

# Reasons for Non-Adoption of Internet Banking: A Study with Reference to Vellore District of Tamil Nadu, India

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## Abstract

The fundamental commotion of twenty first century verve of 'banking' is transformed by the perception called Internet banking or online banking. Internet banking is accomplished by means of a personal computer or any itinerant piece of equipment presenting internet connection. All the banks in India offer Internet banking with a nexus of transactions in addition to an informational source. In spite of scores of incentives, there are certain issues affecting its practice. It is realized that there are a number of psychological and behavioral aspects persuading the acceptance of any new advancement such as Internet banking. It comprises of clientele understanding, availability, safety measures, user-friendliness, techno phobia or lack of enthusiasm to alter, penchant for tailored services and outlay of espousing the new advancements. This study is conducted to find out the barriers in utilizing the services offered by the banks through internet. The study also helps in understanding the opinion of the clientele on the banking through internet offered by their banks as well.

This research paid an attention through exploratory method to recognize the issues acting as difficulties in the practice of the banking services offered through internet and rework the acuity of clientele on banking through technology. The sample clientele are the ones having account in private sector banks, without using internet banking services. A factor analysis test was conducted for the primary data to analyze. Though there are many advantages in using internet banking the barricades in practicing it by the clientele residing in the semi urban areas are cost, lack of infrastructure, traditional banking, unfriendly web site, not aware and reluctance to change.

**Keywords:** Internet banking, cost, lack of infrastructure, traditional banking, unfriendly web site, not aware and reluctance to change

## 1. Introduction

Internet banking is definitely a noteworthy progress in bank segment. The aptitude to lug out banking, communications and transactions all the way through the Internet has authorized clientele to accomplish their financial transactions from their homes. The internet bank pays back both bankers and clientele since it is cost-effective, time saving, making banking faster and convenient. Clientele no longer necessarily need to kill time in long rows on the banks for the financial transactions. Internet banking facilitates the clientele the right to use every banking information concerning their bank account and dealings from anywhere, anytime. This enables the clientele to habitually supervise their account and maintain a track of financial transactions as well. Additionally, transfers of funds for both local and intercontinental accounts have become more swift and expedient. Almost all the banks in India, public or private or foreign banks, offer Internet banking or online banking to its clientele whether they are in Urban or Semi urban areas. The technology was pioneered by private sector banks in India in 1996. The internet banking in India was first introduced by ICICI. It was understood by the private banks that, without the technology like the internet, it is very hard to survive in the field and the possibility of getting connected with the clientele from any place and at any point of time cannot be achieved at ease. Internet banking makes banking process simple, effortless and convenient for the clientele. In 2011, less than 10 percent of the bank clientele used internet banking for their banking operations Since the private banks have branches in urban and semi-urban areas similar to public sector banks, the study was aimed to find out whether the clientele from urban and semi urban areas use Internet banking and the reason for not adopting this technology. Since no study is made to identify the non-espousal of internet banking by, the clientele of urban and semi urban areas in Vellore district

earlier, the present study is focused on that area. According to the District census of 2011, 43.13 percent of the people live in urban areas (Vellore city) and 56.87 percent living in semi urban and rural areas. There are seven new age private sector banks functioning in India started functioning after 1996. They are ICICI, HDFC, AXIS, INDUSIND, Kotak Mahindra, Development Corporation bank and YES bank. Except Development Corporation bank and YES bank, the other private sector banks are functioning in Vellore district. The private sector banks have 35 branches both in urban and the semi urban areas in the district (District Industries Centre, 2009).

## 2. Literature Review

Almost everyone gives the impression on employing banking through Internet facilities and established banking association has been reinstated by technology. This new technology offers the banking transactions at a minimum cost, with a greater speed. Today, lot things are feasible via Internet banking embarking on. The client can apply for of a fresh cheque book, downloading the account statements, fund transfers, e-payments for many other services. In addition to the liberty of standing in a queue at the branch is the reason sufficient for the clientele to prefer Internet banking over traditional banking options. According to Ramadhan, (1987), clientele normally fine-tune to advancements slowly to adjust their present preferences and practices.

In 2002, Broderick and Achirapornpuk proved that the intensity and character of client contribution had the maximum bang on the quality of the service which the clientele had experienced from the past and also on issues such as clientele' acceptance, the degree of real understanding. Liao and Cheung (2003) suggested that the client's perceptions on safety measures, accurateness of the business transactions, and client easiness with transaction velocity are the significant factors for the achievement in Internet banking. The internet banking is the economical way of making the banking services available (Arunachalam & Sivasubramanian, 2007) and newfangled relief strait given by the private sector banks in the country. The internet banking strait offers transactions in addition to an informational source. However, banking through internet has not been prevalently adopted in India as expected (Ravi et al., 2007). In spite of notable benefits and tailor made services offered by the banks, some bank clientele still pay bills in more through the bank branches because there are some factors that act as the barriers on the clientele' adoption of internet banking (Laukkanen, 2007).

Vishal Goyal and Sonia Goyal, (2012), analyzed the perception among bank clientele who are adopting banking technology and those who do not adopt internet banking. They found risk transferring finances, emotional and security was more amongst the clientele who do not use than those who use. Clientele who do not prefer to use internet banking had feared that their money could be tricked during transfer of money. Some clientele use them because of convenience during shopping and found safety measure is the main reason for not opening an internet banking account in India. Musiime (2011), Amin (2007) and Davis (1989) recognized many aspects that affected the client's choice in adoption of new technology. These aspects incorporated perceived security, internet experience, trust, skills and prestige on the internet, exposure on marketing, reliability and demographic characteristics of the clientele.

## 3. Primary Objective

- 1) To study the demographic profile of urban and semi urban living bank clientele who do not adopt internet banking in Vellore district, Tamil Nadu, India.
- 2) To identify the rationale for non-adoption of internet banking in urban and semi urban living bank clientele in the specific age group and different occupations.
- 3) To explore the major factors for non-adoption of Internet banking in the urban and semi-urban living bank clientele in Vellore district of Tamil Nadu.
- 4) To suggest measures for adoption of internet banking by the urban and semi urban living bank clientele in Vellore district, Tamil Nadu.

## 4. Research Methodology

This is an exploratory study in nature. Totally 200 clientele reside in Vellore city which is an urban area and 20 Semi urban areas of Vellore district, Tamil Nadu were taken as sample for the study. The clientele approached for the present study are those having their bank account in the private sector banks, either savings or current or any loan account, but not using Internet banking either through a personal computer or through mobile devices. Both primary and secondary data were collected. To gather primary data a questionnaire was widely circulated to the clientele of private sector banks in Vellore district. A pilot study was conducted to validate the reliability of the questionnaire. The results of the study stated that the reliability value was above 0.8. Based on the pilot study changes were made to the questionnaire.

A four point scale (in which '4' is to strongly agree, '3' for agree, '2' for disagree and '1' for strongly disagree) was developed with 17 items associated with barricades in adoption of banking technology in semi-urban areas. A questionnaire was distributed to the clientele which included questions on demographic variables of the clientele and the hindering factors for using internet banking offered by their banks. The sample for the study was selected on the basis of stratified random sampling through direct method and also through e-mail. The period taken to collect primary data was 6 months, i.e., from May 2013 to November 2013. The secondary data were gathered from magazines, journals, books and websites. Using the 200 completed questionnaire, the data were analyzed in the SPSS 16.0 version through factor analysis. The study was conducted in urban and semi-urban areas of Vellore district only. Hence the generalization of results is not possible.

## 5. Results and Discussion

### Objective 1: To study the demographic profile of urban and semi urban living bank clientele in Vellore district, Tamil Nadu, India

The demographic profile of all clientele who do not use internet banking offered by their banks is presented in the following Table 1 and is analyzed using simple percentage analysis.

Table 1. Demographic profile of the clientele who do not use internet banking

Items	Category	Frequency	Percentage
Age	18-24 years	43	21.5
	25-34 years	106	58
	35-44 years	25	12.5
	45-54 years	16	8.0
	Above54 years	10	5.0
	<b>Total</b>	<b>200</b>	<b>100</b>
Gender	Male	93	46.5
	Female	107	53.5
	<b>Total</b>	<b>200</b>	<b>100</b>
Marital status	Married	106	53.0
	Unmarried	94	47.0
	<b>Total</b>	<b>200</b>	<b>100</b>
Place of residence	Urban	95	47.5
	Semi urban	105	52.5
	<b>Total</b>	<b>200</b>	<b>100</b>
Educational Level	School Education	119	59.5
	Graduate	47	23.5
	Professional	24	27.0
	Others	10	15.0
	<b>Total</b>	<b>200</b>	<b>100</b>
Occupation	Govt	29	14.5
	Private	19	9.5
	Business	101	50.5
	Professional	41	20.5
	Student	10	5.0
	<b>Total</b>	<b>200</b>	<b>100</b>
Monthly Income	Below Rs. 20,000	77	38.5
	Rs. 20,001-30,000	42	21.0
	Rs. 30,001-40,000	25	12.5
	Rs. 40,001-50,000	33	16.5
	Above Rs.50,000	23	11.5
	<b>Total</b>	<b>200</b>	<b>100</b>
Type of account held	Savings a/c	110	55.0
	Recurring deposit	24	12.0
	Current a/c	66	33.0
	<b>Total</b>	<b>200</b>	<b>100</b>

Source: Primary data

From the above Table 1, it is clear that the clientele of the study are from the age group of 18-54 years. The highest percentage of non-adopters fall in the category of age group of 25-34 years (58 percent), female (53.5 percent), married (53 percent), semi urban living (52.5 percent) has a basic school level education (59.5 percent) earning less than Rs. 20,000 p.m. (38.5 percent), has a savings account (55 percent), engaged in business (50.5 percent). The results are not consistent with Waite & Harrison (2004) and Kerem, (2002) revealed that younger adults would be very much attracted to utilize new banking services. But similar to Kolodinsky et al. (2004) where they found that those in their middle age were not as much as likely to adopt internet banking than the youngest group of consumers. Since it is observed that the most of internet banking subscribers belong to the young generation and the chance of its adoption among mature people is low (Wang et al., 2003; Yuan et al., 2010), it was decided to study the various reasons given by them for non-adoption of internet banking as they form 58 percent of the clientele. Hence the following objective is framed and analyzed.

**Objective 2: To identify the reasons for non-adoption of internet banking in urban and semi urban living bank clientele in the specific age group and different occupations**

The various reasons given by the various age groups and in different occupations for non-adoption of internet banking are explained in Table 2 and Table 3.

Table 2. Age group and the reasons for non-adoption of internet banking

Items	Age group in years				
	18-24	25-34	35-44	45-54	Above 54
Inconvenient	11	14	2	1	<b>4</b>
Hidden cost	3	7	1	2	1
No personal touch	2	6	2	<b>4</b>	-
Time consuming	2	<b>54</b>	1	2	-
Reluctance to change	2	6	2	1	1
Needs technical knowledge	1	7	2	2	1
Less speed	<b>19</b>	3	2	1	1
Unfriendly web site	1	5	<b>12</b>	2	1
Not aware	2	2	1	1	1
Total	43	106	25	16	10

Source: Primary data

It is evident from the Table 2 that the clientele in the age group of 18-24 years, said less speed (19) as the reason for non-adoption of internet banking compared to other groups. Clientele in the age group of 25-34 years agreed time consuming (54) as the reason for non-adoption. Whereas the clientele in the age group of 35-44 years accepted unfriendly website (12) as the reason, no personal touch (4) by 45-54 years and the clientele above 54 years found inconvenient (4) as the major reasons for non-adoption of internet banking in urban and semi urban areas in Vellore District, Tamil Nadu.

Similarly occupation is also considered for the study, as more people are engaged in businesses in around the Vellore city as this city is surrounded by Leather industries. The district is popularly known for its leather products which contributes a major portion in the export of the country. Hence the reasons for non-adoption of internet banking by them is found and analyzed in the following Table.

Table 3. Occupation and the reasons for non-adoption of internet banking

Items	Occupation				
	Govt	Private	Business	Professional	Student
Inconvenient	<b>6</b>	2	14	2	1
Hidden cost	4	1	9	3	0
No personal touch	4	1	8	4	1
Time consuming	2	<b>5</b>	<b>24</b>	3	1
Reluctance to change	5	2	9	4	1
Needs technical knowledge	3	2	11	8	1

Items	Occupation				
	Govt	Private	Business	Professional	Student
Less speed	1	2	9	<b>12</b>	1
Unfriendly web site	1	3	10	4	<b>3</b>
Not aware	3	1	7	1	1
Total	29	19	101	41	10

Source: Primary data

From Table 3 it is clear that out of 200 non-adopters, the reason for non-adoption is highlighted. The clientele working in Government sector (6) found inconvenient to use internet banking. Similarly the clientele in the private sector (5) found time consuming as the reason for non-adoption. The clientele engaged in business (24) found using internet banking is time consuming. The professionals (12) felt less speed as the reasons for non-adoption of internet banking and students (3) found an unfriendly website as the major reason for non-adoption in Urban and Semi urban areas in Vellore District.

### **Objective 3: To explore the factors of non-adoption of Internet Banking in semi urban areas in Vellore district, Tamil Nadu, India**

In this paper, factor analysis is used to find the determining factors among the observed variables. It is also used to reduce the number of variables. The reduced factors are used for further analysis.

To begin with the factor analysis, KMO and Bartlett's test was done to find out the adequacy and appropriateness of the sample. A test of the Kaiser-Meyer Olkin measure of sampling adequacy recommended that the sample was factorable at .719 indicating the high degree of sampling adequacy. The result is given in the following table.

Table 4. KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.719
Bartlett's Test of Sphericity-Approx. Chi-Square	118.84
df	19
sig.	0.000

From the above Table. It is clear that Bartlett's Test of Sphericity was significant at 1 percent, chisquare being 118.84, df 19 and resulting in a significant value of .000. This supports the factor analysis.

The factor loadings and communalities produced by varimax rotation and reliability coefficients are presented in the following Table. As the result of factor analyses, the following nine factors emerged as the barriers in the usage of Internet Banking services in semi urban areas (Table 5). The reasons given by the clientele are divided under three headings as Customer experience, complexity and infrastructure from the factor analysis.

Table 5. Factors for non-adoption of Internet banking

Variables/factor	Items	Factor loading	Reliability (Cronbach's alpha) > 0.6
Customer Experience (2.225)	Inconvenient	0.879	0.873
	Hidden cost	0.872	
	No personal touch	0.815	
	Time consuming	0.811	
Complexity (2.421)	Reluctant to change	0.862	0.741
	Needs technical knowledge	0.768	
	Less speed	0.751	
Infrastructure (1.986)	Unfriendly web site	0.678	0.642
	Not aware	0.633	

### Factor 1: Customer Experience

Factor 1: Client Experience: This factor surfaced with maximum factor load in 2.225. It consisted of two things associated to the barricades in the use of banking technology in semi-urban area with the load of inconvenience (0.879), hidden cost (0.872), no personal contact (0.815) and time consuming (0.811). The factor item loading showed that the client who has a fear towards the cost is not using internet banking services in semi-urban areas.

### Factor 2: Complexity

The factor surfaced with maximum factor load in 2.421. It consisted of two items related to the barricades in the use of Internet banking in semi-urban areas with the load of reluctance to change (0.862), no technical knowledge (0.768) and speed (0.751). This shows that Complexity related to technical aspects prevented the clientele from the use of internet banking services in semi-urban areas.

### Factor 3: Infrastructure

This factor surfaced with maximum factor load in 1.986. It consisted of two items related barricades in the use of Internet banking in the semi-urban areas of Vellore district with the load of unfriendly web site (0.678) and not aware (0.633). This shows that infrastructure act as a barrier in using internet banking services in urban and semi-urban areas.

## 6. Suggestions

There are many advantages in using Internet Banking services like cut back on time, minimum efforts, cut back on costs, hassle-free and many more. However, a good number of the bank clientele in India, particularly in semi-urban areas are not using these services. This study paid attention to semi-urban area clientele towards non-adoption of Internet banking and recognized nine factors, i.e. inconvenient, hidden cost, no personal touch, time consuming, Reluctant to change, Needs technical knowledge, less speed, unfriendly web site and not aware of internet banking services offered by their banks for non-adoption of Internet Banking. To augment the adoption of Internet banking in semi-urban areas appropriately, a basic familiarity with computers and the Internet is compulsory. Until today, 60% of the Indian population lives in villages where internet development is slow. The clientele, who is not contented with computers and the Internet, are not confident to use internet banking. Therefore, for starters, banking through internet is in actual fact, not time saving but taking lot of time in practice. Also clientele also find complexity in trusting the Internet Banking, in case of financial matter. However, by way of the growth in technology, various banks have taken ample actions to reduce plight associated to the safety of internet banking and provide an easy way of accessing the technology. But the common man is not aware of the security measures taken by the banks, hence has his own reservations in the using Internet Banking. Hence it is the duty of the banks to educate the clientele regarding the safety measures taken by the banks to avoid phishing and encourage their clientele to open internet banking. In the process, thriving advancements can only start after the reluctance to change is overcome

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