

# PROGRESS OF BANKING IN INDIA: CUSTOMERS' PERSPECTIVES

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## Abstract

The present paper is concerned with the various ways of doing banking electronically. This paper has been divided into four sections dealing with four aspects of E-banking i.e. ATM, Internet banking, Mobile banking and Credit cards. Paper is basically concerned with the customer aspect of banking searching for customer satisfaction level. This is a comparative study of Public sector banks, Private sector Indian banks and Private sector foreign banks.

**Key words:** E-Banking, ATM, Internet banking, Credit cards, Mobile banking, Traditional banking, Credit frauds, Security, Competition, Customer satisfaction etc.

## I INTRODUCTION

Banking has come a long way from the time of ledger cards and other manual filing systems. Most of the banks today have electronic systems to handle their daily voluminous tasks of information retrieval, storage and processing. Irrespective of whether they are automated or not, banks by their nature are continually involved in all forms of information management on a continuous basis. The computer is, of course, an established tool for achieving a competitive edge and optimal resource allocation. Competition and the constant changes in technology and lifestyles have changed the face of banking. Nowadays, banks are seeking alternative ways to provide and differentiate amongst their varied services. Customers, both corporate as well as retail, are no longer willing to queue in banks, or wait on the phone, for the most basic of services. They demand and expect to be able to transact their financial dealings where and when they wish to. With the number of computers increasing every year, the electronic delivery of banking services is becoming the ideal way for the banks to meet their clients' expectations.

E-banking refers to the effective deployment of IT by the banks. It is about using the infrastructure of the digital age to create opportunities - both local and global. It enables the dramatic lowering of transaction costs and the creation of new types of banking opportunities that address the barriers of time and distance. Banking opportunities are local, global and immediate in e-banking. The current webbased variant of banking is the latest of several generations of systems: ATM was the first well-known machines to provide electronic access to customers of retail banks. With advent of ATM, banks are able to serve customers outside the banking hall. Next came phone banking where users call their bank's computer system on their ordinary phone and use the phone keypad to perform banking transactions. PC banking superseded phone banking and allowed users to interact with their bank by means of a computer with a dialup modem connection to the phone network. PSBs, which are the foundation of the Indian banking system, account for more than 78 per cent of the assets of total banking industry. Unfortunately, they are burdened with excessive NPAs, massive manpower and lack of modern technology. On the other hand, the PSIBs and PSFBs in India are witnessing immense progress. They are leaders in Internet banking, mobile banking, phone banking, ATMs. Given this background, it is interesting to analyze the e-banking scenario in India. In a quest to seek an answer, the present study is undertaken with specific research objectives as envisaged in the following section.

## II RESEARCH METHODOLOGY

### Objectives of the Study

The present study aims to examine the progress of e-banking in India. In this broader framework, an attempt is made to achieve the following specific objectives:

- To analyze the present e-banking scenario concerned with ATM, Internet banking, Mobile banking and Credit cards in India.
- To examine the impact of ATM, Internet banking, Mobile banking and Credit cards on customer satisfaction by analyzing the problems faced by the customers.

### Research Hypotheses

To achieve the objectives of the study, the following hypotheses are formulated:

1. There is no significant difference in the present e-banking scenario of ATM, Internet banking, Mobile banking and Credit cards in India.
2. There is no significant difference in the impact of ATM, Internet banking, Mobile banking and Credit cards on customer satisfaction in PSBs, PSIBs and PSFBs in India.

### Data Analysis

The collected data in the present study are analyzed through descriptive and inferential statistical techniques. The analysis has been in conformity with the objectives of the study and the hypotheses formulated to achieve those objectives. In order to examine the level of customer satisfaction regarding various e-banking services and their interplay in different banks, various statistical techniques have been applied like frequency distribution, percentage, mean, standard deviation, chi-square and ANOVA. The application of normal distribution has been followed in order to categorize the different variables. The level of customer satisfaction of the respondents regarding ATMs, Internet banking, Mobile banking and Credit cards is assumed to be normally distributed. The level of customer satisfaction of the respondents is divided into three categories, i.e. below average, average and above average levels. The lower and upper limits of average level have been calculated with the help of the following formula:

The below average, average and above average levels have been defined as Low, Medium and High respectively. The two stage analytical approach is used to analyze the data. In the first stage, total CSL and usage rate of various services is analyzed. Total CSL shows the total weighted value of all the variables of customer satisfaction. In the second stage, ANOVA is used for summarizing the difference between the levels of customer satisfaction.

Analysis and Interpretation

### Data Collection

The present study is of analytical and exploratory nature. Accordingly, the use is made of primary data. The primary data is collected with the help of pre-tested structured questionnaires from a sample of 450 respondents from Haryana, Delhi, Chandigarh and Punjab using the services provided by the various branches of PSBs, PSIBs and PSFBs. A sample of 450 respondents/customers is taken (150 respondents from each group) with the help of judgment or purposive sampling method.

The lower limit of average level = Mean + 1 Standard deviation
The upper limit of average level = Mean – 1 Standard deviation

Source: Bhatnagar and Bhatnagar (1992), Measurement and Evaluation', pp. 116-120.

III DATA ANALYSIS & INTERPRETATION

E-banking scenario is analyzed regarding four major e-banking products i.e. ATMs, Internet Banking, Mobile Banking and Credit Cards in terms of customer satisfaction level on the basis of various variables like length of the use of service, information about change, frequency of complaints, problems faced, reliability of service and level of satisfaction for the service, etc.

**Period of Use**

The present scenario of ATMs, Internet Banking, Mobile Banking and Credit Cards is measured in terms of the length of the period the respondents are using a particular service. For this purpose, time is divided into five sub-heads i.e. less than 6 months, 6 months to 1 year, 1 to 2, 2 to 3 and more than 3 years.

Table - 1: Period of Use

No. of Respondents (percentage)

Period of use	ATMs	Internet Banking	Mobile Banking	Credit Cards
a) Less than 6 months	30(07)	48(13)	90(38)	30(08)
b) 6 months to 1 year	06(01)	30(08)	24(10)	30(07)
c) 1 to 2 years	18(04)	66(18)	30(12)	84(21)
d) 2 to 3 years	42(09)	60(17)	30(12)	66(16)
e) More than 3 years	354(79)	162(44)	66(28)	192(48)
Total	450(100)	366(100)	240(100)	402(100)

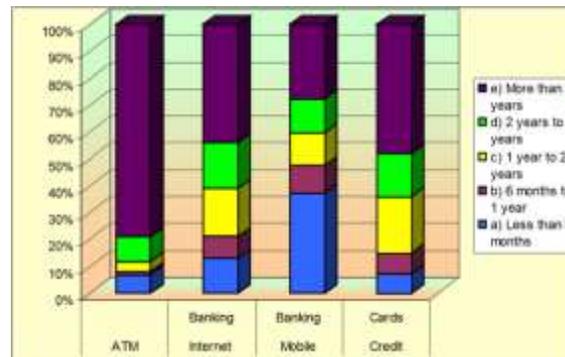


Fig.1: Period of use

Chi-Square = 3.938

Source: Compiled from the responses obtained from respondents

Table 1 and figure 1 envisages that ATM is the oldest service in use. Out of total respondents, maximum 79 per cent respondents are using it for more than 3 years. Credit cards are at 2nd position with 48 per cent users. Internet and Mobile banking are at 3rd and 4th position with 44 per cent and 28 per cent users respectively.

**Complaints Regarding Services**

To find out the frequency with which customers are having complaints against their banks with regard to these services, five parameters of complaints are considered which are very often, often, sometimes, rarely and never.

Table - 2: Complaints Regarding Services

No. of Respondents (percentage)

Complaints	ATMs	Internet Banking	Mobile Banking	Credit Cards
a) Very often	30(07)	12(03)	-	48(12)
b) Often	24(05)	18(05)	27(11)	66(16)
c) Sometimes	78(17)	42(11)	27(11)	72(18)
d) Rarely	198(44)	204(56)	126(53)	132(33)
e) Never	120(27)	90(25)	60(25)	84(21)
Total	450(100)	366(100)	240(100)	402(100)

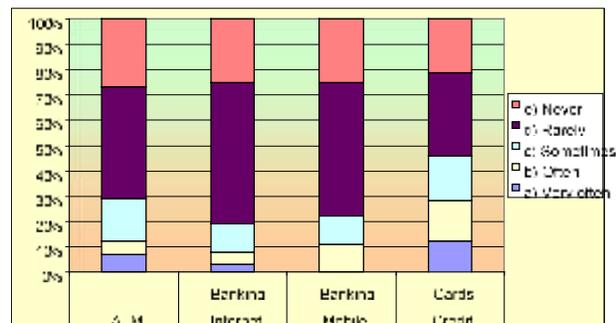


Fig. 2: Complaints regarding Services

Chi-Square = 5.880

Source: Compiled from the responses obtained from respondents

Table 2 and figure 2 reveals that there are maximum 27 per cent respondents who never had problems with ATMs. In case of credit cards, this per cent is lowest, i.e. 21 per cent. The table also shows the positions of Internet and Mobile banking in this context where this percentage is 25 per cent in each case.

**Grievance Settlement System**

The information has been collected from the respondents about the grievance settlement system for these products in banks to know whether this system is satisfactory or not.

Table - 3: Grievance Settlement System

No. of Respondents (percentage)

Grievance settlement	ATM s	Internet Banking	Mobile Banking	Credit Cards
a) Highly satisfactory	72(22)	66(24)	36(17)	48(15)
b) Satisfactory	234(71)	186(67)	113(52)	156(49)
c) Indifferent	18(05)	18(07)	30(14)	42(14)
d) Unsatisfactory	06(02)	06(02)	36(17)	42(13)
e) Highly unsatisfactory	-	-	-	30(09)
Total	330(100)	276(100)	215(100)	318(100)

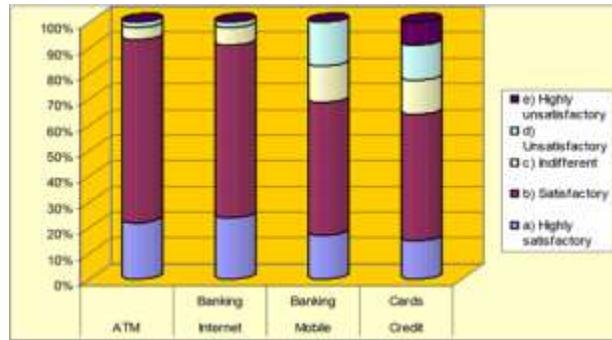


Fig. 3: Grievance Settlement System

Chi-Square = 2.864

Source: Compiled from the responses obtained from respondents

The table 3 and figure 3 shows that out of the total respondents having problems, maximum number of respondents, i.e. 22 and 71 per cent are highly satisfied and satisfied respectively with the grievance settlement system of ATM, whereas this percentage is 24 and 67 per cent in case of Internet banking, 17 and 52 per cent in case of Mobile banking and 15 and 49 per cent in case of credit cards.

**Reliability of Services**

Reliability of e-banking products is another dimension, which constitute the present status of e-banking and is analyzed on the basis of three parameters i.e. very reliable, reliable and unreliable.

Table - 4: Reliability of Services

No. of Respondents (percentage)

Reliability	ATMs	Internet Banking	Mobile Banking	Credit Cards
a) Very reliable	234(52)	96(26)	43(18)	66(16)
b) Reliable	216(48)	210(57)	128(53)	240(60)
c) Unreliable	-	60 (17)	69(29)	96(24)
Total	450(100)	366(100)	240(100)	402(100)

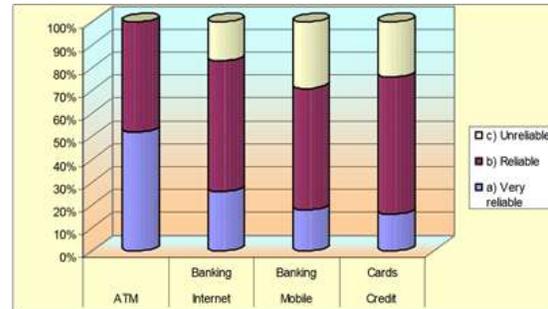


Fig. 4: Reliability of Services

Chi-Square = 2.600

Source: Compiled from the responses obtained from respondents

Table 4 and figure 4 depicts that out of the four services ATM is the very reliable with maximum number of respondents, i.e. 52 per cent and credit card is at the minimum with 16 per cent. The table also shows that reliability is highest in credit cards and lowest in ATM with 60 per cent and 48 per cent respondents respectively. This percentage is 57 per cent and 53 per cent in case of Internet and Mobile banking respectively. Whereas the unreliability is maximum i.e. 29 per cent in case of mobile banking followed by credit cards having 24 per cent respondents.

**Level of Satisfaction**

Level of satisfaction after using a particular product has also been examined to find out the clearer picture regarding their status on the basis of five parameters i.e. highly satisfied, satisfied, indifferent, dissatisfied and very unsatisfied.

Table - 5: Level of Satisfaction

No. of Respondents (percentage)

Satisfaction Level	ATMs	Internet Banking	Mobile Banking	Credit Cards
a) Highly satisfied	180(40)	78(21)	16(07)	84(21)
b) Satisfied	270(60)	246(67)	117(49)	228(57)
c) Indifferent	-	36(10)	96(40)	30(08)
d) Dissatisfied	-	06(02)	11(04)	30(07)
e) Very unsatisfied	-	-	-	30(07)
Total	450(100)	366(100)	240(100)	402(100)

Source: Compiled from the responses obtained from respondents

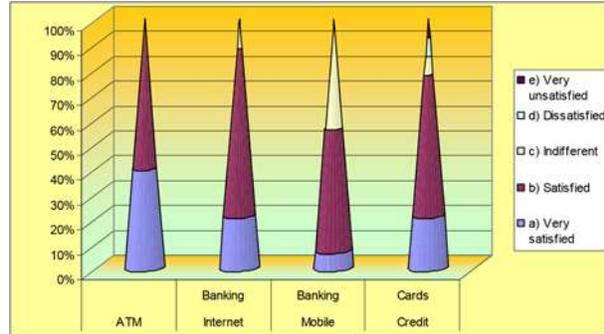


Fig. 5: Level of Satisfaction

Table 5 and figure 5 present that satisfaction level, which is highest in case of ATM as all the respondents are highly satisfied/satisfied, followed by Internet banking, credit cards and M-banking. The table also reveals that dissatisfied level is highest in case of Credit card and lowest in Internet banking. On the other hand, indifferent level is highest, i.e. 40 per cent in case of Mobile banking.

**Status of All E-banking Products**

The present status of e-banking services is analyzed in all the banks with the help of total CSL and total number of respondents using these products. Total CSL includes the total weighted value of all the variables discussed above.

Table - 6: Status of E-Banking Products

No. of Respondents (percentage)

Name of Bank	Total CSL	Total No. of Users
ATM	7650(85)	450(100)
Internet Banking	5694(78)	366(81)
Mobile Banking	3252(68)	240(53)
Credit Card	5964(74)	402(90)

Source: Compiled from the responses obtained from respondents

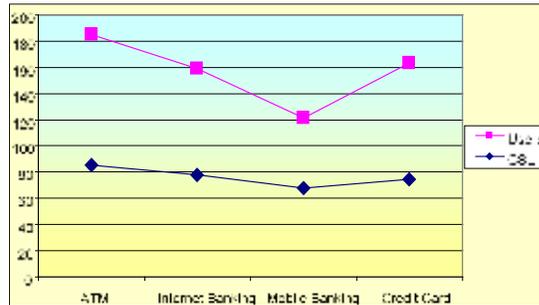


Fig. 6: Status of E-Banking Products

Table 6 and figure 6 elucidate the present status of e-banking products. It is clear that ATM is having maximum 85 per cent CSL and respondents using it are also maximum 100 per cent. Position of mobile banking is worst with minimum 68 per cent and 53 per cent CSL and users respectively. Internet banking is at second place with 2nd highest CSL (78 per cent) and in usage, it is at third place with 81 per cent usage rate. Credit card is at third place in terms of CSL (74 per cent) but its usage rate is second highest.

To study the level of customer satisfaction further, the respondents are divided into three categories i.e. below average, average and above average levels, which have been defined as Low, Medium and High respectively.

**CSL of ATMs**

Table 7 and figure 7 project that out of the total 84 per cent respondents have medium CSL. On the other hand, only 4 per cent fall in high CSL and 12 per cent in low CSL.

Table - 7: CSL of ATMs

No. of Respondents (percentage)

CSL	Frequency	Percentage
Low (Below 15)	54	12
Medium (15-19)	378	84
High (Above 19)	18	04
Total	450	100

Mean Value = 17.00, Std. Dev. = 1.97

Source: Compiled from the responses obtained from respondents



Fig. 7: CSL of ATMs

**CSL of Internet Banking**

Table 8 and figure 8 envisages that 82 per cent respondents have medium CSL for Internet banking. Whereas low and high CSL is 11 per cent and 7 per cent respectively.

Table - 8: CSL of Internet Banking

No. of Respondents (percentage)

CSL	Frequency	Percentage
Low (Below 13)	42	11
Medium (13-18)	300	82
High (Above 18)	24	07
Total	366	100

Mean Value = 15.56, Std. Dev. = 2.30

Source: Compiled from the responses obtained from respondents

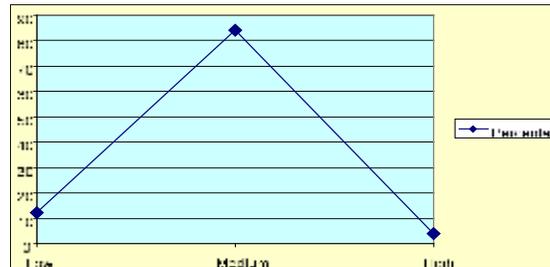


Fig. 8: CSL of Internet Banking

**CSL of Mobile Banking**

Table 9 and figure 9 reveals that 75 per cent respondents of mobile banking have medium CSL and 15 per cent respondents fall in low CSL, whereas only 10 per cent respondents have high CSL.

Table - 9: CSL of Mobile Banking

No. of Respondents (percentage)

CSL	Frequency	Percentage
Low (Below 11)	36	15
Medium (11-16)	180	75
High (Above 16)	24	10
Total	240	100

Mean Value = 13.55, Std. Dev. = 2.58

Source: Compiled from the responses obtained from respondents

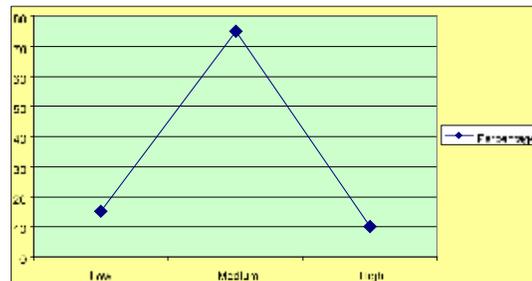


Fig. 9: CSL of Mobile Banking

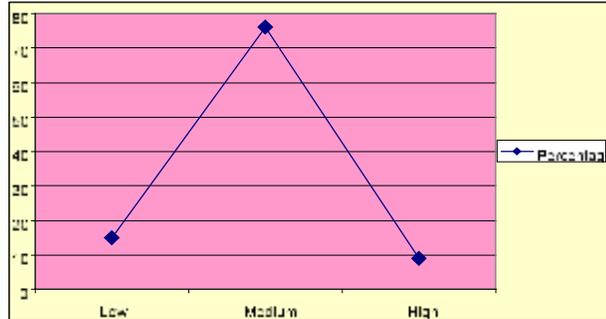
**CSL of Credit Cards**

Table 10 and figure 10 shows that 76 per cent out of total respondents have medium CSL and 15 per cent have low CSL, whereas only 9 per cent respondents fall in high CSL.

Table - 10: CSL of Credit Cards

No. of Respondents (percentage)

CSL	Frequency	Percentage
Low (Below 12)	60	15
Medium (12-18)	306	76
High (Above 18)	36	09
Total	402	100



Mean Value = 14.84, Std. Dev. = 3.00

Fig. 10: CSL of Credit Cards

Source: Compiled from the responses obtained from respondents

**IV CONCLUSION**

**Combined CSL of All E-banking Products**

Table 11 and figure 11 depicts that medium CSL is maximum in case of ATM with 84 per cent and minimum in case of Mobile banking with 75 per cent respondents.

Internet banking and credit card are at 2nd and 3rd position with 82 per cent and 75 per cent CSL respectively. The table also shows that maximum 15 per cent respondents have low CSL in Mobile banking. High CSL is highest in Internet banking and lowest in ATM with 10 per cent and 4 per cent respondents respectively.

Table 11: Combined CSL of E-Banking Products

No. of Respondents (percentage)

Products	Low	Medium	High	Total
ATM	54(12)	378(84)	18(04)	450(100)
Internet Banking	42(11)	300(82)	24(07)	366(100)
Mobile Banking	36(15)	180(75)	24(10)	240(100)
Credit Card	60(15)	306(76)	36(09)	402(100)

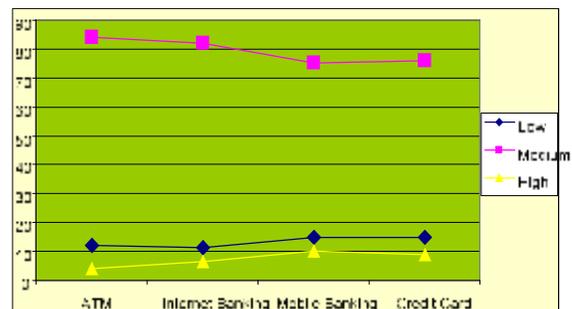


Fig. 4.1k: Combined CSL of E-Banking Products

ANOVA: F = 634.82 (F.05, 2, 9 = 4.26)

Chi-Square = 8.000 (Significant at 5 per cent level)

Source: Compiled from the responses obtained from respondents

As depicted by the above table, the calculated value of F is greater than the tabulated value, therefore the null hypothesis, i.e. there is no significant difference in the present e-banking scenario of ATM, Internet banking, Mobile

banking and Credit cards in India, cannot be accepted. It means that the alternative hypothesis, i.e. there is a significant difference in the present e-banking scenario of ATM, Internet banking, Mobile banking and Credit cards in India can be accepted. This view point is also supported by the value of chi square, which is also significant at 5 per cent level of significant.

The analysis also shows that among all the e-banking products, CSL of ATM is highest and the number of users of ATM is also highest as compared to other services. Internet banking and credit card are at second and third position as far as CSL is concerned but the number of users is more in case of credit cards as compared to Internet banking as depicted by table-6. Mobile banking is at the lowest position in terms of CSL and also in number of users. Therefore, the null hypothesis i.e. there is no significant difference in the impact of ATM, Internet banking, Mobile banking and Credit cards on customer satisfaction in PSBs, PSIBs and PSFBs in India cannot, be accepted.

To sum up, opportunities in e-banking are immense but the only need is to explore them. The nature of banking services may still be the same but the way in which they are being offered has been changed dramatically. Banks must realize the seriousness of challenges ahead and develop a strategy that will enable them to leverage the opportunities presented by e-banking. E-banks need to shift now from product centric to customer centric i.e. to design services according to the needs dreams and expectations of the customers. Opportunities and challenges offered by e-banking can only be met fruitfully if banks assemble different dimensions services including banking, broking, insurance, channel delivery, sales culture, back office processes and knowledge management under one corporate name. Most of the market is still untapped in India especially in rural areas. There is a lot of scope for banking institutions to expand their e-banking services to have a more sophisticated customer base. ICT infrastructure facilities are also not well developed and the banks are unable to extend the e-banking services, therefore, good infrastructure need to be developed.

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