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A Study On The Determining Demographic Factors For Green Banking Usage

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ABSTRACT

With the advancement of time, technology is also changing very rapidly and banks are not untouched with its effect. The way of banking has also changed to Green Banking. A banking that is new in our country but it has become the demand of time that customer use. For this, banks have spread awareness about green banking products and services among its customers. However the bank customers have different characteristics like age, gender, marital status, income, education, occupation etc. Due to which their acceptance level towards green banking is also different. The researchers have made humble effort to estimate the determining demographic factors for the green banking usage.
The study has been conducted in Indore city. It is based on primary information and 400 customers (200 customers from each private and public bank) were selected for comprehensive study. The outcomes of the study reflects that married male and females customers may use more green banking devices in comparison to unmarried customers, Thus, banks must evolve effective strategies to enhance the awareness level of customers for the usage of GBPS technology.

KEY WORD- Green banking, Demographic, Technology, Product, Service.

I. INTRODUCTION

Banking is a system that connects with the mass. It is a platform that creates awareness among its customers for anything and at anytime. Green banking is also a thing or new technology about which people should know about. Green Banking is a way of sustainable development of the country. However, it is a new concept to everyone but due to demand of time it is catching its momentum amongst the bank customers. Green Banking means the banking practices followed in a manner that is eco- friendly in nature. Green Banking not only makes banking system functions easy but is also efficient and that to within less duration of time as compared to the traditional approach. It has proved it worth to the society and to the ecology by reducing the paper work, reducing carbon foot prints , making the existing industries eco-friendly, promoting the projects that are eco- friendly, by reducing the time of spending in bank for a transaction, by organising the customer data more efficiently and handling them with full care and security.

No matter what, time has changed but there are still people in the society who are not willing to accept green banking and wish to follow the traditional banking approach

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only. Considering the situation of our country India, India is a vast country with varied culture, dialects, heritage, beliefs etc. In simple words, a country with diversified population and this population has their own characteristics like gender, income, status, educational qualification, occupation, age, marital status etc. This diversification in nature has given them a reason to have a different opinion about anything which includes green banking too.

For achieving the promise made by the country at UN assembly of attaining the Sustainable Development Goals, it is necessary that people of every characteristic come together and have a consensus on using green banking. With the help 0of green banking only country can achieve the goal of Green Economy as economy of any country is directly affected the banking system of that country. However, it will be a small initiative but eventually; it will show its large impact on the society, economy and environment too.

II. LITERATURE REVIEW

Veena and Nayana (2017) have studied about the customers' perception towards green banking by taking State Bank of India bank of Bangalore and Mysore city and found that females are using more green banking services rather than males of both the cities and majority of the respondents are students in Bangalore whereas in Mysore city majority is towards other occupation. Along with maximum people have agreed to the fact green banking services provided by the bank are easy to use and access and banks encourage the customers to use it.

Vimala (2016) has made a study on internet banking security among the selected Indian bank customers and found that customers of internet banking are aware about the security issues related to it but still there is a group of customers that is unaware about internet banking and its concerned issues. Thus, there are still lot of people who are practicing banking in traditional manner.

Reddy and Reddy (2015) have studied about the customers' perception and satisfaction towards electronic banking in Khammam district and found that maximum people are having positive perception and are satisfied with electronic banking services but due to lack of knowledge about the computer and internet there is a hitch in using the services.

Bhatnagar (2015) had studied about the awareness and adoption of technology in banking in rural areas of Udaipur and found that the awareness about the technology banking is dependent on age, education, occupation and income. Similarly, the usage of technology banking is dependent on the gender. Among the customers computer knowledge is found to be correlated with the usage of technology banking. However, there is same awareness about the technology banking amongst both public and private bank customers.

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Palani and Yasodha (2012) revealed that education, gender and income play an important role in shaping customer's perceptions about mobile banking services offered by Indian Overseas Bank.

Kumbhar (2011) have studied about customers' demographic profile and satisfaction in e-banking services on Indian banks and found that there was no difference in service quality perception, overall satisfaction and perceived value on the basis of gender but there was the difference noted on the basis of age, education, occupation, and income.

Dixit and Datta (2010) have tried to make an empirical investigation in India regarding the acceptance of electronic banking among adult customers and found that customers ready to adopt online banking but only if they are provided with proper guidelines as their major concerns are privacy and security of their bank account details.

Suoranta and Mattila (2004) indicated that demographics, perceived risk and attributes pertaining to innovation diffusion such as relative advantage, complexity, compatibility and trial ability affect the adoption of mobile banking in Finland.

OBJECTIVE OF THE STUDY

The main objective of the study is to estimate the determining demographic factors that affect green banking usage.

The paper is organised as follows- Section 1 deals with introduction, Section 2 contains literature review, Section 3- discusses about research methodology, Section 4- data analysis followed conclusion and policy implications in Section 5.

III. RESEARCH METHODOLOGY

The study has been done in all four corner of Indore city. From each corner 100 customers were selected by the convenient sampling method. Thus total 400 customers were undergone for comprehensive study.

An attempt has been made to estimate whether customers (male and female) behaviour differ in their usage pattern of Green Banking Practice and Services. Therefore, a test has been used to determine who use Green Banking Practice and Services more among male and female customers. It has been hypothesized that customers with similar demographic traits have different customers' behaviour. Therefore, regression (OLS) analysis has been applied to assess the effect of demographics on the behaviour of both male and female bank customers. The following regression model has been used:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 i X_{3i} + \beta_4 X_{4i} + \beta_{5i} X_{5i} + \beta_6 X_{6i} + \mu_i$$

Where,

Y_i–Green Banking Products and Services Usage

β_1 = Intercept

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$\beta_2 \ldots \beta_6$ = Coefficient of variables
X_{1i} = Gender
X_{2i} = Age
X_{3i} = Income
X_{4i} = Education
X_{5i} = Occupation
X_{6i} = Martial status
μ_i = Error term

Finally, Qualitative Response Regression Model (Linear Probability Model) has been run to determine the probability of usage of male and female customers of Green Banking Products and Services. The model is

$$Z_i = \alpha_1 + \alpha_2 X_{2i} + \alpha_3 X_{3i} + \alpha_4 X_{4i} + \alpha_5 X_{5i} + \alpha_6 X_{6i} + \alpha_7 X_{7i} + \mu_i$$

Where,
Z_i = 1 if using Green Banking Products and Services
= 0 if Less user of Green Banking Products and Services
α_1 = Intercept
$\alpha_2 \ldots \alpha_6$ = Coefficient of variables
X_{1i} = Gender
X_{2i} = Age
X_{3i} = Income
X_{4i} = Education
X_{5i} = Occupation
X_{6i} = Martial status
μ_i = Error term

The following variables have been used in the study and their information search has been discussed below.

Gender: To understand the behaviour of male and female bank customers, gender has been used as dummy variable. Female was assigned 0 while male 1.

Education: The undergraduate customers were assigned value 1. Subsequently 2 and 3 have been given to graduate and postgraduate and above.

Age: The actual age has been considered for measuring the usage pattern of bank customers. They have been clubbed in three groups i.e. 20-25; 25-30 and 30 and above.

Marital Status: For married customers1 was assigned while unmarried were given value 0.

Income: The value of 1 was assigned to the customers who have income up to Rs. 25,000/. The value of 2, 3 and 4 were assigned for Rs. 25,000-50,000/; 50,000-1 lakhs, and above 1lakh.

Occupation: There were only three categories of customers made for computing the usage behaviour of bank customers. They have been assigned value 1, 2 & 3 respectively student /housewives, business and service class

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Measuring Usage Pattern of GREEN BANKING PRODUCTS AND SERVICES:

In this study, similar scale of Moorthy et al. (1997) has been used for measuring the usage pattern of *Green Banking Products and Services*.

Four statements were framed like '(1) I easily accept new technology. (2) I am not easily ready to accept new technology. (3) After experience of somebody I accept new technology. and (4) I shall not accept new technology at all'. These statements were asked to rate on 5 point scale, ranging from Strongly Agree to Strongly Disagree and Mean score of these statements have been worked out. Later on the variable has been converted into dummy variable by assigning a value 0, if mean value was less than 3.5 and 1 otherwise.

IV. EMPIRICS

The study has been conducted in Indore city. 200 consumers from each public and private bank have been selected by the convenient sampling method from all corner of the city. Thus, total 400 consumers were undertaken for comprehensive study. After analysing the data following information have been derived regarding public and private sector banks is given in the following table:

	Demographic characteristics	Public Bank (200)		Private Bank (200)		Total (400)	
1.	**AGE**	No.	%age	No.	%age	No.	%age
	Up to 30	96	48.00	66	33.00	162	40.50
	31 - 50	49	24.50	85	42.50	134	33.50
	Above 50	55	27.50	49	24.50	104	26.00
2.	**GENDER**						
	Male	109	54.5	82	41.00	191	47.75
	Female	91	45.5	118	59.00	209	52.25
3.	**MARITAL STATUS**						
	Unmarried	100	50.00	110	55.00	210	52.50
	Married	100	50.00	90	45.00	190	47.50
4.	**EDUCATION**						
	Intermediate	46	23.00	29	14.50	75	18.75
	Under Graduation	80	40.00	64	32.00	144	36.00
	Post-Graduation	56	28.00	83	41.50	139	34.75
	Above Post Graduation	18	09.00	24	12.00	42	10.50
5.	**INCOME**						
	Up to 25000	111	55.50	56	28.00	167	41.75
	25001-50000	43	21.50	64	32.00	107	26.75
	50001-1 lakh	36	18.00	61	30.50	97	24.25
	Above 1lakh	10	05.00	19	09.50	29	07.25
6.	**OCCUPATION**						
	Service	76	38.00	87	43.50	163	40.75
	Business	29	14.50	23	11.50	52	13.00
	Student	64	32.00	50	25.00	114	28.50
	Other	31	15.50	40	20.00	71	17.75

Thus from the above table at a glance a clear cut demographic characteristic of both public and private banks customers can be seen.

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Demographic Factors Affect the Behaviour of both Male and Female Bank Customers

$$Yi = \beta_0 + \beta_1 X_1 i + \beta_2 X_2 i + \beta_3 i X_3 i + \beta_4 X_4 i + \beta_{5i} X_{5i} + \beta_6 X_6 i + \mu_i$$

Variables	*Coefficient*	*t value*
Intercept	***2.76***	
Gender	-0.23	4.91
Age	-0.05	5.69
Income	0.09	4.83
Education	0.02	2.56
Occupation	0.03	1.98
Marital Status	0.23	3.13
R^2	52.4	

In above result the qualitative variables like gender and marital status have been observed important. Female dummy coefficient is highest and negative. It means female usages are more than male bank customers. It is also fact that there is time constraint for married person.

The following four other variables play very vital role in determination of usage of Green Banking Products and Services Y.

Education has positive impact on Y i.e. Usage pattern of Green Banking Products and Services. All other three variables like income, education, occupation and marital status have positive impact on Y i.e. Usage pattern of Green Banking Products and Services. These variables are found statistically significant also. Thus from above table it can be inferred that male and female customers of bank are indulging in using Green Banking Products and Services. The results are very consistent with the findings of Saigal et al. (2010). Age is also very important variable. It has been found in the study that with the increase in age knowledge also increases the present results are very similar to Westbrook and Fornell (1979). Keil and Layton (1981); Ratchford (1982).

It has been noted from analysis that knowledge increase with increase in education and it is human instinct to know more and more about the new things. For it there is no formal education is required. The findings are very close to outcomes of Newman and Staelin (1972); Claxton et al. (1974); Kiel and Layton (1981); Schaninger and Sciglimpaglia (1981); and Ratchford (1982) studies.

Estimation of Probability of Usage of Green Banking Products and Services

Relationship between bank customers and demographics have been assessed with the help of Qualitative Response Regression Model and its results are given as below

$$Z_i = \alpha_1 + \alpha_2 X_{2i} + \alpha_3 X_{3i} + \alpha_4 X_{4i} + \alpha_5 X_{5i} + \alpha_6 X_{6i} + \alpha_7 X_{7i} + \mu_i$$

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Variables	*Coefficient*	*t value*
Intercept	**1.57**	
Gender	-0.06	4.08
Age	-0.05	2.49
Income	0.11	1.97
Education	0.04	3.69
Occupation	0.05	2.01
Marital Status	0.07	2.73
R^2	55.6	

From above table usage pattern of customers have been derived and summarised as below:

Probability of Usage of Green Banking Products and Services

	Probability	*Rank*
Female Unmarried	64	4
Female Married	71	2
Male Unmarried	68	3
Male Married	75	1

It has been estimated that married females are using more green banking products and services. Even married males are far ahead from female. The estimate reflects that mostly married female and male are working so that they have shortage of time and they prefer to use green banking devices.

V. CONCLUSION AND POLICY IMPLICATIONS

The outcomes reflect that married males and females prefer green banking products and services more than the traditional banking method. Unmarried males and females usage preference is low compared to the married customers. This is because the married customers have shortage of time and they want to get their work done within a click. The unmarried customers are free from the responsibilities and have time to use other way of banking. The main agenda is to get work done either by using green banking products and services or by using traditional method.

In order to tackle the problem the bank will have to formulate the policies keeping in mind the gender, marital status, age of their customers so that they may compel the customers to use green banking products and services. Banks have to create an urge in every type of customers towards GBPS (green banking products and services) and environment so that the customers like to prefer only GBPS over the traditional banking approach.

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