



A study on impact of technology on customer satisfaction towards banking services with reference to SBI

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ABSTRACT

Nowadays banks are going to provide smart services to satisfy the customers. Application of technology in banking services is evidence for positive as well as negative impact on customer satisfaction. Since the products sold by banks are virtually similar, banks are attempting to gain an advantage over competitors on other causes that may trigger a rise customer retention as well as loyalty. Service quality management is of interest to banks and researchers as this influence's customer satisfaction, loyalty, and business efficiency.

The researcher used the descriptive analysis in the study. Online questionnaire used to collect the data from a sample of 121 customers of SBI bank. Customers satisfaction measured through 5-point Likert scale based on four service quality dimensions like Reliability, responsiveness, Access and security. Further, tried to know the applications such as internet banking, mobile banking, SMS banking, ATM services, telephone Banking, RTGS etc have been using mostly. The result found that customers are Extremely satisfied with security and reliability Services and least satisfaction Access and Responsiveness or not providing customers satisfaction and also found that mostly used technological services are ATM services, internet banking services and least services SMS banking and ETF. this research confirmed that the technology impact on customer banking services.

Introduction

Nowadays banks are going to provide smart services to satisfy the customers. Application of technology in banking services is evidence for positive as well as negative impact on customer satisfaction. Since the products sold by banks are virtually similar, banks are attempting to gain an advantage over competitors on other causes that may trigger a rise customer retention as well as loyalty. Service quality management is of interest to banks and researchers as this influence's customer satisfaction, loyalty, and business efficiency. The majority of studies on the efficiency of technology-based self-service banking only look at one of the bank's automatic platforms. In this context a study has been undertaken to assess the satisfaction of bank customers on technology-based services such as ATM banking, Internet banking, Mobile banking, Telephone banking, SMS banking. Service quality attributes are grouped into four dimensions viz Reliability, Responsiveness, Access, Security and analysed customer Satisfaction levels in the present study.

Definition

According to Section 5(b) of the Banking Companies Act, 1949 defines banking as “accepting for the purpose of lending or investments of deposits of money received from the public, repayable on demand and withdrawal by cheque, draft, and order or otherwise”.

Importance of technology in banks:

Many of the IT initiatives of banks started in the late 1990s, or early 2000, with an emphasis on the adoption of core banking solutions (CBS), automation of branches and centralisation of operations in the CBS. Over the last decade, most of the banks completed the transformation to technology-driven organisations.

Moving from a manual, scale-constrained environment to a global presence with automated systems and processes, it is difficult to envisage the adverse scenario where the sector was in the era before the reforms, when a simple deposit or withdrawal of cash would require a day. ATMs, mobile banking and online bill payments facilities to vendors and utility service providers have almost obviated the need for customers to visit a branch. Branches are also transforming from operating as transaction processing points into relationship management hubs...

Introduction of computer and other electronic technologies in banks has the advantages viz : increase efficiency, Handling of information, cost reduction, accuracy, customer service, easy communication.

Review of literature

Krishnamurthy (2006) in a study highlighted the benefits, risks, innovations and convenience concerned in e-banking. ATM, telephone, web and cluster banking helped banks to deliver the merchandise a lot of effectively. The author, in his paper, conjointly delineated operational potency of e- banking.

Rosy Chawla, Rachana Kumari and Ponam Rani (2009) study made an attempted to study on the changing face of Indian Banking, Financial sector reforms, banking sector reforms are the part and parcel of economic reformat. Computerization, ATMs cash Deposit machine in public sector banks, scheduled commercial banks are the mark of their technological advancement. The study mainly concentrated on two aspects i.e. financial soundness; Technological development like computerization, branch automation, ATM technology etc.

Kulwant Singh Patnania, and Mamatha Sharma (2010) study emphasized on rate of banking technologies. The study identified the operational problem in the usage of modern banking technologies and suggested measures for improvement of technologies. The researchers opined that the banking technologies must be user friendly and able to operate even an illiterate and a layman. The range of adoption of technologies of different kinds elaborated in their study

Nadire Cavus, Dambudzo Netsai Christina Chingoka (2016): found in the study that in order to connect with people from various nations, industries around the globe, geographic distance and diverse markets, IT allows new technological services with better mechanisms to be created and effective strategies applied.

Ahmed Taha Al Ajlouni, Monir Al-Hakim (2019): The paper aims first to shed light on this wave of financial sector growth, which, combined with high technology, also seeks to explain FinTech's position in the financial sector as a rule, and in particular the banking industry.

Lakshmi Narayana et.al (2013) in their study entitle “A Study on Customer Satisfaction towards Online Banking services with reference to Bangalore city” focuses on investigating the major factors that influence online customers’ satisfaction with the overall service quality of their banks. Assessing the power of these factors in the context of Online (Internet) banking and would, therefore, help the bank management not only in improving the level of satisfaction but also strengthening the bond between the banks and their customers, thereby helping them to retain and expand their overall customer base. Further this study reveals that online banking, to make a customer's banking experience more convenient, efficient, and effective, it becomes even more important to ascertain the customers’ perception of the overall service quality and their satisfaction with the current online banking services.

Vimala (2015) has attempted a study on "An Evaluative Study on Internet Banking Security among Selected Indian Bank Customers". This study shows that Internet banking is very convenient and fast, it is mired with several security issues. Banking institutions have taken several measures to ensure safety measures for their customers while performing various transactions

Khaled Bin Amir and Dr. Hasina Sheykh (2017) in their study entitle "Analysis of Customer Satisfaction on Online Banking: A Case Study on "One Bank Limited" has stated that customers are asked about their satisfaction level on online banking. Online banking services of One Bank Limited, is quite good and satisfactory but customers were not aware and willing to take these services. customers are satisfied with security and user friendliness of the website of the banks and somewhat neutral in perception with update frequency. For this reason, internet banking has become an important measurement tool to attract larger customer base.

Sunith C K (2019) has made an empirical study of customer satisfaction in E-banking services. This study stated that electronic banking incorporates systems that enable individual customers to access their accounts, transact with speed and obtain current and updated information on latest financial products and services through public or private networks. It accommodates a variety of platforms such as internet banking, telephonic and television-based banking, automated teller services, mobile phone banking as well as personal computer based and offline banking services. Customer is distinguished from a consumer in the sense that a customer pays for a product or service while a consumer is the end user who experiences a product or service.

To sum up review literature clear that though studies on technology impact on bank performance, factors influenced bank performance, technology role in banking operations, there are very few studies on analysing impact of customer satisfaction on different technological service quality dimensions. It indicates gap in the literature and hence the present study has been under taken

Objectives of the study

- To study the customer satisfaction on service quality dimensions.
- To identify the preferred usage of technology on customer satisfaction

Need of the study

This study is conducted to understand the impact of technology on customers preferences and satisfaction levels towards Banking services of State Bank of India.

Scope of the study

The study covers impact of technology on customer satisfaction towards Banking services of State Bank of India.

Research Methodology

The study is based on the primary data and secondary data. The primary data collected from customers through questionnaire online survey and the secondary data collected from internet, articles, and bank portals. The size of the sample is 121 and to collect the data snow ball sampling method has been used. The data is analysed and interpreted with percentage, average, charts & graphs and 5-point Likert scale

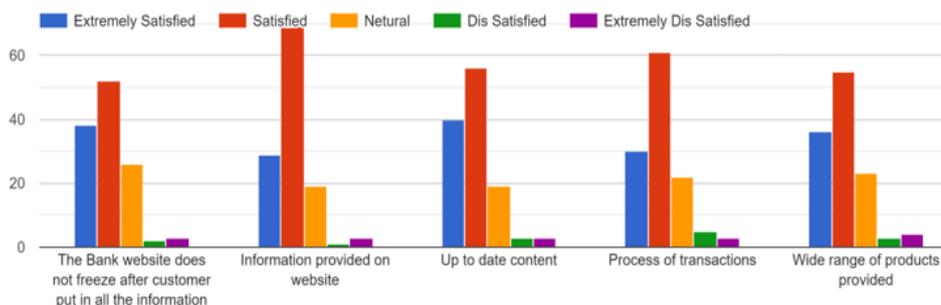
Data Analysis and Interpretation:

Customer satisfaction on service quality has been elicited by grouping all the attributes in to four groups viz., Reliability, Access, Responsiveness and Security. Reliability consists 5 attributes, access consists 5, responsiveness and security with 4 attributes each respectively. The customer satisfaction on all these four dimensions has been gathered using 5-point Likert scale and the results are presented as below.

TABLE:-1 Table Shows the Customer Satisfaction of Service Quality – Reliability (N=121)

Satisfaction Levels of Reliability	Extremely Satisfied	Satisfied	Neutral	Dissatisfied	Extremely Dissatisfied
The bank website does not freeze after customer put in all the information	38 (31.4%)	52 (42.9%)	26 (21.4%)	2 (1.65%)	3 (2.4%)
Information provided on website	29 (23.9%)	69 (57%)	19 (15.7%)	1 (0.8%)	3 (2.4%)
up to date content	40 (33)	56 (46.28%)	19 (15.7%)	3 (2.4%)	3 (2.4%)
Process of transactions	30 (24.7%)	61 (50.4%)	22 (18.1%)	5 (4.1%)	3 (2.4%)
Wide range of products provided	36 (29.7%)	55 (45.4%)	23 (19%)	3 (2.4%)	4 (3.3%)
Total	173 [28.8%]	293 [48.9%]	109 [18.1%]	11 [1.8%]	13 [2.1%]

NOTE: - 1. Figures in () indicates percentages of row N
2. Figures in [] indicates Percentages of row total respondents

Fig: -1 Chart Showing Customer Satisfaction of Service Quality - Reliability

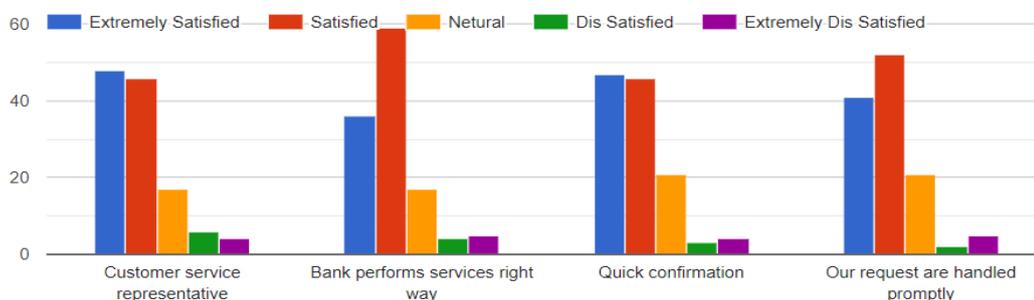
INTERPRETATION

- From the total sample 31.4 % respondents are Extremely satisfied, 42.9% satisfied and 1.65% dissatisfied, 2.4% Extremely Dissatisfied and 21.4% respondents are neutral towards bank website.
- Total sample 23.9% respondents are Extremely satisfied, 57% respondents are satisfied and 0.8% dissatisfied, 2.4% Extremely Dissatisfied and 15.7% respondents are neutral towards providing information on websites.
- From the sample 33% respondents are Extremely satisfied, 46.2% respondents are satisfied and 2.4% dissatisfied, 2.4% Extremely Dissatisfied and 15.7% respondents are neutral towards up-to-date information.
- In the total sample 30% respondents are Extremely satisfied, 50.4% respondents are satisfied and 4.1% dissatisfied, 2.4% Extremely Dissatisfied and 18.1% respondents are neutral towards process of transactions.
- From the sample 29.7% respondents are Extremely satisfied, 45.4% respondents are satisfied and 2.4% dissatisfied, 3.3% Extremely Dissatisfied and 19% respondents are neutral towards to provide wide range of products
- Out of the five aspects customer extremely Satisfied with bank website freeze information (31.4%), information provide on website (23.9%), up to date content (33%), process of information (24.7%), and wide range of products of provided (29.7%).

TABLE: -2 Table Shows the Customer Satisfaction of Service Quality – Responsiveness(N=121)

Satisfaction Levels of Responsiveness	Extremely Satisfied	Satisfied	Neutral	Dissatisfied	Extremely Dissatisfied
Customer service representative	48 (39.6%)	46 (38%)	17 (14%)	6 (4.9%)	4 (3.3%)
Bank performs the services right Way	36 (29.7%)	59 (48.7%)	17 (14%)	4 (3.3%)	5 (4.1%)
Quick confirmation	47 (38.8%)	46 (38%)	21 (17.3%)	3 (2.4%)	4 (3.3%)
Our request are handled promptly	41 (33.8%)	52 (42.9%)	21 (17.3%)	2 (1.6%)	5 (4.1%)
Total	172 [35.5%]	203 [41.9%]	76 [15.7%]	15 [3%]	18 [3.7%]

NOTE: - 1. Figures in () indicates percentages of row N
2. Figures in [] indicates Percentages of row total respondents

Fig:-2 Chart Showing Customer Satisfaction of Service Quality – Responsiveness**INTERPRETATION**

- From the total sample 39.6% respondents are Extremely satisfied, 38% satisfied and 4.9% dissatisfied, 3.3% Extremely Dissatisfied and 14% respondents are neutral towards customer service representative
- Total sample 29.7% respondents are Extremely satisfied, 48.7% respondents are satisfied and 3.3% dissatisfied, 4.1% Extremely Dissatisfied and 14% respondents are neutral towards Bank performs the services right way.
- From the sample 38.8% respondents are Extremely satisfied, 38% respondents are satisfied and 2.4% dissatisfied, 3.3% Extremely Dissatisfied and 17.3% respondents are neutral towards quick confirmation.
- In the total sample 33.8% respondents are Extremely satisfied, 42.9% respondents are satisfied and 1.6% dissatisfied, 4.1% Extremely Dissatisfied and 17.3% respondents are neutral towards request are handled promptly.
- Out of the four aspects customer extremely Satisfied with Customer Service representative (39.6%), Bank performs the services (29.7%), Quick confirmation (38.8%) and Our request are handled promptly (33.8%).

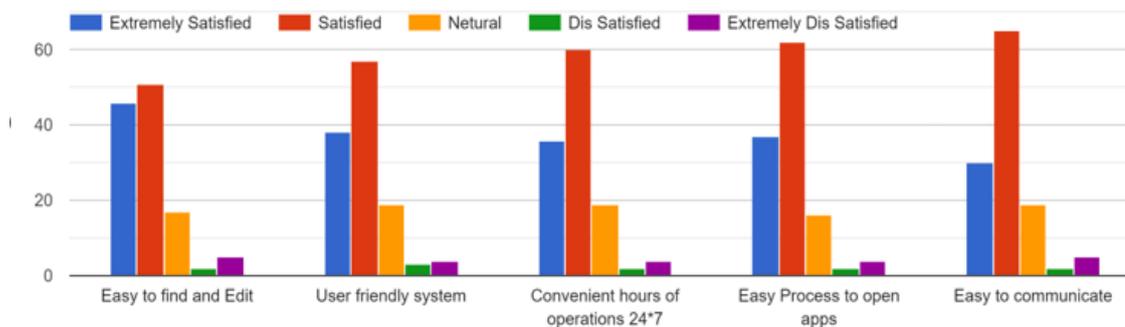
TABLE: -3 Table Shows the Customer Satisfaction of Service Quality – Access (N=121)

Satisfaction Levels of Access	Extremely Satisfied	Satisfied	Neutral	Dissatisfied	Extremely Dissatisfied
Easy to find and edit	46 (38%)	51 (42.1%)	17 (14%)	2 (1.6%)	5 (4.1%)
User friendly system	38 (31.4%)	57 (47.1%)	19 (15.7%)	3 (2.4%)	4 (3.3%)
Convenient hours of operations (24*7)	36 (29.7%)	60 (49.5%)	19 (15.7%)	2 (1.6%)	4 (3.3%)
Easy Process to open apps	37	62	16	2	4

	(30.5%)	(51.2%)	(13.2%)	(1.6%)	(3.3%)
Easy to communicate	30 (24.7%)	65 (53.7%)	19 (15.7%)	2 (1.6%)	5 (4.1%)
Total	187 (30.9%)	295 (48.7%)	90 (14.8%)	11 (1.8%)	22 (3.6%)

NOTE: - 1. Figures in () indicates percentages of row N
 2. Figures in [] indicates Percentages of row total respondents

Fig:- 3 Chart Showing Customer Satisfaction of Service Quality - Access



INTERPRETATION

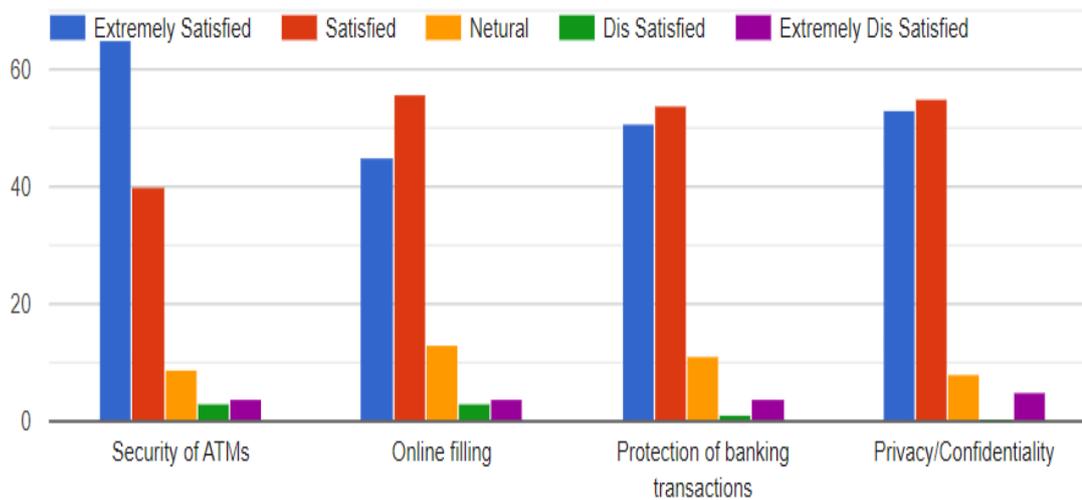
- From the total sample 38% respondents are Extremely satisfied, 42.1% satisfied and 1.6% dissatisfied, 4.1% Extremely Dissatisfied and 14% respondents are neutral towards Easy to find and edit
- Total sample 31.4% respondents are Extremely satisfied, 47.1% respondents are satisfied and 2.4% dissatisfied, 3.3% Extremely Dissatisfied and 15.7% respondents are neutral towards friendly system.
- From the sample 29.7% respondents are Extremely satisfied, 49.5% respondents are satisfied and 1.6% dissatisfied, 3.3% Extremely Dissatisfied and 15.7% respondents are neutral towards convenient hours of operations (24*7) .
- In the total sample 30.5% respondents are Extremely satisfied, 51.2% respondents are satisfied and 1.6% dissatisfied, 3.3% Extremely Dissatisfied and 13.2% respondents are neutral towards process of apps.
- From the sample 29.7% respondents are Extremely satisfied, 51.2% respondents are satisfied and 2.4% dissatisfied, 3.3% Extremely Dissatisfied and 19% respondents are neutral towards to provide wide range of products.
- Out of the five aspects customer extremely Satisfied with Easy to find and edit (38%), User friendly system (31.4%), Convenient hours of operations (24*7) (29.7%), Easy Process to open apps (30.5%) and Easy to communicate (24.7%).

TABLE:-4 Table Shows the Customer Satisfaction of Service Quality – Security (N=121)

Satisfaction Levels of Security	Extremely Satisfied	Satisfied	Neutral	Dissatisfied	Extremely Dissatisfied
Security of ATMs	65 (53.7%)	40 (33%)	9 (7.4%)	3 (2.4%)	4 (3.3%)
Online filling	45 (37.1%)	56 (46.2%)	13 (10.7%)	3 (2.4%)	4 (3.3%)
Protection of banking transactions	51 (42.1%)	54 (44.6%)	11 (9%)	1 (0.8%)	4 (3.3%)
Privacy/confidentiality of the bank	53 (43.8%)	55 (45.4%)	8 (6.6%)	0 (0%)	5 (4.1%)
Total	214 (44.2%)	205 (42.3%)	41 (8.4%)	7 (1.4%)	17 (3.5%)

NOTE: - 1. Figures in () indicates percentages of row N
 2. Figures in [] indicates Percentages of row total respondents

Fig:-4 Chart Showing Customer Satisfaction of Service Quality - Security



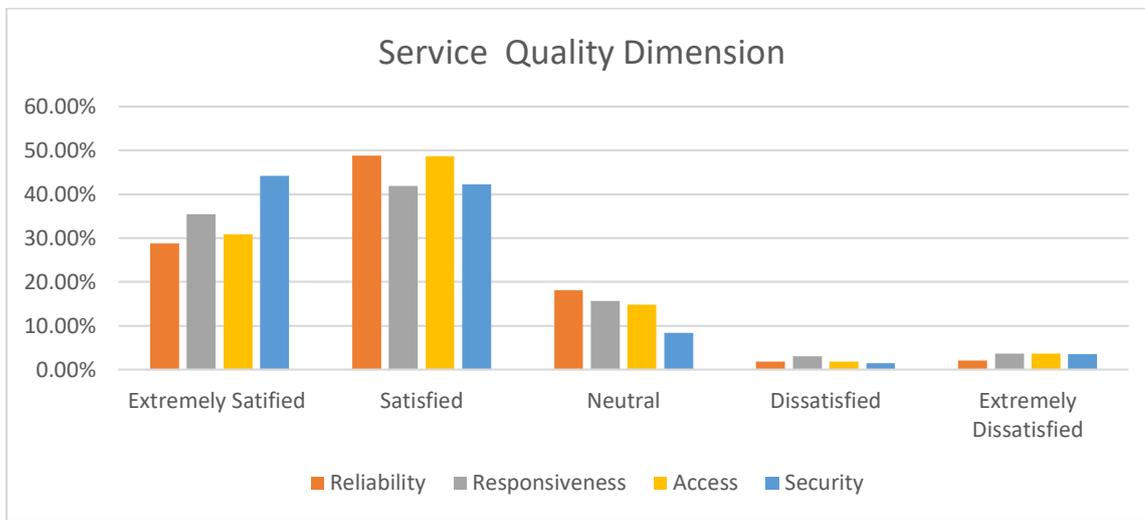
INTERPRETATION

- From the total sample 53.7% respondents are Extremely satisfied, 33% satisfied and 2.4% dissatisfied, 3.3% Extremely Dissatisfied and 7.4% respondents are neutral towards Security on ATM Services
- Total sample 37.1% respondents are Extremely satisfied, 46.2% respondents are satisfied and 2.4% dissatisfied, 3.3% Extremely Dissatisfied and 10.7% respondents are neutral towards Online filling Services.
- From the sample 42.1% respondents are Extremely satisfied, 44.6% respondents are satisfied and 0.8% dissatisfied, 3.3% Extremely Dissatisfied and 9% respondents are neutral towards Protection of banking transactions.
- In the total sample 43.8% respondents are Extremely satisfied, 45.4% respondents are satisfied and 0% dissatisfied, 4.1% Extremely Dissatisfied and 6.6% respondents are neutral towards Privacy/confidentiality.
- Out of the four aspects customer extremely Satisfied with Security of ATMs (53.7%), Online filling (37.1%), Protection of banking transactions (42.1%) and Privacy/confidentiality of the bank (43.8%).

TABLE:-5 Table Shows Over all service quality dimension

SLNO	Service quality Dimension	Extremely Satisfied	Satisfied	Neutral	Dissatisfied	Extremely Dissatisfied
1	Reliability	28.8%	48.9%	18.1%	1.8%	2.1%
2	Responsiveness	35.5%	41.9%	15.7%	3%	3.7%
3	Access	30.9%	48.7%	14.8%	1.8%	3.6%
4	Security	44.2%	42.3%	8.4%	1.4%	3.5%

Fig:-5 Chart Showing over all service quality Dimension



INTERPRETATION

From the above table, it may be interpreted that, comparing to all service quality dimension provided by SBI customers are Extremely satisfied with security (44.2%), and extremely dissatisfied with Responsiveness (3.7%),

Technological Services Used by the customer:

customers using different technological banking services viz.,ATM services, Internet Banking services, Telephone Banking Services, Mobile Banking Services, SMS Banking, EFT (Electronic Fund Transfer) and RTGS. The responses towards the mostly used services of customers in SBI are presented in the below table

TABLE:-6 Table Shows Technological Services Are Mostly Used

Particulars	No. of Respondents	Percentage of Respondents
ATM services	68	56.2%
Internet Banking services	53	43.8%
Telephone Banking Services	16	13.2%
Mobile Banking Services	66	54.5%
SMS Banking	17	14%
EFT (Electronic Fund Transfer)	8	6.6%
RTGS	1	0.8%

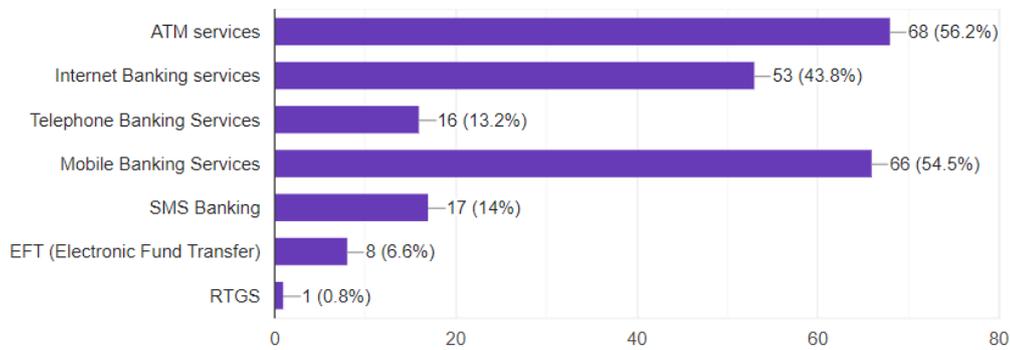
SOURCE : Online Survey

NOTE:- Percentage are Calculated to (N=121)

INTERPRETATION

From the above table, it may be interpret that, comparing to all technological services provided by SBI customers are mostly using ATM services (56.2%), Mobile banking services (54.5%) and Internet banking services (43.8%) and EFT, RTGS services used are very low.

Fig:-6 Chart Showing Technological Services Are Mostly Used



Findings

- Based on Reliability dimension customer extremely Satisfied with bank website freeze information (31.4%), information provides on website (23.9%), up to date content (33%), process of information (24.7%), and wide range of products of provided (29.7%).
- With regarding to responsiveness dimension customer extremely Satisfied with Customer Service representative (39.6%), Bank performs the services (29.7%), Quick confirmation (38.8%) and Our request are handled promptly (33.8%).
- with reference to Access dimension customer extremely Satisfied with Easy to find and edit (38%), User friendly system (31.4%), Convenient hours of operations (24*7) (29.7%), Easy Process to open apps (30.5%) and Easy to communicate (24.7%).
- From security dimension customer extremely Satisfied with Security of ATMs (53.7%), Online filling (37.1%), Protection of banking transactions (42.1%) and Privacy/confidentiality of the bank (43.8%).
- It may be interpret that, comparing to all service quality dimension provided by SBI customers are Extremely satisfied with security and extremely dissatisfied with reliability.
- comparing to all technological services provided by SBI customers are mostly using ATM services, Mobile banking services and Internet banking services.

CONCLUSION

There is an impact of technology on customers preferences and satisfaction levels towards Banking services of State Bank of India. Most of the customers are extremely satisfied with reliability of security service quality dimension.

The overall study shows that the customers are willing to use the technology like the online banking, ATM etc., SBI have been successful implementing the technologies into banking operations. They have been successful in achieving a satisfying relationship with customers. Most of the respondents are satisfied with ATM services, Mobile Banking services and internet banking services.

SUGGESTIONS

- The bank management to provide new facilities which are mostly customers preferred.
- SBI should bring new technological services to ease customer's experience.
- Advertisements of the SBI bank are very less compared to other competitors. It may lead to switching on other banks. So, the SBI management should promote more advertisement through various advertisement channels.
- SBI have to improve it's RTGS Services

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