IJMDRR E- ISSN -2395-1885 ISSN -2395-1877

## E-BANKING IN INDIA- AN EXPLORATORY STUDY

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#### Abstract

Banking in India has under gone repaid transformation the last two decades have witnessed a sea change in the nature of services offered by banks, which have a positive impact on the customers of banks Advances in information technology and data processing are rapidly changing the methods of communication and transaction processing procedures used by commercial banks. Banks that are able to make use of this technology are also able to provide better services to customers and for provide the same services at lower cost. The present study hence attempts to get a glimpse of the trends in banking technology adopted by banks and its preferences by the customers. The various plethora of banking products and its characteristics are described. The association of the customers and their behavior towards it are studies. The satisfaction level of the customers with respect to the various banking products

Keywords: Banking Technology, Banking Products, Customer Satisfaction.

#### 1. INTRODUCTION

Modern technology in banking industry has under gone several changes during the post-reform period. Most of the banks have adopted PC linked technological services to boost this banking business. The IT action plan suggested by the national task force aims to create operational knowledge campaign, not only for the banking sector but also for universalizing IT-education and IT-based education in the company IT and allied actors have immense potentiality for employment generation and expect to provide jobs to about 25% of the labor fore in the first two decades of the 21<sup>st</sup> century.<sup>1</sup>

Banking in India has under gone repaid transformation the last two decades have witnessed a sea change in the nature of services offered by banks, which have a positive impact on the customers of banks. What was once a public sector dominated scenario with a few foreign banks has now changed and private sector banks co-exist along with thesis public sector counterparts who have also adapted them selves well to the changing scenario, the foreign banks have futures widened theis operations.

Advances in information technology and data processing are rapidly changing the methods of communication and transaction processing procedures used by commercial banks. Banks that are able to make use of this technology are also able to provide better services to customers and for provide the same services at lower cost. It allows banks to change how they do business in ways that will be beneficial to both theis customers and theis stockholders.

## TRENDS IN BANKING AND INFORMATION TECHNOLOGY

Banking and finance have become information based business in a book electronic Treasury Management, the author Peter Gallant says. "Information means power and prior information means wealth" the Rothschild's, made one of theis fortunes by learning first (this was around the year 1815 and a pigeon was used to carry to carry the massage) about the battle of waterloo and the fact that they were the first to hear was no accident.

The customer with a micro computer system today can collect data from several banks. If the has accounts with two or more banks independently manipulate, analyses and store the same, giving him a good deal of control over his banking information. It, thus provides division support he can integrate it with this accounting and information system.

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## MODERN BANKING PRODUCTS AND SERVICES

Telephone Banking Internet Banking Electronic Founds Transfer Electronic Clearing Services Automated Teller Machine (ATM) Cards/ Debit cards Research Paper Impact Factor - 2.262 Peer Reviewed Journal IJMDRR E- ISSN –2395-1885 ISSN -2395-1877

Credit Cards

Dematerialisation Services (DEMAT)

Smart Card

E-checks

Electronic Bill Payment

Mobile banking

Real Time Gross Settlement (RTGS)

Electronic Mail Massaging (EMM)

MMS Web mail

## 2.NEED FOR THE STUDY

An understanding of consumer perceptions for the banking technology or services.

To find out the fast moving of new banking technology.

To find out the satisfaction level of customer using the banking technology.

To know the factors which motivate the consumer for purchasing the new banking technology?

#### 3. METHODS OF ANALYSIS

**3.1 Problem Statement:** At this juncture, the present study tries

#### 3.2 OBJECTIVE

- 1. To study about the various New banking Technology.
- 2. To understand the characteristics of consumers using modern banking technology.
- 3. To study the overview of Customer Behavior of new banking technology.
- 4. To provide findings, suggestions, implication and scope for further research study in new banking technology.

#### 3.3 SAMPLING DESIGN

POPULATION: The populations are the customers using new banking technology.

3.4SAMPLE UNIT: It includes the customers of State Bank of India in Chennai City.

**3.5 SAMPLE SIZE:** The data are collected from 100 Customers of new banking technology.

**3.6RESERCH INSTRUMENT:**Research instrument means the instrument customers in research for gathering the information.

**3.7 QUESTIONNAIRE:**Questionnaire is used as a research instrument. The success of survey methods depends on the strength of the questionnaire used. A questionnaire consists of a set of well-formulated questions to probe and obtain responses from respondents.

## 3.8 PROCESSING THE DATA

The collected data was analyzed, tabulated and classified used in the processing the data. Bar charts and pie charts used to explain the tabulation.

Technical of statistical methods: In the study techniques such as percentage method, chi-square method and various types of charts are used.

# 4. RESULTS AND DISCUSSION

Interpretation refers to the task of drawing inference from the collected facts after analytical study. The data, after collection has to be processed and analysis in accordance with the outline laid down for the purpose at the time of developing the research plan. Process implies editing, coding, classification and tabulation of the collected data. So that they are amenable to analysis.

In the process of analysis, relationships or difference supporting or conflicting with original or new hypothesis, should be subjected to statistical test of significance to determine with what validity data can be said to indicate any conclusion. The various methods of analysis used for the purpose of the study. Chi-Square Test

# Hypothesis – I

# The New Banking Technology And Consumer Preference With Regard To Age

The relationship between the age group and no. of year using new banking technology, the researcher used chi-square test to test the formulated hypothesis which is given as follows:-

H<sub>o</sub>: There is associated between the no. of year using new banking technology and the age group.



H<sub>1</sub>: There is no associated between the no. of year using new banking technology and the age group. The Banking technology and consumer preference with regard to age.

Table No.3.1

Year of using	Age Group				
	<25	25-35	35-45	>45	Total
<1	7	6	11	4	28
1-2	13	14	5	2	34
2-3	2	4	7	3	16
>3	8	6	7	1	22
Total	30	30	30	10	100

$$X^{2} = [(O-E)^{2}]_{/E}]$$
 =12.68  
Calculated value =12.68

Tabulated value at 5% level of signification for degree of freedom

$$= (r-1) (c-1)$$

$$= (4-1) (4-1)$$

$$= (3) (3)$$

$$= 9$$

Degrees of freedom = 9

Tabulated =16.919

Conclusion:

The calculated value  $X^2$  is greater then the table value of  $X^2$ .

H<sub>o</sub> is accepted at 5% level.

# The New Banking Technology And Consumer Preference With Regard To Monthly Income

The relationship between the monthly income and using credit card, the researcher used chi-square test to test the formulated hypothesis which is given as follows:-

 $H_0$ : There is associated between the monthly income and using credit card.

H<sub>1</sub>: There is no associated between the monthly income and using credit card.

The Banking technology and consumer preference with regard to monthly income

Table No.3.2

	Monthly Income						
Using Credit Card	< 10000	10000 - 20000 -	20000 - 30000	30000 – 40000	> 40000	Total	
Satisfied	11	8	6	8	4	37	
Not Satisfied	6	7	11	6	3	33	
No Opinion	3	5	13	6	3	30	
Total	20	20	30	20	10	100	

$$X^{2} = [(O-E)^{2}]_{/E}] = 7.944$$
  
Calculated value = 7.944

Tabulated value at 5% level of signification for degree of freedom

$$= (r-1) (c-1)$$

$$= (5-1) (3-1)$$

$$= (4) (2)$$



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= 8

Degrees of freedom = 8

Tabulated = 15.507

Conclusion:

The calculated value X<sup>2</sup> is greater then the table value of X<sup>2</sup>.

H<sub>o</sub> is accepted at 5% level.

## The New Banking Technology and Consumer Preference With Regard To Occupation

The relationship between the Occupation and no. of year using new banking technology, the researcher used chi-square test to test the formulated hypothesis which is given as follows:-

H<sub>0</sub>: There is associated between the no. of year using new banking technology and the Occupation.

H<sub>1</sub>: There is no associated between the no. of year using new banking technology and the Occupation.

The New Banking Technology and consumer preference with regard to Occupation

Table No.3.3

Year of using	Occupation					
	Student	Profession	Business	Others	Total	
<1	4	8	13	2	27	
1-2	12	9	7	7	35	
2-3	3	6	8	5	22	
>3	1	7	2	6	16	
Total	20	30	30	20	100	

Chi-Square Table:

 $X^{2} = [(O-E)^{2}]_{E}$  = 17.904 Calculated value = 17.904

Tabulated value at 5% level of signification for degree of freedom

= (r-1) (c-1) = (4-1) (4-1) = (3) (3)

Degrees of freedom = 9

Tabulated =16.919

Conclusion:

The calculated value X <sup>2</sup> is greater then the table value of X <sup>2</sup>.

H<sub>o</sub> is rejected at 5% level.

# The New Banking Technology And Consumer Preference With Regard To Occupation

The relationship between the Occupation and using debit card, the researcher used chi-square test to test the formulated hypothesis which is given as follows:-

H<sub>o</sub>: There is associated between the using debit card and the Occupation.

 $H_1$ : There is no associated between the using debit card and the Occupation.

The New Banking Technology and consumer preference with regard to Occupation

Table No.3.4

Using Debit	Occupation				
Card	Student	Profession	Business	Others	Total
<1	8	17	8	3	36
1-2	6	7	8	12	33
2-3	6	6	14	5	31
Total	20	30	30	20	100

Chi-Square Table:

 $X^2 = [(O-E)^2_{/E}]$  = 16.295 Calculated value = 16.295

IJMDRR E- ISSN -2395-1885 ISSN -2395-1877

Tabulated value at 5% level of signification for degree of freedom

= (r-1) (c-1) = (3-1) (4-1) = (2) (3) = 6

Degrees of freedom = 6

Tabulated = 12.592

Conclusion:

The calculated value X <sup>2</sup> is greater then the table value of X <sup>2</sup>.

H<sub>o</sub> is rejected at 5% level.

# 5. FINDINGS, SUGGESTIONS AND CONCLUSION

# Findings after using statistical tools

There are some statistical tools used to measure the various levels of significance such as percentage, Chi square test, the major findings obtained were mentioned below

- Many customers are having savings bank account and also they prefer savings bank account in large.
- It is inferred that the rate of interest levied on loans are agreed and satisfied by only small portions of the customers. Many respondents said that they were dissatisfied
- The rate of interest levied on deposits are agreed and said satisfied by majority of customers.
- Many customers agreed that the time taken for withdrawal of cash from the bank is done within 15 minutes but some customers insisted that it is taken more than 15 minutes.
- ATM Facility is fully computerized in all the branches.
- The mail transfer and Demand Draft are said that they are quickly done.
- Majority of the customers are accepted that the clearance of local cheques is done within a day and outstation cheques within two days.
- Majority of the respondents said that the services on DEMAT account are not effective.
- Majority of the customers are satisfied with the behavioral approach of the customer care executives but some customers gave bad certificate for the behavioral approach by the executives.
- Many customers insisted that the product knowledge of the customer care executives is good but not excellent and also some respondents say that in many branches the executives must well trained.
- The latest technologies introduced by the State Bank of India (SBI) bank are welcomed and appreciated by large number of customers and internet banking and mobile banking are effective according to their view.

**Null hypotheses:** In the context of statistical analysis if we are to compare two methods A and B, about its superiority and if we proceed on the assumption that both methods are equally good, then this assumption is termed as null hypothesis.

## There are two conditions for the alternatives between hypotheses

If the calculated value from our data is greater than the statistical table value, reject the null hypothesis.

If the calculated value from our data is less than the statistical table value, accept the null hypothesis

### A) Percentage

- Majority of the respondents 70% are Male and 30% of the respondents are Female.
- Most of the respondents belong to the age group 35-45 years and 40% of the respondents belong to the age group of below 25.
- Regarding occupation, most of the respondents are working in professional next to that business.
- 30% of the respondents are in monthly income group Rs. 20000-30000.
- Majority of the respondents belonging to the post graduate (50%).
- Majority of the respondents 60% are married and 40% of the respondents are unmarried.
- 40% of the respondents are using the Net Banking.
- Most of the using respondents are using Telephone Banking in percentage is 50.

### B) Chi Square Test

The calculated value of chi-square is greater than the table value of chi-square; accepted the null hypothesis at 5 % level of significance. Hence there is association between age and years of using new banking technology.



The calculated value of chi-square is greater than the table value of chi-square; accepted the null hypothesis at 5 % level of significance. Hence there is association between Monthly income of respondents and using the credit card.

Since the calculated value of chi-square is greater than the table value of chi-square, rejected the null hypothesis at 5 % level of significance. Hence there is association between occupation respondents and year of using.

The calculated value of chi-square is greater than the table value of chi-square; reject the null hypothesis at 5 % level of significance. Hence there is association between occupation respondents and using the debit card.

#### **6.SUGGESTIONS**

- The banker should concentrate more on maintaining customer relationship since some customers are not satisfied with customer executives behavior.
- Internet banking is mostly preferred and popular among peoples. Similarly other forms of technologies are also more
  effectively used.
- DEMAT services should be more effectively improved.
- The State Bank of India (SBI) services did not reach fully to rural areas. So they concentrate on reaching rural areas.
- ATM problems are now happening continuously. It should be solved.
- Interest rates on loans can be minimized.
- Compulsory maintenance of minimum balance in the savings bank account should be minimized.
- The bank should focus more attention an improving all aspects in maintaining good relationship with customers more because State Bank of India (SBI) is considered as a good servicing bank.

New Banking Technology is a simple philosophy that places the customer at the heart of a business organization's processes, activities and culture to improve his satisfaction of service and, in turn, maximize the profits for the organization.

A successful New Banking Technology strategy aims at understanding the needs of the customer and integrating them with the organization's strategy, people, technology and business,

Therefore, one of the best ways of launching a New banking Technology initiative is to start with what the organization is doing now and working out what should be done to improve its interface with its customers

The idea of New banking Technology is that it helps businesses use technology and human resources to gain insight into the behavior of customers and the value of those customers New banking Technology solutions are more effective once they are being implemented in information systems used by the company.

New banking Technology is nothing short of a strategy, which places CUSTOMERS in a pivotal position for the organization. It changes the focus of the organization to better exploit its key relationship with customers, to significant advantage, Customers are the lifeblood of any organization be it a global corporation with thousands of employees and a multi-billion turnover, or a sole trader with a handful of regular customers. New banking Technology is the basic tool for analyzing.

So New banking Technology is the essential one for maintaining good relationship strategy.

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