Customers' Perception of ICT Based Services of State Bank of India

Vivek Kumar Pathak*
Dr. Vishal Shukla**
Dr. Mitushi Singh***

ABSTRACT

ICT has taken the center stage in almost every aspect of human endeavour. Banking services are not in exception. For the last one decade banks have invested heavily on deployment of ICT. As the prime objective of Computerization is to serve customers effectively, this paper aims to evaluate customer's perception with regard to ICT based services offered by State bank of India, the oldest and largest public sector bank in India. Four parameters namely: In-branch services, ATM services, Website convenience & security services and E-banking transaction services were considered for the study. It was predicted at the start of the study that on all the four parameters identified, the outcome will be positive. The result shows that for all except ATM services, the results are in the predicted direction.

Key Words: ICT, Banking industry, Customers' perception.

1. Introduction

Information and Communication Technology (ICT) has changed the working of banks and other financial institutions worldwide. Banks in India have invested heavily on deployment of information and communication technology (ICT) in the past one decade. ICT over the years has become a business driver rather than a business enabler. The State Bank of India (SBI) is the oldest and largest public sector bank in India. Till 1992, it has just one fully computerised branch. Due to the implementation of more modern centralized core processing systems by private sector banks it started losing its market share. In 2002, it began the largest implementation of a centralised core system ever undertaken in the banking industry to remain competitive. Today, SBI has 15,000 computerized branches and more than 22,000 ATMs across the country. It has now 8.96 million internet banking customers out of the 153.9 million saving bank account holders. With increasing competition among banks, customers are also becoming more discerning and demanding. The traditional Banking with brick and mortar structure is now getting converted into click and portal model, thereby giving a concept of virtual banking a real shape. At the time of manual transactions, an account holder had to wait for hours at the bank counters for getting a draft or for withdrawing his own money. Now, for banking transactions customers are no longer prepared to wait for information or services. They want their banking information and services at their fingertips by their chosen delivery channel. With the advent of Core banking solutions, customers can open an account at one location and can deposit a cheque, check bank balance, withdraw cash, get demand draft, get account statement, transfer funds, and perform other transactions from various locations in different cities. E-banking is now becoming a large part of financial services. As the prime objective of Computerization is to serve customers, the present study aims to evaluate customers' perception with regard to ICT based services offered by State bank of India on certain parameters, identified through literature review.

2. Literature review

A review of previous studies relevant to the present study was undertaken. According to Abubakar et al (2012), Information and communication technology (ICT) has in particular brought a complete paradigm shift on the bank's performance and on the customer service delivery in the banking industry. Customer satisfaction and customer service delivery is a key parameter for banks to ascertain how effectively the web furthers their objectives of customer acquisition, retention and increased share of wallet. According to Kanhaiya et al (2011), efficient customer service helps a bank to attract and retain customers. To meet customer expectations, banks now offer a broad

Research Scholar, Faculty of Management Studies, Banaras Hindu University, Varanasi.
**Assistant Professor, School of Management, IMS UNISON University, Dehradun
*** Assistant Professor, Amity School of Business, Amity University, Noida.

range of deposit, investment and credit products through diverse distribution channels including upgraded branches, ATMs, telephone and Internet. According to Saraswat (2013), E-banking is now becoming a large part of financial services. Though any type of transactions can be handled through E-banking, in the initial phase, most of the basic banking transactions can be performed conveniently through it. Some of the basic functions include account inquiry, fund transfer, payment of utility bills (Electricity, Water, and Telephone bills etc.), online payment for transactions, request for issuance of cheque book, draft etc. Woldie et al (2008) classified E-banking services on the basis of service sophistication. According to him, E-banking services range from information-push services where customers receive information about the bank, its products and services, to information-download services where customers can download account information and forms to full-transaction services where customers can perform most banking transactions (such as transfer between accounts, bill payment, third party payment, card and loan applications, etc.) electronically. According to Selvi (2012), the introduction of automated teller machines (ATMs) has enabled customers to do banking without visiting the bank branch. Using an ATM, customers can access their bank accounts in order to make cash withdrawals, credit card cash advances, and check their account balances as well as purchase prepaid cell phone credit.

3. Scope of the Study

The present study has tried to examine customers' perception with regard to ICT based services offered by State bank of India. Out of the three groups of banks- public sector, private sector and foreign sector banks, only one bank, which is the largest public sector bank in India, has been selected for the study. Apart from this, only those variables that fall under the category of high-tech services have been considered.

4. Objective of the study:
The present study is aimed at evaluating customers' perception with regard to ICT based services offered by State bank of India. Customers' perception is evaluated on the basis of four group-class variables. In-branch services, ATM services, Website convenience & security services and E-banking transaction services.

5. Research Methodology

Methodology is an essential part of research in order to find answers to the research objectives. The objectives and the procedure followed to collect, capture, process and analyse data is discussed below.

5.1 Variables used in the study: Customer services are intangible and can be easily duplicated. They can be classified as high-touch services and high-tech services. High-touch services are mostly dependent on people producing the services whereas high-tech services are

Table 1. Variables used in the study

Group Class (ITC Based Services)	Components	Meaning of Abbreviations Used
A. IN_BRANCH_SR (In-Branch services)	1. INB_TM_AC 2. INB_DEP_CAS 3. INB_WITHD 4. INB_CLR_CHQ 5. INB_DD	"Opening of account" "Cash deposit" "Cash withdrawal" "Clearance of Cheques" "Issuing of Demand draft"
B. ATM_SR (ATM services)	1. ATM_LOCN 2. ATM_FUNC 3. ATM_NUM 4. ATM_CRD	"locational Convenience of ATMs" "Functioning of ATMs" "Number of ATMs" "Crowding at ATM Booths"
C. WEB_COSEC_SR (Website Convenience & Security services)	1. WBS_FUN 2. WBS_NAV 3. WBS_LAN 4. WBS_UPDT 5. WBS_MSUINF 6. WBS_CONFD 7. WBS_CRDINF	"Functioning of Website" "Navigation and Simplicity of Website" "language of Website" "Updated technology for E-banking" "Misuse of Information" "Confidentiality of online transactions" "Credit/Debit card Information security"
D. TRANSAC_SR (E-Banking Transaction Services)	1. EBT_ACIN 2. EBT_FUNDTRF 3. EBT_PMUTI 4. EBT_PMMRCH 5. EBT_RQDDCH	"Account Information" "Fund transfer" "Payment of utility bills" "Payment to merchants" "Request and intimation for DD & Cheques"

based on the use of automated systems, information technology and other type of physical resources. Based on literature review and existing practices of electronic banking, four group-classes of variables were identified. All these identified variables fall under the category of high-tech services. High-touch and advanced core banking service variables were excluded from the study (Table 1).

5.2 Predictions (Expected outcome of the study) about customer's perception with regard to ICT based services: With so much heavy investment and deployment of ICT in SBI in the past one decade, it is predicted that for all the four group-class variables (In-branch services, ATM services, Website convenience & security services, E-banking transaction services), the perception of customers is positive (+).

5.3 Sampling & Questionnaire Design: A non-probability, convenience sampling method is used to select customers of SBI making use of both ATM and E-banking transaction services. A total of 150 respondents were approached, out of which 120 completed responses are used. For the final study, a structured questionnaire consisting of different sections is compiled in accordance with the conceptual framework and study objectives. The various sections dealt with identified four group-class variables and demographic information. A Likert-type scale varying from 1 to 5 was used to measure the degree

to which the variables under study vary with 1 = strongly disagree and 5 = strongly agree.The primary data was collected from sample customers from sample branches (two) of State Bank of India (Varanasi city) with the help of questionnaire. The data obtained was analysed using various statistical tools such as mean, standard deviation and 't' test using SPSS package.

6. Results and discussion: The results obtained from the study are presented here.

6.1 Banking profile of customers: The Banking profile of customers reveals that 60 % of the customers maintain savings account, 30% current account and 10% maintain both types of accounts with SBI. 6% of them are having banking experience of more than 10 years, 36% of 5 to 10 years, 46% are having banking experience of 1 to 5 years whereas 12% are having banking experience of less than 1 year. 75 % of the respondents have E-banking experience ranging between 1-5 years.

6.2 Descriptive statistics and t-test results:

The relevant descriptive statistics are given in Table-2

Group-class variable A-In-branch services: For In-branch services positive perception of customers was predicted. With a mean value of 3.53 it is ranked third in the selected four group-class variables, but the results are in predicted direction and significant (p-value .000<.05).

Table 2. Descriptive statistics and One sample t-test results   (N=120, df=119)

GroupClass	Components	Mean	p-Value*	Composite Mean & SD	Value For Group Class*	Predicted Direction & Outcome
A. IN_BRANCH_SR	1. INB_TM_AC 2. INB_DEP_CAS 3. INB_WITHD 4. INB_CLR_CHQ 5. INB_DD	3.50 3.34 3.30 3.71 3.80	.000 .000 .000 .000 .000	3.53 & 409	.000	In Predicted direction Positive(+) Significant
B. ATM_SR	1. ATM_LOCN 2. ATM_FUNC 3. ATM_NUM 4. ATM_CRD	2.70 2.97 3.10 2.78	.000 .757 .186 .664	2.93 & 447	.142	Not in predicted direction Negative (-) Not Significant
C. WEB_COSEC_SR	1. WBS_FUN 2. WBS_NAV 3. WBS_LAN 4. WBS_UPDT 5. WBS_MSUINF 6. WBS_CONFD 7. WBS_CRDINF	3.73 3.43 3.65 3.14 3.90 4.09 4.23	.000 .000 .000 .015 .000 .000 .000	3.74 & 342	.000	In Predicted direction Positive(+) Significant
	1. EBT_ACIN 2. EBT_FUNDTRF 3. EBT_PMUTI 4. EBT_PMMRCH 5. EBT_RQDDCH	3.95 3.91 4.03 3.95 3.60	.000 .000 .000 .000 .000	3.89 & 631	.000	In Predicted direction Positive(+) Significant

*Statistically significant at p<0.05, Test value=3

Group-class variable B - ATM services: For ATM services the mean value of responses is 2.93. It is lowest of all the group-class variables taken into account. The outcome is not in the predicted direction and is not significant (p-value .142>.05).

Group-class variable C - Website convenience & security services: For Website convenience and security services mean value is 3.74 and it is ranked second in the selected four group-class variables, the results are in predicted direction and significant (p-value .000<.05).

Group-class variable D-E-banking transaction services: For E-banking transaction services mean value is 3.89 which is the highest in the selected four group-class variables, the results are in predicted direction and significant (p-value .000<.05).

7. Conclusion

The conclusion derived from the analysis of the customer's opinion is given here. In order to know the perception of customers about ICT based services in SBI they were asked to indicate their agreement on given statements. Regarding the perception of individual group-class variables, the perception score varied from 3.89 (E-banking transaction services) to 2.93 (ATM services). As the prime objective of Computerization is to serve customers effectively, it was predicted at the start of the study that for all the four group-class variables identified, the outcome will be positive i.e. the perception for these services will be positive. For all the group-class variables except ATM services the outcomes were in the predicted direction (with a mean score>3) and were statistically significant. The E-banking services scored the highest, which included services like fund transfer, payment of utility bills, payment to merchants etc. Almost all the components in this group-class scored near a mean of four. Based on the perception score received it can be said that SBI excels in providing these services. A mean score of 3.74 was obtained for website convenience and security services. Internet related fraud schemes are perpetrated with increasing frequency, creativity and intensity, also, ease of use is associated with all the factors relating to the design of website. The key site seeks to reduce customer's frustration during the course of navigation. The mean score obtained for this group-class variable was in the predicted direction and statistically significant. Almost all the components under this group scored around 3.50, except use of updated technology for E-banking transactions by SBI. Based on the scores obtained, it can be said that customers trust the website of SBI while doing online transactions. For In-branch services the mean score obtained was 3.53 which is in the predicted direction and statistically significant. This group-class was ranked third in terms of composite mean. This group-class of services has some component of high-touch services which depends on people producing the services. The group-class service which seems to be a concern for SBI is ATM services. It scored the lowest of all the classes in the study. The composite mean obtained was 2.93 which is against the predicted direction and the result was not significant. For the individual components under this class it was found that the customers find ATMs not functioning properly, the number of ATMs is not sufficient and there is always crowding at ATM booths.

8. Limitations of the Study

Although the present study has yielded some preliminary findings, its design is not without flaws. The main limitations are as follows: the data collection was confined only to two branches of State Bank of India; the sample size for the present study comprised of only 120 customers which is only a small proportion of the entire population; certain relevant variables of ICT based services might have been skipped.

References

- AbubakarA. et al. (2012), The impact of information and communication technology on Bank's performance and customer service delivery in the banking industry, I*nt. J Latest Trends Fin. Eco. Sc.,* Vol.2, No.1, pp.80-90.

- Harikanth D. (2012), Customer perception towards computerization in Indian banks- A study of select banks, *IJREB*, Vol.1, No.2

- Hunt R. (2009), Case study: State bank of India, World's largest centralized core processing implementation.

- Kanhaiya S. et al. (2011), Technological innovation in Indian banking sector Use of it products, *International journal of management and strategy,* Vol.2, No.2.

- Kumbhar V.M., Alternative Banking Channels and Customers' Satisfaction: An Empirical Study of Public and Private Sector Banks, *International journal of business and management tomorrow*, Vol.1, No.1, pp.1-24.

- Luka M.K. and Frank I.A. (2012), The impacts of ICTs on banks, *International journal of advanced computer science and applications*, Vol.3, No.9, pp.145-149.

- Meena R.S., Lecture Notes -Use of Information System in Banking and Insurance Sector.

- Sanjay D. (2011), Measuring IT effectiveness in banks of India for sustainable development, *International journal of information technology*

- Santhiyavalli G. (2011), Customer's perception of service quality of State bank of India-A factor analysis, *IJMBS*, Vol.1, No.3, pp.78-84

- Saraswat V. and Jadhav P. (2013), Impact of information technology on banking industry, Abhinav, Vol.2, pp.10-13.

- Selvi V.D. (2012), IT enabled banking services in the globalized era, *International journal of multidisciplinary research*, Vol.2, No. 5, pp.232-243.

- Woldie A. et al. (2008), *Internet banking: an initial look at Ghanaian bank consumer perception, Banks and bank systems*, Vol.3, No.3, pp.36-46.

- http://businesstoday.intoday.in/story/sbi-competing-hard-with-the-best-private banks/1/190807.html(accessed on 5-7-2013).