by financing 100% of the initial costs with a combination of public and private funding.
- Mobilize public funds by enabling much larger amounts of private investment in clean energy and markets.
- Recycling public money so as to grow green investment and not hurt taxpayers.
- Ramp up clean energy solutions as quickly as possible, maximizing clean electricity and efficiency improvements

1.9 CHALLENGES OF GREEN BANKING

While embracing green banking practice, the banks would encounter the following challenges:

Reputational Risk:

If banks are part of those projects which are harming the environment they are likely to lose their reputation. There are limited instances where environmental management system has led to cost saving, bond value increase.

Diversification Problem:

Green banks limit their business transaction to those business entities that pass through screening process carried out by green banks. Having few customers they will have less base to support them.

Start-up face:

Most of the banks in green business are very new and are in start-up face. In general it takes 3 to 4 years for a bank to begin earning money. Hence it doesn't assist banks in recession.

Credit Risk:

Credit risk occurs as a result of lending the customers whose businesses are impacted by the cost of pollution, environmental regulation change and new emission level requirements.

High operating cost:

Green bank needs skilled and experienced personnel to offer appropriate services to the customers. Experienced loan officers are required, they provide added experience in handling green business and customers.

1.10 PROBLEM OF STUDY

The destruction of nature by human beings is the reason behind environmental degradation. Environmental degradation is causing global warming and climate change. Climatic alterations have been inducing natural disasters such as cyclones, floods, landslides, and droughts. Together, governments, corporate world and individuals can contribute towards reducing these different forms of environmental degradation. For this, the governments need to devise effective policies; corporate houses need to adhere to guidelines of protecting the environment more strictly; and people need to be self-conscious to safeguard the environment in which they live. Banks have been making use of lighting, air conditioning, electronic appliances, IT, high paper usage in gigantic ratio. The resulting internal carbon footprint can be minimized through using renewable energy, automation etc. On the contrary, banks can mitigate external carbon emission through funding projects and business ventures that are engaged in pollution control and using green technology.

1.11 RESEARCH QUESTIONS

- What are the customers perception towards green banking?
- Which are the challenges encountered during green banking?
- How are the customers satisfied through green banking?

1.12 OBJECTIVES

- To get to know about customers perception towards Green banking.
- To get to understand about the challenges encountered during Green banking.
- To get to know about the customer satisfaction towards Green banking.

1.13 HYPOTHESIS

HO - There is no difference between customer satisfaction towards Green banking and Qualification.

H1 – There is difference between customer satisfaction towards Green banking and qualification

1.14 SCOPE OF THE STUDY

The study was undertaken to comprehend the perception and customer satisfaction towards green banking. The study was conducted with regard to Coimbatore city, since this region studying attitudes, awareness, and behaviour towards environmental sustainability within the banking industry. This may include exploring customer's awareness and knowledge regarding green banking practices, customer's perception towards the significance of sustainability of banking services, and customer satisfaction with existing green banking practices provided by financial institutions.

1.15 LIMITATIONS

Following are the limitations of the study:

- 1. The study is confined only to erode city and limited to 131 respondents alone for time constraints.
- 2. The outcome depends upon the information provided by the people, hence it is biased.

REVIEW OF LITERATURE

Amita Charan, Rekha Dahiya and Manpreet kaur (2019) undertakes a study about customer perception towards green banking practices in India. The findings of the study reported that the usage of green loan was very low as compared too the green banking channel as 22 respondents out of 208 were green loan respondents 186 were not used. From factor analysis, it can be conducted that environment pay off and importance of green banking and consumer role were factors affecting customers perception towards green banking practices. The most preferred channel from the analysis seems to be ATM followed by Internet Banking, Mobile banking, SMS, Telephone Banking and Green Loan.81% of the respondent were using ATM, 78% were using Internet Banking, 74% of the respondent were using Mobile Banking, 63% were used SMS, 27% were used Telephone Banking and rest 11% of the respondent

using Green Loan. The usage of green loan was very low as compared too green banking channels as 22 respondents out of 208 were used green loan and rest 186 were not used.

Mehree Iqbal, Nabila Nisha and syed Ali raza (2016) undertakes the study on customers perception of green banking the finding of the study systematically explores whether service quality of the green banking system can influence the behavirial intention of customers alternate financial delivery service. Result that conclude that quality dimensions like reliability, privacy, information quality responsiveness and empathy can significantly affect the performance of green banking. Theoretically, this hybrid model is a contribution to the literature since it is capable of understanding the service quality determinants, along with other factors, behind the adoption of green banking in Bangladesh. From a managerial perspective, the findings of this research should provide further insights into understanding and managing potential and current users. This study can also assist banks to discover the qualities that existing users demand and potential users anticipate from the existing green banking system in Bangladesh.

Veena K.P and Nayana.N (2017) undertakes the study on customer perception towards green banking on SBI. They collected 50 respondent on their studies. The research methodology used in this study is based on primary data and secondary data. The analysis of data is done using percentage, Standard deviation, Mean, Co-variance and quantitative method for tabulation and represents the data using graphical method. The study has been conducted in Indore city. It is based on primary information and 400 customers (200 customers from each private and public bank) were selected for comprehensive study. The outcomes of the study reflects that married male and females customers may use more green banking devices in comparison to unmarried customers, Thus, banks must evolve effective strategies to enhance the awareness level of customers for the usage of GBPS technology.

Jooyabal and M.Soundaryan (2023) undertake the study on customers satisfaction regarding green banking in public sector banks. The tools used for the analysis of data on statistical tool such as descriptive statistics, Chi square test, Simple coorelation, Factor analysis and percentage analysis were to analyze the primary data collected from the respondents. Multi tools stage random sampling method is used to draw required samples for the study.

Chandrekaran and M.Narayanan (2020) has took the study customer perception and satisfaction of E-banking services provided by private sector banks in India. The Study is an empirical study based on primary data Questionnaire method was developed for this purpose. Then secondary sources of data consists of existing information by the researcher from different sources.

Anum Ellahi, Hammna Jillani & Hesan Zahid (2021) undertakes the study that customer awareness on green banking practices. The tools are descriptive analysis for the sample of green banking awareness. There are 400 individual samples are gathered and 60% of the people have a awareness about the green banking. The sample of both men and women, banks investment in green facilities and sustainable green practices are positively significantly related to the individual green banking awareness. Furthermore, the females in our society are more mindful of the services of banks that constitute green investment and all methods adopted by banks to become sustainable. On the other hand, the sample constituting male participants, has knowledge regarding e banking services by their respective banks. The male respondents have knowledge of environment friendly investments made by banks.

Veena K.P and Narayana.N (2017) undertakes the study that customers perception towards green banking. The research methodology used in this study is based on primary as well as secondary data. The primary data was collected from the study conducted through personal interviews. The study examines major aspects concerned with the green banking specially structured questionnaires and interviews with employees of well established banks and general public have been used for survey purpose. The analysis of data is done using percentage, standard deviation, mean, co-variance and quantitative method for tabulation and respondents the data using graphical method.

Sri M.Narayan and Chandrasekaran (2022) analyses about the study on customer's awareness on green banking initiatives in selected public sector banks. The researcher has selected sample of 80 respondents. Sampling method was adopted and respondents were chosen simple random sampling. Questionnaire were used to collect data from the respondents in the area. The secondary data collected from journals, books, magazines and websites.

F.Sultana, S.Dutta and M.B.Khais undertakes the study about the green banking and customer satisfaction. This study made both primary and secondary data were analyzed during this research. The research design of this study contains the development of the questionnaire, selection of the respondents from the cbl, collection of data information, analysis of data, hypothesis testing, and finally, report writing, face to face (interviews), (using a semi – structured questionnaires) was applied to excerpt the primary data. The data analysis formulas descriptive analysis, multiple regression analysis (MRA), analysis of variance (Anova), correlation, erc., The statistical software package (spss version).

R.Ganesan and A.Bhvaneshwari (2016) undertakes the study on customer perception towards green banking. The convenience sampling is used in this research. The researcher collected primary data and secondary data both are collected. The statistical tools are applied in the research is chi square analysis, analysis variance – one way ANOVA (F- test), Frequency tables. Chi square analysis was used in order to identify the association between any two given variables. One way anova applied in the order to find out the each variable and also ascertain the association between a dependent variable and group of independent variables. 64% of the respondents are aware of green banking and 36% of them are unaware of green banking. 98% are aware of the meaning of green banking, 32% of the respondents are aware of cheques on recycled paper, 68% are unaware of cheques on recycled paper. 96% of the respondents are aware of online banking and accounts maintenance while only 4% are unaware. 62% are aware of Automatic cheque deposit services offered, 36% are unaware of the service offered. 78% of the respondents are unaware of automatic cash deposit while 18% are only aware of automatic cash deposit.18% respondents are aware of green mortgage while majority are unaware of green mortgage.16% of the respondents are aware of percentage of loans awarded to environmentally focused companies and 82% are unaware of percentage of loans awarded to environmentally focused companies.32% of the respondents are aware of use solar powered ATM machines while 68% are unaware of solar powered ATM. Majority of respondents are unaware of green credit cards service offered by their banks. Only 14% are aware about the green credit card service offered. Respondents are unaware about the investing in mutual funds engaged in solar or wind energy. Only 24% are aware about the investing in mutual funds engaged in solar or wind energy. 30% Respondents feel comfortable using ICICI Bank and 24%SBI bank when considered other banks while using green banking facility.14%of respondents using Canara bank and Axis bank.10% use HDFC bank.34% respondents feel Lack of security and Lack of facility are the problems faced by the majority of respondents.20% fear for breach of privacy. 98% of the respondents use mobile banking. 36% of the respondents are aware of recycled debit and credit cards while others are unaware

Retta Rai, Saraamesh kharel, Niranjan Devkota and udaya paudel (2019) undertakes the study on customer perception on green banking practices that researcher explain how green banking and perception of customer are collected through the questionnaire on the behalf of the research. The various studies found out customers are less aware about the green banking concept adopt by their

banks and their positive perception towards the green banking concept. The review of literature shows that although the increasing concern for the green banking practices around the globe.

K.Nithya kele, K.Vidyakala and Jamuna.S (2020) undertakes the study impact of green banking practices on banks environmental performance of the research. The researcher analyzed the simple random sampling method and primary and secondary data were collected in this research. The primary data were collected through structured questionnaire. The secondary data were collected through journals, Annual reports, and Online websites.

Varsha Bihade and Prof.Saylee Karanede (2020) undertakes the study customer satisfaction towards green banking. The researcher both concentrated on primary data and secondary data. The sample size for the study is based on experience gathered in the survey which was conducted in the two parts. In the first part of the survey, it is observed that interviewing 80 account holders on overall perception about green banking is the waste of time and money because on additional interviewing to reverberation of answers be structured questions and have the sample size was fixed near to that i.e. 83 customers having a bank account.

H.Manasa(2024) conduct a study on perception towards green banking. Based on this study of customer perception towards green banking she found that 57% of female compared to the males are 43% responded to my survey. And the responses came under the age aware about the green banking, only 5% of the respondents are not have the idea about the green banking will help in reducing the paper work and make sustainable development. It is found that the green banking development.

Sohan singh dagur and Ravi Juniwal (2019) undertakes the study on customer perception about green banking with specific reference to ICICI Bank. In this study descriptive statistical (Mean and standard deviation) of all groups was compared through SPSS-17 software. The statistics was computed to investigate the significance of mean difference between the awareness customers perception in the context of green banking among various socio-economic classes (low, middle and high). There is an urgent need for the banking services to themselves in view of cutthroat competition, which is close on the banks. The banks shall have to reorient themselves in terms of the customer services parameters to instill the concept of quality service in the mind of the customer and therefore the growth.

M.Thirunarayanasamy and M.Natarajan(2023) conduct a study on customer perception towards green banking services offered by commercial bankers. The researchers te respondents opinion on green banking services offered by bankers in tamil nadu are determined by the mean score values calculated for eight statement by adopting likert scaling technique. For analytical purposes, the total perception on green banking service offered bankers, five points are given for 'excellent', four points for 'good', three points 'fair', two points for 'poor' and one point for respondents are obtained by selected green banking services. Bank should take into deliberation the ecological aspect in lending apart from security and profitability. The banks in India also started green banking practices such as online banking, mobile banking, Green channel counters, e-statement, green loans, solar ATMs, etc. The issues of global warming should not be only restricted to a debate but has to be dealt with going green. To gain a better understanding of how bankers are practicing green banking and how does the go green concept impact to the society, environment and economy, whether customers have aware effectiveness of green banking. There is a need to involve key stakeholders and creating awareness about environment-friendly banking.

HMAK herath and HNSP herath (2022) undertakes the study on impact of green banking initiatives on customer satisfaction that the researcher collected the 247 responses and they used descriptive analysis and multiple regression analysis and correlations and collinearity statistics to analyze the people. Impact on customer satisfaction followed by environmental and social concern features and values creation features respectively. In order to use constrained resources cautiously and keep in the mind that unnecessary use may endanger the future generation. Hence it is needed that each and every of paper less activity has a specific impact on the environment. Financial institutions are playing an intermediator role between economy and environmental development therefore Banking industry address this issues to save environmental degradation and conserve the ecological balance, the Green Banking concept green banking is introduced and gradual emergence in banking. There is a need to focus on sustainable banking to protect the environment from disaster.

Meenakshi swami, Gioia Arnone, Dr.S.Murugesan and Ramesh Pandi (2023) undertakes the study on their research on primary data collection is taken and 55 responses are collected to know opinion about green banking practices. In this research random sampling method and the statistical tools are demographic details gross tab analysis of descriptive. Statistical analysis, SPSS, Correlation, One way Anova and other suitable tools have been used based on the requirement of the study. The data are collected based on primary as well as secondary data. Data is collected from the green banking customers. The secondary data collection has been the various sources such as the bank official website, Annual reports, Sustainability, reports, IDRBT reports, RBI reports.

Ashish krishna K, Aahwarth kumar, Ashwija, Ashwini, Ashwini P.H, and Ashwitha K (2019) undertakes the study customer perception towards green banking. This study going to undertaken the primary and secondary data. The total respondents are 30 account holders, conventional banks who are selected randomly from belthangady taluk. A random sample of 30 account holders. In this study it is clear that green banking system in conventional banks are are similar among consumers in the recent years. More number of peoples using green banking system than aged peoples. Peoples are worried about the online frauds, cyber scans, etc., and this system are helpful to be reducing the burden on account holders.

Bukhari, S. A. A., et al. (2019) in their attempted to examine how organizational adoption determinants and the adoption of green banking. According to the findings of this study, stakeholder involvement is crucial in influencing and supporting the adoption of green banking and should be prioritized to ensure its uptake. The study suggests, based on the body of available research, that various stakeholder pressures may have a favorable impact on the adoption of green banking. Redwanuzzaman, M. (2020) attempted to evaluate the impact of environmental issues on Bangladesh's adoption of green banking. The survey portion of the analysis used a constructed questionnaire to deliver a straightforward random sample procedure to 323 respondents. According to the study's findings, the key environmental elements that influence Bangladesh's adoption of green banking include consumer pressure, competitor pressure, and community pressure. Adoption of green banking is more or less favorably connected with variables measuring competitor pressure, community pressure, and customer pressure.

Sharma, A., & Verma, G. (2020) made an effort to pinpoint underlying factors that influence customers' expectations of green banking practices from the perspective of the Indian banking sector. A sample size of 160 respondents was used for the analysis. According to the study's findings, clients want banks to cut back on their extensive paper usage. Therefore, using less paper will significantly reduce the need to cut down trees. Equipment that emits fewer pollutants and eco-friendly technology with several functions both help to create the "Energy Efficiency" factor. Another important research finding is that banks' attempts to use less

energy should be evident to customers. Installing solar panels, utilizing energy-saving bulbs, reducing paper-related tasks, utilizing sensory taps to limit water consumption, and maintaining a clean working environment are all steps that should be made.

Sharma, M., & Choubey, A. (2022) In their study, the authors sought to determine the effects of three green banking initiatives—green product creation, green CSR, and green internal processes—on two potential outcomes, namely green brand perception and green trust. 36 middle- to senior-level managers from twelve public and private Indian banks took part in semi-structured in-depth interviews for the study, which is qualitative in nature. The banking sector may significantly contribute to the greening of the banking system by expanding financial options and addressing the demands of a "green economy." According to the study's findings, 63% of all respondents thought their bank had created a number of green banking products and services, 53% of bankers thought their bank had incorporated green internal procedures into daily operations, and 78% of respondents thought their bank had taken part in a large number of green CSR initiatives. Additionally, this investigation showed that more than 60% of respondents claimed that green banking initiatives improved the reputation of the green brand, which in turn helped to restore client trust.

Vijai (2018), stated that banking sector has undergone significant developments and investments in the recent past; most of the banks take green banking initiatives. The banks are adopting various environmental practices in their day to day business operations for the environmental concern to maintain the ecological balance. He also pointed out the rapidly changing market economy where globalization of markets has intensified the competition, the industries are vulnerable to stringent public policies, severe lawsuits or consumer boycotts. In addition that perception towards complying with environmentally safe norms and standards is changing over time. People are gradually becoming more conscious about environmental issues. Environmental friendly technologies also make economic sense for the banking industry. Today it is believed that adopting environmentally sustainable banking saves costs and time, minimizes the risk, enhances the reputation of banks and contributes to the common good of environmental sustainability. One would expect that as the person grows older, he would be content with his job and organizational activities. He mentioned that increasing concern about global warming and conserving environment, Indian banks are becoming more responsive towards the green aspirations of their customers. Green banking has continued to evolve in the recent years and is expected to become an even greater driving force behind banks competitive strategies. Green banking offers more than just monetary benefits to the banks, the intangible benefits include reputation, increased customer base, positive effects on the environment, and simplicity of bank processes. Green banking requires a paradigmatic change in thinking about economics, business and finance. As far as green banking in concerned, Indian banks are running behind time and it is the need of the hour to think it seriously for the sustainable growth of the nation. Therefore, the select commercial banks should adopt effective strategies for green banking by considering it as a strategic imperative

Geetha Verma and Aditya Sharma (2014), found that efforts were made to emphasis on customer's expectation's towards green banking practices and check out to show the factors that influence the customer's expectations Green banking is different from conventional banking as conventional banking is based on the principal of security and profitability and it hardly focuses on morality. Bank should take into consideration the ecological aspect in lending aside from security and profitability. She also mentioned out the customers" expectation that banks will provide proper information about green banking financial products and services in all touch points like website, financial reports, call center and other client service advisors. So banks should have an integrated communication system to provide coordinated information and message about green loans, mortgages, credit card and other services to provide clients green image of banks. In addition that Moreover, changes in daily operations should be brought regarding environment related issues so that they become easily discernible to customers. Overall, banks should adopt strategies to represent itself as "Green Bank" in customers" eyes. I have observed that bank uses Eco-friendly technology which has multi-functionality such as solar array, solar water heater, energy monitor.

Chijioke Nweke, Chinonso Ugwuoke and Gabriel Idume and NgoziIroegbu(2020) In their study, The meager rate of green banking implementation and awareness in Nigeria is traceable to a lack of adequate educational, financial, and ICT infrastructure in Nigeria. From the findings, it can be inferred that educational level, age group, lack of basic ICT knowledge, and illiteracy among the rural and urban dwellers are challenges to green banking awareness and sustainability in Nigeria. Poor knowledge of green banking among customers and bank staff affects the level of customer awareness and the impact of green banking on the eco-system. In summary, decreases in educational, financial, and ICT infrastructure decrease the level of customer awareness and the impact of green banking by -0.102% and -27%, respectively. The value of effective and efficient customer awareness and the impact of green banking implementation on the ecosystem are 85% and 83%, respectively.

Md. Maruf Ullah (2014) this study reported on that basically Green banking avoids as much paper work as possible and rely on electronic transactions for processing of activities. Less paperwork means less cutting of trees. Here, most of the PCBs and FCBS adopted the GB policy except SCBs and SDBs who have not taken such steps yet. Bangladesh Bank not only gives the policy but also provide technical supports for GB adoption. Bangladesh Banks developed a policy for sanction loans to environmentally harmful projects so that make sure the necessary environmental compliance factors before lending a loan/investment. GB motivates the banking system that reduces use of paper which create brand image and Create awareness amongst the stakeholders about the environment as well as environmental friendly business practices

Meenakshi sharma and Akansha choubey(2023) the states the reported that the findings of the study revealed that 63% of the total respondents were of view that their bank indulges in development of several green banking products and services, 53% of the bankers said that their bank incorporates green internal processes in their daily activities, and 78% respondents said that their bank undertakes several green corporate social responsibility initiatives. This investigation further highlights that more than 60% respondents believed that Green banking initiatives have positive role in restoring customer trust through enhanced Green brand image. With dearth of studies on green banking in India, the present qualitative study contributes to the body of knowledge and paves way for future research in green banking for sustainable development.

Md. Shafiqul Islam and Prahallad Chandra Das(2013) states that It evaluates all the factors before giving the loan whether the project is environment-friendly and has any implication on the future people and planet. Green finance as a branch of green banking makes significant contribution to the transition to resource efficient and low carbon industries That is green industry and green economy in general. Green banking is a component of the global initiative by a group of stakeholders to put aside environment. Green banking or ethically responsible banks do not only advance their own initiatives but also affect socially responsible behavior of other business. 45 banks have formulated policy for green banking. 46 banks have formed a Green Banking unit. 41 Banks have introduced a Green Office Guide. Environmental risk rating has been done for 13,779 projects. 13,833 risk rated prefects have been financed. 13, 07,479.64 million taka has been disbursed. 212 Branches and 150 SME Units/ATM booths are powered by solar energy. 37 banks are fully automated. 3226 branches have been facilitated with online coverage.

Raad Mozib Lalon(2015) states that the report are most of the PCBs and FCBS adopted the policy except SCBs and SDBs who have not taken such steps yet. Online banking and ATM facilities of SCBs and SDBs are very poor, BB need necessary steps for that regards. Shrink giving loans to environmentally harmful projects; Make sure the necessary environmental compliance factors before lending a loan/investment. Sharing knowledge and technical know-how within peer groups could be of immense help. A database can be developed for technical assistance. Authority must try to develop more effective issues to make banking sector greener and more ethical.

Jha and Bhome (2013) conduct a similar survey as stated above to check and thereby create consumer awareness on Green Banking. Conducting interviews and using specially structured questionnaires for survey they state certain steps needed in Green Banking. Online Banking, Green Checking Accounts (ATM, Special Touch Screens), Green loans (low rate to those who wish to buy solar equipment's) for supporting environment friendly residential projects, power saving equipment's, Green Credit Cards, Paper Saving Mobile Banking are among few steps suggested by them. Green Banking will ensure organization's move towards sustainability.

Rajput, Kaur et al. (2013) aims to understand how Indian banks respond to environmental changes and the action taken in respect of Green Banking. They find that there is a small group of banks in India that lead in environmental aspect. Response of Indian banks towards international initiative for environment is sluggish. In the United Nation Environment Programme Finance Initiative there is no single Indian signatory. Using factor analysis they conclude that risk of failure of business to peers and lack of RBI mandates are the obstacles to moving towards sustainability. The gaps in India are the awareness and consciousness on the environmental issues. Carbon Disclosure Projects- India requires public disclosure of emissions. This disclosure project is active in India. But the response is very less as only 8 signatories are there. The researchers feel that current management system needs to be integrated with the environmental and sustainable issues.

RESEARCH METHODOLOGY

Research Methodology is a systematic way to solve the research problem with logic. The research study attempts to know the perception and consumer satisfaction of the green banking. In order to achieve these objectives a suitable research method is framed. The collection of data and analysis strategy are planned accordingly.

3.1 SAMPLE SIZE

The study adopted convenience sampling technique to select the sample respondents. Thus, a sample of 131 respondents were selected.

3.2 AREA OF THE STUDY

In Coimbatore city, people have good knowledge about the green banking and have reasonable education qualification. Majority of them are green banking users and they are more aware about green banking and the benefits. Hence, Coimbatore city was selected as the area of the study.

3.3 SOURCE OF DATA

The study adopted primary data as a principal source of data. The required primary data for the study was collected through structure questionnaire. It includes sample respondents demographic profile, perception of green banking, consumer satisfaction of green banking and impact of green banking.

PRIMARY DATA

Primary data means the data or information which are directly collected from the sources which will be used in the need by manipulating according to the need. They take a lot of effort to collect the information. They are totally reliable as they are directly collected. These data are said as raw information or data as they are unprocessed and it is the base of any form of secondary data. Primary data are collected through questionnaires, survey, interviews, etc.,

SECONDARY DATA

Secondary data or information is data which are being already collected and stored or maintained for future use. They are developed from the base called Primary data. Secondary data were acquired from a variety of sources, including websites, books, journals, the internet, and magazines.

3.4 STATISTICALS TOOLS USED FOR THE STUDY

The following are the tools used to analyze the collected data.

- Percentage Analysis
- > Anova
- ► Garrant ranking

PERCENTAGE ANALYSIS

A percentage frequency distribution is a display of data that specifies the percentage of observations that exist for each data point or grouping of data points. It is a particularly useful method for expressing the relative frequency of survey responses and other data.

Number of Respondents

Percentage = ----- * 100

Total Number

GARRET RANKING

The ranking technique involves training a model to predict the rating of one item over another. In the training model, things can be ranked by assigning a "score" to each one. greater ranked items have greater scores, whereas lower ranked items have lower points.

The Formula to calculate Garrett ranking technique:

Percentage position=100(R-0.5)/N

ONE WAY ANOVA

One-way ANOVA, or analysis of variance, is a statistical method used to compare the means of three or more groups to determine if there are statistically significant differences between them. It helps to assess whether there are differences in means across different levels of a single categorical independent variable.

IV. RESULTS AND DISCUSSION

The results and discussions may involve an evaluation of the design or method used. The current study aims to know the perception and customer satisfaction towards green banking. To achieve these, suitable methodologies were framed and the results are discussed. The results of the study are presented based on the following heads:

Table 1 Socio-Economic Profile of the Respondents

Particulars	Number of Respondents	Percentage
	N = 131	(in %)
Gender:		
Male	65	50
Female	66	50
Age:		
18-28 Years	121	92
29-39 Years	5	4
40-50 Years	4	3
51-61 Years	1	0.8
Education qualification:		
School	11	8
Undergraduate	107	82
Post Graduate	13	0.8
Occupation :		
Student	96	73
Employee	25	19
Entrepreneur	7	5
Home Maker	3	2
Annual Income :		
Below 2 lakhs	102	78
2-3 Lakhs	18	14
3-4 Lakhs	7	5
Above 4 Lakhs	4	3

Source: primary data

Table 1 shows the results of the socio economic profile of the respondents

Age and Educational qualification

It reveals from the table 1 that 92.4 percentage of the respondents are from the age group between 18-28 years followed by 3.8 percentage of the respondents are 29-29 years age groups peoples. Only 4 respondents are from the age group 40 – 50 years. It indicates that the majority 81.7 percentage of the respondents are undergraduate and 8.4 percentage of school level respondents are using the green banking.

Occupation and Family Income

The majority 73.3 percentage of the respondents are students Only 19.1 percentage respondents are employee. The 5.3 percentage of peoples are entrepreneur and 2.3 percentage of respondents are home makers. The majority 77.9 percentage of the respondents annual income is below 2 lakhs followed by 13.7 percentage having annual income above 2-3 lakhs. Only 5.3 percentage of the respondents have annual income of 3-4 lakhs.

Table 2 Green banking is Environment Friendly

Particulars	Number of Respondents N = 131	Percentage (in %)
Yes	128	98
No	3	2

Source: Primary data

Table 2 shows the result of the green banking is environment friendly that is out of total respondents, 97.7 percentage of the respondents are satisfied with the green banking is environment friendly, 2.3 of the respondents are not satisfied with environmental green banking.

Figure 1 Green banking is Environment Friendly

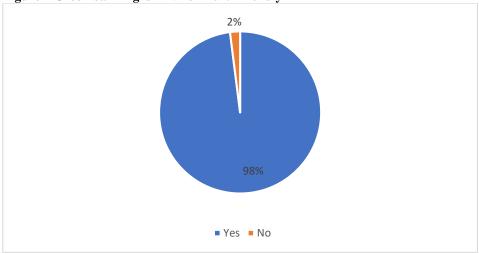


Table 3 Preference on Green banking

Particulars	Number of Respondents N = 131	Percentage (in %)
Only cashless economy	43	33
Avoidance of possible pollution	54	41
Promoting environmental	24	18
Only creating awareness on environment	10	8

Sources: Primary data

Table 3 shows that 32.8 percentage of respondents opined are only cashless economy of green banking.41.2 percentage of respondents opined that avoidance of possible pollution.18.3 percentage of respondents that opined green banking is promoting environmental. 7.6 percentage of the respondents opined only creating awareness on environment of green banking.

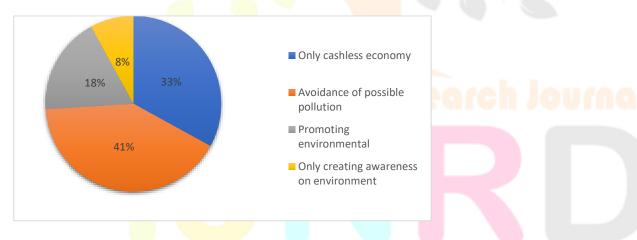


Figure 2 Preference on Green banking Table 4 Kind of Green banking products

Particulars Number of Respondents Percentage N = 131(In %) Online Bill payment 34 26 Online savings account 25 19 Net banking 24 18 Green home equity loan 10 8 5 Green car loan 6 2 1 Green mortgages Paperless statement 6 5 Mobile banking 20 15 Solar ATM electronic fund transfer 3

Source: Primary data

Table 4 shows the green banking green banking products you aware of. It reveals that the majority 26 percentage of the people are preferring on online bill payment followed by 19.1 percentage of online savings account. 15.3 percentage of the respondents

are using mobile banking and 7.6 percentage of the respondents are using the green home equity loan. 4.6 percentage of respondents opined green car loan and paperless statement. 3.1 percentage of respondents are using solar ATM electric fund transfer and 1.5 percentage og the respondents using green mortgages.

FIGURE 3 Kind of Green banking products

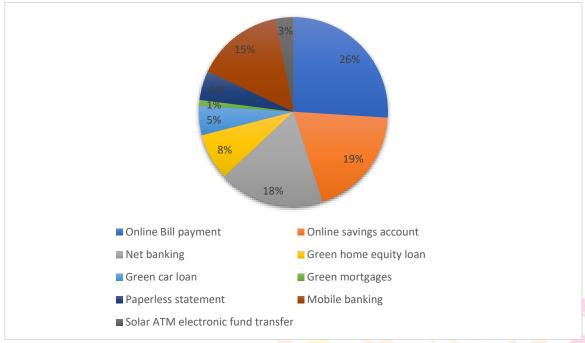


Table 5 Factors influencing the Adoption of Green banking Services

Particulars	Number of Respondents	Percentage
	N = 131	(in %)
Convenience	30	23
Easy of use	48	37
Environment concern	36	28
Time saving	17	13
cost saving	30	23
easy transactions	48	37
Paperless banking	17	13

Sources: Primary data

Table 5 shows that influencing the adoption of green banking services. It reveals 36.6 percentage of the respondents opined that easy on use. 27.5 percentage of respondents are states that environment concern. 22.9 percentage of the respondents are convenience and 13 percentage of the respondents are time and cost saving.

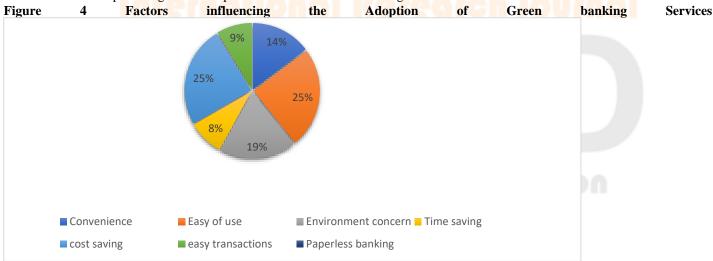


Table 6 Ranking of Green banking application

Table o Ranking of Orech	able o Kanking of Green banking application							
Particulars	Total Score	Garrett Ranking Score	Mean Rank					
Mobile banking	8118	62	2					
Green Card	7141	55	3					
Home Equity Loan	7041	54	4					
Internet Banking	8964	68	1					

c391

Green Car Loan	6055	46	5
Green Mortgages	5090	39	6
Paperless statement	4558	36	7

Sources: Primary data

Table 6 shows that rank of green banking application, it reveals the 68 percent of the peoples prefer internet banking. The 61 percentage of the respondents opined on mobile banking.54 percentage of the respondents using the green card provided by the banks. 54 percentage of the respondents are avails their home equity loan.46 percentage of the respondents opined on green car loan.38 percentage of the respondents are using the green mortgages.34 percentage of the respondents are prefers paperless statement.so it shows that most of the respondents are choose easy mode of green banking like mobile and internet banking.

Figure 5 Ranking of Green banking application

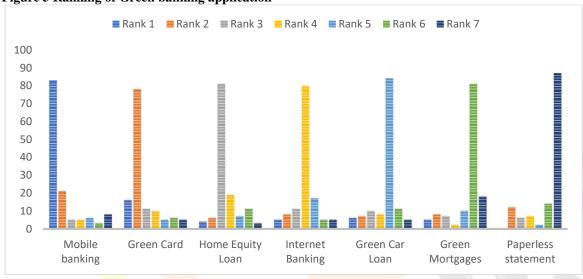


Table 7 Challenges of Green Banking

Particulars	Strongly		Agree		Neutral		Disagree		Strongly Disagree	
	N=131	%	N=131	%	N=131	%	N=131	%	N=131	%
Lack of knowledge about green banking	69	53	47	36	11	8	1	.9	3	2
Its gives insecurity feels to the customer	19	14	71	54	32	24	4	3	5	4
No demo is made for green banking	51	39	41	31	31	24	6	4	2	1
Reduced trust in the process of green banking	20	15	65	50	26	20	13	10	7	5
Limited scope for personal advice	47	36	42	32	30	23	4	3	8	6
Sometimes problematic for transactions	26	20	74	57	21	16	6	5	4	3
Fear about security	52	40	34	26	33	25	6	5	6	5

Sources: Primary data

Table 7 shows that the challenges of green banking, it reveals that a significant majority of respondents 89 % express agreement regarding the lack of knowledge about green banking, indicating a perceived need for more education and awareness in this area. Additionally, a substantial proportion 68% believe that green banking instills insecurity in customers, suggesting worries about the reliability and security of green banking practices. Moreover, a notable percentage 70% agree that there is a lack of demonstration for green banking, highlighting a desire for more informative resources to better understand these services. Concerns about reduced trust in the process of green banking 65% and limited scope for personal advice 68% further indicate apprehensions

about the effectiveness and supportiveness of green banking initiatives. Moreover, the majority 77% find green banking sometimes problematic for transactions, pointing to perceived challenges in carrying out banking activities through green channels. Finally, a significant portion 66% express fear about security in green banking, indicating apprehensions about the safety of personal information and assets within green banking systems. Overall, these findings underscore the need for improved education, transparency, and user-friendly features in green banking to address the concerns and build trust among customers.

Figure 6 Challenges of Green Banking

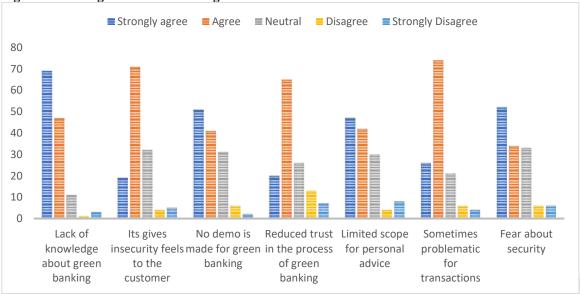


Table 8 Perception towards green banking

Particulars	Strongly		Agree		Neutral	Neutral Disagree				Strongly agree	
	N=131	%	N=131	%	N=131	%	N=131	%	N=131	%	
It leads carbon emission and pollutants	64	49	40	30	17	13	7	5	3	2	
Its saves money and time	35	27	73	56	18	14	4	3	1	.7	
Increase safety in transaction	52	40	38	29	34	26	5	4	2	2	
Its gives quick customer care services	26	20	59	45	33	25	11	8	2	2	
It provides green mortgages	50	38	37	28	27	21	7	5	10	8	
It provides Green loans	23	18	65	50	25	19	9	7	9	7	

Source: Primary data

Table 8 shows that perception towards green banking, it reveals that a significant portion of respondents, comprising 49%, strongly agree, and 30% agree, express concerns about the subject's contribution to carbon emissions and pollutants, highlighting a prevailing environmental apprehension among the surveyed individuals. Conversely, the majority of respondents, with 56% agreeing and 27% strongly agreeing, perceive the subject as a facilitator of savings in both money and time, indicating a widespread belief in its financial and time-saving benefits. Furthermore, a substantial proportion of respondents, consisting of 40% strongly agree and 29% agree, endorse the subject's role in enhancing safety in transactions, suggesting confidence in its security measures. Additionally, a considerable number of respondents, with 45% agreeing and 20% strongly agreeing, acknowledge the subject's provision of quick customer care services, underscoring its perceived responsiveness to customer needs. Moreover, respondents exhibit varying degrees of acceptance towards the subject's initiatives such as green mortgages and green loans, with a notable proportion expressing favorable views towards these environmentally conscious financial products. Overall, the interpretation suggests a nuanced perception of the subject, with respondents recognizing both its positive impacts, such as financial savings and environmental initiatives, as well as potential concerns regarding environmental consequences and transactional safety.

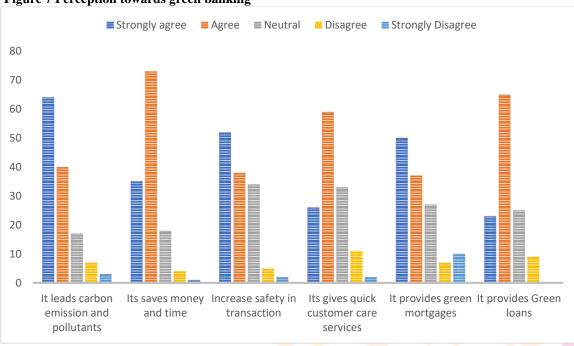


Figure 7 Perception towards green banking

Table 9 Customer satisfaction through Green banking compared to Occupation

ANOVA

	-	Sum of Squares	df	Mean Square	F	Sig.
No Face to Face Interactions	Between Groups	3.406	3	1.135	3.252	.024
	Within Groups	44.335	127	.349		
	Total	47.740	130			
Pollution Free Banking	Between Groups	2.535	3	.845	2.219	.089
	Within Groups	48.381	127	.381		
	Total	50.916	130			
Customer Experience	Between Groups	1.379	3	.460	.864	.462
	Within Groups	67.537	127	.532		
	Total	68.916	130			
Decrease Usage For Paper	Between Groups	5.100	3	1.700	2.166	.095
	Within Groups	99.694	127	.785		
	Total	104.794	130			
Simple Mode Of Transaction	Between Groups	1.269	3	.423	.417	.741
	Within Groups	128.869	127	1.015		
	Total	130.137	130			

Source: Calculated value

Table 9 reveals the associate between socio economic profile and consumer satisfaction on green banking. The analysis of variance (ANOVA) results provide insight into the relationships between the variables under consideration. Among the variables examined, significant differences were found in the mean scores of No Face to Face Interactions across different groups (F(3, 127) = 3.252, p = 0.024). This suggests that varying levels of No Face to Face Interactions are associated with different groups, with approximately 24% of the total variance in scores attributed to these differences. Conversely, for Pollution Free Banking, Customer Experience, Decrease Usage For Paper, and Simple Mode Of Transaction, no statistically significant differences were observed between groups (p > 0.05). This implies that factors other than group membership may be influencing the mean scores for these variables. However, it's important to note that effect sizes for these non-significant findings were relatively small, indicating that any differences between groups explain only a small proportion of the total variance in scores. Overall, these findings highlight the importance of considering various factors that may influence the variables of interest and suggest avenues for further exploration to better understand the relationships at play.

Table 10 Customer satisfaction through Green banking compared to Qualification

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
No Face to Face Interactions	Between Groups	.293	2	.147	.410	.664
	Within Groups	45.768	128	.358		
	Total	46.061	130			
Pollution Free Banking	Between Groups	2.325	2	1.163	3.062	.050
	Within Groups	48.591	128	.380		
	Total	50.916	130			
Customer Experience	Between Groups	.759	2	.380	.713	.492
	Within Groups	68.157	128	.532		
	Total	68.916	130			
Decrease Usage For Paper	Between Groups	7.335	2	3.667	4.817	.010
	Within Groups	97.459	128	.761		
	Total	104.794	130			
Simple Mode Of Transaction	Between Groups	5.520	2	2.760	2.410	.094
	Within Groups	146.617	128	1.145		
	Total	152.137	130			

Source: Primary data

Table 10 shows that reveals the associate between qualification and consumer satisfaction on green banking. The ANOVA results indicate that there are significant differences among groups for the variables "Pollution Free Banking" (F(2, 128) = 3.062, p = 0.050) and "Decrease Usage For Paper" (F(2, 128) = 4.817, p = 0.010). This suggests that there are meaningful variations between groups for these two variables. However, no significant differences were found for "No Face to Face Interactions" (F(2, 128) = 0.410, p = 0.664), "Customer Experience" (F(2, 128) = 0.713, p = 0.492), and "Simple Mode Of Transaction" (F(2, 128) = 2.410, p = 0.094). This indicates that the differences observed among groups for these variables are likely due to random chance rather than meaningful distinctions. In summary, the findings suggest that while "Pollution Free Banking" and "Decrease Usage For Paper" exhibit significant differences among groups, the other variables do not show statistically meaningful variations.

Table 11 Customer satisfaction through Green banking compared to Annual income

ANOVA

	-	Sum of Squares	df	Mean Square	F	Sig.
No Face to Face Interactions	Between Groups	2.140	3	.713	2.063	.108
	Within Groups	43.921	127	.346		
	Total	46.061	130			
Pollution Free Banking	Between Groups	2.491	3	.830	2.178	.094
S	Within Groups	48.425	127	.381		
	Total	50.916	130			
Customer Experience	Between Groups	2.526	3	.842	1.611	.190
	Within Groups	66.390	127	.523		
	Total	68.916	130			
Decrease Usage For Paper	Between Groups	.980	3	.327	.400	.753
	Within Groups	103.814	127	.817		
	Total	104.794	130			
Simple Mode Of Transaction	Between Groups	3.301	3	1.100	.937	.425
	Within Groups	149.111	127	1.174		
	Total	152.412	130			

Table 11 shows that reveals the associate between Annual income and consumer satisfaction on green banking. The analysis of variance (ANOVA) was conducted to assess the differences among groups for various factors, including "No Face to Face Interactions," "Pollution Free Banking," "Customer Experience," "Decrease Usage For Paper," and "Simple Mode Of Transaction." The results revealed non-significant differences among the groups for all factors: No Face to Face Interactions, F(3, 127) = 2.063, p = .108; Pollution Free Banking, F(3, 127) = 2.178, p = .094; Customer Experience, F(3, 127) = 1.611, p = .190; Decrease Usage For Paper, F(3, 127) = 0.400, p = .753; and Simple Mode Of Transaction, F(3, 127) = 0.937, p = .425. These findings indicate that there are no statistically significant differences between the groups for any of the factors examined.

Findings of the study

The results from the research study are summarized based on the following heads:

- Socio economic profile of the respondents
- Perception towards green banking among customers
- > Satisfaction of the customers on green banking

Socio – economic profile of the respondents:

- \triangleright The results of the study reveal that in 131 respondents, majority of 98.2 percentage falls under the age group of 18 28 years.
- The study indicates that majority of 50 percentage of the respondents are male and the remaining 50 percentage of the respondents are female.
- The study indicates that majority of 96 percentage of the students using the green banking.
- From the study 78 percentage of the below salary of 2 lakhs peoples using the green banking the most.
- The study indicates that Education can increase a usage of green banking. The study states that majority of respondents 82 percentage (108) are undergraduate.

Know about Green banking

- The study indicates 97.7 percentage of the respondents are satisfied with the green banking is environment friendly, 2.3 of the respondents are not satisfied with environmental green banking.
- From the study 32.8 percentage of respondents opined are only cashless economy of green banking.
- The study indicates 41.2 percentage of respondents opined that avoidance of possible pollution.
- The study indicates 19.1 percentage of respondents using online savings account, 15.3 percentage of the respondents are using mobile banking and 7.6 percentage of the respondents are using the green home equity loan.
- From the study 7.6 percentage of the respondents opined only creating awareness on environment of green banking.

Factors influencing the Adoption of Green banking Services

- From the study 36.6 percentage of the respondents opined that easy on use. 27.5 percentage of respondents are states that environment concern.
- The study indicates 22.9 percentage of the respondents are convenience and 13 percentage of the respondents are time and cost saving.
- The study indicates 37 percentage of the respondents are convenience on the easy transactions of green banking.
- The study indicates 13 percentage of the respondents are accept that is a paperless banking.

Ranking of Green banking application

- The study indicates 68 percent of the respondents prefer internet banking.
- From the study 61 percentage of the respondents opined on mobile banking.54 percentage of the respondents using the green card provided by the banks.
- The study indicates 54 percentage of the respondents are avails their home equity loan.46 percentage of the respondents opined on green car loan.
- The study indicates 38 percentage of the respondents are using the green mortgages.34 percentage of the respondents are prefers paperless statement

Challenges of Green Banking

- From the study 89 % express agreement regarding the lack of knowledge about green banking, indicating a perceived need for more education and awareness in this area.
- The study indicates 65% agree that green banking reduces trust in the process.
- The study indicates 52% agree that there's fear about security in green banking.
- From the study 53% strongly agree that there's not enough knowledge about green banking, and an additional 36% agree.
- In this study majority 71% agree that green banking makes customers feel insecure.
- From the study majority 74% agree that green banking can sometimes be problematic for transactions.

Perception towards green banking

- The study indicates 64% percentage of the respondents preferred that the initiative reduces carbon emissions and pollutants.
- From this study 35% percentage of respondents that it saves money and time and 52% strongly agree that it increases transaction safety.

- In this study 50% percentage majority of the respondents that it offers green mortgages and 23% strongly agree that it provides green loans
- The study indicates 26% percentage of the respondents consider that it provides quick customer care services.

Customer satisfaction through green banking

The study indicates significant differences were found in the mean scores of No Face to Face Interactions across different groups (F(3, 127) = 3.252, p = 0.024). This suggests that varying levels of No Face to Face Interactions are associated with different groups, with approximately 24% of the total variance in scores attributed to these differences. Conversely, for Pollution Free Banking, Customer Experience, Decrease Usage For Paper, and Simple Mode Of Transaction, no statistically significant differences were observed between groups (p > 0.05). This implies that factors other than group membership may be influencing the mean scores for these variables. However, it's important to note that effect sizes for these non-significant findings were relatively small, indicating that any differences between groups explain only a small proportion of the total variance in scores. Overall, these findings highlight the importance of considering various factors that may influence the variables of interest and suggest avenues for further exploration to better understand the relationships at play.

Conclusion

Finally, Green banking is a proactive and shrewd approach to thinking about future sustainability because banks took the initiative to promote environmentally friendly investing. Furthermore, it is essential for banks in emerging economies to be realistic and accelerate the pace of the economy's expansion. As a result of the fierce competition that exists in the worldwide market due to the ongoing environmental element change, banks may adhere to strict governmental regulations and legal requirements. In order to become stronger, banks may also incorporate sustainability and responsibility into their business model, development of product and service strategies, operations, and financing activities. As many green goods and services are anticipated in the future, India's green banking industry appears to have a very bright future. In the near future, we'll hear about and witness things like green excellence awards and recognitions, green rating agencies, green investment funds, green insurance, and green accounting and transparency in action. A check on the polluting businesses would be provided by properly implementing green banking. Banks can serve as a roadmap for the economy's transformation and provide a foundation that would open up several opportunities for financing and investment strategy and help develop a low-carbon economy.

Suggestions

- Though all are aware of Green Banking, most of them are not using it because of lack of knowledge
- Customers should be made aware of green banking services through media and other sources
- Banks should try to educate its customers on green banking and its benefits
- Customers should be assured of the security of green banking.
- Most of the footfalls in Banks are for the deposits, they should be encouraged to use deposit machines
- The bank should train employees; so that they can give the demo on how to use green banking services

REFERENCES

Charan, A., Dahiya, R., & Kaur, M. (2019). Customers Perception towards Green Banking Practices in India. *Think India Journal*, 22(4), 3653-3665.

Iqbal, M., Nisha, N., & Raza, S. A. (2017). Customers' Perceptions of Green Banking.

Shrivastava, D., Shrivastava, A., & Prakash, G. (2019). A Study On The Determining Demographic Factors For Green Banking Usage. *Think India Journal*, 22(14), 13979-13986.

Ellahi, A., Jillani, H., & Zahid, H. (2023). Customer awareness on Green banking practices. *Journal of Sustainable Finance & Investment*, 13(3), 1377-1393.

Nath, V., Nayak, N., & Goel, A. (2014). Green banking practices—A review. *IMPACT: International journal of research in business management (IMPACT: IJRBM) Vol.* 2, 45-62.

Lalon, R. M. (2015). Green banking: Going green. International Journal of Economics, finance and management sciences, 3(1), 34-

Bahl, S. (2012). Green banking-The new strategic imperative. *Asian Journal of Research in Business Economics and Management*, 2(2), 176-185.

Khairunnessa, F., Vazquez-Brust, D. A., & Yakovleva, N. (2021). A review of the recent developments of green banking in Bangladesh. *Sustainability*, 13(4), 1904.

Ahuja, **N.** (2015). Green banking in India: A review of literature. *International Journal for research in management and pharmacy*, 4(1), 11-16.

Sharma, M., & Choubey, A. (2022). Green banking initiatives: a qualitative study on Indian banking sector. *Environment, Development and Sustainability*, 24(1), 293-319.

Islam, M. S., & Das, P. C. (2013). Green banking practices in Bangladesh. *IOSR Journal of Business and Management*, 8(3), 39-44. Sahoo, P., & Nayak, B. P. (2007). Green banking in India. *The Indian Economic Journal*, 55(3), 82-98.

Giridhar, K. V., & Sudhakar, K. G. (2017). Green banking: Issues and challenges in India. *International Journal of Latest Technology in Engineering, Management and Applied Science*, 6(6), 130-132.

Bouteraa, M., Raja Hisham, R. R. I., & Zainol, Z. (2023). Challenges affecting bank consumers' intention to adopt green banking technology in the UAE: A UTAUT-based mixed-methods approach. *Journal of Islamic Marketing*, *14*(10), 2466-2501.

Nath, V., Nayak, N., & Goel, A. (2014). Green banking practices—A review. *IMPACT: International journal of research in business management (IMPACT: IJRBM) Vol.*, 2, 45-62.

Nweke, C., Ugwuoke, C., & Idume, G. (2020). Green banking awareness, challenges and sustainability in Nigeria. *Technology*, 11(3), 30-54.

- Ashiq, M. A., & Shahir, F. (2019). Challenges of Green Banking in the Context of Bangladesh. Available at: ChallengesofGreenBankingintheContextofBangladesh. pdf. Last accessed on Nov, 22, 2022.
- Park, H., & Kim, J. D. (2020). Transition towards green banking: role of financial regulators and financial institutions. *Asian Journal of Sustainability and Social Responsibility*, 5(1), 1-25.
- Saho, D. B. P., & Singh, A. (2015). Adoption of Green Banking in India: Challenges and Prospects. *International Journal of Science and Research (IJSR) ISSN (Online)*, 2319-7064.
- **Islam, M. A., Yousuf, S., Hossain, K. F., & Islam, M. R. (2014).** Green financing in Bangladesh: challenges and opportunities—a descriptive approach. *International Journal of green economics*, 8(1), 74-91.
- Rai, R., Kharel, S., Devkota, N., & Paudel, U. R. (2019). Customers perception on green banking practices: A desk. *The Journal of Economic Concerns*, 10(1), 82-95.
- Ganesan, R., & Bhuvaneswari, A. (2016). Customer perception towards green banking. *IOSR Journal of Economics and Finance*, 7(05), 05-17.
- Masukujjaman, M., Siwar, C., Mahmud, M. R., & Alam, S. S. (2016). Bankers' perception of Green Banking: Learning from the experience of Islamic banks in Bangladesh. *Geografia*, 12(2).
- Charan, A., Dahiya, R., & Kaur, M. (2019). Customers Perception towards Green Banking Practices in India. *Think India Journal*, 22(4), 3653-3665.
- Masukujjaman, M., Siwar, C., MAHMUD, M. R., & Alam, S. S. (2015). BANKER'S PERCEPTION ON GREEN BANKING-AN EMPIRICAL STUDY ON ISLAMIC BANKS IN BANGLADESH. *Management & Marketing Journal*, 13(2).
- Nedumaran, D. G., & Baladevi, M. (2020). Impact on customer perceptions of green banking process with special reference in Rajapalayam Taluk.
- **Iqbal**, M., Nisha, N., Rifat, A., & Panda, P. (2018). Exploring client perceptions and intentions in emerging economies: The case of green banking technology. *International Journal of Asian Business and Information Management (IJABIM)*, 9(3), 14-34.
- Sateesh Kumar, T. K., & Vijaya Kumar, R. (2024). Green Banking Practices: An Investigation into the Perception of Employees of PSUs and Private Banks in Bangalore. In Information and Communication Technology in Technical and Vocational Education and Training for Sustainable and Equal Opportunity: Business Governance and Digitalization of Business Education (pp. 287-298). Singapore: Springer Nature Singapore.
- Sharma, M., & Choubey, A. (2022). Green banking initiatives: a qualitative study on Indian banking sector. Environment, Development and Sustainability, 24(1), 293-319.
- Herath, H. M. A. K., & Herath, H. M. S. P. (2019). Impact of Green banking initiatives on customer satisfaction: A conceptual model of customer satisfaction on green banking. *Journal of Business and Management*, 1(21), 24-35.
- Nath, V., Nayak, N., & Goel, A. (2014). Green banking practices—A review. *IMPACT*: International journal of research in business management (IMPACT: IJRBM) Vol., 2, 45-62.
- Weber, O. (2016). The impact of green banking guidelines on the sustainability performance of banks: the Chinese case.
- Vidyakala, K. (2020). A study on the impact of green banking practices on bank's environmental performance with special reference to Coimbatore city. African Journal of Business and Economic Research, 15(3).
- Chen, J., Siddik, A. B., Zheng, G. W., Masukujjaman, M., & Bekhzod, S. (2022). The effect of green banking practices on banks'

