

A study on impact of demographical variable on use of Banking Technology

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Abstract

Banking sector is a mainstay of Indian financial system and it is affected by many forces. One such force is revolution of information technology in banking sector. In today's era, technology support is very important for the effective functioning of the banking sector. Technology has opened new products and services, new market and efficient delivery channels for banking industry. This paper explore about various banking technology available to customer, awareness level of banking technology and analyze the impact of demographical variables of banking technology. The results show that the younger generation are more comfortable with the use of banking technology and customer who are graduate and postgraduate are mostly adopter of banking technology.

Keywords: Banking Technology, Customer Awareness, Banking Sector

Introduction

Banking sector is a mainstay of Indian financial system and it is affected by many forces. One such force is revolution of information technology in banking sector. In today's era, technology support is very important for the effective functioning of the banking sector. Without information technology and communication we cannot think about the success of banking industry, it has widen the role of banking sector in Indian economy. With the use of technology there has been an increase in penetration, productivity and efficiency. The Indian banking system consists of 20 public sector banks, 22 private sector banks, 3 local area banks, 10 small finance banks, 7 payment banks, 44 foreign banks, 56 regional rural banks.

Technology has brought a complete paradigm shift in the functioning of banks and delivery of banking services. Now time has change, most of the banking transactions can be done online from the home and customers need not visit the bank branch for anything. The growth of the internet, mobiles and communication technology has added a different dimension to banking. The information technology (IT) available today is being leveraged in customer acquisitions, driving automation and process efficiency, delivering ease and efficiency to customers.

The banking industry is going through a period of rapid change to meet competition, challenges of technology and the demand of end user. Clearly technology is a key differentiator in the performance of banks. Banks need to look at innovation not just for product but for process as well. Today, technology is not only changing the environment

but also the relationship with customers. Technology has not broken barriers but has also brought about superior products and channels. This has brought customer relationship into greater focus. It is also viewed as an instrument of cost reduction and effective communication with people and institutions associated with the banking business. The RBI has assigned priority to the up gradation of technological infrastructure in financial system. Technology has opened new products and services, new market and efficient delivery channels for banking industry. IT also provides the framework for banking industry to meet challenges in the present competitive environment. IT enables to cut the cost of global fund transfer.

Recent IT Trends of Indian banks:-

Automated Teller Machine (ATM) – ATMs are perhaps most revolutionary aspect of virtual banking. The facility to use ATM is provided through plastic cards with magnetic strip containing information about the customer as well as the bank. In today's world ATM are the most useful tool to ensure the concept of "Any Time Banking" and "Any Where Banking". The automated teller machine was invented by John Shepherd-Barron in year of 1960.

Telephone Banking – Telephone banking is a service provided by a bank that enables customers to perform over the telephone a range of financial transactions which do not involve cash or documents, without the need to visit a bank branch or ATM.

Internet Banking – Internet banking enables a customer to do banking transactions through the bank's website on the internet. It is system of accessing accounts and general information on bank products and services through a computer while sitting in its office or home.

Mobile Banking – Mobile banking refers to the use of a smartphone or other cellular device to perform online banking tasks while away from your home computer, such as monitoring account balances, transferring funds between accounts, bill payment and locating an ATM.

Core Banking Solutions (CBS) – Core Banking Solution (CBS) is networking of bank branches, which allows customers to manage their accounts, and use various banking facilities from any part of the world. In simple term, there is no need to visit your own branch to do banking transactions we can do it from any CBS branch of particular branch.

Electronic Clearing Services (ECS) – ECS is an electronic mode of funds transfer from one bank account to another. It can be used by institutions for making payments such as distribution of dividend interest, salary, pension etc. It can also be used to pay bills and other charges such as telephone, electricity, water or for making equated monthly installments payments on loans as well as SIP investments.

CTS (Cheque Truncation System) – Cheque Truncation System (CTS) is a cheque clearing system undertaken by the Reserve Bank of India (RBI) for faster clearing of cheques. As the name suggests, truncation is the process of stopping the flow of the physical cheque in its way of clearing. In its place an electronic image of the cheque is transmitted with key important data.

National Electronic Fund Transfer (NEFT) –National Electronic Funds Transfer (NEFT) is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals can electronically transfer funds from any bank branch to any individual having an account with any other bank branch in the country participating in the Scheme. All NEFT settlements are made in a batch-wise format.

Real Time Gross Settlement (RTGS) - Real Time Gross Settlement (RTGS) is an electronic form of funds transfer where the transmission takes place on a real time basis. In India, transfer of funds with RTGS is done for high value transactions, the minimum amount being Rs 2 lakh. The beneficiary account receives the funds transferred, on a real time basis.

Literature Review

- ❖ **Sandhu.H.S and Souch (2003)** said that investment in new technology must be made to modernize the existing banks operations. The adoption of Information Technology also helps them to face competition and new challenges to meet the customer expectation in the contacts of globalization.
- ❖ **Fitzergelad (2004)** conducted a research on the preferences of customers towards online banking technology in Malaysia due to internet access, electronic banking knowledge and confronting customers transform are basically the factors contributing to adopt online banking. Some were not adopted online banking due to security fears and lack of awareness of electronic banking.
- ❖ **Mittal R. K. and Dhingra (2007)** discussed the issue that the transaction through technology channels cost much less to the banks than the customers reaching the bank and doing the transactions. In the study authors have identified the different technology issues and challenges such as choice of right channel, e-governance, customer relationship management, security concerns etc. Banks are required to address these issues and challenges effectively to stay in business and grow.
- ❖ **Dasgupta Siddhartha, Paul, Fuloria &Sanjay (2011)** the study was conducted to understand the behavioural intention of mobile banking usage of Indian customers. Research methods like the Factor analysis and a multiple regression analysis were done in order to determine the extent of impact the antecedents have over the behavioural intentions of mobile banking usage. The results of the study showed that other than the traditional variables like perceived usefulness and perceived ease of use, factors like perceived image, perceived value, self-efficacy, perceived credibility and tradition all significantly affects behavioural intentions towards mobile banking usage.
- ❖ **Shilpi Khandelwal (2013)** in his research titled on “E Banking: Factors of Adoption in India” This study present the last decade has endorsed a harsh change in the economic and banking environment all over the world. For the banks, technology has come up as a strategic resource for achieve in higher efficiency, control of operations, productivity and profitability. For consumer, it is the realization of their anywhere, anytime, anyway banking dream. This has prompted the banks to embrace technology to meet the increasing customer expectation and face the tough competition. This research paper is

focused on what are the drivers that drive consumers towards acceptance of E banking. How customer have accepted internet banking and how to improve the usage rate were the focus of research area in this study.

- ❖ **Dr. Sadaf Khan (2015)** highlighted the growing potential of technological innovations. There are various innovative services used in banking industry has been discussed in detail such as Automated Teller Machine, Phone Banking, Electronic payment systems, Internet Banking and Mobile banking. It concluded that without technology, banking industry cannot think about development and expansion or further growth strategies in the current competitive business world.

Methodology

This research is about to know the customer awareness level and challenges faced with reference to use of banking technology. In order to conduct research following are the research objectives:

- To identify the various banking technology.
- To know the level of customer awareness regarding Banking Technology.
- To analyze the impact of demographic variables (age, gender & educational level) on usage of banking technology.

In order to understand the various technology use by bank, awareness level of banking technology, various challenges with reference with reference to use of banking technology and acceptance level of banking technology, a descriptive research study has been used. In this research one survey was conducted in the area of Ahmedabad district. The data is collected through a questionnaire based survey done with the sample of 200 customers of private and public sector banks. The customers were selected on the basis of convenience from different areas of Ahmedabad district. Total 200 questionnaire were filled by the interviewer but out of 200 only 173 respondents have responded. To collect data questionnaire was designed according to the objectives and study variables. The questionnaire is divided into 3 parts. Part I consists 6 questions which aims at collecting information about the demographic details of the customers. Part II dealt with questions framed specifically for understanding the awareness level of customers for technology in banking. Part III dealt with questions framed specifically for understanding the usage pattern and motivating factors for use of banking technology. Various statistical tools such as Chi Square, Pi charts. Percentage used to analyze the data. On the basis of above objectives the following hypothesis are framed:

H1: There is Association between Banking Technology and Different age group of customer.

H2: There is Association between Banking Technology and Different gender.

H3: There is Association between Banking Technology and Education Level.

Analysis & Interpretation

Age	No. of Respondents
18 - 25 years	119
26 - 30 years	32
31 – 40 years	19
41 – 50 years	3
Total	173

Table 1. Age of Respondents

For the purpose of the analysis, the sample respondents are classified into four different age groups. From the above table no.1 it is clear that 68% of the respondents belong to age group of 18 to 25 years, 19% of the respondents belong to between 26-30 years and 11% of the respondents belong to between 31- 40 years and 2% belong between 41-50 years. In a sample maximum number of respondents belongs to up to 25 years age group.

Gender	No. of Respondents
Male	105
Female	68
Total	173

Table 2. No. of respondents according to Gender

The table 2 represents number of male and female respondents, it is clear 61% of the respondents belong to male group and 39% of the respondents belong to female group. Hence we can say that most of the bank transactions are still handled by males in comparison to females.

Marital Status	No. of Respondents
Married	50
Unmarried	123
Total	173

Table 3. No. of Respondents according to Marital Status

It is observed from the above table no.3 that 29% of the respondents are married and 71% of the respondents are unmarried.

Educational Qualification	No. of Respondents
Degree	54
High school	2
Intermediate	19
Master's Degree	98
Grand Total	173

Table No. 4 No of respondents according to Education Level

From the above table no. 4 out of 173 respondents, it is clear that only 1% of the respondents educational qualification is school level, 11% of the respondent's are intermediate level, 31% of the respondent's educational qualification is college level and 57% of the respondent's educational qualification is Master degree level.

Level of Awareness	No. of Respondents
Not Aware	Nil
Somewhat Aware	25
Aware	148
Grand Total	173

Table No. 5 Awareness Level of Respondents

It is clearly observed from above table no.5 that the awareness level about banking technology is 86% respondent are aware about different types of banking technology and 14% respondent know some about technology of bank. There is no responses about not aware about banking technology. To test the first hypothesis that there is association between banking Technology and different age group of customer chi square test has been used. Following results came after applying test:

Are you Aware about Different type of Banking Technology with Age Cross tabulation

Count

	8. Are you Aware about Different type of Banking Technology		Total
	Yes	Somewhat	
18-25 Years	111	8	119
26-30 Years	22	10	32
31-40 Years	12	7	19
40-50 Years	3	0	3
Total	148	25	173

Chi-Square Tests

	Value	df	Asymp. Sig. (sided)
Pearson Chi-Square	21.266 ^a	3	.001
Likelihood Ratio	19.518	3	.000
Linear-by-Linear Association	12.873	1	.000
N of Valid Cases	173		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .43.

It can be clearly seen that the value of chi-Square is .001 which is less than .05 so alternate hypothesis is accepted. It shows that there is association between Banking Technology and different age group of customer. It also shows that the awareness and its acceptance are totally dependent on different age group.

To that the second hypothesis that there is association between Banking Technology and different gender chi square test has been used. Following result came after applying test:

Are you aware about different type of Banking Technology and gender Crosstabulation

Count

	8. Are you Aware about Different type of Banking Technology		Total
	Yes	somewhat	
Male	87	18	105
Female	61	7	68
Total	148	25	173

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.566 ^a	1	.211		
Continuity Correction ^b	1.061	1	.303		
Likelihood Ratio	1.626	1	.202		
Fisher's Exact Test				.270	.151
Linear-by-Linear Association	1.557	1	.212		
N of Valid Cases	173				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.83.

b. Computed only for a 2x2 table

From the above table it can observed value of Chi-Square is .211 which is greater than .05 it conclude that there is no association between Banking Technology and different gender. So we can say that the awareness of banking technology is not dependent on gender group.

To test the third hypothesis that there is association between Banking Technology and Education level again chi square test has been used. Following result came after applying test

Are you Aware about Different type of Banking Technology with education Cross tabulation

Count

	8. Are you Aware about Different ty Banking Techlllogy		Total
	Yes	Somewhat	
High School	0	2	2
Intermediate	13	6	19
Degree	46	8	54
Master Degree	89	9	98
Total	148	25	173

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sid
Pearson Chi-Square	18.554 ^a	3	.001
Likelihood Ratio	13.791	3	.003
Linear-by-Linear Association	12.186	1	.000
N of Valid Cases	173		

a. 3 cells (37.5%) have expected count less than 5. The minimum exp count is .29.

It observed that the value of chi- Square is .001 which is less than .05. It shows that there is association between Banking Technology and education level. So it means that the awareness of banking technology is dependent on different education level.

Conclusion

The study concludes that majority of customers are accepting banking technology because of many reasons like convenience, 24/7 available, transaction speed is faster etc. Acceptance of banking technology is affected by age and education level of customer. Customers who are below 40 years of age found the banking technology are friendly and easy to use. Customers with post-graduate and graduate qualifications are found to be mostly adaptors of banking technology. In closing, we note that the study is it covers only limited geographical area and findings are based on convenience sample. The study conducted only in Ahmedabad district of Gujrat state. Hence the findings may not applicable to whole geographical area.

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