



## Research Article

# THE INFLUENCE OF INTERNET BANKING ON THE EFFICIENCY AND COST SAVINGS FOR BANKS' CUSTOMERS

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## Abstract

The world is developing; the internet has become one important tool in life. Its proper use can create wonders. This research paper is about how the internet is used by Indian banks and how it has changed the face of banking. The study is limited to Kochi alone. Internet banking has its advantages: primarily it is cost efficient. Using internet banking customers can do most of their bank transactions online; almost all of the transactions are possible. Adding to the advantages these transactions require only an internet connection and a computer. These facilities are not limited to the working hours of the bank; one can avail these services 24 hours a day, 7 days a week. But proficiency to use these facilities properly is the main challenge. This study is based upon the review taken from part of the Kochi population who are Customers of State Bank of India and ICICI bank. Day by day customers using internet banking is on the rise. Also, internet banking is not limited to the bank transactions alone, it can be used as a mode of payment to registered merchants. This makes the regular payments, like that of electricity, water, mobile bill etc. very easy. Any tool can be efficient only if it is used properly. How cost effective and popular is the usage of online banking tool in Kochi is the major problem under investigation.

Keywords: Internet banking; online; customers; transactions

## Introduction

Online banking is a term used for performing transactions, payments etc. over Internet through a bank, credit union or building society's secure website. With the development of internet banking customers received the freedom of banking at any time at any place; all one need is a computer with internet access. The web browser is used for making the online transactions (Berger, 2003).

When internet banking was first introduced, banks used it as a medium to advertise services and as a mode to communicate with customers (Daniel, 1999). On the go, technology kept developing and this has enabled banks in making online transaction services safe and more economical. Day by day banks were able to introduce more and more services online. Today, we can say it is difficult for a bank to survive without having online banking facilities (Zerbe, 2001). The expenditure banks have to incur to develop and maintain online banking tools are much cheaper; hence this will help banks to give better service at cheaper costs (Kotler and Keller, 2006). Also, we cannot forget the wide reach of service it offers. However the target customers need to know how to use the service. Payment to merchants is another advantage of online banking offers.

Now a day, we can purchase items and services online. Even mobile bill, electricity bill etc. can be paid through net banking (Kothari, 1999; Zerbe, 2001).

If this service develops at this rate, soon we may be able to make all our cash transactions online.

## Statement of the Problem

Internet Banking provides customers many services like 24 hours banking, Cash transfer, Balance Check, Account statements, online purchase etc. Providing this service is without doubt more efficient but this will be a successful system only if it is cost effective. Hence the sole purpose of this research is to study how cost effective is the online banking system.

## Scope of the Study

The purpose of this study is to analyse the cost effectiveness of online banking system.

## Objective of the Study

- To analyse the efficiency of internet banking for the bank with regard to its customers and their age.
- To analyse the efficiency of internet banking for the cost savings of customers.

- To understand the popularity of internet banking usage among customers in Kochi city.

**Hypothesis:**

**H0** - There is no relationship between mode of banking adopted and cost savings of banks customers

**H1**- There is a relationship between mode of banking adopted and cost savings of banks customers

**Methodology of the Study****Research Approach**

Survey method

**Research Design**

Descriptive research

**Population**

All customers of State Bank of India, ICICI using the facility of internet banking.

**Sampling Method**

Method of Convenience sampling was used to select the sampling units from which information was collected.

**Sample Unit**

Users of internet-Banking facility of State Bank of India and ICICI bank

**Sample Size**

Sample size of 120 customers (60 ICICI and 60 SBI)

**Sampling Technique**

Method of Convenience sampling was used to select the sampling units from which information was collected.

**Software package**

SPSS

**Tool for Data Collection**

Questionnaire is used for collecting data. The questionnaire contains question that is logically related to the topic under study.

**Analysis**

The data obtained from the survey is tabulated below for easy understanding (Table 1).

Out of the total sample size most of the people from the age group of 26-40 has been effectively using the internet banking facility. People in the age group of 18-25 also effectively use the internet banking facility as most of them are not yet earning the some of them use this facility as they all are employed in good companies. People above the age of 41 also use the internet banking facility though not many on whom the study has been conducted (Table 1).

The Table 2 shows the number of professionals who are using the internet banking facility. From the table we come to know that out of 120 respondents 44% of them are business men who use the internet banking facility and 33% students and a percentage consisting of 23% employees use the internet banking facility.

**Table 1:** The age group of people using internet banking facility

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-25	36	29.8	30.0	30.0
26-40	50	41.3	41.7	71.7
Valid 41-55	15	12.4	12.5	84.2
56-65	14	11.6	11.7	95.8
65above	5	4.1	4.2	100.0
Total	120	99.2	100.0	
Total	120	100.0		

Data shown is from SPSS analysis

**Table 2:** professions of respondents using the Internet banking

Profession	Frequency	Percent	Valid Percent	Cumulative Percent
Business	53	43.8	44.2	44.2
Valid Employees	28	23.1	23.3	67.5
Students	39	32.2	32.5	100.0
Total	120	99.2	100.0	
Total	120	100.0		

Data shown is from SPSS analysis

**Chi-Square Test**

H0: There is no significant association between age and online service used

H1: There is a significant association between age and online service used

**Asymp.Sig.** refers to the p value and is .000 in this case. The above Table 3 shows that there is a significant

association between age group and online account service used. So here null hypothesis will be rejected and alternative hypothesis will be accepted.

The Table 4 shows that the sig value is less than 0.05. Therefore here we accept alternative hypothesis and reject null hypothesis. So, there is a significant relationship between age group and online bill payment service used by the customers.

**Table 3:** Association between age group and online account service used

		Age vs. online service Cross tabulation				
		Online service				
		Rarely	Sometimes	Most often	Always	Total
Age	18-25	0	0	0	36	36
	26-40	0	0	10	40	50
	41-55	0	3	12	0	15
	56-65	1	13	0	0	14
	65 above	5	0	0	0	5
Total		6	16	22	76	120

  

Chi-Square Tests				
Pearson Chi-Square		2.471e2 <sup>a</sup>	12	.000
Likelihood Ratio		172.239	12	.000
Linear-By-Linear Association		96.548	1	.000
N of Valid Cases		120		

Data shown is from SPSS analysis

**Table 4:** Association between age group and online bill payment service

		Age vs. Bill pay Cross tabulation					
		Bill pay					Total
Count		Never	Rarely	Sometimes	Most often	Always	
Age	18-25	0	0	0	3	33	36
	26-40	0	0	12	38	0	50
	41-55	0	9	6	0	0	15
	56-65	0	14	0	0	0	14
	65above	4	1	0	0	0	5
Total		4	24	18	41	33	120

  

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-Sided)
Pearson Chi-Square	3.045e2 <sup>a</sup>	16	.000
Likelihood Ratio	245.071	16	.000
Linear-By-Linear Association	104.257	1	.000
N of Valid Cases	120		

Data shown is from SPSS analysis

The sig value .000 indicates that, there is a significant association between age and online fund transfer service used by the customers. Therefore we accept alternative hypothesis and reject null hypothesis (Table 5).

The Table 6 shows that the sig value is .000 that is less than 0 .05; we can conclude that there is a significant relationship between age and online loan application service used.

Therefore we accept alternative hypothesis and reject null hypothesis.

**Correlation Analysis**

H0: There is no relationship between mode of banking adopted and cost saving for bank customers.

H1: There is a relationship between mode of banking adopted and cost saving for bank customers.

**Table 5:** Age group and online fund transfer service

Age vs. Fund transfer Cross tabulation							
Count		Fund transfer					Total
		Never	Rarely	Sometimes	Mostoften	Always	
	18-25	0	0	0	13	23	36
	26-40	0	0	16	34	0	50
Age	41-55	0	7	8	0	0	15
	56-65	5	9	0	0	0	14
	65above	5	0	0	0	0	5
Total		10	16	24	47	23	120

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-Sided)
Pearson Chi-Square	2.239e2 <sup>a</sup>	16	.000
Likelihood Ratio	206.775	16	.000
Linear-by-Linear Association	99.932	1	.000
N of Valid Cases	120		

Data shown is from SPSS analysis

**Table 6:** Age group and online loan application service

Age vs. Loan application Cross tabulation							
Count		Loan application					Total
		Never	Rarely	Sometimes	Most often	Always	
	18-25	0	0	14	14	8	36
	26-40	0	44	6	0	0	50
Age	41-55	1	14	0	0	0	15
	56-65	14	0	0	0	0	14
	65above	5	0	0	0	0	5
Total		20	58	20	14	8	120

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-Sided)
Pearson Chi-Square	2.119e2 <sup>a</sup>	16	.000
Likelihood Ratio	210.168	16	.000
Linear-By-Linear Association	78.995	1	.000
N of Valid Cases	120		

Data shown is from SPSS analysis

The Table 7 represents the relationship between mode of banking adopted and cost saving for customers. Since the significance value is .775, which shows a strong relation between both. Therefore here we accept alternative hypothesis and reject null hypothesis. That means there is a significant relationship between mode of banking adopted and cost saving for customers.

**Correlation Analysis**

H0: There is no significant relationship between mode of banking adopted and transaction cost involved

H1: There is a significant relationship between mode of banking adopted and transaction cost involved

In the Correlation analysis it shows the significance level is .378. That means both the mode of banking and transaction costs have a weak relationship. Therefore H0 is accepted and the H1 is rejected (Table 8).

Out of total respondents, 70% prefer using online banking services. The rest 30% goes with traditional banking the most (Table 9).

**Table 7:** relationship between mode of banking adopted and cost savings for bank customers

<b>Correlations</b>			
		Mode	Cost savings
Mode	Pearson Correlation	1	.775**
	Sig. (2-Tailed)		.000
	N	120	120
Cost savings	Pearson Correlation	.775**	1
	Sig. (2-Tailed)	.000	
	N	120	120

Data shown is from SPSS analysis

**Table 8:** Relationship between modes of banking adopted and transaction cost involved

<b>Correlations</b>			
		Mode	Transaction
Mode	Pearson Correlation	1	.378**
	Sig. (2-Tailed)		.000
	N	120	120
Transaction	Pearson Correlation	.378**	1
	Sig. (2-Tailed)	.000	
	N	120	120

Data shown is from SPSS analysis

**Table 9:** the mode of banking adopted or preferred by customers

Mode		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Online	84	69.4	70.0	70.0
	Traditional	36	29.8	30.0	100.0
	Total	120	99.2	100.0	
Total		120	100.0		

Data shown is from SPSS analysis

The Table 10 depicts that 54% of respondents agrees that the channel offers convenience of operating time. 21% of respondents strongly agree to it. There are people who say that the channel doesn't offer any time convenience while comparing to traditional banking. 7% of respondents include in that category.

The Table 11 explains that, out of the total population 42% agrees that the channel is very easy to use while comparing to traditional mode. And 22% respondents neutrally agree to it.

But 16% of total population disagree to this. They say that online banking is not so easy to use.

From the Table 12 we come to know that from the total population interviewed a large population of 47% does not trust internet banking completely. It is because of security problems. They say that channel does not provide security of customer information. While 23% neutrally agree that it is safe and secure to use.

**Table 10:** convenience of operating time

Time	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	6	5.0	5.0	5.0
Disagree	9	7.4	7.5	12.5
Neutral	15	12.4	12.5	25.0
Agree	65	53.7	54.2	79.2
Strongly agree	25	20.7	20.8	100.0
Total	120	99.2	100.0	
Total	120	100.0		

Data shown is from SPSS analysis

**Table 11:** Easy use of channel

Use	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	15	12.4	12.5	12.5
Disagree	19	15.7	15.8	28.3
Neutral	26	21.5	21.7	50.0
Agree	50	41.3	41.7	91.7
Strongly agree	10	8.3	8.3	100.0
Total	120	99.2	100.0	
Total	120	100.0		

Data shown is from SPSS analysis

**Table 12:** Security of online banking

Security	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	20	16.5	16.7	16.7
Disagree	56	46.3	46.7	63.3
Neutral	28	23.1	23.3	86.7
Agree	12	9.9	10.0	96.7
Strongly Agree	4	3.3	3.3	100.0
Total	120	99.2	100.0	
Total	120	100.0		

Data shown is from SPSS analysis

**Table 13:** The influence of internet banking on transportation cost of customers

	Transportation Cost	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	116	95.9	96.7	96.7
	No	4	3.3	3.3	100.0
	Total	120	99.2	100.0	
Total		120	100.0		

Data shown is from SPSS analysis

**Table 14:** Influence of internet banking on transaction cost

	Transaction	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	30	24.6	25.0	25.0
	No	90	73.8	75.0	100.0
	Total	120	98.4	100.0	
Total		120	100.0		

Data shown is from SPSS analysis

It is understood from the Table 13 that out of the total respondents, major number says that internet banking helps in reducing transportation cost thereby saves the cost of customers. 97% of people agree to it. Rest 3% says that it doesn't make any cost saving to them.

Influence of internet banking on transaction cost shows that 75% of respondents say that internet banking has not reduced the transaction cost of the customers. That means that effect is same as that of traditional banking (Table 14).

## Findings

The findings from the study are as follows:

- Customers aged from 25 to 40 use the internet banking facility most.
- Age of the customer plays an important role in the banking service done using internet banking. Different age group prefer different online services. It can be either online account information, online bill payment, loan application etc.
- It is observed that there is a relationship between mode of banking adopted and cost saving of bank customers'. Customers says internet banking helps save time and money, mainly the transport charges.
- Still customers are not gaining profit in using the internet banking transactions.
- A major share, that is 54% confirm that the 24hours and 7 days a week internet banking service gives them great convenience to bank.
- Only 42% say that internet banking is user friendly, the remaining feel it is not that user friendly due to many reasons.
- Around 47% feel that there is a higher risk of fraud in internet banking. They prefer the older methods.

## Suggestions

Few actions the bank can take are:

- Conducting demonstrations to customers to make them aware of the features of internet banking and how to use them.
- Discuss with customers before introducing new services so as to know for user friendly the system may become.
- Improvement of the security systems as well along with the system development.
- Creating a strong customer care team which can support the customers in using such advanced systems.

## Conclusion

Without doubt the internet banking system is more efficient from the financial point of view. It reduces the cost incurred by the bank as well as for the customer. When looking from the customer point of view the main financial gain is the reduction of transport expense. However the facilities offered in internet banking are very useful for the customers. The functional time and fast delivery of services add up to the advantages (Broderick *et al.*, 2002).

Internet banking services are gaining popularity and comfort as technology advances but the security in the service is a concern. As technology advances steps should be taken to improve the security aspect as well (Gerrard and Cunningham, 2003).

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