

# E-Banking as an innovative tool for measuring Customer Satisfaction in Indian Banks

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## Abstract

*Traditionally, banks had a close relationship with their customers. They often knew them as individuals, and satisfied their needs through personal customized services. Recently, the development of electronic banking or e-banking has influenced the increasing competition within the banking industry. E-banking customers are nowadays just "a click away" from the competition. In addition, a few years ago, traditional banks started to face new competition with the development of e-banking services. With the popularity of PCs, easy access to Internet and World Wide Web, banks increasingly use Internet as a channel for receiving instructions and delivering their products and services to satisfy their customers. This form of banking is generally referred to as Internet Banking, although the range of products and services offered by different banks vary widely both in their content and sophistication. In such banks, there are less personal relationships, with no face-to-face contact. There is a trend among banks towards a focus on the new electronic relationship. It is necessary for banks offering online services to confront a different kind of loyalty (e-loyalty), the loyalty being derived from the relationship an electronic customer has with electronic commerce, as a great deal of customers will do their banking mainly if not completely on the internet. To reach these electronic customers and to satisfy them will impose a major challenge. The purpose of this paper is to examine how banks offering e-banking services achieve customer satisfaction and the ranking of most commonly used e-banking services customers is also done. Exploratory research is design is used and I have applied non probability sampling technique for collection of data in west Delhi. It may be concluded that the customer satisfaction and evaluation of the electronic services is influenced by the attribution of success and failure in inter-personal service situations.*

**Key Words:** Customer Satisfaction, E-banking, Transactional Baking, E-loyalty, Tele-Banking

## INTRODUCTION

Innovation in the banking sector has gone a long way. Banking sector in India has also been adapting to new technology and international standards. Technology has been one of the most important factors for the development of the finance sector in India and the aggressive infusion of information technology has brought in a paradigm shift in banking operations. For the banks, technology has emerged as a strategic resource for achieving higher efficiency, control of operations, productivity and profitability. For customers, 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. There is a trend among banks towards a focus on the new electronic relationship. Given the fact that banks invest billions in the internet infrastructure (Deutsche Bank invests approximately half a billion US\$ per year), customer satisfaction and customer retention are increasingly developing into key success factors in e-banking. Most

importantly, profitable e-banking requires a strong focus not only on the acquisition of new customers but also on the retention of existing customers, since the acquisition costs in online banking exceed that of traditional off line business by 20-40 per cent (Reibstein, 2002; Reichheld and Scheffer, 2000). Consequently, establishing long-term customer relationships is a prerequisite for generating positive customer value on the internet.

Internet banking involves consumers using the Internet to access their bank account and to undertake banking transactions. At the basic level, Internet banking can mean the setting up of a Web page by a bank to give information about its product and services. At an advance level, it involves provision of facilities such as accessing accounts, funds transfer, and buying financial products or services online. This is called as 'transactional' online banking (Sathye, 1999).

Most of the banks providing Internet banking products and services offer, to a large extent, an identical and standard package of banking services and transactional capabilities. In

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general, Internet banking products are offered in a two-tiered structure. A basic tier of Internet banking products includes customer account inquiry, funds transfer and electronic bill payment. A second or premium tier includes basic services plus one or more additional services.

Basic: (i) Account inquiry (ii) Funds transfer (iii) Electronic bill presentment and payment. Premium: (i) Brokerage (ii) Cash management (iii) Credit applications (iv) Credit and debit cards (v) Customer correspondence (vi) Demat holdings (vii) Financial advice (viii) Foreign exchange trading (ix) Insurance (x) Online trading (xi) Opening accounts (xii) Requests and intimations (xiii) Tax services (xiv) E-shopping (xv) Standing instructions (xvi) Investments (xvii) Asset management services etc.

The emergence of private banks and expansion by the foreign banks, the changing business model of the nationalized banks compounded by financial reforms and burgeoning of middle class, has, over the last ten years, completely transformed the ways banks in India operate. The government-owned commercial banks have a market share of around 75% (down from the earlier 95%), the private sector banks about 20% and the foreign banks about 5% (Kannabiran and Narayan, 2005). NPSBs perceived that future competition among banks would be essentially based on the technology and developed state-of-the-art technology infrastructure, comparable with that of banks in developed countries.

While the entire banking industry is moving fast to improve the IT infrastructure and to implement core-banking solution to integrate the entire banking operations, it is very much important to study in the Indian context how computerisation has influenced the banking habits and preferences of Indian customers and banks are making their customers loyal and satisfied by providing them better innovative services. As IT services have come into the Indian banking only in the last ten years, not many research works are documented in Indian context especially on customer loyalty and customer satisfaction in e-banking sector.

## EVOLUTION OF INTERNET BANKING IN INDIA

E-banking has its origin in Finland in the world. Finland's three biggest banking groups, Merita, Leona and Okobank, are global pioneers in the development of electronic banking services. Finland was the first country in the world to offer telephone banking in 1982, on-line share trading in

1988, banking via a mobile phone in 1992, Internet banking in 1996 and banking using a WAP phone in 1999. As a result only 10 to 15 per cent of all banking transactions in Finland are now done over-the-counter. All of these services are integrated, for instance users of the Okobank can access WAP services using the same codes that they currently use for GSM services, the Internet, telephone banking and the automatic telephone service.

The financial reforms that were initiated in the early 90s and the globalization and liberalization measures brought in a completely new operating environment to the banks. Services and products like 'Anywhere Banking', 'Tele-Banking', 'Internet Banking', 'Web Banking', 'E-Banking' etc. have become the buzzwords of the day and the banks are trying to cope with the competition by offering innovative and attractively packaged technology based services to their customers.

The Government of India enacted the Information Technology Act, 2000, generally known as IT Act, 2000, with effect from the 17<sup>th</sup> October 2000 to provide legal recognition to electronic transactions and other means of Electronic Commerce. Reserve bank of India had set up a 'Working Group on Internet Banking' to examine different aspects of Internet banking (I-banking). The Group had focused on three major areas of I-banking i.e., (i) technology and security issues, (ii) legal issues and (iii) regulatory and supervisory issues. RBI had accepted the recommendations of the Working Group and accordingly issued guidelines on *Internet banking in India* for implementation by banks. The Working Group has also issued a report on Internet banking covering different aspects of I-banking.

Private and foreign banks have been the early adopters of e-banking while the Public sector banks are also beginning to hold on to the competition. ICICI Bank and HDFC Bank have taken a lead in introducing e-banking in India. ICICI Bank is the first one to have introduced Internet banking for a limited range of services such as access to account information; correspondence for the first time in 1996 and then funds transfer between its branches (Rajneesh and Padmanabhan, 2002). ICICI is also getting into e-trading, thus offering a broader range of integrated services to the customer. Other banks also followed the suit. However, 1996-98 was the period of Internet banking adoption while the Internet banking usage gained importance only in 1999. After ICICI, Citibank, IndusInd Bank and HDFC Bank were the early ones to adopt the technology in 1999.

## REVIEW OF LITERATURE

When technology opened several channels of delivery like Internet banking, telephone banking, ATM, mobile banking, etc., different views were expressed about future acceptability of technology-based services. One view was that 'brick and mortar' would be substituted by 'click of the mouse'. NPSBs with a fewer number of branches and staff strength focused on creating IT-based delivery channels to compete with thousands of branches of PSBs located in every street corner. The argument against technology was that it caused 'depersonalisation' or increases the gap between the customers and the bank. A trend of depersonalisation is emerging in the banking industry, and as such, its impact on the way in which banking business will be conducted in future bears a heavy question mark. Moreover, it will become more difficult for customers to differentiate the services offered by one bank from another, as any technological advantage gained will be short-lived. (Moutinho and Curry, 1994).

In contrast, short-term customers might not have any expectations of value-added relationships from the firm, so nothing stops them from buying. The finding in a case study at AT&T revealed that no differences regarding spending were spotted between long-term and short-term customers (Reinhartz and Kumar, 2000).

Mookerji (1998), Pegu (2000), Gupta (1999) and Dasgupta (2002) found that Internet banking is fast becoming popular in India. Almost all the banks operating in India are having their websites but only a few banks provide transactional Internet banking.

Suganthi *et al.* (2001) conducted the review of Malaysian banking sites and revealed that all domestic banks were having a web presence. Only 4 of the ten major banks were with transactional sites. The remaining sites were at informational level. There are various psychological and behavioral issues as trust, security of Internet transactions, reluctance to change and preference for human interface, which appear to impede the growth of Internet banking.

Kolodinsky *et al.* (2000) and Kolodinsky and Hogarth (2001) studied the adoption of new innovations and services like electronic transfer of funds, electronic bill payment, phone banking, and PC banking, to identify the characteristics of these innovations that are most related to consumer adoption, or rejection of e-banking technologies. The study looked beyond current users and included consumers' intentions to adopt in the future. Researchers concurred

with the opinion that there is an e-banking revolution in the USA. The study estimated that the relative advantage, compatibility, complexity, trial ability, and observables associated with the four technologies studied are important in their adoption by consumers. However, those individuals who have higher incomes have higher probabilities of currently using or intending to use these products. If relative income matters in adoption, then lower income households will continue to be left out. For India, which has substantial rural, poor and illiterate population, this is a significant observation to be taken note of. The study also concluded that current and expected future users were younger (with the exception of electronic bill payment) and of higher economic status. Gender differences existed for phone banking, electronic funds transfer and PC banking. Men were more likely to have been loyal towards PC banking as compared to women. More women have already adopted phone banking and some men indicated an intention to adopt it.

US customers have clearly indicated that they are not single-channel users. The retail branch, however, is the main and preferred channel of most customers. In this environment, the low levels of investment and attention directed to the retail branch over the past few years has created a disconnect between customer expectations and bank services and capabilities. To bridge this gap, it will require a fundamental change in the predominant technology infrastructure that is in place today (Kim, 2001).

Hasan (2002) found that online home banking has emerged as a significant strategy for banks to attract customers. Almost 75 percent of the Italian banks have adopted some form of Internet banking during the period 1993-2000. It also found that the higher likelihood of adopting active Internet banking activities is by larger banks, banks with higher involvement in off-balance sheet activities, past performance and higher branching network.

Lustsik (2003) based on the survey of experts of e-banking in Estonian banks found that Estonia has achieved significant success in implementation of e-banking and also gaining customer satisfaction and is on the top of the list in emerging countries. All the major banks are developing e-business as one of the core strategies for future development.

The study by Chau and Lai (2003) concluded that 'perceived ease of use' might be the single most significant determinant of users' acceptance of internet banking perceived usefulness and accessibility followed perceived ease of use.

Other factors such as task familiarity, personalisation and alliance services also exhibited positive influences on attitude through significant influence on perceived usefulness.

Christolov and Marianne (2004) suggested that consumer satisfaction and use of e-banking technologies are related to the characteristics of both individual customers and the specific technology. In USA, nearly two-thirds of all employees are getting their salaries directly into their accounts. ATMs were introduced in USA in late 1960s, and 902 million ATM transactions were reported per month in 2003, and nearly two-thirds of ATMs in USA are located away from branches (offsite ATMs).

Customer relationship management (CRM) applications are found to result in improvements in customer knowledge and customer satisfaction (Mithas, Krishnan & Fornell, 2005). When Scandinavia's largest business publisher, Dagbladet Borsen, implemented its 4-year CRM strategy, its circulation increased 40 percent, advertising revenue increased 50 percent, and its overall revenue more than doubled (Lindgreen, 2004).

Bhat (2005), using SERVQUAL scale, studied the service quality of Indian banks and service quality variation across demographic variables. The study was conducted in four north Indian states of Jammu & Kashmir, Punjab, Haryana and Delhi restricted to five banks such as State Bank of India (SBI), Punjab National Bank (PNB), Jammu & Kashmir Bank (J&K Bank), CITI Bank (CB) and Standard Chartered Grindlays Bank (SCGB). The results suggest that foreign banks are relatively close to the expectations of their customers in comparison with Indian banks. The study confirmed that poor service quality among Indian banks is mostly owing to deficiency in tangibility and responsiveness. The analysis of service quality across income variable shows that service quality of Indian banks as perceived by their respective customers varies with their level of income, though not proportionately, viz a viz less variations across income segments as perceived by clients of foreign banks.

Reicheld (cited in Brige, 2006) presented research that showed that satisfied customers also leave their suppliers and a lot of dis-satisfied customers never say something about their dissatisfaction, they just leave the company. The research also showed it is much more costly to find new customers than to keep old customers and totally satisfied customers possibly re-purchases six times more than just satisfied customers.

The study by Khalil and Pearson (2007) has found that trust significantly affects attitude towards maintaining long term

relationships with customers in e-banking. To encourage e-banking adoption, banks need to develop strategies that improve the customer's trust in the underlying technology. The other factors include quick response, assurance, follow-up and empathy. Security, correct and privacy are other important factors in the online service that affect the customer satisfaction.

The study by Soma and A.Sarkar (2008) has revealed that in order to increase commitment it is important for customer relationship managers to make their technology-based remote service a 'satisfying' brand toward which customers have an overall favourable disposition. Creating and maintaining customer satisfaction through its antecedents would be an appropriate strategy. Managers should also take care about the customers technology-based remote services encounter, from the first exposure to technology through purchase to delivery and beyond, as the case may be, because customer's remote self-service experience can influence customer satisfaction, which in turn would influence customer commitment and loyalty.

## RESEARCH METHODOLOGY

### Objectives of the Study

- 1) To study the e-services offered by banks and most common e-services utilized by the customers.
- 2) To study the factors affecting customer satisfaction in relation to the usage of e-banking services in India.

### Research Design and sampling Design

Exploratory as well as descriptive research designs have been chosen. The questionnaire is prepared after detailed discussions with banks managers looking after the internet banking usage of customers and handling customers' complaints in this regard. Important inputs have been taken from academicians working in similar areas.

### Sampling Design

Sample size	160
Sample unit	The study is conducted in West Delhi
Sample technique	Non Probability Sampling, under this convenience sampling is used.

### Sources of Data Collection

For the purpose of conducting this study, both primary and secondary data are used.

For Primary data, a well-structured questionnaire has been designed so as to take responses from customers who are

using e-banking services and also from prospective customers of e-banking & from those who hesitate to use e-banking services.

Questionnaire design: Structured (5 point Likert Scale)

Secondary data is also used which includes data from journals, magazines etc.

## **FINDINGS BASED ON DATA ANALYSIS AND CONCLUSION**

Data analysis has been divided into 2 groups. First one deals with the ranking of the services most commonly used by the customers and services and second deals with the factors affecting customer satisfaction with the usage of the e-banking services provided by the banks. Different banks are a large number of e-banking services; some banks are providing more number of services as comparatively to other banks. Customers of all the banks are considered and not in particular any single bank is being chosen. Customers are choosing banks as per their service demands and as per the relations with the banks.

### **E-banking Services commonly used in India**

Descriptive statistics and bar charts were constructed as a preliminary analysis to determine which of the e-banking services users make use of more often. It could be interpreted that the mostly used services are railway reservation, checking online transactions, telephone bill payment, and transfer to credit card account, recharge mobile phones. Rankings have been given to the services used by customers. (Table 1: Ranking of e-services offered and Utilized by Customers)

### **Factors Affecting Customer satisfaction in India**

List of factors affecting customers' satisfaction is being prepared. Firstly, customers' demographics are being studied. To examine whether the demographic variables of the respondent affect the usage of internet banking, the demographic variables of the internet banking users are also compared to the non internet banking users. The rationale for such a belief is that: The younger the generation, the more they are used to the new technological advancements as compared to the older generation, thereby they are more likely to use Internet banking. The higher the education level achieved, the greater the probability of the customer to use Internet banking; The higher the income ladder, that is the more affluent people are more likely to possess a personal

computer and internet connection, thus the more the tendency to use Internet banking.

As far as age group is concerned, there is no significant difference between the two groups of users. Moreover, there is no significant difference between the education level of the respondents and their preference for either conventional (non-Internet banking users) and Internet banking users. However, the mean monthly income is seen to be significant. (Table 2: Factors affecting Customer satisfaction due to usage of Internet banking)

To identify the factors affecting the customer satisfaction in banking industry due to technological advancements in our country, factor analysis has been performed to determine whether the data can be condensed or summarized into smaller sets of factors. We have used seven factors and are of equal relevance to the study. Table 3 illustrates the condensed factors named in line with their factor loadings. It concludes that the most significant factor is ease of use. The other factors that are of influence are namely: reluctance to change, trust and relationship with banker, cost of computers, Internet accessibility, convenience of use, and security concern.

Overall the seven factors account for 83% of the total variance.

Customers are very much satisfied with the e-banking services as far as the ease of use of these services. Web page is user friendly and quite easy to use. Customer satisfaction is mediated by trust to build customer retention in the context of Internet banking. Relationship with the banker and trust element is very important in case of internet banking services. Customers are very satisfied with banks providing e-banking services where they have built long term relationships with the banks and they have maintained same account in the bank what their ancestors were using. If the customers are good speed of internet connection so they are very much satisfied with the e-services because of convenience and cost. But as far as the security concerns are there, people are not much satisfied because of phishing and other internet hacking tools are available in the market. Interestingly, 55% of the respondents who have an internet package are internet banking users as well. As such it has been observed that people working in the Internet banking/finance sector are more prone to use the service (68%), followed by those in the IT industry (56%) and other professional fields. Thus being in the sector itself bank customers are more aware, less reluctant and more accustomed to the service, thus favoring its use. Another

important element is the fact that 57% of respondent having an education level in the category 'post graduate' uses the service, as compared to 33% in the category of 'undergraduate'. Lastly people in the income group of Rs 30 000 to 49 000 are the one making mostly usage of internet banking (48%) and they are highly satisfied while 34% of those in the income range Rs 20,000-29,000 and 33% in the range of 10 000- 19000 use the service. It would thus appear that higher income earners are more sensible in using of internet banking as income may also be a sign of high profile jobs thus time constraint. Long-term customers expect value-added relationships in order to purchase more, otherwise, they spend less.

## CONCLUSION

E-Banking holds a great promise for the banking sector in India. It is expected to change the banking scenario, in terms of cost of transactions, easy accessibility of services, effectiveness in the execution of cross-border transactions and the customer relationship management. However, the growth of e-banking is also fraught with some serious problems. These include, the limitations of the digital divide, security risk, enhanced cost of supervision relating to cross-border transactions and lack of legal safeguard provided by the cyber law which causes dis satisfaction among users and creates reluctance to use e-banking services. It may be concluded that the customer satisfaction and evaluation of the electronic services is influenced by the attribution of success and failure in inter personal service situations. The use of electronic banking has removed the banking personnel who facilitate the transactions and has placed additional responsibilities on the customers to transact with the service. The use of e-banking provides benefit to the customers, but the changes require increased work or involvement of customers. These factors might be seen as service providers in terms of customer service.

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**Table 1: Ranking of e-services offered and utilized by customers**

E-banking services utilized by customers	Percentage of respondents claiming use of these services often/ very often	Ranking of services used
Checking online account statements only.	18	II
NEFT /RTGS transfers to other bank account	11	VII
Transfer of funds to credit card account	14	IV
Recharge mobile phones	15	III
Foreign Currency Payments	2	XII
Water & Electricity Bills Payment	6	VIII
Telephone Bill Payment	13	V
Railway Reservation	21	I
Online shopping payments	3	
Insurance Premium Payments	12	VI
Air ways Reservation	4	X

**Table 2: Factors affecting Customer satisfaction due to usage of Internet banking**

<b>Factors</b>	<b>Rotated factor loading</b>
<b><i>Ease of use</i></b> User friendly web site Ease of performing E-Transaction	0.691 0.517
<b><i>Reluctance to change</i></b> Willingness to adopt technology Level of awareness of the service	0.92 0.882
<b><i>Trust and relationship</i></b> Reliability of your banker Bank response rate to queries Ethical and professional conduct Bank's policy to compensate for losses	0.831 0.807 0.804 0.543
<b><i>Cost</i></b> Cost of internet connection Cost of acquiring a computer	0.916 0.837
<b><i>Accessibility</i></b> Convenience to access the service Connection speed	0.935 0.782
<b><i>Convenience</i></b> Range of services offered Convenient way of doing bank transactions Time saving	0.429 0.852 0.465
<b><i>Security</i></b> Clear and understandable instructions Security of internet transaction Length of internet experience	0.427 0.802 0.541