
Changing Scenario of Banking: An Empirical Study on Customers' Perspective on Green Banking

Anu Sahi¹ and Anurag Pahuja²

¹ Apeejay Institute of Management Technical Campus, Jalandhar, Punjab

² IMS, Ghaziabad, Uttar Pradesh

Indian Government is proposing quiet stringent policies for tackling the climate changes and financial service sector is also covered in the regime. The massive amount of carbon emissions and pollutants are fatal for the human kind and countries are making effort to create a carbon free economy. To foster environmental friendly products and services, one of the buzzword in banking industry is Green Banking. This paper is a niche attempt to unveil the awareness of green banking initiatives, frequency of usage of green services and the perceived benefits of using green banking services among customers of selected public and private sector banks in Punjab. The results revealed a high level of awareness about green banking concept and the most widely used green product found to be plastic money (debit and credit cards). The results highlighted that irrespective of the education level of customer, there is no difference in usage of green banking services. The findings showed three main perceptual benefits of green banking namely online transactions, safe and secure transactions and environmental benefits.

Keywords: Green Banking, Scenario, Customer, Environment Sustainability, Punjab, India

INTRODUCTION

The gigantic environmental changes are impacting the ecosystem a lot. No one is left behind from the vagaries of earthquakes, hurricanes, tsunamis etc. These changes in the environment are an alarming signal for all the stakeholders in the country. The responsibility to protect environment is not only of manufacturing companies alone but equally lies on other organizations including banking corporations. Banks are moving from traditional banking to green banking. The concept of Green bank has varied implications in terms of resource-efficiency, involvement of employees and saving money also. A green bank considers how its business model affects customers, employees and the communities it serves. Greening your bank isn't hard. According to Indian Banks Association (IBA, 2014) “Green Bank is like a normal bank, which considers all the social and environmental / ecological factors with an aim to protect the environment and conserve natural resources”. It is also known as ethical bank or sustainable bank. The purpose of green banks is to perform banking activities, while taking care of earth's ecology, environment, and natural resources including biodiversity.

The saving of biodiversity can help world to become a better place to live with certain changes in the

mankind's habits, including client habits in the banking sector. Green banking is a concept which aims at promoting environmental friendly practices and to reduce the carbon footprint from banking operations. It is a smart and proactive way of thinking with a vision of future sustainability. The ethical business behavior also demands actions which lead to generating profits but also to sustain them in an eco-friendly manner.

GREEN BANKING PRACTICES

Green Banking is an umbrella term encompassing eco-friendly products, services and processes being adopted by the banks. It may take the form of online banking, online bills, online account opening, Solar Powered ATMs, Energy-efficient branches, etc. The benefits of green banking are numerous like reduction of carbon footprint, efficient utilization of resources and cost cutting etc. Some of the newly invented green banking products, services and processes are explained below:

Green Products

- Green Deposits:** Deposits made through online channel of banking are termed as green deposits. Banks help to provide higher interest rates on commercial deposits, fixed deposits and saving accounts if customers choose to conduct their banking activities through online.
- Green Mortgages and Loans:** Loans and mortgages offered for energy efficient business are popularly known as green loans and mortgages. Some green mortgages allow home buyers to enjoy 15 percent of the price of their house into loans for upgrades including energy-efficient windows, solar panels, geothermal heating or water heaters. The savings in monthly energy bills can also offset the higher monthly mortgage payments and save money in the long run.
- Green Certificate of Deposits:** These are basically short term money market instrument

known as green certificate of deposit. These are issued for promoting energy efficient business, business involved in promoting green energy or sustainable environment.

- Green Credit Cards:** A green credit card is just like a normal credit card with the only difference that the rewards or points earned by green cardholders can be redeemed for contributions to eco-friendly charitable organizations. These cards usually offer lucrative incentives for consumers to use their green card for their expensive purchases.

Green Services

- Mobile Banking:** Mobile banking is the most widely used green banking services of the banking industry. This product allows the customers to check balances, transfer funds or pay bills from mobile phone. It also saves time and energy and in reducing massive use of energy and paper of the bank. Most of the banks in India have introduced this paper-less facility.
- Net Banking:** Net Banking is similar to mobile banking. In this service, the customers can assess the various services of banks through internet. The customer needs to have only login account and user password. It helps in saving time and reducing energy and paper work.
- E-Investment Services:** Another step towards green banking is promoting e -investment services. E-investment services are basically concerned with providing online platforms for investors and traders for indulging in investments. This help in saving time, energy and paper. Banks allow their customers to provide all the necessary information for investments online.
- Online Banking:** This banking service helps in additional conservation of energy and natural resources. Online banking facilities include paying bills online, remote deposit, online fund transfers and online e-statements. It allows

savings in terms of less paper, less energy and less expenditure of natural resources from banking activities. Customers can also save money by avoiding late payments of fees and save time by avoiding standing in queues and paying the bills online from home.

Green Processes

- Green Reward Checking Accounts:** This initiative of banks is to promote paperless society. The banks encourage customers through high bonus rates if they maintain a certain balance with the bank and use more of electronic statements, online bill payments or using a debit or credit card. This banking product combine higher rates along with eco-friendly living.
- Use of Solar and Wind Energy:** Using solar and wind energy is one of the decent way of going green. State Bank of India (SBI) has become the first bank in the country to start 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. Using the same concept, other banks are introducing Solar powered ATMs, which can help reduce the electricity and save environment.
- Energy Consciousness:** Developing energy consciousness, adopting effective office time management and automation solutions and using compact fluorescent lighting (CFL) can help banks save energy consumption considerably. Banks should conduct energy audits in all of their offices for effective energy management. They can also switch over to renewable energy (solar, wind etc.) to manage their offices and ATMs.
- Use of Recycled Paper and Waste:** Banks are using recycled paper products for printing monthly statements, brochures, ATM receipts,

annual reports, newsletters, copy paper, and envelopes etc. Indian banks are also employing vegetable-based inks instead of less environmentally friendly oil-based inks.

REVIEW OF LITERATURE

Jeucken (2001) focused on preparation of environmental risk and liability guidelines by banks and financial institutions on development of protective policies and reporting for each project they finance or invest. Gupta (2003) focused on the emerging needs of environment sustainable businesses and products and argued that in future, market will reward those industries or the companies, which emerge as the efficient users of the energy and raw materials and will penalize the less efficient one. Guo (2005) explained that commercial banks have to adopt proactive strategies for reducing internal operation risks from environmental issues thereby realizing long-term profitability by external financing of environmentally friendly products and services. Heim (2005) found that environmental sustainable projects are quite difficult to implement as it requires efficient management procedures, yet the benefits of environmental management system can be phenomenal and in cases have proven cost savings, increase in bond value etc. Sudeep (2006) elaborated the increased use of Internet banking as a part of green banking practices and explored that Indian customers' preference for internet banking depends on five variables namely perceived usefulness, perceived ease of use, consumer awareness, quality of facilities and subjective norms. The aspect of sustainable environment needs to be coordinated with all the participants to be in win- win situation. The solution to environmental problems through investment in pollution prevention or cleaner production equipment and machinery that improve industrial efficiency needs to be a triple win for all parties: "win" for the enterprise, "win" for the bank, and certainly "win" for the environment. Further the

adoption of greener banking practices will not only be useful for environment, but also benefit in greater operational efficiencies. But there has not been much initiative in this regard by the banks and other financial institutions in India. Indian banks are unable to contribute towards the direction of environment yet they have a big role to play in the economy (Dhewanthi, 2007; Sahoo, 2008).

Global warming issues are alarming all sectors of economies with banks no exception. To cope with the same issue, Sharma (2011) argued that Indian banks are now becoming more conscious on Corporate Social Responsibility (CSR) and one of the main CSR is green banking. Recognizing the warning of global warming the State bank of India has initiated urgent measures to combat the climate change by reducing the bank's own carbon footprint and sensitizing the bank's clients to adopt low carbon emission practices. Joshua and Koshy (2011) explored that banks in India are increasingly providing services through electronic channels such as ATMs, Internet banking, Tele-banking and Mobile banking. ATMs have been widely adopted but the level of adoption of other electronic banking means despite their potential are yet to pick in a big way. Jain (2012) conducted a comparative study of public and private sector banks and concluded that the key areas of strength in case of public sector banks are accessibility, privacy and demo at the counter and the areas of significant improvement are: transfer of funds, convenience, timeliness, cost effective services and network coverage. On the other hand, key areas of strength in private sector banks are: bill payment, customer correspondence, e-shopping and technical efficient services. The areas where improvements are required are: receiving alerts, mobile banking, online trading and advertisement. Kumar and Singh (2013) undertaken a service quality survey of banks using SERQUAL and found that account holders were dissatisfied with the service quality dimension i.e. assurance followed by reliability, responsiveness, empathy

and tangibles respectively. Such a study can be helpful in assessing weak areas of bank services, so that immediate steps can be undertaken. Khosla and Munjal (2013) argued that those banks which will be successful in creating customers by offering innovative and advanced services ahead of their competitors will reap more benefits, and recommended that bank should target their promotional activities towards literate, young and resourceful brigade who possess a rich potential to use e - banking services for long as can be generalized from this study. Nath, Nayak and Goel (2014) presented in a very concise and comprehensive way the various measures and initiatives taken by world bank and by central bank of India for combating the effects of environmental disasters and also focused on customer awareness of green banking products about public and private sector banks. Shakil, Azam and Raju (2014) tried to explore the green banking practices in various banks in Bangladesh using secondary data. They concluded that majorly state owned commercial banks, and state development banks are far lacking in implementation of green banking practices like ATMs or online banking. Further they focused the reason for non implementation is cost issue.

NEED AND OBJECTIVES OF THE STUDY

The perusal of literature revealed that green banking is a paradigm shift of banking towards environment sustainability and saving cost. The research papers and articles available in this regard are more conceptual in nature and focusing on benefits of the same. However, there is dearth of empirical research studies on green banking especially in Punjab.

Specific objectives of the study include the following:

- To study awareness regarding Green Banking concept among respondents.
- To examine the usage of various Green Banking

products/services among respondents.

- To study the perceptual benefits of green banking initiatives to the customers

HYPOTHESES OF THE STUDY

- H_{01} : Education level of customer does not affect the usage of green baking products.
- H_{02} : Age of the customer does not affect the usage of green banking products.
- H_{03} : Income of the customer does not affect usage of green banking products.

METHODOLOGY USED IN THE STUDY

Data used

The primary data has been collected using a well structured questionnaire comprising of two sections. Section A consists of Demographic profile of the respondents and covers age, gender, occupation, income level, family members etc. and Section B comprises of nine questions related to various aspects of green banking like awareness of concept, awareness about various green banking products/services and usage of green banking products among customers and one likert scale question on benefits of green banking has been designed.

Locale of the Study

The study has been conducted at Jalandhar, Ludhiana and Amritsar districts of Punjab state during the time period February-March 2015.

Sampling Method and Sample Size

The data has been collected using non probability convenience sampling method. In total 150 respondents were targeted and questionnaire has been sent, out of which 32 questionnaires were not filled at all and 18 were rejected due to incompleteness and inconsistent responses. Finally

the data has been analyzed and results have been interpreted based on 100 respondents.

Analytical Tools used

In order to interpret the data well, uni-variate descriptive statistics viz. mean and standard deviation have been used. Further to test hypothesis, bi-variate inferential statistics like chi square and Kruskal Wallis test have been employed. Further multivariate technique, factor analysis, has also used meticulously. For univariate, bivariate as well as multivariate statistics SPSS 20 has been employed.

DATA ANALYSIS AND INTERPRETATION

The data has been processed and analyzed so that findings can be interpreted, communicated and can be easily understood. The findings are presented in the best possible way with the help of tables.

Demographic Profile of Respondents and their Awareness Level about Green Banking

The demographic characteristics of respondents and their awareness level have been measured and the responses are as follows.

The demographic profile of the surveyed respondents revealed that majority of the respondents were male (82%) and belonging to the age category of 20-30 years (38%). The majority of respondent's family size lies between 4 & above (48%) and majority of the respondents were professionals (54%). The Income level of surveyed respondents was lying between 50,001 & above (52%). Majority respondents surveyed were using services of public sector banks like SBI, PNB and BOB (57%), whereas private banks' respondents were (43%). Further to empirically test the hypothesis that demographic profile has no significant relation with awareness level, chi square statistics has been used and the results were not found to be statistically significant.

Changing Scenario of Banking:
An Empirical Study on Customers' Perspective on Green Banking

Table 3: Demographic Profile of Respondents and Awareness Level		
Demographic Factors	Number of Respondents	Percentage of Respondents
Gender of the Respondent		
Male	68	68
Female	32	32
Total	100	100
Age of the Respondent		
20-30 years	38	38
30-40 years	15	15
40-50 years	20	20
More than 50 years	27	27
Total	100	100
Family Size		
2	3	3
3	18	18
4	31	31
4 & above	48	48
Total	100	100
Education		
Matriculation	6	6
Higher Secondary	13	13
Graduation	44	44
Post Graduation	37	37
Total	100	100
Occupation		
Self Employed	16	16
Business Man	20	20
Service Class	26	26
Professional	38	38
Total	100	100
Income per month		
Below 10,000	-	-
10,001-30,000	23	23
30,001-50,000	25	25
50,001 & Above	52	52
Total	100	100

Changing Scenario of Banking:
An Empirical Study on Customers' Perspective on Green Banking

Respondents' Bank	No. of Respondents	Percentage of Respondents
Punjab National Bank	24	24
State Bank of India	27	27
Bank of Baroda	6	6
HDFC Bank	14	14
ICICI Bank	20	20
Axis Bank	9	9
Total	100	100
Awareness of Green Banking		
	No. of Respondents	% of Respondents
Yes	93	93%
No	7	7%

*Chi Square not significant at 5% level

Awareness about Green Banking Products

The main objective behind this question was to check the awareness level regarding various green banking services available and the responses are as follows:

Table 4: Awareness about Green Banking Products	
Green Banking Products/Initiatives	Percentage of Respondents
Green Checking	5%
Green Loans	8%
Green Mortgages	6%
Green CD's	3%
Controlled use of energy	12%
E-Statement	17%
Net Banking	21%
Solar Powered ATMs	11%
Energy-efficient branches and loans	2%
Recyclable Debit and Credit Cards	4%
Using Recycled Paper and Recycled Waste	5%
Conducting Workshops and Seminars	-
Bank Environmental Policy	-
Online Bill Payment	3%
Cash Deposit System	2%
E-Investment Services	1%
Communicate through the Press	-
Total	100

Changing Scenario of Banking:
An Empirical Study on Customers' Perspective on Green Banking

In this digital era, the awareness of Net banking as a green banking service was highest (21%) followed by E-statement (11%) and Solar Power ATM's (11%).

Usage of Various Green Banking Services

The respondents have been asked to mention the Green Banking services they are using and the responses are as follows:

On the basis of descriptive statistics, it is found that the most widely used green banking service among surveyed respondents was Recyclable Debit and credit card (Mean=2.70, S.D=0.58), followed by Mobile Banking (Mean=2.55, S.D=0.74) and Net

Banking (Mean=2.25, S.D =0.54). The other used technologies in order were Paperless Statements (Mean= 2.19, S.D= 0.88), Use of Direct Deposits (Mean =2.06, S.D=0.51) and Online Bill Payments (Mean= 1.87, S.D = 0.95) respectively.

Hypothesis Testing

Gender and Usage of Green Banking

In order to test Null hypothesis (Ho2), there is no relation between gender and usage of green banking, chi square statistics have been used and the results are as below:

Table 5: Usage of Various Green Banking Services					
Usage of Green Banking Services	N	Minimum	Maximum	Mean	Std. Deviation
Online Saving Account	100	1	3	1.72	.922
Paperless Statements	100	1	3	2.19	.884
Use Direct Deposit	100	1	3	2.06	.509
Online Bill Payments	100	1	3	1.87	.950
Reward Debit and Credit Card	100	1	3	2.70	.577
Net Banking	100	1	3	2.25	.539
Mobile Banking	100	1	3	2.55	.744
Phone Banking	100	1	3	1.56	.701
SMS Banking	100	1	3	1.10	.414
Valid N (listwise)	100				

(Note: The Mean is an average on a scale of 1-3, where, 1= Always, 2=Often and 3= Never)

Table 6: Gender And Usage Of Green Banking					
Usage of GB		Gender		Total	Pearson
		Male	Female		Chi Square
Yes	Count	60	27	87	0.592*
	% within Usage of GB	69.0%	31.0%	100.0%	
	% within Gender	88.2%	84.4%	87.0%	
	% of Total	60.0%	27.0%	87.0%	
No	Count	8	5	13	
	% within Usage of GB	61.5%	38.5%	100.0%	
	% within Gender	11.8%	15.6%	13.0%	
	% of Total	8.0%	5.0%	13.0%	
Count		68	32	100	

*Chi Square not significant at 5% level of significance

Changing Scenario of Banking:
An Empirical Study on Customers' Perspective on Green Banking

Perusal of table 6 tells us that there is no statistically significant association between Gender and usage of green banking that is, both Males and Females equally use green banking services.

After determining the association between selected variables gender and usage of green banking, Phi and Cramer's V have also been applied to tests the strength of association. The results of the symmetric measures show that the strength of association between the variables is very weak. On this basis, one can conclude that neither there is any association between gender of

respondents and usage of green banking nor the association is strong. Thus we cannot recommend the banking industry to focus more on males or females for persuasion for green banking.

Age and Usage of Green Banking

Green Banking is a novel concept and is assumed to be used more by younger people more as younger generation is more inclined towards new products or innovations. Null hypothesis has been tested using chi square statistics and the results are as follows:

Table 7: Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.054	.592
	Cramer's V	.054	.592
N of Valid Cases		100	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Table 8: Age and Usage of Green Banking					
Age			Usage of GB		Total
			Yes	No	
Age	20-30 years	Count	36	3	39
		% within Age	92.3%	7.7%	100.0%
		% within Usage of GB	41.4%	23.1%	39.0%
		% of Total	36.0%	3.0%	39.0%
	31-40 years	Count	11	4	15
		% within Age	73.3%	26.7%	100.0%
		% within Usage of GB	12.6%	30.8%	15.0%
		% of Total	11.0%	4.0%	15.0%
	41-50 years	Count	19	1	20
		% within Age	95.0%	5.0%	100.0%
		% within Usage of GB	21.8%	7.7%	20.0%
		% of Total	19.0%	1.0%	20.0%
	Above 50 years	Count	21	5	26
		% within Age	80.8%	19.2%	100.0%
		% within Usage of GB	24.1%	38.5%	26.0%
		% of Total	21.0%	5.0%	26.0%
Total	Count	87	13	100	
	% within Age	87.0%	13.0%	100.0%	
	% within Usage of GB	100.0%	100.0%	100.0%	
	% of Total	87.0%	13.0%	100.0%	

Note:Pearson Chi Square non significant at 5%level

Changing Scenario of Banking:
An Empirical Study on Customers' Perspective on Green Banking

Table 8 unveils that age has no statistical significant relation with usage of green banking services among the surveyed respondents ($p > 0.05$)

The symmetric measures as shown in table 9 further highlighted the weak association between the variables, hence it can be concluded that usage of green banking services are not related to age of respondent. Further, the relation between demographic feature age and green banking put light on the fact, that the concept of green banking is not yet reached the stage of growth, rather it is on the introductory stage only, so majority of demographic

features are not showing any relation with the variable usage of green banking under study.

Education and Usage of Green Banking

Technology has always been used more by the educated people. Green banking is one such step towards technology. So in order to verify whether education has any relation with usage of green banking services, null hypothesis has been framed and tested. At the first outset, normality of data has been checked using K-S test, which showed data deviates from normal distribution ($p \text{ values} < 0.05$). Hence, the hypothesis has been tested using non parametric H-test and the results are as follows:

Table 9: Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.234	.140
	Cramer's V	.234	.140
N of Valid Cases		100	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Table 10: Kruskal Wallis-H Test					
Green Banking Services	Education	N	Mean Rank	Chi-Square	Asymp. Sig.
Online Saving Account	Matric	6	59.83	1.084	0.781*
	HS	13	47.12		
	Grad	44	50		
	PG	37	50.77		
	Total	100			
Paperless Statements	Matric	6	52.5	0.243	0.97*
	HS	13	47.31		
	Grad	44	51.08		
	PG	37	50.61		
	Total	100			
Use Direct Deposit	Matric	6	55	0.535	0.911*
	HS	13	51.19		
	Grad	44	48.93		
	PG	37	51.39		
	Total	100			

Changing Scenario of Banking:
An Empirical Study on Customers' Perspective on Green Banking

Green Banking Services	Education	N	Mean Rank	Chi-Square	Asymp. Sig.
Online Bill Payments	Matric	6	44.67	3.049	0.384*
	HS	13	60.54		
	Grad	44	51.42		
	PG	37	46.82		
	Total	100			
Reward Debit and Credit Card	Matric	6	35	5.038	0.169*
	HS	13	54.35		
	Grad	44	48.34		
	PG	37	54.23		
	Total	100			
Net Banking	Matric	6	40.08	5.485	0.140*
	HS	13	46.27		
	Grad	44	47.2		
	PG	37	57.59		
	Total	100			
Mobile Banking	Matric	6	48.83	0.281	0.964*
	HS	13	48.96		
	Grad	44	51.86		
	PG	37	49.69		
	Total	100			
Phone banking	Matric	6	61.5	3.257	0.354*
	HS	13	40.35		
	Grad	44	52		
	PG	37	50.5		
	Total	100			
SMS	Matric	6	47.5	5.856	0.119*
	HS	13	47.5		
	Grad	44	48.66		
	PG	37	54.23		
	Total	100			

*Not Significant @5%

On the basis of Kruskal Wallis H test (refer table 10), it has been found that there is no significant difference between the categories of independent variables and as a result it can be concluded that education of customer and his usage of various green banking services has no significant relation. As a result the null hypothesis cannot be rejected.

Perceptual Benefits of Green Banking: An application of Factor Analysis

In order to gauge the perceptual benefits of green banking among the surveyed respondents they were asked to rate their opinion on various dimensions focusing benefits of green banking and the results are as below after applying the exploratory factor analysis.

Changing Scenario of Banking:
An Empirical Study on Customers' Perspective on Green Banking

Measure of Sampling adequacy (MSA) value (refer table 11) falls in the acceptable range (above .50) with a value of .861 for KMO and .000 for Bartlett's test (less than .5), these measures indicate that the set of variables are fit for factor analysis (Hair, Black, Babin, & Anderson, 2010).

Table 11: KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.581
Bartlett's Test of Sphericity	Approx. Chi-Square	451.948
	Df	136
	Sig.	.000

Table 12: Total Variance Explained

Comp.	Initial Eigenvalues ^a			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.204	16.490	16.490	2.339	12.037	12.037
2	2.939	15.128	31.618	2.464	12.681	24.718
3	2.052	10.560	42.177	2.160	11.116	35.834
4	1.960	10.090	52.267	1.914	9.851	45.685
5	1.739	8.949	61.216	1.805	9.290	54.975
6	1.263	6.502	67.718	1.703	8.763	63.738
7	1.146	5.899	73.616	1.919	9.878	73.616
8	.967	4.978	78.595			
9	.868	4.467	83.062			
10	.755	3.886	86.948			
11	.593	3.052	90.000			
12	.482	2.481	92.481			
13	.400	2.057	94.539			
14	.365	1.881	96.419			
15	.286	1.470	97.889			
16	.214	1.103	98.993			
17	.196	1.007	100.000			

Extraction Method: Principal Component Analysis.

Table 13: Rotated Component Matrix

Problem Variables	1	2	3
Green Banking Promotes investment in bonds & mutual funds meant for environmental investments	.845		
Green Banking supports E-statements	.777		
Green Banking promotes usage of recyclable debit & credit cards	.699		
Green banking involves Self operation		.913	
Green banking is Fully secured		.980	
Green banking provides Easy transfer of funds		.628	
Green Banking is beneficial for banks			.598
Green Banking is paper Savvy			.616

Changing Scenario of Banking:
An Empirical Study on Customers' Perspective on Green Banking

Table 14 : Factors Explaining Perceptual Benefits of Green Banking

Factors	Statements	Loading	Eigen Values	Variance Explained %	Cumulative Variance %
Online Transaction Benefit	Includes usage of recyclable debit & credit cards	.777	2.339	12.037	12.037
	It supports E-statements	.699			
	Includes usage of recyclable debit & credit cards	.845			
Safety and Security Benefits	Green banking provides Easy transfer of funds	0.913	2.464	12.681	24.718
	Green banking is Fully secured	.980			
	Green banking involves Self operation	.628			
Environmental Benefits	Green banking is Beneficial for banks	0.698	2.160	11.116	35.834
	Green banking is all about promoting environmental friendly practices	0.893			
	Green banking is Paper savvy	0.616			

The application of factor analysis revealed three main benefits of green banking termed as online benefits, security benefits and bankers' benefit. This sheds light on the fact that green banking is beneficial both for the customer as well as bank.

CONCLUSION

To conclude with it can be said that awareness regarding Green Banking among investors of Punjab is quite high. More than 80% of total investors surveyed were aware of Green Banking concept. The awareness was quite high among males as compared to females. The majority of the respondents using green banking products feel that green banking practices are environment friendly as well as help in saving their time, cost and efforts etc. Recyclable Debit and Credit Card, Net Banking, Mobile banking, E- statements and ATM's are the most popular products whereas, SMS- banking is the least used banking practice.

Application of factor analysis revealed three main perceptual benefits of green banking namely online benefits, security benefits and bankers' benefits. It can be said that as far as green banking is concerned, Indian banks are far behind their counterparts from developed countries. People in Punjab are yet to

come forward for adoption of these practices as they don't have full knowledge and awareness regarding Green Banking. Banks will have to play a vital role to make their customers educated.

REFERENCES

- Dhewanthi, L. (2007). Greening the Business and Making Environment a Business Opportunity, retrieved 10/2/15 from http://www.greengrowth.org/download/green-businesspub/Greening_of_the_Business/Governments/Laksmi_Dhewanthi_Indonesia_Policy_Initiatives.pdf.
- Guo, H. (2005) Pathways to Sustainable Banking in China: From Environmental Risk Management to Green Financing -An Explorative Case Study of the Financing System for Corporate Customers in the Industrial and Commercial Bank of China. Thesis, Lund University, Sweden, retrieved 21/2/15 from <http://lup.lub.lu.se/luur/download?func=downloadFile&recordId=1325685&fileId=1325686>.
- Gupta, H. (2003). Recent Trend of e-CRM in Commercial Banks of India. IJAIEM. 2(4), 22-32.
- Heim, G. (2005). The Role of Green Banking in Sustainable Growth. International Journal of Marketing, Financial Services & Management Research, 1(2). 22-31.
- Jain, S. C. (2006). E-Banking, Jaipur: RBSA Publishers
- Jeucken, M. (2001). Sustainable Finance and Banking. The Finance Sector And The Future of The Planet. Sterling: Earthscan Publication.
- Joshua, A. J. & Koshy, M. P. (2011). Usage Patterns of Electronic Banking Services by Urban Educated Customers: Glimpses from India. Journal of Internet Banking and Commerce. 16(1), retrieved

Changing Scenario of Banking: An Empirical Study on Customers' Perspective on Green Banking

22/1/15 from. <http://www.arraydev.com/commerce/jibc/2011-04/JoshuaAmbat.pdf>.

Kumar, N. (2012). Green Banking - The New Strategic Imperative. Asian Journal of Research in Business, Economics and Management, 2(2), retrieved from <http://www.ajrsh.org/admin/ajrbem/feb/paper110.pdf> [accessed; 23-2-15].

Sahoo, P. & Nayak, B. P. (2013). Service Quality Measurement and its evaluation of leading Private Banks of India in Delhi and NCR Region. An analytical study. International Journal of Contemporary Business Studies, 4(1), 34-42.

Sharma, N. (2011). CSR Practices and CSR Reporting in Indian Banking Sector. International Journal of Advanced Economics and Business Management. 1(2), 58-65.

Sudeep, S. (2006). Internet Banking and Customer Acceptance: The Indian Scenario, Paper presented at Cochin University of Science and Technology, retrieved 9/3/2015 from <http://dyuthi.cusat.ac.in/xmlui/bitstream/handle/purl/2011/Dyuthi-T0419.pdf?sequence=6>.

Khosla, R. & Munjal, P. (2013). Demographic Inequalities in Using E-Banking Services: A Study of Chandigarh, Indian Journal of Finance, 7(4), 13-18

Nath, V., Nayak, N. & Goel, A. (2014). Green Banking Practices-A Review, International Journal of Research in Business Management, 2(4), 12-19.

Shakil, M. H., Azam, M. K., & Raju, M. S. H. (2014). An Evaluation of Green Banking practices in Bangladesh. European Journal of Business Research, 6(31), 8-16.

BRIEF PROFILE OF THE AUTHORS

Anu Sahi, PhD., is an Assistant Professor in the School of Management Studies, Apeejay Institute of Management Technical Campus affiliated to Punjab Technical University. She has teaching and research experience of Twelve years along with two years of corporate experience. She is Editor of Apeejay Journal of Management and Technology (Bi-

annual referred journal) available online at <http://apeejay.edu/aimtc/journal/index.php>. She has completed her Ph.D in the area of Mutual Funds and has interest in the field of financial services and financial innovations. She is a merit holder throughout at school as well as college level. She has completed her MBA from Guru Nanak Dev University, Amritsar with distinction and Qualified UGC-NET also. She has to her credit number of publications in various national and international journals of repute. Her publications are listed on J-Gate plus, Google scholar and Cabell's Directory USA. She has presented papers in various national and international conferences. She has handled number of administrative responsibilities like research, cultural activities, examinations and mentorship programme.

Anurag Pahuja, PhD., is Associate Professor and Associate Editor, Journal of IMS Group at Institute of Management Studies, Ghaziabad. With her Ph.D. in the area of Corporate Governance, she has more than 17 years of experience in academics. Her past employments include being Asstt. Professor Selection Grade) and Editor, Apeejay Journal of Management and Technology at AIMTC, Jalandhar for thirteen years. She is associated with various professional bodies like AIMA as member and MTC Global as chapter head. She has authored and edited one book each and attended various National and International conferences/seminars, presented around 35 research papers (including the one organized by International Innovative Scientific and Research Organization (IISRO) in Pattaya, Thailand. She has conducted more than 10 FDPs/EDPs/Workshops as resource person. She has been a prolific researcher and has published 26 research papers/articles in international and national Journals of repute and chapters in edited books. She has been associated as Submission Reviewer with the InSITE Conference, for past 7 years and is guiding doctoral students with PTU, Jalandhar.