Adoption and Usage of Sustainable Green Banking Practices: An Empirical Study on Internet Banking in Assam

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ABSTRACT: The most serious problem the human beings facing during the present days is manmade environmental degradation. Hence, there have been continuous endeavors across the globe to measure and mitigate this problem caused by human activities. Banks as responsible corporate citizens are also taking remarkable steps all over the world by adopting a wide variety of green banking practices so that they can make little contribution towards the environment. This paper is an outcome of the Minor Research Project funded by ICSSR and it discusses about customers' perspectives on the adoption and usage of various green banking practices especially Internet banking introduced by the banks in the state of Assam. It is observed that green banking practices have positive impact on the environment because adoption of these practices by the customers may results saving of energy, fuel, paper, water, time as well as money.

KEY WORDS: Green Banking Practices, Sustainable, Internet Banking, ATM, GCCs.

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I. INTRODUCTION

Banks as financial institutions are environmentally neutral. They are considered to be in the nonpolluting sector, and do not impact the environment much through their own internal operations. However, they can still be held responsible because the huge carbon emitted industries like steel, paper, cement, chemicals, fertilizers, power, textiles etc. are set up with the finance provided by them. These industries harm the fragile environment, present population and the posterity. Moreover, banks consume natural resources which add to the pressure on the environment and also because banks enjoy the affiliation of the majority population of any country (Srivatsa H.S., 2011). Therefore, banks should go green and play a pro-active role to take environmental and ecological aspects as a part of their lending principle (Sahoo P., and Nayak B.P., 2008). To aid the reduction of external carbon emission, bank should finance green technology and pollution reducing projects (Bahl S., 2012). To achieve the goal of sustainable banking; 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 (Guo H., 2005). Banks in India as well as in Assam have introduced various green banking practices like ATM, Internet Banking, Mobile Banking, paperless Green Channel Counter, Tele-banking, Online Money Transfers, Cash Deposit Machines, Kiosk Banking, etc.

II. MEANING OF SUSTAINABLE BANKING

Sustainable banking means using all of the banks resources with responsibility and care, avoiding waste and giving priority to choices that take sustainability into account. Green banks or environmentally responsible banks do not only improve their own standards but also affect socially responsible behavior of other business. Banks adopt sustainability practices from all sides; the employees, facilities, products & services, and the authority itself is called green bank.

III. GREEN PRACTICES OF BANKS

Green banking practices that aim to achieve the goal of a green economy, popularly known as 'green banking' refers to the environment-friendly initiatives taken by the banks to reduce the carbon footprint from their day to day banking activities and also to minimize the external carbon emission. Green practices of banks are the efforts of the banking sector to keep the environment green and to minimize greenhouse effects through rationalizing their strategies, policy, decisions and activities pertaining to banking service, business and in-house operational activities.

IV. MEANING OF INTERNET BANKING

Internet Banking, also known as cyber banking, virtual banking, online banking and home banking is the practice of making bank transactions via internet on a secure website of a bank that allows the customers to make deposits, withdrawals, pay bills and many other transactions. This self service practice is the most convenient way to make banking transactions anytime, anywhere, at our convenience. It involves provision of facilities such as accessing accounts, transferring funds, and buying financial products or services online.

V. OBJECTIVES OF THE STUDY

The following were the major objectives formulated to carry out the work:

- i) To evaluate different Green Practices adopted by commercial banks in Assam.
- ii) To study the adoption and usage, utility, merits-demerits and employment issues of Internet Banking.

VI. STATEMENT OF THE PROBLEM

There is general lack of adequate awareness on the man-made environmental issues and hence there is urgent need to promote certain imperative measures for sustainable development and corporate social responsibility. Banks are financial as well as social institutions. They are directly related to the mass. Hence, they have got tremendous scope to fulfill their social responsibility through their green practices. This particular study may facilitate the people to be acquainted with the green practices introduced by the banks and it will make them bound to think about the adverse effect of the existing banking practices and will insist to change their banking habit to protect the environment.

VII.SIGNIFICANCE OF THE STUDY

Climate change is the most complicated issue the world is facing today. Across the globe there have been continuous endeavors to measure and mitigate the risk of climate change caused by human activity. Banks are directly related to the common people. Hence, they have got tremendous scope to fulfill their social responsibility through their green practices. But it is seen that there is lack of awareness amongst the customers regarding various green banking practices. Large part of the people in Assam is still practicing traditional banking practices till date and they do not know the environmental benefits of green banking. Therefore, it is assumed that this particular study will significantly help to make the people aware about the various benefits of green banking practices, especially Internet Banking.

VIII. METHODOLOGY

Study Area: The present empirical study has been conducted in Assam. For collection of primary data from the customers, five districts of Assam namely Jorhat, Kamrup Rural, Kamrup Metro, Dibrugarh and Nagaon have been purposively selected.

Collection of Data: The study has incorporated both primary and secondary data. The primary data have been collected by distributing questionnaires to the customers. Data have also been collected from the Zonal as well as local head offices of various banks by conducting personal interviews with the different officials. To collect necessary primary information 500 questionnaires (100 questionnaires for each of the four districts) have been distributed using convenience method of sampling. Out of them 406 questionnaires have been obtained duly field in and these are the base of this study. Secondary information have been collected from different relevant books, journals, published Reports of the commercial banks, Reserve Bank of India and other reliable agencies. Information also has been collected from different websites for our study.

Types of Questions: The respondents responded to questions which were designed with the mixture of close ended and open ended questions. The developed questionnaire has been pre-tested with a few customers to ensure the quality of the questions.

Duration of collection of data: The data have been collected for this study in between July, 2016 to August 2017.

Size of the sample: As per the 'Sample Size Table' (Annextur-I) available at <u>research-advisors.com</u> the size of the sample for our study has to be 384. However, in response to our distributed questionnaires, 406 respondents (86 from Jorhat, 89 from Kamrup (Metro), 77 from Kamrup (Rural), 82 from Nagaon and the rest 72 from Dibrugarh) have duly filled up and all these respondents have been included in the study.

Technique of analysis of data: The collected data has been processed and analyzed by applying the SPSS (Statistical Package for Social Sciences) Version-16. Tabulation and creation of pictorial presentation has been done wherever found appropriate. To draw inferences on hypothesis framed, descriptive statistical tools such as Chi-square test has been used.

IX. HYPOTHESES OF THE STUDY

The following working hypotheses have been tested throughout the study:

- 1. H₀: There is no relation between the age group of the customers and use of Internet Banking in Assam.
- H_1 : Use of Internet Banking is influenced by the age group of the customers.
- 2. H₀: There is no significant relation between the level of computer literacy of the customers and adoption of Internet Banking.
- H₁: Customers use Internet Banking according to the level of computer literacy.

X. LIMITATION OF THE STUDY

This study is limited in the sense that it is restricted to a limited area and a limited number of respondents taken from a large population of Assam. The study area has been confined to only five districts of Assam. The study is done among the savings bank account holders only. Moreover, this study has covered Internet Banking of the banks though there are a large number of green banking practices adopted by them. In addition to it, the green banking practices in Assam is still in infant stage. Lack of awareness of the people and some of the bank employees can also be regarded as a limitation.

XI. REVIEW OF RELEVANT LITERATURE

Every nation has the right to develop but development process should be conducive to the sustainable growth (Narain, K. and Mridubhashini, M., 2001). While playing role in economic development of the country banks should go green and play a pro-active role to take environmental and ecological aspects as a part of their lending principle (Sahoo, P. and Nayak, B.P., 2008). Banks as a financial partner in various economic activities with various constituents can really play a bigger role in controlling and guiding all the stake holders for better and environmental friendly activities (Prasad, 2011). 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 (Guo H., 2005). Adoption of greener banking practices will not only be useful for environment, but also benefit in greater operational efficiencies (Biswas N., 2011). Indian Banks are now becoming more conscious on CSR and one of the main CSR is green banking (Verma M. K., 2012). Internet banking is one of the best alternative channels available to customers for quick, correct and efficient service at anytime and anywhere (Uppal R. K., 2011). Internet banking which is a securitybased system, there are various risks issues and Internet fraud that can affect the customer's view of the service quality provided by the banks (Jamwal D. and Padha D., 2009). Five variables namely perceived usefulness, perceived ease of use, consumer awareness, quality of facilities and subjective norms had positive influence on internet banking use (Sudeep S, 2006). Trust is the most important factor that influences the intention of current users of Internet banking to continue using the service, followed by compatibility and ease of use (Tat H. H. et al, 2008).

INTERNET BANKING IN INDIA

Internet banking might not be a new feature for many of the developed countries but it is not so old for most of the developing countries like India. Indian banks have an insignificant Internet banking record. The ICICI Bank kicked off online banking in 1996 in India. Gradually other banks like Citibank, IndusInd Bank and HDFC Bank and Timesbank (now part of HDFC Bank), Axis Bank, Deutsche Bank, Federal Bank, IDBI Bank, Punjab National Bank, Standard Chartered Bank, Bank of India etc. started offering this service. The public sector banks lagged behind in the race. However, the State Bank of India, as the largest commercial bank in India, launched this banking service in July 2001 and they are still playing a leading role. The current scenario says that every commercial bank in India, whether private or public even foreign banks are offering Internet Banking services to their customers.

TRANSACTIONS CAN BE DONE THROUGH INTERNET BANKING

Using Internet banking services, one can do the following normal banking transactions online:

- Funds transfer between own accounts
- Third party transfers
- Group transfers to accounts in same bank
- Interbank transfers
- Online standing instructions for periodical transfer
- Request for issue of Demand Draft, Cheque Book etc.
- Opening of new accounts
- Request for closure of loan accounts
- Utility bill payments
- Online ticket booking
- Insurance premium payments
- Mutual funds investments

Tax payment

- Customs duty payment
- Fee payment to selected educational institutions; etc.

BENEFITS OF INTERNET BANKING

Internet marketing is very much popular and it is used by large numbers of people due to its multifarious benefits. The benefits of Internet Banking may be discussed from three angles viz. customers, bank and the environmental point of view.

Benefits to the Customers: From customers' point of view, Internet banking can lower services fees, and allow customers to manage their finances more conveniently, anytime and anywhere. This anytime and anywhere banking practice is also beneficial to the customers as doing this banking practice they can save time, energy and hence the cost. On the other hand opening an online banking account is very quick and easy.

Benefits to the Bankers: From a bank's perspective, Internet banking can reduce costs, increase the speed of service, expand the market, and improve overall customer service. It is the most cost saving practice as it reduces the printing costs and postage expenses. The cost-conscious banks in the country have therefore actively considered the use of Internet as a channel for providing services.

Environmental Impact of Internet Banking: Internet Banking has remarkable positive impacts on the environment. This is a paperless banking practice. Saving of paper will result saving of trees. The customers need not go to the bank physically for transaction. Resulting reduces the energy consumption by them and hence minimizes the carbon emission and air pollution. This will also leads to decrease the number of vehicles on the roads which will result less consumption of fuel.

DRAWBACKS

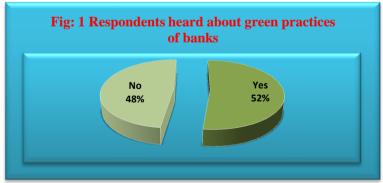
In spite of the great benefits of the online banking, there are many complexities in adopting the Internet Banking. Internet banking is facing the problems such as lack of internet facility, easy access to computers, familiarity with technology, reliability of technology, unfriendly website, server down/unreliable services, fear of government tracking transactions, security risk etc.

XII. OPINION SURVEY: RESULTS AND DISCUSSIONS

Responses collected from the respondents through questionnaires were processed using SPSS (Statistical Package in Social Sciences) Version-16. Every variables included in the questionnaires are put into the tables. Figures have been prepared with the help of windows excel.

| Table: 1 Respondents heard about green practices of banks | | |
|-----------------------------------------------------------|-------------|---------|
| Heard about Green Banking | Respondents | Percent |
| Yes | 211 | 52.0 |
| No | 195 | 48.0 |
| Total | 406 | 100.0 |

Source: Primary Data

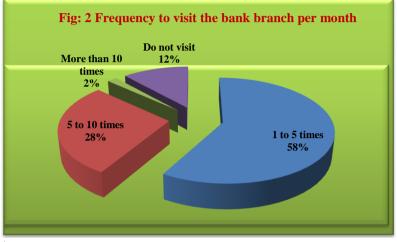


Source: Primary Data

Almost half of the respondents have not heard about the green banking practices of banks. But most of them are using various green banking practices unknowingly. Therefore, this study reveals that people are not yet aware about green banking practices and their benefits.

| Table: 2 Frequency | to visit the bank branch | per month |
|--------------------|--------------------------|-----------|
|--------------------|--------------------------|-----------|

| Table. 2 Frequency to visit the bank branch per month | | | |
|-------------------------------------------------------|-------------|---------|--------------------|
| Frequency to visit the bank per month | Respondents | Percent | Cumulative percent |
| 1 to 5 times | 237 | 58.4 | 58.4 |
| 5 to 10 times | 115 | 28.3 | 86.7 |
| More than 10 times | 7 | 1.7 | 88.4 |
| Do not visit | 47 | 11.6 | 100.0 |
| Total | 406 | 100.0 | |



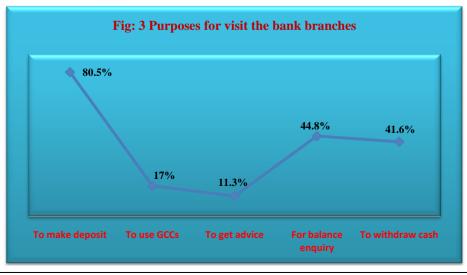
Source: Primary Data

While studying the frequency to visit the bank branches it is observed that 58.4 percent respondents as shown in Table-5.2 visit the bank branches 1 to 5 times and 28.3 percent visit 5 to 10 times per month. However, only 1.7 percent respondents visit their banks more than 10 times per month. 11.6 percent of respondents do not visit banks.

| Table: 3 P | urposes for | visit the | bank | branches |
|------------|-------------|-----------|------|----------|
|------------|-------------|-----------|------|----------|

| Purposes | Respondents Visit | Percent |
|---------------------|-------------------|---------|
| To make deposit | 327 | 80.5 |
| To use GCCs | 69 | 17.0 |
| To get advice | 46 | 11.3 |
| For balance enquiry | 182 | 44.8 |
| To withdraw cash | 169 | 41.6 |

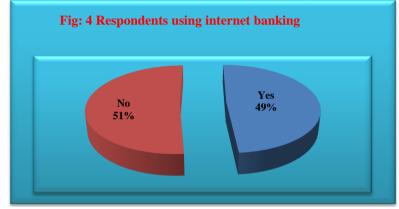
Source: Primary Data



Customers visit the bank branches for different purposes. Maximum 80.5 percent of respondents as shown in Table-5.3 visit bank branches for deposit, whereas, 41.6 percent visit for the purpose of withdrawal of money. However, 'Cash deposit Machine' the newly adopted banking delivery channel by the banks through which one can deposit cash as well as cheque may reduce the frequency of visiting the bank by the customers. It is also observed from the table that 44.8 percent of respondents use to visit the bank branches even for balance enquiry, which can easily be done through the ATMs spreading everywhere at convenient places.

| Table: 4 Respondents using internet banking | | |
|---------------------------------------------|-------------|---------|
| Having PC | Respondents | Percent |
| Yes | 198 | 48.8 |
| No | 208 | 51.2 |
| Total | 406 | 100.0 |

Source: Primary Data

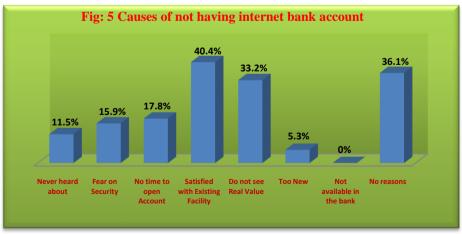


Source: Primary Data

| Table: 5 Causes of not having online bank account | i |
|---------------------------------------------------|---|
|---------------------------------------------------|---|

| Causes | No. of Respondents | Percent |
|----------------------------------|--------------------|---------|
| Never heard about | 24 | 11.5% |
| Fear on Security | 33 | 15.9% |
| No time to open Account | 37 | 17.8% |
| Satisfied with Existing Facility | 84 | 40.4% |
| Do not see Real Value | 69 | 33.2% |
| Too New | 11 | 5.3% |
| Not available in the bank | 0 | 0% |
| No reasons | 75 | 36.1% |

Source: Primary Data



Source: Primary Data

About 48.8 percent of the total respondents are using internet banking. The respondents (51.2 percent) who are not user of internet banking, maximum of 40.4 percent respondents are satisfied with the existing

facilities provided by the bank i.e. traditional banking and ATM. 15.9 percent of them do afraid of the security problem on the online banking. Notable thing is this 33.2 percent of respondents do not see any real value on internet banking and 36.1 percent respondents are not using internet banking have no reasons.

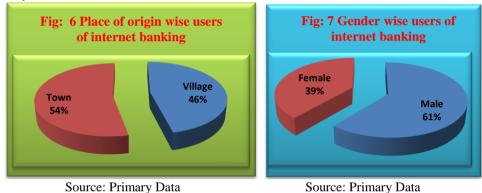
| Table: 6 Place of origin wise users of internet banki | ng |
|-------------------------------------------------------|----|
|-------------------------------------------------------|----|

| Place of origin | Respondents | Percent |
|-----------------|-------------|---------|
| Village | 92 | 46% |
| Town | 106 | 54% |
| Total | 198 | 100% |

Source: Primary Data

| Table: 7 Gender wise users of internet banking | | |
|------------------------------------------------|-------------|---------|
| Gender | Respondents | Percent |
| Male | 121 | 61% |
| Female | 77 | 39% |
| Total | 198 | 100% |

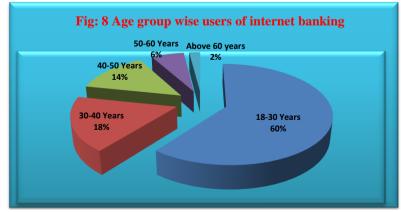
Source: Primary Data



Studying the using pattern of Internet Banking according to place of origin of the respondents it is found that more respondents living in town area use internet banking than that of respondents living in village. Gender wise it is shown that male respondents are more user of internet banking than female respondents.

| Table. 8 Age group wise users of internet banking | | |
|---------------------------------------------------|--------------------------------------|--|
| Respondents | Percent | |
| 120 | 60% | |
| 35 | 18% | |
| 27 | 14% | |
| 12 | 6% | |
| 4 | 2% | |
| 198 | 100% | |
| | Respondents 120 35 27 12 4 | |

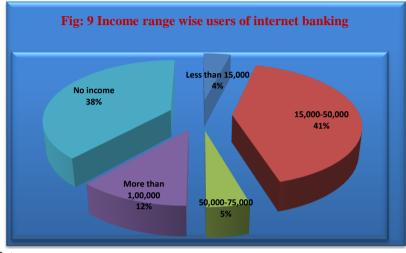
Table: 8 Age group wise users of internet banking



Source: Primary Data

| Table: 9 Income | e range wise user | s of internet banking |
|-----------------|-------------------|-----------------------|
|-----------------|-------------------|-----------------------|

| Income range | Respondents | Percent |
|--------------------|-------------|---------|
| Less than 15,000 | 8 | 4% |
| 15,000-50,000 | 82 | 41% |
| 50,000-75,000 | 9 | 5% |
| More than 1,00,000 | 23 | 12% |
| No income | 76 | 38% |
| Total | 198 | 100% |



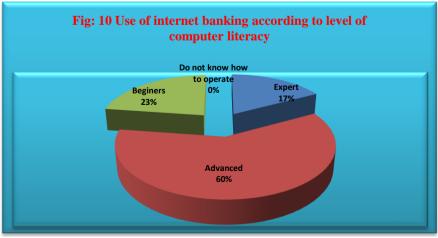
Source: Primary Data

Studying the using pattern of internet banking according to the age group it is clearly found that respondents belong to lower age group is more user of internet banking. On the other hand lower income group respondents are the more user of internet banking. It is found that the respondents not having income i.e. the students are also more user of internet banking.

| rubici io obe or merner i | Tuble. To ese of internet building decording to level of computer interacy | | | | | |
|----------------------------|----------------------------------------------------------------------------|---------|--|--|--|--|
| Computer literacy | Respondents | Percent | | | | |
| Expert | 34 | 17% | | | | |
| Advanced | 119 | 60% | | | | |
| Beginers | 45 | 23% | | | | |
| Do not know how to operate | 0 | 0% | | | | |
| Total | 198 | 100% | | | | |

Table: 10 Use of internet banking according to level of computer literacy

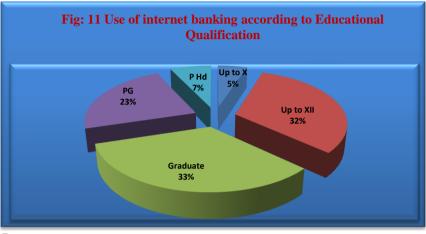
Source: Primary Data



Source: Primary Data

| Tabl | e: 11 | Use of | f internet ban | king acco | rding to Educ | cational Qualification | |
|------|-------|--------|----------------|-----------|---------------|------------------------|--|
| | | | | | | | |

| Educational Qualification | Respondents | Percent |
|---------------------------|-------------|---------|
| Up to X | 10 | 5% |
| Up to XII | 63 | 32% |
| Graduate | 66 | 33% |
| PG | 45 | 23% |
| P Hd | 14 | 7% |
| Total | 198 | 100% |

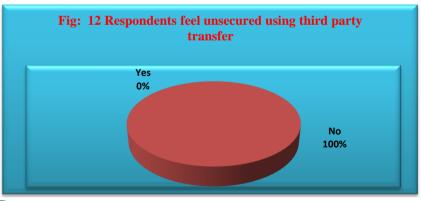


Source: Primary Data

This study finds that computer literate people only use internet banking. No respondents without having computer knowledge are using internet banking. On the other hand graduate respondents are more user of internet banking.

| Table: 12 Respondents feel unsecured using third party transfer | | | | | |
|-----------------------------------------------------------------|-------------|---------|--|--|--|
| Feel Secured | Respondents | Percent | | | |
| Yes | 0 | 0% | | | |
| No | 198 | 100% | | | |
| Total | 198 | 100% | | | |

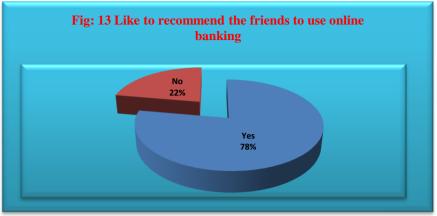
Source: Primary Data



Source: Primary Data

| Table: 13 Like to recommend the friends to use online banking | | | | | |
|---------------------------------------------------------------|-----|-------|--|--|--|
| Like to recommend Respondents Percent | | | | | |
| Yes | 154 | 77.8 | | | |
| No | 44 | 22.2 | | | |
| Total | 198 | 100.0 | | | |

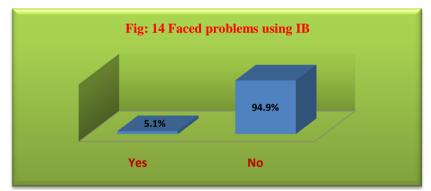
Source: Primary Data





| Like to recommend | Respondents | Percent |
|-------------------|-------------|---------|
| Yes | 10 | 5.1 |
| No | 188 | 94.9 |
| Total | 198 | 100.0 |

Source: Primary Data



Source: Primary Data

One important thing the study has reveals that no respondents doing third party transfer do not feel security problem doing this type of banking transaction. Respondents using online banking have been asked whether they like to recommend their friends and relatives to open online banking and found 77.8 percent respondents like to recommend using online banking. Respondents were asked whether they faced any problems using internet banking and it was found that 94.9 percent respondents have not faced any problem while using internet banking. However, 5.1 percent respondents faced problem of internet server while using internet banking.

Test of Hypotheses

The variables of hypotheses that formulated were qualitative in nature; hence, they are tested with Chi-Square test.

1. H_0 : There is no relation between age group of the customers and use of Internet Banking. H_1 : Use of Internet Banking is influenced by the age group of the customers.

| User of Internet Banking * Age group of the respondents Crosstabulation | | | | | | | |
|-------------------------------------------------------------------------|-----|----------------|------------------------------|----------------|----------------|-------------------|-------|
| Count | | | | | | | |
| | | Age group | Age group of the respondents | | | | Total |
| | | 18-30 Years | 30-40 Years | 40-50 Years | 50-60 Years | Above 60 years | |
| User of | Yes | 120 | 35 | 31 | 12 | 0 | 198 |
| Internet Banking | No | 52 | 82 | 22 | 28 | 24 | 208 |
| Total | | 172 | 117 | 53 | 40 | 24 | 406 |

Source: SPSS output from Primary Data

| Chi-Square Tests | | | | | | |
|------------------------------|---------------------|----|---------------------------|--|--|--|
| | Value | df | Asymp. Sig. (2- sided) | | | |
| Pearson Chi-Square | 77.493 ^a | 4 | .000 | | | |
| Likelihood Ratio | 88.199 | 4 | .000 | | | |
| Linear-by-Linear Association | 43.883 | 1 | .000 | | | |
| N of Valid Cases | 406 | | | | | |

Source: SPSS output from Primary Data

XIII. CONCLUSION

Since the calculative value (.000) is less than .05 (p value), therefore we reject the null hypothesis at 5% level of significance. Therefore, it is found that use of internet banking is influenced by the age group of the customers; i.e. customers of all age group do not use internet banking equally.

2. H_0 : There is no significant relation between the level of computer literacy of the customers and adoption of Internet Banking.

H₁: Customers use Internet Banking according to the level of computer literacy.

| Level computer literacy * Having Internet Banking Crosstabulation | | | | | | |
|-------------------------------------------------------------------|----------------------------|-----------------|-------------------------|-----|--|--|
| Count | | | | | | |
| | | Having Internet | Having Internet Banking | | | |
| | | Yes | No | | | |
| Level computer | Expert | 34 | 0 | 34 | | |
| literacy | Advanced | 119 | 45 | 164 | | |
| | Beginers | 45 | 74 | 119 | | |
| | Do not know how to operate | 0 | 89 | 89 | | |
| Total | | 198 | 208 | 406 | | |

Source: SPSS output from Primary Data

| Chi-Square Tests | | | | | | | |
|------------------------------|----------------------|----|---------------------------|--|--|--|--|
| | Value | df | Asymp. Sig. (2- sided) | | | | |
| Pearson Chi-Square | 1.633E2 ^a | 3 | .000 | | | | |
| Likelihood Ratio | 212.034 | 3 | .000 | | | | |
| Linear-by-Linear Association | 162.118 | 1 | .000 | | | | |
| N of Valid Cases | 406 | | | | | | |

Source: SPSS output from Primary Data

Conclusion: Since the calculative value (.000) is much less than .05 (p value), therefore we reject the null hypothesis at 5% level of significance. Therefore, it is found that use of Internet Banking is highly influenced by the computer literacy of the customers; i.e. computer literate customers generally use Internet Banking.

| Table: 16 User of other delivery channels | | |
|-------------------------------------------|-------------|---------|
| | Respondents | Percent |
| User of ATM | 388 | 95.6 |
| User of GCCs | 69 | 17.0 |
| User of Mobile banking | 125 | 30.8 |

Source: Primary Data

While studying the use of other delivery channels of by the respondents it has found that ATM is the popular banking delivery channel which is used by 95.6 percent of respondents. Mobile banking is used by 30.8 percent respondents while Green Channel Counters is used by only 17 percent respondents.

XIV. FINDINGS, CONCLUSION AND SUGGESTIONS

The various findings have been arrived at after doing the analysis and interpretation of the collected data. The study could find out the following major findings which are considered to be the most important indicators for evaluation of various green banking practices adopted by the bank in Assam.

General Banking Habits of the Customers:

Although the banks in Assam have introduced various alternative banking delivery channels through which the customers can fulfill banking transactions without visiting the bank branches physically, the frequency to visit the bank branches is still high. The respondents use to visit the bank branches even for balance enquiry, which can easily be done through the ATMs spreading everywhere at their convenient places. *Customers' Awareness about Green Banking Practices:*

- This study reveals that people are not yet fully aware about green banking practice. Almost half of the respondents have not heard about it. But unknowingly most of them are using various green banking practices.
- ATM is the most popular alternative banking delivery channel. Green Channel Counters is the least used banking channel.
- > This study reveals that respondents use various green banking practices irrespective of gender.
- It is found that the respondents belong to lower age group are more user of various green banking practices than the respondents belong to higher age group.
- There is significant relation between income range of the respondents and use of green banking practices. The respondents belong to higher income group are the more user of green banking practices.
- Respondents getting regular monthly income either employed permanently or part time are more users of green banking practices.
- Higher the educational qualification greater is the tendency to use green banking practices in all districts.
- > ATM is the popular banking practice preferred by majority of the respondents.
- Most of the respondents feel adopting various green banking practices they can contribute towards the environment by saving paper as well as energy.

Usage and Adoption of Internet Banking:

- Only 48.8 percent of the total respondents are user of internet banking. Out of the respondents using online banking facilities 23.7 percent are very new.
- ➤ 40.4 percent respondents are satisfied with the existing facilities provided by the bank i.e. traditional banking and ATM.
- Security problem is the major cause of not adopting internet banking.
- Maximum of 89.9 percent of the internet banking users use it for online shopping and various recharge purposes. 83.8 percent respondents use it for the purpose of online ticket booking. However, 63.1 percent online banking users use it for bill payment purpose, which is a positive sign of green banking.
- > 100 percent of respondents doing third party transfer do not feel security problem at the time of transaction.
- Use of online banking is highly influenced by the computer literacy of the customers; i.e. computer literate customers generally use internet banking.
- There is lack of knowledge even among the bank employees so far as the various green practices are concerned. Few employees have even not heard about some green practices.

XV. RECOMMENDATIONS AND SUGGESTIONS

From the present study, the following recommendations and suggestions towards the bank, the Government and the customers have emerged:

Role to be played by the Banker:

- Training and Awareness among the Employees: It is recommended that banks should conduct training programmes for the employees so that they can be made aware about the benefits and using pattern of various green banking practices.
- Customers Education: There should be two levels of education viz. products and practices. Seminar and workshops regarding this aspect should be organized and public meetings are to be arranged by the banks to make the e-banking practices familiar among customers.
- Customer Awareness Screens on ATM and Computer/Mobile: The bank may display some congratulating statements like 'Congrats! You have saved paper, energy, time and money by using it' on the screens of the ATMs, computer/laptop and mobile phones after using Internet banking and mobile banking to attract them to use such green practice.
- Special Arrangement for Green Channel Counters in the Branch: There should be separate booth for Green Channel Counters so that customers can handle this device secretly in the bank premises.
- Easy Methods of Operation: It is highly recommended that banks should install easy methods of operating internet banking so that more and more customers can make use of it easily.
- More Stress should be given on Security aspect: There are unethical practices of hacking of accounts of customers come to know in the news some times. It is nothing but the breach in the security of the banks on internet. The bank should take appropriate measures in order to prevent such practices.
- Biometric Authentication: This study highly recommends Biometric Authentication for access of alternative channels like ATM and Internet banking as an additional safety measure.

- Security Personnel in the ATM Booths: The researcher is also agreeing with the majority of the respondents that security personnel should be appointed by the banks in every ATM booth. Besides security problem this will also help to solve the problem of unemployment. Thousands of youths may get engaged by doing this.
- ➢ Grievance Handling: The banks will have to take a particular focus on their grievance-handling mechanisms so that they can attract the customers.

Role of the Governments:

Central as well as state governments will have to play a vital role to make the people understand the environmental benefits of using green practices of banks. Moreover, the government should support the banks by guaranteeing the loan sanctioned for green projects.

Customers are to be more conscious:

Besides tremendous benefits the green banking practices are also having fear of security problem. However, the security of adopting various green banking practices is mostly depends upon the users. Therefore, users should become more conscious while using these banking practices. They should strictly follow the guidelines given by the banks.

CONCLUDING REMARKS

Use of Information Technology in the banking industry has opened up new markets, new products, new services and efficient delivery channels for the banks. These products and services are highly beneficial to the environment because they consume fewer natural resources. Use of these new products and services is also results reduction of carbon footprint and carbon emission. Hence, these types of banking practices are called green banking practices. Opportunities in green banking practices are immense. The only need is to explore them. Indian banks particularly in Assam are far behind in the implementation of green banking practices. Therefore, they need to be made fully aware of the environmental and social guidelines. Banks should also educate their customers enough to make them aware about the positive consequences of using green banking practices and also to guide for proper use of them.

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