

A study on Adoption of green banking services with reference to Avinashi

P.Deepa, Ph.d Research scholar [Full time], Department of Commerce, L.R.G Government Arts College for women, Tirupur, Tamilnadu, India.

Dr. (Mrs.) C.R.Karpagam, Assistant Professor, Department of Commerce, L.R.G Government Arts College for women, Tirupur, Tamilnadu, India.

Abstract:

Green banking is different from traditional banking, as green banking focus on promoting environment friendly banking. Green banking is also known as ethical banking. This paper attempts to analyze the adoption of green banking products among customers with different educational qualification and different age groups. ANOVA, percentage and rank are applied for analyzing both the objectives. This paper finding explains that young generation is more inclined towards green banking products than middle age and senior age groups but there is no significant difference in mean usage of green banking products among the customers with different educational qualification. Therefore, the educational qualification has nothing to do with usage of green banking products, whereas, more awareness is need to be created among the middle and senior age groups individuals.

Keywords: Green Banking, ANOVA, Ethical Banking, Product and services

Introduction:

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. Green banking is a new concept that considers environmental and socially responsible investing. Green banking is defined as promoting environmental-friendly practices and reducing the carbon footprint from banking activities. In simple words, green banking is a banking that benefits the environment. The green banking is also known as ethical banking. The bank can minimal the use of paperwork by promoting paperless banking through online banking. To initiate sustainable development, there is a need to promote green banking practices so that we can tackle the problems like global warming, natural calamities, and disaster. Bank is a financial institution that deals with masses and banks by adopting green activities can influence the attitude of the customers towards the environment. The concept and practice of green banking is new to India, but not in developed nations like the USA. There is a need to focus on sustainable banking to protect the environment from disaster. In less developed countries (LDC) like Bangladesh, where losses from natural calamities are huge. The performance of bank's clients impact the performance of banks so there is a need for appropriate environmental and social due diligence to reduce the chance of non-performing assets, as legal

environmental compliance failure can halt the client's project and result in NPA to the bank. Bank should take into consideration the ecological aspect in lending apart from security and profitability. Various international protocols such as UNEPFI, Equator Principles, and LEED certificates have been issued in order to facilitate green banking, but Indian banks are still lagging behind. Various banks in India have formulated strategies and initiated green banking practices to support environment-friendly banking and reduce the carbon footprints of bank and customers. 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.

Statement of the problem:

Green banking is different from normal banking system in the sense it updates itself from the traditional mode of functioning with a view to supporting environmental consideration. Lack of adequate number of specialized programs is foremost reason for people not being aware its importance. No separate trainings and awareness programme have been conducted for their customers to operate the green banking system. The banks are facing a lot of challenges in controlling environment impact on their business. The role of banking sector which is on major financing source to the industries assumes high importance. Further the RBI do not clearly speak about the specification of rules that can hold banks responsible for scrutinizing investment project before financing and for the environmental protection. However there are some indirect suggestions from them to the branches to take initiatives of their own to take steps for safeguarding the environment. The main problem is that not only the customers but also the banks themselves are not adequately aware of the concept of green banking system. Of course the RBI promotes the concept of Green banking, but there is some lacuna in its implementation. This gives way to the branches to conclude that there will be no action against them if their guidelines are not adhered to. The majority of the banks simply follow the suggestions they receive from the head office and implement things that are suggested by the head office and nothing more. The banks are ready to procure loans for environmental sustainable projects like renovation of building, eco-friendly businesses, installing solar system, less use of energy business etc., Though the banks encourage the customers to take the environmentally sustainable projects, the customers evince least interest in them. There are one or two exemptions from the above. For instance, banks provide all these expected services to their customers, but the fact is they don't claim that it is a part of green banking system.

Review of literature:

According to *Nigamananda (2011)*, some other benefits of green banking are: It will rationalize the paper use by giving free access to do all the banking transactions through Internet Banking, SMS Banking, Phone Banking and ATM Banking. Free Electronic Bill Payment Services and E-Remit services for remitting funds to the customers' home country. This is a unique service.

Vinay Kumar Nagu, (2012), in his study on "Managing Customer Relations through Online Banking" It was found that the primary benefit of E- CRM in the banking sector is the reduced cost of

operation, locks in target prices, and increases in customer loyalty. While secondary importance is given to customer cognitive, competitive products and a high security system, low priority is given to different contact options for customers to contact and minimize the administrative work. While in overview of transactions, localizations of transactions real time overview of liquidity position, organizational activity and one point of contact, one bank is giving less importance to some factors, while the other is giving more importance. The finding shows that definite benefits which are derived from a bank's perspective by using E – CRM are: Reduced cost of operation; increased customer loyalty, Staff training, Evaluation of Customer Feedback.

Amitabh Mishra, et.al. (2013), in their articles entitled “A study of Gaps in Service Quality at a leading Private Sector Commercial Bank in Greater Noida”. The study concludes that account holders were relatively more dissatisfied with the service quality dimension, „assurance” with a high weighted gap score of 0.21, followed by reliability, responsiveness, empathy and tangibles and weighted gap scores of 0.20, 0.21, 0.08 and 0.05, respectively. Such a study is useful in determining the weak areas of a bank's service where immediate steps are necessary.

Ragupathi and Sujatha (2015), Green banking and Environment sustainability by commercial banks in India, Green banking initiatives of commercial banks in India studied the way to go green through green banking. According to this paper, earlier bank was not aware about the concept green banking. But now a day's banks are playing very important role in environment sustainability program. By the green banking practice people is getting more aware about the global warming and each business man's contributing in environment sustainability to make this earth a better place to live in. Green banking is not only greening the industries but it will also facilitate is not only greening the industries but it will also facilitate in improving the assets quality of the bank in future.

Objectives:

1. To identify the nature of problem faced by the customers while adopting green banking practices.

Research Methodology:

The research methodology used in this study based on primary as well as secondary data. The primary data have been collected to true questionnaire and the secondary data have been collected from websites of various banks and journals related to banking.

Sample size:

Sample size is 112.

Sampling Method:

General public of the city and sampling units are chosen on the basis of convenience sampling.

Period of the study:

The study has been adopted during the period 3 months.

Tools for analysis:

The following statistical tools have been used for the purpose of analyzing data collected.

1. ANOVA
2. Percentage analysis
3. Mean rank

Adoption of Green Banking and Age groups:

The descriptive statistics of mean usage of green banking services across various age groups have been shown in Table No.1 (a). The descriptive statistics shows that the usage of green banking product is high among individuals of age groups of 15-30, with mean score of 26.51, whereas, the usage is minimum among individuals of age above 60 with mean usage of 15 only. The standard error of the mean score for each group is between one and two, which is consistent and moderately low.

1). Relationship between age groups and adoption of green banking products.

H₀: The mean usage of green banking services (adoption) is independent of age.

Table No.1 (a)**Descriptive statistics of green banking services across various age group**

Age groups	No. of Respondent	Mean	Std. Deviation	Std. Error
15-30	66	26.5152	9.09648	1.1197
30-45	27	26.0741	7.7456	1.49064
45-60	15	22.9333	7.38209	1.90605
60 Above	4	15	2.3094	1.1547
Total	112	25.5179	8.66492	0.81876

Table No.2 (b)**ANOVA results of test of equality of mean usage across various age groups**

	Sum of squares	Df	Mean square	F	Sig.
Between groups	616.694	3	205.565	2.877	.039
Within groups	7717.270	108	71.456		
Total	83331.94	111			

To test the hypothesis, is usage of green banking products (adoption) independent of age, ANOVA test has been conducted. The result of ANOVA test has been shown in Table No.2 (b). The p value of chi-square statistics is found to be 0.039 (less than 0.05), which reject our null hypothesis that usage of green banking is independent of Age. Since, ANOVA test assume variance is equal across various group age

group, therefore, to test the equality of variance, Leven test the null hypothesis is variance of mean usage of green banking products is equal among various age group has been applied.

Adoption of Green Banking and Level of Education

The descriptive statistics of mean usage of green banking products across various level of education has been shown in Table No 1(a). The descriptive statistics shows that the usage of green banking product is high among individuals who have attained professional qualification, with mean score of 27.538, whereas, the usage is minimum among graduates with mean usage of 24.21 only. The descriptive results show that mean usage of green banking product is higher among intermediate than graduates. The standard error of the mean score for each group is between 24-27, which is consistent high among all groups.

2). Relationship between level of education and adoption of green banking products.

H₀: The mean usage of green banking services (adoption) is independent of level of education.

Table No.1 (a)

Descriptive statistics of green banking services across various level of Education

Education	No. of Respondent	Mean	Std. Deviation	Std. Error
Intermediate	9	24.2222	11.69164	3.89721
Graduate	14	24.2105	6.45135	1.48004
Post graduate	71	25.6620	8.17128	.96975
Professionals	13	27.5385	11.95558	3.31588
Total	112	25.5179	8.66492	.81876

Table No.2 (b)

ANOVA results of test of equality of mean usage across various education groups

	Sum of squares	Df	Mean square	F	Sig.
Between groups	102.133	3	34.044	.447	.720
Within groups	5231.832	108	76.221		
Total	8333.964	111			

To test the hypothesis, is usage of green banking products (adoption) independent of education, ANOVA test has been conducted. The result of ANOVA test has been shown in Table No.2 (b). The p value of chi-square statistics is found to be 0.720, which reject our alternate hypothesis that usage of green banking is not independent of level of education. It postulates that adoption of green banking is independent of level of education. Since, ANOVA test assume variance is equal across various age group is same, therefore, to test the equality of variance, Leven test the null hypothesis is variance of mean usage of green banking products is equal among various educational wise has been applied.

Table No.3**Level of green banking services utilized by the customers**

SI. No.	Categories	No. of the Respondents	Percentage
1.	Very active adopters	26	23.21
2.	Active adopter	44	39.28
3.	Moderately active adopter	42	35.7
	Total	112	100

Sources: Primary data

The above table shows that the categories as green banking services adopter. It has been inferred that 39.28 per cent of respondents have said that they were active adopter in the green banking services. Followed by, 35.7 per cent of the respondents have said that they moderately active adopter in the green banking services and 23.21 per cent of respondents have said that they were very active adopters in the green banking adopters respectively.

Hence it has been concluded that majority of 39.28 per cent of respondents have said that they were active adopter in the green banking services.

Table No. 4**Nature of service of green banking services utilized by the customers**

SI. No.	Nature of service	No. of the Respondents	Percentage
1.	Online savings account	12	10.71
2.	Paperless statement	12	10.71
3.	Use direct deposit	26	23.21
4.	Online bill payment	14	12.5
5.	Reward debit and credit cards	3	2.68
6.	Net banking	15	13.39
7.	Mobile banking	16	14.28
8.	Frequent usage of debit/credit cards for bills payment	14	12.5
	Total	112	100

Sources: Primary data

The table shows that 23.21 per cent of sample of the respondents use direct deposit, followed by, 10.71 per cent of the respondents online savings account and paperless statement are using services. 14.28 per cent of the respondents have said that they use mobile banking, 13.39 per cent of the respondents use net banking, and 12.5 per cent of the respondents have said that frequent usage of debit/credit for bills payment.

Thus it has been concluded that 23.21 per cent of sample of the respondents use direct deposit.

Table No. 5
Customer's opinion on E-banking services

SI. No.	E-banking services	No. of the Respondents	Percentage
1.	Through bank officials	14	12.5
2.	Advertisement in print media	13	11.60
3.	Online advertisement	22	19.64
4.	Through your family members	18	16.07
5.	Though your friends	28	25
6.	Television and radio advertisement	17	15.17
	Total	112	100

Sources: Primary data

From the above table reveals that factors that respondents come to know above the E-banking services. It has been inferred that 25 per cent respondents though your friends. Followed by, 19.64 per cent of respondents' online advertisements, 16.07 per cent of the respondents have said that they gathered information through their family members, and 15.17 per cent of the respondents' television and radio advertisement and remaining 11.60 per cent of respondents have said that advertisement in print media.

Hence, it is concluded that majority of the 25 per cent respondents though your friends.

Table No. 6
Advantage of green banking services

SI. No.	E- banking services	Sum	Mean	Rank
1	Anytime anywhere banking	486	4.33	1
2	Time saving banking practices	458	4.09	2
3	Free access to bank transaction through net	447	3.10	5
4	Cost saving process	439	3.91	4
5	Reduce transaction cost	393	3.50	9
6	Remote area access	387	3.45	10
7	Paying bills online	412	3.67	7
8	Online fund transfer	407	3.63	8
9	Remote deposits	418	3.73	6

10	High security	442	3.94	3
----	---------------	-----	------	---

Sources: Primary data

From the above table indicate that most of the respondents (4.33) of mean value highly usage of anytime anywhere banking. They have less usage of service about mean value of the respondents of (3.45) remote area access.

Findings:

- Majority of the 39.28 per cent of respondents have said that they were active adopter in the green banking services.
- Majority of the 25 per cent respondents though your friends.
- Most of the respondents (4.33) of mean value highly usage of anytime anywhere banking. They have less usage of service about mean value of the respondents of (3.45) remote area access.
- 23.21 per cent of sample of the respondents most use direct deposit.

Suggestion:

1. The initiative to be taken by the Banks in spreading the awareness among the clients about Green banking by organizing seminar and symposium. They can organize awareness campaign in schools and colleges. They can participate in the tree plantation and cleanliness programmes in city areas.
2. Consumers should be aware that banks offer green checking account because ultimately it helps their profits and not for purely altruistic reasons. They can profit customers as well because many reward checking accounts will pay a high interest rate to bank customers who meet certain monthly requirements.
3. Banks must adopt a strategic plan to perform green activities on long term basis as well as short term basis.
4. Banks should use Green Loans for Home Improvements in a way that before a customer undertake a major home improvement project, study if the project can be done in an eco-friendly manner and if the customer might qualify for a green loan from a bank. Green loans are perfect for energy-saving projects around the house. Find a better loan rate and save energy costs all at the same time.

Conclusion:

The present study finds that the young generation is more inclined towards green banking products than middle age and senior age groups (above 60 years). The mean score of usage of green banking products among low age group (15-30) is 26.50, whereas, it is just 15 for individuals age above 60. Therefore, the present study finds that there is more of need to create awareness about green banking products adoption among the middle and senior age groups individuals than young age people. The present study finds no significant difference in usage of green banking products across various level of education.

Reference:

1. Nigamananda Biswas (2011), *Sustainable Green Banking Approach: The need of the Hour*, Volume No. I, Issue No.1, January.
2. Vinay Kumar Nagu (2012), *Managing Customer Relations through Online Banking, India*.
3. Aimtabh Mishra, B.K Kumar and Dharambir Singh (2013), *A study of gaps in service quality at a leading private sector commercial bank in gender Noida, Hyderabad IUP publication*, Volume No.12, Issue No. I, Page No.43-62.
4. Ragupathi. M and Sujatha. S (January 2015), *Green Banking Initiatives of Commercial Banks in India, International research Journal of Business and Management*, Volume No. VIII, Issue No. 2, ISSN No.2322-083X, Page No.74-96.
5. Dr. Bibhu Prasad Sahoo (2013), *Adoption of Green Banking in India: Challenges and Prospects*, *International Journal of Science and Research (IJSR)*, Volume No.5, Issue No.8, ISSN No: 2319-7064.
6. Choudhury, T.T., et al. (2014), *Influence of Stakeholders in Developing Green Banking Products in Bangladesh. Research Journal of Finance and Accounting*, Volume No.4, Issue No.7, Page No. 77-77.

