Green Banking Trends: Customer Knowledge and Awareness in India

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Abstract  
Global warming is increasing; therefore, Change is the law of nature. The changes like the environmental and climatic conditions, are one of the most complicated issues faced by the growing society. The survival of the fittest contributes to the idea of adaptation to the changes in society. Today’s business is all about being green, and companies use this as a key strategy to expand its market and impact society. Even the top companies like Amazon to apple are moving in a great way towards green. The economic development lies in the palms of the banks being the financial organizations.

Green banking means a financial institution, typically public or quasi-public, that uses innovative financing techniques and market development tools in partnership with the private sector to accelerate deployment of clean energy technologies. Green banks use public funds to leverage private investment in clean energy technologies that, despite being commercially viable, have struggled to establish a widespread presence in consumer markets. Green banks seek to reduce energy costs for ratepayers, stimulate private sector investment and economic activity, and expedite the transition to a low-carbon economy. Adoption of green banking practices will not only be useful for the environment but also benefit in greater operational efficiencies, minimum errors and frauds, and cost reductions in banking activities. The present paper aims to highlight Indian initiatives and adoption by various banks towards green banking in India. Further, an attempt has been made to highlight the major benefits, confronting challenges of Green Banking.

Keywords: Green Banking, Environmental sustainability, Climate change, Customer Knowledge and Awareness.

Introduction  
In the process of economic and environmental development, “Go Green,” “Adopt Green” mantra has become appropriate in every aspect of business and among people. There can be a change seen with all business activities to not only focus on profit but also people and the world. The public is as well, much concerned about the environment because of increased carbon emission, global warming, climate change, flood, drought, tsunami, etc., and moving towards ecological products and services.

According to the global risk report 2019, the environment is at high risk due to inadequate response to deal with climatic change and reduce green house emissions. Feasibility is the key issue. Green is the word now, ‘Green Processing of data,’ ‘Green Banking,’ ‘Green Revolution in Management,’ and many more. Organizations for social cause are now interested in executing policies that help to address environmental issues.

Banks being the biggest system in India, realized the importance of environmental stability and marching towards Green Banking. The idea will mutually address the banks, companies, and the economy as a whole.
Green banking means the banking business, which assists in reducing the harmful environmental factors such as carbon emission. It also focuses on improving the banking activities by adopting technology and creating the systems and processes which will improve the banking experience by the customers.

It refers to the practices and guidelines which help the banks being sustainable in economic, environmental, and social dimensions. It aims to make banking processes, use of IT, and physical infrastructure as efficient and effective, with minimal impact on the environment.

When compared to normal banking, Green banks take into account the environmental factors, to provide good environmental and social business practices. They usually check all the factors before lending a loan to see if the project is environmentally friendly and if it has any implications in the future. The loan would be awarded only when it follows all the environmental safety standards.

Green Banking means promoting environmentally – friendly practices and reducing the carbon footprint from banking activities. This comes in many forms;
1. Using online banking instead of branch banking.
2. Paying bills online instead of mailing them.
3. Opening up accounts at online banks, instead of large multi-branch banks.
4. Finding the local bank in your area that is taking the biggest steps to support local green initiatives.

There exists the pressure for the Banks from the regulatory in India, the growing interest of the consumers, and the public towards the environmental approach to move towards Green Banking. It widely uses IT and other banking systems, which will reduce the adverse impact of the economy. Some of the Impactful Green banking arrangements are Online account Opening, Online Payment, online E-commerce stock, and money transfers.

**Review of Literature**

Krebsbach (2005) stated that banks that adopted socially and environmentally responsible lending and investing were altering their processes of bond underwriting, investment banking, and corporate lending. These banks were enjoying a competitive advantage over others as society is aware of the environmental issues. The author suggested that banks should adopt green lending principles in such a way that a customer base will not be affected. The author said credibility comes from having high standards. He concluded that environmental management in the banking sector is like risk management because it reduces the credit risk, improves asset quality, and increases the enterprise value. Atiur Rahman (2010) studied the monetary and credit policies of Bangladesh Bank towards attaining a broader financial enclosure. Bangladesh Bank is carry forwarding with the technology-driven, innovative environment and low-cost banking approach, conveying a qualitative change in banking, application of advanced banking technology, and use of information and communication technology to extend financial services to the door step of common people. To ensure access to financial services for all, various initiatives have been taken like trade finance; digitalization of the financial sector, channeling liquidity into productive and supply augmenting investments including agriculture, SMEs, green banking and CSR activities; expected to inclusive growth and therefore lessen poverty; required for pushing the country on course to the targeted vision of digital Bangladesh by 2021. If Indian banks desire to enter global markets, it is important that they recognize their environmental and social responsibilities. Recognizing the warning of global warming, the State bank of India has initiated urgent measures to combat climate change by reducing the bank’s carbon footprint and sensitizing the bank’s clients to adopt low carbon emission practices (Sharma 2011).

Broto Rauth Bhardwaj & Aarushi Malhotra (2013), their study focused on various models of green banking practices adopted by Indian companies to grow. The conclusions of the research study showed that the banks which are adopting green banking practices influence the performance of the organization. The managerial implications and discussions were also given. Sarita Bahl (2012), in this paper, the role of green banking in sustainable growth aimed to highlight the Indian initiatives by various banks adopting green banking and to enlist significant strategies for adopting green banking. According to Amitabh Mishra et al. 2013, in his
study, A study of Gaps in Service Quality at a leading private sector commercial bank in greater Noida, account holders are more dissatisfied with the service quality dimension. This study helps to know the weak area of a bank’s service where immediate steps are necessary. The Role of Green Banking in sustainable Growth (2012), this study explained that the survival of the banking industry is inversely proportional to the level of global warming. According to Vinay Kumar Nagu (2012), it is evident that the primary benefits of E-CRM in the banking sector are the reduced cost of operation, locks in target prices, and increases in customer loyalty.

**Objectives**

- To know the concept of Green Banking
- To Understand the level of consumer Knowledge and awareness towards Green Banking
- To know various methods for adopting Green Banking, explore the Prospects for Green Banking and to know the Green Banking challenges.

**Research Methodology**

**Research Design:** Descriptive research design is used for the study.

**Sources of Data:** Primary and secondary data were used for this purpose. The study includes reviews from secondary data from the reports of the respective banks and other relative information published on the banks and other Internet sites, Research Paper, and Various articles on Green Banking. The primary data was collected among the consumers to understand the knowledge awareness towards Green Banking and E-Banking service quality.

**Sample Size:** Accidental random sampling is used as a sampling technique. The survey is conducted among the consumers of bank viz., Two banks from Public, private and Foreign Banks based on their performance. State Bank and Bank of Baroda are being chosen from Public sector Bank, HDFC & ICICI from Private Sector Banks, and Citi Bank and HSBC are listed in Foreign Banks.

**Data Analysis and Interpretation**

**Customer Knowledge and Awareness of Green Banking**

**a. Respondent Background**

**Respondent Background Based on Gender:** There are 52% of male customers and 48% of female customers.

| Gender | Frequency | Percentage |
|--------|-----------|------------|
| Male   | 52        | 52%        |
| Female | 48        | 48%        |

**Respondent Background Based on Age:** Most of the Respondents are from the 20-30 age category, followed by 31-40 years.

| Age          | Frequency | Percentage |
|--------------|-----------|------------|
| 20-30 years  | 104       | 52%        |
| 31-40 years  | 96        | 48%        |
| 41-50 years  | 11        | 11%        |
| 51-60 Years  | 8         | 8%         |

**Respondent Background Based on Occupation:** The majority are Students followed by Private Employees.

| Education Level | Frequency | Percentage |
|-----------------|-----------|------------|
| Student         | 35        | 35%        |
| Government Employee | 20     | 20%        |
| % Private Employee | 28     | 28%        |
| Entrepreneur    | 17        | 17%        |

**b. Knowledge Level**

The result shows the knowledge level of the customers that are at the average level.

| Categories             | Knowledge Level | Level |
|------------------------|-----------------|-------|
| Green Banking in General | 53%             | Average |
| Green Lending Policy    | 49%             | Average |
| E Banking Service       | 48%             | Average |

The most widely used e-Banking service is ATM, followed by SMS & Mobile Banking. Internet Banking is also as close to the usage of Mobile Banking. E billing is gaining importance now with 7%.

**c. Awareness Level**

Customer awareness level is at good with 75%. Under each category of Green banking, the level of awareness is Green Banking in General-75%, Green Lending Policy at 74%, and E-Banking Service is at 75%. ATM with the highest awareness Level,
followed by SMS and Internet banking. Consumers to accept and adopt Green banking.

d. Awareness Level at Different Banks

| Type of Bank | Frequency | Percentage |
|--------------|-----------|------------|
| Public Bank  | 24        | 24%        |
| Private Bank | 30        | 30%        |
| Foreign Bank | 46        | 46%        |

Hence it is through the strong message and activities of the banker who will make the consumer opt Green banking.

Green Banking: Future of Banking

The primary Banking function of accepting deposits and lending money is extended to Green Banking also through an online platform which encourage a cashless economy. It is carried out by financial arbitrators, which performs the functions of safeguarding deposits and providing loans to the public. Banking is the nerve system of a country through which the money supply of the country is created and controlled based on the scenario economy. In India, there are different types of Banking and Financial institutions that help the country to develop by regulating the economy under the guidance of the Central Bank.

The whole of India is moving towards Green and Banks are also contributing to a greater extend. According to Indian Banks Association (IBA 2014), “Green Bank is like a normal bank, which considers all the social and environmental factors to protect the environment and conserve natural resources” (Singh, 2015).

Green Banking is also known as ethical banking or sustainable banking. The purpose of Green Banking is to protect the environment through its activities through its improved system and processes. Green banking is also responsible for high-tech developments, effective functioning, and inculcating and developing the habits of its clients to accept and adopt the new system, which will promote environmentally friendly practices and to reduce the carbon footprint in banking operations. Banks should develop many more activities and products, process, es, and technology, which substantially reduce the carbon footprint from the environment. Green Banking is not a project of the bank, but it will pave the way for sustainable development. India being a developing nation, Financial inclusion, has been achieved to a larger extend through various government initiatives and grants. Hence, there is a huge lack of awareness and inadequate knowledge in adopting Green Banking.

However, India being the young nation’s majority of the young population, is helping and adopting Green Banking to a larger extends.

Green Banking Initiatives by Indian Banks

Though the majority of the banks are moving towards paperless, cashless, and digital transactions through E-banking, the following banks are supporting Green projects to a greater extend.

SBI is the largest bank in India with its association, became the first bank in the country to adopt Green banking by generating green power through windmills for captive use in few states, including Tamilnadu. Some of its Green Banking Initiatives are: Introducing Green Channel Counter’ facility during 2010 at 57 select branches spread across the country, and the same was expanded to more than 14,981 branches in 2014.

Bank of Baroda to support Green Banking operation provides financial assistance to many green projects, and preference was also given to them while extending loans. In order to protect the environment, it has constructed buildings at Varanasi and Jaipur as per green building norms.

Punjab National Bank has started using energy efficient appliances & conducting the electricity auditing of their offices. Bank of India has undertaken initiatives to popularize the use of solar street lights and rain water harvesting in rural areas.

Eco-Friendly Vehicle Finance - As an initiative towards a more environmentally friendly way of life, ICICI Bank offers a 50% waiver on Auto loan processing fees on car models, which use an alternate mode of energy.

HDFC Bank is using Social and Environmental Risk Management System (SEMS) that helps in screening projects’ negative social and environmental impacts before approval.

Canara Bank, being the public sector one trying to digitalize its transaction and suggesting its customers adopt me banking.
Kotak Mahindra Bank to support Green Banking encourages Paperless transactions and encouraging Customers to sign for E-statements, and they partnered with Grew-Tress.com to plant one sapling for each statement. IndusInd Bank installed ATMs using Solar Power in various cities for energy conservation and to reduce carbon emission. YES, Bank adopts Clean technology, and HSBC has a separate data center to monitor energy consumption.

Use of Green Banking Products in Banking Sector

**Online Banking:** Online Banking and Mobile Banking is the easiest way to adopt Green Banking. Online Banking includes Paying bills online, remote deposit, online fund transfers, and Online statements. Online Banking and Mobile Banking are highly effective ways to understand your financial operation and to avoid unnecessary late payment fees and save time by avoiding standing to queues to update the transaction.

**Card-Based Transaction:** This will help many parties mutually. Using cards will reduce the burden of printing more money and reduce the cutting of trees to a larger extend. Customers, Bankers, and Traders need not deal with cash but a digital transaction. A variety of cards such as ATM, Credit and Debit cards, green remit cards, Foreign Travel Card, eZ Pay Card, Gift Card, Smart Payout Card, etc. are available for customers.

**Paperless Statement:** Sending out bank statement by mail is a big waste of paper which impact the environment to a great extent. E-Statement is a great method of Green Banking. Receiving Statements electronically can benefit the customers in many ways, such as missing statements, cause of damage, or identity theft.

**Save Paper:** Banks should purchase recycled paper products with the highest post- customer waste content. Whenever possible, use vegetable-based inks instead of less environmentally friendly oil-based inks.

**Use of 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 non-profit organization from every rupee you spend on your credit card to a worthwhile cause of environmental protection.

**Green Finance:** Bank should finance environment development projects and products such as Renewable energy like solar panels, reprocessed furniture, vehicle finance for low carbon emissions vehicles, home finance for green buildings, etc. With giving some concessions in processing fee and concessional rate of interest.

**Green Infrastructure:** Banks can move to renewable energy like solar, wind, etc. to effectively manage their offices and ATMs for going green. Banks can conduct energy audits in all their offices for effective energy management.

**Benefits and Opportunities of Green Banking**
1. Green banking, as the name denotes it, avoids unnecessary paperwork which means less cutting of trees, and to support this, many Banks venture into renewable energy and other Green supporting projects.
2. As a part of G-Banking, E-Statement will be generating to update the customers’ accounts through email instead of printing it.
3. Many payment services were made online free of cost, which reduces travel and hence less petrol and diesel.
4. Green banks give more importance to environmentally friendly factors like ecological gains; thus, interest on the loan is comparatively less.
5. Customers are encouraged to operate their accounts online to save resources such as time and energy, which would improve the transaction experience and efficient working.

Green Banking creates and develops various financial products that upkeep economic development through ecological uses. Implementing naturally sustainable tech is a boon to the banks through which various services could be rendered and earn profits through that. Through Green Banking, human person hour is efficiently used where the routine and clerical work can be done through technology in an easy way. CRM is effectively done using electronic ways, and the periodical updating and information are shared with them and rendered as an additional service. Banking services are taken by most of the people in the nation. Green Banking also encourage the clients and other parties to move towards green.
Challenges of Green Banking

Green banks and their project are extended only to qualifying customers; hence the support is provided to limited base only. And also G banking is in the beginning, and in the developing phase hence developing and adopting is a challenge. Adoption and training to this banking system require talented and effective resources that require huge capital. The purpose of banking is to supply money to the business, and if it is involved in those project which damages the environment, it is contradictory to Green banking concept. Due to a change in regulation to protect the environment, there are new amendments that will increase the credit risk. Estimating the change and to adapt it to the business according to the new regulation will rise to customers’ default state.

Green Banking in 2020

Green Banking is a greater platform to encourage, adapt, and develop the process and products which will support the environment. Banking is the service that is acquired by most of the common people in the country; hence it is the right way to inculcate the Green concept among the public. Through its efficient process, many are comfortable, and ready to acquire the services provided by Green Banks.

In 2018, Banks supported many clean energy projects, and it is one of the main agendas of the government to make the country energy sufficient. India is one of the largest renewable energy markets in the world; distributed solar projects are widely sanctioned through Green Bank Development under the natural resources Defence council.

Financial assistance was made available to the companies in public and private sectors to address the clean energy in India.

NRDC partnering with the Ministry of New and Renewable Energy and IREDA and Indian development banks, the focus of banks in 2019 is to develop the Clean energy source in India through various projects and services. Hence, banks are at the condition to support and identify renewable energy projects to build the nation.

Conclusion

The awareness level is right in all the three types of top-performing Public, Private and Foreign Banks; however, the knowledge level is good at Foreign Banks, moderate in Private Banks, and Public Banks. But the fact is other banks have to increase both the awareness and knowledge level towards Green Banking.

Though there are a lot of steps taken by the government and banks to provide a Green environment through Green Banking, there is a need to create awareness about green banking and its varied services. This Banking system will be a mutual benefit across various parties involved, including the nation. The Government rightly understood the importance of the Banking system and how it can impact the nation as a whole. Further green policy guidelines and incentives for going green would develop Green banking to the next level.

References

Ahuja, Neyati. “Green Banking in India: A Review of Literature.” International Journal for Research in Management and Pharmacy, vol. 4, no. 1, 2015, pp. 11-16.

Bahl, Sarita. “Green Banking - The New Strategic Imperative.” Asian Journal of Research in Business Economics and Management, vol. 2, no. 2, 2012, pp. 176-185.

Bahl, Sarita. “The Role of Green Banking in Sustainable Growth.” International Journal of Marketing, Financial Services and Management Research, vol. 1, no. 2, 2012, pp. 27-35.

Bhanagade, B.D. “Globalization and Indian Banking: Issues, Challenges & Strategies.” Economic Challenger, vol. 52, no. 13, 2011.

Bihari, S.C. “Green Banking-towards Socially Responsible Banking in India.” International Journal of Business Insights and Transformation, vol. 4, no. 1, 2011, pp. 82-87.

Chaurasia, A.K. “Green Banking Practices in Indian Banks.” JOMASS, vol. 1, no. 1, 2014, pp. 41-54.

Dhond, A.A. “An Empirical Study on Green Channel Counter in Banks.” Applied Research and Development Institute Journal, vol. 7, no. 2, 2013, pp. 11-20.
Jha, Nishikant and Shraddha Bhome. “A Study of Green Banking Trends in India.” *Abhinav*, vol. II, 2013, pp. 127-132.

Lemeshow, S. et al. *Adequacy of Sample Size in Health Studies*, John Wiley and Sons, 1990.

Panjaitan, L.T. *The Eco-Friendly Banking*, Penebar Plus, 2015.

Rahman, S.M.M. and Suborna Barua. “The Design and Adoption of Green Banking Framework for Environment Protection: Lessons from Bangladesh.” *Australian Journal of Sustainable Business and Society*, vol. 2, no. 1, 2016, pp. 1-19.

Ritu. “Green Banking: Opportunities And Challenges.” *International Journal of Informative & Futuristic Research*, vol. 2, no. 1, 2014, pp. 34-37.

Sharma, Neetu, et al. “A Study on Customer’s Awareness on Green Banking Initiatives in Selected Public and Private Sector Banks with Special Reference to Mumbai.” *IOSR Journal of Economics and Finance*, 2014, pp. 28-35.

Singh, Ashok. “Mobile Banking: Evolution and Business Strategy for Banks.” *The Indian Banker*, vol. V, no.4, 2010.

Singh, Yadwinder. “Environmental Management through Green Banking: A Study of Commercial Banks in India.” *International Journal of Interdisciplinary and Multidisciplinary Studies*, vol. 2, no. 4, 2015, pp. 17-26.

Suresh, C.B. and Bhavna Pandey. “Green Banking in India.” *Journal of Economics and International Finance*, vol. 7, no. 1, 2015, pp. 1-17.

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