Internet Banking: An Empirical Analysis of Indian Customers’ Perspective

Dr. Lakshminazrayana Bhat A
Associate Professor, Besant Evening College Mangalura

ABSTRACT

Under the impact of banking sector reforms, the Indian banking has transformed to a dynamic entity. This transformation has been largely brought about by a combination of factors, such as deregulation, liberalisation, competition and technological advancements. The most significant among these factors is advancement in ICT. Application of the internet to banking has created an important channel available to customers for quick, correct and efficient service, at any time. The focus of this study has been on the satisfaction of the respondents availing IB services. The primary data for the present study were gathered through a field survey, using structured interview schedules, from bank customers residing in DK district of Karnataka State. In the case of awareness of Internet Banking 71.4 per cent of the respondents is found aware of it. The customers of the public sector banks are satisfied while the customers of the old private sector banks and the new private sector banks are highly satisfied with regard to the Internet Banking services.

Key Words: Internet Banking, Customer Satisfaction and Quality of Service

INTRODUCTION

Under the impact of banking sector reforms, the Indian banking has come a long way from being a conservative, traditional and sleepy business institution to a highly proactive and dynamic entity. This transformation has been largely brought about by a combination of factors, such as deregulation, liberalisation, competition and technological advancements. The most significant among these factors is advancement in ICT. The banks in India have been effectively deploying ICT in the post-liberalisation era as a strategic means to achieve speed, efficiency, cost reduction, customer service and competitive advantage and provide best services to their customers. These services provide the customers with anytime and anywhere access to their accounts. The thrust on automation and computerisation has led to massive investments in the banking sector and the entire banking system is now more or less fully computerised.

Application of the internet to banking has created an important channel available to customers for quick, correct and efficient service, at any time. In general, IB refers to the use of the internet as a delivery channel for the banking services, including traditional services, such as opening an account or transferring funds to different accounts, as well as new
banking services such as electronic bill presentation and payment which allows the customers to receive the bills and pay on secure bank websites operated by their bank.

REVIEW OF LITERATURE
A broad review of the existing literature on the subject has been found useful in getting an insight into the topic of study. However, the review made cannot be claimed to be an exhaustive one.

The study of Ramayah T Muhamad Jantan, Mohad Nasser Mohd Noor and Koay Pei Ling (2003) examines the receptiveness of the IB by Malaysian Consumers. The study found that although the awareness is high, this has not translated into actual use as only 23 per cent have had IB experience. Security, availability of infrastructure and complexity of technology were the main concerns reported by the respondents which is hindering the migration from traditional banking to the IB. Perceived ease of use (PEU), perceived usefulness (PU) have been found to be significantly related to intension to use the IB and perceived usefulness is the driver of the intension to use.

The study of Muniruddeen Lallmahamood (2007) explores the impact of perceived security and privacy on the intension to use internet banking. The study found that perceived usefulness is a critical factor in explaining users’ intension to use internet banking. The study also found that convenience, ease and time saving are the main reasons for the adoption of the IB, whereas security, trust and privacy appear to be the top main concerns for non internet banking users. The use of local language did not contribute to the ease of use of IB.

The study by Hanuddin Amin (2007) examines the acceptance of the IB among undergraduate students in Malaysia and explains the factors influencing their choice. The study uses extended technology acceptance model with perceived credibility (PC), PU, PEU and computer self efficacy constructs. The study found that PU, PEU, and PC had a significant relationship with the behavioral intension for acceptance of the IB.

Murali Raman et al. (2008) in their study investigated customer perceptions on quality of E-services and internet banking in Malaysia. It was found that 72 per cent of the respondents mentioned that they have already adopted the IB and 50 per cent of the respondents pictured
themselves as occasional users of the IB. The IB is perceived by the users as a quite useful tool to manage their financial matters. In a comparative study of the Punjab National Bank (PNB) and the HDFC bank Sonal Chawla (2004) investigated internet banking and its adoption and implementation and found that many of the services which were offered online by the HDFC bank are not offered by the PNB; and therefore, the HDFC bank has a competitive edge over the PNB.

The study on internet banking by Geethika, Tanuj Nandan and Ashwini Kr. Upadhyaya (2008) analyses the concept of internet banking, perception of internet bank customers’ and non-customers and issues and major concerns in internet banking in Allahabad. The analysis found that there is not much difference in the basic internet banking services offered by various banks. The analysis of the websites of various banks revealed that the design of the website, technological up-gradation, security features, consumer friendliness and value added services vary from bank to bank. The users weigh different reasons before choosing a particular banking service and the users of e-banking give utmost importance to excellent services. There is greater concern for security among non-users.

In a study Sofri Yahya, Harshid and Thakur Rajendar Singh (2009) found that computer proficiency, education and banking literacy have a positive impact on the acceptance of internet banking in the city of Hyderabad. The analysis showed that various facilities provided by the banks, apart from security, have a very strong positive relationship with the acceptance of IB and banks themselves have a major role in ensuring that more customers adopt IB.

Khan, M.S., Mahapatra, S.S. and Sreekumar (2009) in a study evaluated the quality of internet banking services in India from customers’ perspective. The analysis showed that the customers are satisfied with the quality of service on four dimensions such as reliability, accessibility, privacy and responsiveness, but least satisfied with user friendliness. The study provides guidelines to bankers to focus on user friendliness to improve upon internet banking.

Gunajith Sarma and Pranav Kumar Singh (2010) in their joint study on the applicability of biometric technology for authentication in internet banking observed that technologically implementing web based banking to customers is challenging. The focus of the study was on
providing banking services to customers using web with highly secured technology. The study found that bio-metric technology has played an important role in controlling the risk factors through authentication system. The study argues that careful planning is a prerequisite for technology implementation if full benefits are to be realized.

Vijay M. Kumbhar (2011) in a study of the determinants of internet banking adoption in Indian banking showed that demographic characteristics, internet access, awareness, customer education, cost effectiveness and service quality were the most important factors in the adoption of internet banking. The study identified the attitudinal, cost, service quality and awareness factors that are significant in explaining the intentions to adopt internet banking services in India. This empirical investigation was undertaken on public and private sector banks in Satara and Khollapur city of Maharashtra.

Rahmath Safeena, Hema Date and Abdullah Kammani (2011) in a study of the factors influencing the consumers’ adoption of IB in India investigated the influence of Perceived Usefulness (PU), Perceived Ease of Use (PEU) and Perceived Risk (PR) on the use of IB. The study examines the Indian consumers’ perspective of IB adoption and observed that PU, PEU and PR were found to be the influential factors in explaining the use of on-line banking services. PU and PEU are positively related and PR is negatively related with IB use.

The benefit of large scale adoption of the ICT in banking is efficiency in providing banking services on the one hand and the reduction in cost on the other. According to an online banking report published by Emst and Young, the transaction costs of various banking services are as presented in Table 1.

Table 1: Transaction Costs of Various Banking Transactions

<table>
<thead>
<tr>
<th>Type of service</th>
<th>Cost in US Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch</td>
<td>$1.07</td>
</tr>
<tr>
<td>Automated Response System (AVR)</td>
<td>$0.41</td>
</tr>
<tr>
<td>ATM</td>
<td>$0.27</td>
</tr>
<tr>
<td>Dial up PC Banking</td>
<td>1.5 cents</td>
</tr>
<tr>
<td>Internet Banking</td>
<td>1 cent</td>
</tr>
</tbody>
</table>

The cost of branch banking is $1.07 and that of technology aided services is lower particularly, that of internet banking which is very low i.e. just one cent. Hence banks have to build the required infrastructure to provide more and more ICT based products. The technology aided products ensure cost effective banking services and thereby improve the profitability of the banks.

A brief review of the studies undertaken indicates that many studies have been conducted in different aspects of IB in different countries of the world including India but few studies have been done on awareness and customer satisfaction of IB.

FOCUS OF THE STUDY
The focus of this study has been on the satisfaction of the respondents availing IB services provided by the banks from which the customers benefit as the services enable them to avail themselves of banking facilities with or without the assistance of the bank employees.

OBJECTIVES OF THE STUDY
The major objective of this study has been an analysis of the satisfaction of the customers availing IB in Dakshina Kannada (DK) district of Karnataka state. However, the specific objectives of the study have been-
1. To investigate the IB awareness of the customers.
2. To analyse the service quality perception of the customers availing IB.

HYPOTHESES
In order to achieve the objectives this study has set the following hypotheses for testing/verification.
1. The awareness of net banking is more with the customers of new private sector banks.
2. The customers availing net banking services are satisfied.

METHODOLOGY
The present study depended both on primary and secondary sources. The primary data were gathered through a field survey, using structured interview schedules, from bank customers residing in DK district of Karnataka State. The sample consists of 405 respondents who are the customers of the three categories of banks in the study area which are taken for analysis.
Of the total respondents 154 (38%) are of the Public Sector Banks, 149 (36.8%) are of the Old Private Sector Banks and 102 (25.2%) are of the New Private Sector Banks. Then data so collected are analysed with the help of SPSS Ver13.

ANALYSIS AND DISCUSSION

The responses of the customers of the banks are gathered to assess the awareness, adoption and satisfaction from the use of internet banking products and services in the study area.

AWARENESS OF NET BANKING FACILITY

The awareness of the bank’s E-banking services is one of the most important factors determining the actual use of such services by the respondents. The bank group wise awareness of net banking channel is provided in the Table 2.

Table 2: Awareness of IB Services

<table>
<thead>
<tr>
<th>Type of Bank</th>
<th>Public Sector Bank</th>
<th>Old Pvt. Sector Bank</th>
<th>New Private Sector Bank</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Respondents (customers)</td>
<td>(01) 103 (66.9)</td>
<td>(02) 97 (65.1)</td>
<td>(03) 89 (87.3)</td>
<td>(04) 289 (71.4)</td>
</tr>
<tr>
<td>Awareness of Net Banking</td>
<td>(\chi^2 = 16.975, p=0.000, d.f=2) HS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Figures in parenthesis are in percentages which are computed.

Source: Data gathered through primary investigation, June-September 2013.

In the case of awareness of Internet Banking 71.4 per cent of the respondents is found aware of it. The awareness is more with the respondents of new private sector banks as against old generation banks. There is a highly significant difference in the awareness of Internet Banking products of the new private sector banks as against the public sector and old private sector banks as shown by the chi-square test. It may be because the new private sector banks...
entered into business with state-of-art technology and also promote technology based banking products.

The hypothesis that awareness of net banking is more with the customers of new private sector banks is proved and accepted.

ADOPTION OF NET BANKING

The success of a bank depends on the adoption of IB facilities by the customers. The number of the respondents availing and not availing net banking facilities is presented in Table 3.

<table>
<thead>
<tr>
<th>Type of Bank</th>
<th>Public Sector Bank</th>
<th>Old Pvt. Sector Bank</th>
<th>New Private Sector Bank</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Respondents (customers)</td>
<td>(01)</td>
<td>(02)</td>
<td>(03)</td>
<td>(04)</td>
</tr>
<tr>
<td>Availing Net-Banking</td>
<td>27 (17.5)</td>
<td>24 (16.1)</td>
<td>57 (55.9)</td>
<td>108 (26.7)</td>
</tr>
<tr>
<td>( \chi^2 ) =27.943, ( p=0.000 ), d.f=2 HS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IB is a self-service banking facility that has made ‘anywhere and anytime banking’ possible. The services of IB can be accessed by the customers having computer and internet facilities. Of the 405 respondents covered in the study 26.7 per cent is found availing themselves of IB facility. There is a highly significant difference in the adoption of IB products of the new private sector banks as against the public sector and old private sector banks as shown by the chi-square test.

QUALITY OF SERVICE OF INTERNET BANKING

The customer satisfaction depends on the service quality of the ICT products of the bank with which they are frequently transacting. The opinions of the respondents regarding the quality of service are summarised in Table 4.
Table 4: Descriptive Statistics on Ratings for Quality of Service of E-banking Products

<table>
<thead>
<tr>
<th>Type of bank</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>(01)</td>
<td>(02)</td>
<td>(03)</td>
<td>(04)</td>
<td>(05)</td>
<td>(06)</td>
<td>(07)</td>
</tr>
<tr>
<td>Net-Banking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Sector Bank</td>
<td>47</td>
<td>1.00</td>
<td>5.00</td>
<td>4.17</td>
<td>.70</td>
<td>4.00</td>
</tr>
<tr>
<td>Old Pvt. Sector Bank</td>
<td>39</td>
<td>2.00</td>
<td>5.00</td>
<td>4.23</td>
<td>.67</td>
<td>4.00</td>
</tr>
<tr>
<td>New Private Sector Bank</td>
<td>57</td>
<td>3.00</td>
<td>5.00</td>
<td>4.28</td>
<td>.56</td>
<td>4.00</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>1.00</td>
<td>5.00</td>
<td>4.23</td>
<td>.64</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Source: Data gathered through primary investigation, June-September 2013.

The assessment of the quality of the net banking services is done on the basis of the mean score, where if the mean score is equal to 3 the customers are assumed neutral, if mean is less than 3 the quality of service is poor and if mean score is greater than 3 it is assumed that the quality of service is good. Further if the mean score is greater than 4 it is assumed that the quality of service is excellent. The rating of Internet banking services by the customers was 4.23±0.64. In the public sector banks the rating was 4.17±0.70, in the old private sector banks it was 4.23±0.67 and in the new private sector banks it was 4.28±0.56. The quality of Internet-banking services of all the bank groups was found excellent.

CUSTOMER SATISFACTION

All time uninterrupted service and ease of use and convenience of the service are the major factors that determine customer satisfaction. Customer satisfaction is measured on a 5 point scale where 5 means highly satisfied and 1 means highly dissatisfied. The level of satisfaction of the respondents availing themselves of net banking facilities is shown in Table 5

Table 5: Descriptive Statistics of Customer satisfaction from E-banking facilities

<table>
<thead>
<tr>
<th>Services</th>
<th>Type of bank</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>(01)</td>
<td>(02)</td>
<td>(03)</td>
<td>(04)</td>
<td>(05)</td>
<td>(06)</td>
<td>(07)</td>
<td>(08)</td>
</tr>
<tr>
<td>Internet</td>
<td>Public Sector Bank</td>
<td>27</td>
<td>1.00</td>
<td>5.00</td>
<td>4.04</td>
<td>.94</td>
<td>4.00</td>
</tr>
</tbody>
</table>
According to Table 5 assessment of satisfaction is done on the basis of the mean score, where if the mean score is equal to 3, the respondents are assumed to be neutral, if the mean score is less than 3, they are not satisfied and if mean score is greater than 3, they are assumed to be satisfied. Further, if the mean score is greater than 4, they are assumed to be highly satisfied and if mean score is less than 2, they are highly dissatisfied. The level of satisfaction regarding the Internet Banking services has been 4.19±0.73. The customers of the public sector banks are satisfied while the customers of the old private sector banks and the new private sector banks are highly satisfied with regard to the Internet Banking services. Thus, the hypothesis “customers availing net banking services are satisfied” has been tested, proved and accepted.

FINDINGS
The major findings of the study are-

- The awareness is more with the respondents of new private sector banks as against old generation banks.
- It is found that a small proportion of the respondents are availing IB in the study area.
- The quality of Internet-banking services of all the bank groups was found excellent.
- The customers of the public sector banks are satisfied while the customers of the old private sector banks and the new private sector banks are highly satisfied with regard to the Internet Banking services.

CONCLUSION
The customers are not only aware of the net banking services provided by the banks but also have been accessing such services. It is found that the quality of Internet-banking services of all the bank groups was excellent. It is also found that the customers are satisfied with the adoption of such services. The proportion of the population accessing net banking services of
all bank groups is found to be very low and hence the banks have to try to popularise the net banking channel as it is the most economical proposition to the banks and convenient alternative delivery channel to the customers.

REFERENCES


