

Consumer Awareness and Adoption of Green Banking Services

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Abstract:

Green banking is an upcoming area with sustainability emerging as a need of the hour. The awareness level, acceptance level, adoption level is not as expected. There is a need for increasing the awareness level and acceptance level among the various stakeholders. Objectives include to study the awareness level of Green Banking among the customers and bank employees and to study the challenges faced by in implementing Green Banking. Primary data has been collected from bank employees and customers through two structured questionnaires. Two bank employees and one hundred customers had been contacted for the study using a convenience sampling method. Majority of the bank employees have claimed that their bank is undertaking good efforts to promote green banking and the primary benefits of green banking as perceived by respondents include environmental sustainability, accounting, enhanced customer satisfaction and competitive advantage. The primary challenge in implementing green banking is the lack of customer awareness, resistance to change within the bank, technological limitations and security concerns and high implementation costs.

Keywords: *Green banking, sustainability, challenges of green banking, corporate social responsibility, technology.*

1Introduction:

Green banking operates similarly to a traditional bank, taking into account all social and environmental/ecological issues with the goal of protecting the environment and conserving natural resources. It is also known as an ethical or sustainable bank. They are overseen by the same authorities, but with an added focus on protecting the earth's environment, habitats, and resources (Nath, 2014).

. The primary objective of green banking includes promoting Environmental Sustainability, enhancing energy efficiency, reducing waste and emissions, supporting green financing and creating awareness. The key practices of green banking are paperless banking, energy efficient operations, green products and services, sustainable investments, corporate social responsibility initiatives and green building practices (Deka, 2015).

The different methods in green banking are embracing online banking, opting for green checking accounts, using green credit cards, saving paper and utilizing e mobile banking and choosing direct deposits. the different green banking products and services include green deposits, green mortgages and loans, green credit cards, green rewards checking accounts, mobile banking, online

banking, green cds and so on. The green banking offers numerous benefits for banks, their customers, and the environment through environmental benefits, economic benefits, reputational benefits, regulatory compliance and social benefits (Biswas, 2011). Thus Green banking is an environmentally conscious approach to financial services, integrating sustainability principles into banking operations, products, and policies. It involves promoting eco-friendly practices, such as reducing carbon footprints, supporting renewable energy projects, and offering green financial products like e-statements, green loans, and investment options that prioritize environmental sustainability (Jayabal, 2016). Through green banking, financial institutions not only contribute to environmental preservation but also gain a competitive advantage by aligning with the values and preferences of an environmentally conscious clientele (Trehan, 2015).

2. Design of the study:

The objectives of the study are to study the awareness level of Green Banking amongst the customers and bank employees and to study the challenges faced by bank in implementing Green Banking.

Data Collection Methods: Primary data has been

collected through two separate questionnaires one for bank employee and one for the bank customers. The sample size for the bank customer is 100 from 20 different banks and for the bank employees it is 20 from different bank employees in Bangalore. The convenience sampling has been using for the selecting the respondents.

3 Data analysis:

The data analysis has been divided into three parts. The first part deals with the primary data analysis for the bank employee, the second part deals with the primary data analysis from bank customers and third part deals with the challenges of green banking which is based on secondary data i.e. review of literature.

3.1 From bank employee's perspective: Majority of the bank employees have claimed that their bank is undertaking good efforts to promote green banking and the primary benefits of green banking as perceived by respondents includes environmental sustainability, accounting, enhanced customer satisfaction and competitive advantage. Cost savings and compliance with regulations are less emphasized. Green banking is primarily valued for its environmental impact, its potential to improve customer satisfaction and competitive positioning is also significant.

According to bank employees the primary challenge in implementing green banking is the lack of customer awareness, resistance to change within the bank, technological limitations and security concerns. High implementation costs are the least cited challenge. This indicates that while technical and security issues are notable, the most pressing issues are related to customer awareness and internal resistance to change.

Majority of the bank employees find it is important for their respective banks to invest in the green banking services and opined that future for green banking is extremely promising. Majority of the employees agree that green banking is effectively contributing to the environmental sustainability, However, 50% of the employees agree that green banking is meeting the customer expectations. This indicates a generally positive perception among bank employees regarding their success in meeting customer expectations related to green banking.

Majority of bank employees think that investing in green banking is a competitive advantage for their

banks. Almost all the respondents agree to the belief that additional training on green banking services would help them to promote green banking services (Rajan, 2017).

3.2 from the customer's perspective

Majority of the customers are aware of the term green banking. They are aware through social media, banks website and friends. Majority of them are using green banking services, provided by their respective banks.

Online banking is the prominent type of green banking service used by the customers, followed by mobile banking, E-statements, mortgage loans, and sustainable investment options. However, the frequency is not as expected. The major motives behind green banking are environmental concerns, convenience accounting, cost saving and bank's promotion accounting. Majority of the customers find that green banking services are easy to use. 40% of the respondents strongly agree to prefer green banking over traditional banking and 36% of them agree to prefer. Only 33% of the total respondents strongly agree that green banking services are secure to use, Majority of the total respondents strongly agree and agree that green banking services have improved their banking experience accounting. Majority of the customers are satisfied with the present green banking system. Majority of the customers opined that green banking is cost effective compared to other banking services and the transition towards green banking is smooth. The benefits of green banking include time saving, convenience, cost savings, reduced environmental impact and other benefits. However they are not in a position green banking system for others) (Charan, 2019).

The following hypothesis is tested using chi square test.

Null Hypothesis (H0): There is no significant association between the education and the awareness of Green Banking among customers.

Alternative Hypothesis (H1): There is a significant association between the education and the awareness of Green Banking among customers.

The calculated significance level (0.0000) is lower than the assumed one (0.05), the null hypothesis is rejected.

Thus there is a statistically significant relationship between the level of education and the awareness of Green Banking among customers in Bangalore.

The second hypothesis tested is based on income

and various factors of green banking. ANOVA has been conducted on various factor for the same.

Null hypothesis (H0): There is no significant difference between various factors of green banking and income of respondents.

Alternate hypothesis (H1): There is significant difference between various factors of green banking and income of respondents.

a) Education: There is no significant difference in how respondents perceive the importance of green banking based on their education level ($p > 0.05$) as the calculated $p = 0.452$. Education does not significantly influence perceptions of green banking importance.

b) Easy to Use: The ease of use of green banking does not significantly differ based on education level ($p > 0.05$) as the calculated $p = 0.289$. Education level does not affect how easy respondents find green banking to use.

c. Financial Requirements: There is a significant difference in perceptions of financial requirements for green banking based on education level ($p < 0.05$) as the calculated $p = 0.029$. Different educational backgrounds influence how respondents view the financial requirements of green banking.

d. Preference: In Preferences for green banking vary significantly with education level ($p < 0.05$) as the calculated $p = 0.035$. Education level influences the preferences respondents have regarding green banking.

e. Perceptions of security in green banking do not significantly differ across education levels ($p > 0.05$) as the calculated $p = 0.31$. Education does not significantly affect how secure respondents feel about their green banking.

f. Experience: There is a significant difference in green banking experience among different educational backgrounds ($p < 0.05$) as the calculated $p = 0.008$. Education level affects the experience respondents have with green banking.

g. Environmental Sustainability: The perception of environmental sustainability in green banking does not show a significant difference based on education level ($p > 0.05$) as the calculated $p = 0.112$. Education does not significantly influence views on environmental sustainability.

h. Satisfaction: Satisfaction with green banking shows a marginally significant difference based on education level ($p = 0.089$) as the calculated $p = 0.089$. While not statistically significant at the 0.05 level, there may be some variation in satisfaction

across educational backgrounds.

i. Cost Effective: The perception of green banking as cost effective does not significantly differ with education level ($p > 0.05$) as the calculated $p = 0.426$. Education level does not significantly impact perceptions of cost effectiveness.

j. Easy Transition: The ease of transitioning to green banking shows a marginally significant difference based on education level ($p = 0.069$) as the calculated $p = 0.069$. This result is close to significance and may indicate variations in the ease of transition based on education.

EDUCATION:

Null hypothesis (H0): There is no significant difference between various factors of green banking and education of respondents.

Alternate hypothesis (H1): There is significant difference between various factors of green banking and education of respondents.

a) Importance: There is a significant difference in the perceived importance of green banking across different income ranges ($p < 0.05$) as the calculated $p = 0.003$. This suggests that income level influences how important respondents consider green banking to be.

b) Easy to Use: The ease of use of green banking does not significantly differ across income ranges ($p > 0.05$) as the calculated $p = 0.674$ ($F=0.513$). Income does not significantly impact how easy respondents find green banking to use.

c) Financial Requirements: The financial requirements of green banking do not show a significant difference among income ranges ($p > 0.05$) as the calculated $p = 0.138$. Income levels do not significantly affect perceptions of the financial requirements for green banking.

d) Preference: Preferences for green banking do not significantly vary with income range ($p > 0.05$) as the calculated $p = 0.775$. Different income groups do not have significantly different preferences for green banking.

e) Security: There is a significant difference in the perceived security of green banking based on income range ($p < 0.05$) as the calculated $p = 0.033$. This indicates that income level influences how secure respondents feel about their green banking.

f) Experience: The experience with green banking significantly varies among different income ranges ($p < 0.05$) as the calculated $p = 0.026$. Different income groups have different experiences with green banking.

g) Environmental Sustainability: Perceptions of environmental sustainability in green banking do not significantly differ among income ranges ($p > 0.05$) as the calculated $p = 0.802$. Income level does not significantly affect views on the environmental sustainability of green banking.

h) Satisfaction: Satisfaction with green banking shows a significant difference based on income range ($p < 0.05$) as the calculated $p = 0.027$.. Different income groups experience different levels of satisfaction with their green banking.

i) Cost Effective: The perception of green banking being cost effective does not significantly differ across income ranges ($p > 0.05$) as the calculated $p = 0.192$.. Income levels do not have a significant impact on how cost effective green banking is perceived to be.

j) Easy Transition: The ease of transitioning to green banking does not show a significant difference among income ranges ($p > 0.05$) as the calculated $p = 0.130$. Income level does not significantly impact the ease of transitioning to green banking.

Hypothesis 3:

- Null Hypothesis (H0): There is no significant association between the challenges faced by banks and the effectiveness of their Green Banking services.

- Alternative Hypothesis (H1): There is a significant association between the challenges faced by banks and the effectiveness of their Green Banking services.

The assumed significance level is 5% and the significance level from hypothesis testing is 0.000.

Since the significance level is $< 0.05\%$. Thus, we have to reject the Null Hypothesis. Based on the chi-square test results the Pearson Chi-Square and Likelihood Ratio Chi-Square tests both indicate test result ($\chi^2 = 104.226$, $p < 0.05$) suggests that there is a statistically significant relationship between the challenges faced by banks and the effectiveness of their Green Banking services. This implies that the challenges banks encounter significantly influences how effective their Green Banking services are.

3.3 Challenges and Barriers

i) Insufficient knowledge and awareness of the consumers : Green Banking deals with eco-friendly approaches utilized in the banking industry to

decrease internal and external jurisdictions on the environment. A broader view is incorporation of green criteria in the lending premise (Sudhalakshmi, 2014). The banking business is not usually associated with pollution hence the emphasis on stimulating it. Still, it creates a positive effect on the environment because it increases energy consumption, namely lighting, air conditioning, and papers. The lack of awareness about green banking particularly in rural places is a big challenge (Ahuja, 2015).

ii) demographic profile of the customers. Majority of the banking activities will be done by younger generation in a family. The old age people are not aware and are not ready to learn or accept the green banking principles. Education also plays an important role in usage of green banking practices. It is not exaggerating to recollect that in rural places, many customers will come and check their balances on regular basis. People in the middle and older age groups need to be made more aware of them (Prasad, Sahoo, 2015).

iii) Implementing green banking practices often requires significant upfront investment. For example, upgrading to energy efficient equipment or constructing green buildings can be costly. These initial expenses can be a deterrent for some banks, particularly smaller institutions. Central banks should be able to support the green banking initiatives (Giridhar, 2017).

iv) Government support : There is need for support from the Government to the banks in terms of technology, bringing awareness among the customers, security measures so that more bank will come forward to implement the green banking. (Naveenan, Madeswaran, & Arun, 2021).

v) Need from more clear green banking regulations: Developing inclusive banking strategies will help the socio economic growth along with environmental sustainability. Government should do sufficient studies from the countries which are already doing the green banking practices and then they can customize the same to their respective countries. (Lalon, 2015).

vi) Cultural changes: successful implementation of green banking need changes in operation, technical and cline habits. Bringing this change is the responsibility of all the stakeholders of the banking system as the benefits are for the entire society in terms of environmental, ecological, preservation of natural resources and in terms of carbon foot printing. (Prabhu, 2021).

vii) Measurement and Reporting: Accurately measuring and reporting the environmental impact of green banking practices can be challenging. Banks need robust systems and methodologies to track their sustainability efforts and demonstrate their effectiveness (Sahoo, 2016).

viii) Need for more research and communication to the stakeholders: More research studies to be done to identify the benefits and spreading the benefits to all the stakeholders through various communication programs so that stakeholders will be ready to implement the green banking easily and conveniently (Kapoor, 2016).

xi) Training: Increase awareness campaigns and training for both employees and customers on green banking benefits. Emphasize the environmental and customer satisfaction benefits of green banking, and explore cost savings and regulatory advantages. Focus on educating customers and fostering a culture of innovation among staff to overcome adoption challenges. Prioritize investments in green banking and improve communication about its benefits to engage employees (Sahoo, 2015). Use education to convert indifferent staff into supporters of green initiatives. Act on customer feedback to enhance green banking services and promote successful outcomes to boost employee confidence. Regularly communicate progress and seek feedback to maintain employee engagement and improve services. Highlight green banking as a competitive advantage in strategic communications and address indifferent responses with targeted engagement. Invest in and update training programs to ensure employees are knowledgeable about green banking (Naidu, 2015).

4. Conclusion:

The study on awareness and adoption of green banking reveals a generally positive yet nuanced perspective among respondents. The majority of bank employees acknowledge significant efforts by their institutions to promote green banking, with high recognition of its environmental benefits. Despite this, challenges such as customer awareness and internal resistance remain prevalent, indicating areas for targeted improvement. Key findings highlight that while green banking is valued for its environmental sustainability and perceived cost effectiveness, communication strategies and security perceptions require enhancement. Employees 'exhibit optimism about

the future of green banking, yet a significant portion remains neutral or cautious, especially regarding recommendations to others (Yadav, 2014). To protect traditional resources and the environment, organizations have begun to seek for environmental sensitivity. To advance green banking adoption, banks must focus on bolstering customer education, refining communication strategies, and addressing security concerns. Leveraging the positive aspects identified such as the smooth transition process and high satisfaction levels can further bolster support. By addressing the challenges and building on the strengths identified in this study, banks can foster greater awareness, enhance customer engagement, and drive broader adoption of green banking practices, thereby contributing more effectively to sustainable financial services (Prakash, 2024). By improving the availability of financing and meeting the demands of a "green economy," the banking sector may play a significant role in greening the banking system (Sharma, 2022).

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