



A sustainable banking services analysis and its effect on customer satisfaction

Neha Puri^a and Vikas Garg ^b

^aACCF, Sector 125, Noida India; ^bAmity University, Amity College, Noida India

ABSTRACT

The banking system has evolved with time. Earlier, the banks maintained the storage and counting of coins, but the storage was not safe. Then started the concept of lending with interest. The banking system has completely revolutionised the system, and made it easier to transact online. In this study, the main aim is to understand the banking services and how it impacts the level of satisfaction. To conduct the study, a questionnaire was circulated, containing two sections. The first section contains a set of 16 questions containing demographic- and services-related question. Section 2 contains 24 questions, showing a Likert scale to measure the level of satisfaction of the customers. One hundred ten customers of State Bank of India, SBI Branch Gurgaon and Haryana responded to the questionnaire. Different tools such as factor analysis and reliability tests were conducted to find out the relationship between customer behaviour and banking services.

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Banking; customer satisfaction; factor analysis; banking system

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1. Introduction

The banking system has a very long history. Even when there was no currency, people borrowed and lent some thing or the other. The barter system holds the history of banks, keeping grains as the source of collateral with them. Gradually, the currency was developed, making it easier for the people to borrow and lend. In the fourteenth century, banks were formed globally. Modern banking practices started when bank notes were released in the seventeenth and the eighteenth centuries. The merchants began to borrow money from the money lenders. The goldsmiths paid interest in the deposits. Promissory notes were also developed as safe and convenient ways of banking. It is challenging for the banking sector to provide them with quality services by identifying their needs and taking continuous feedback. Hence, the major concerns of our study regarding customer satisfaction are:

- (1) What are the major factors affecting customer satisfaction?
- (2) What are the e-banking services offered by SBI to its customers?
- (3) What are the factors associated between the banking services provided and the customer satisfaction derived.?

E-Banking

e-banking is nothing but making transactions online. Through e-banking, a customer can access his or her accounts on his or her mobile phone or a computer. This can be done through various websites and applications.

This is helpful in the following ways, because it

- Helps reduce the cost of transactions.
- Reduces the chances of errors.
- Saves the paper
- Is Fast and easy
- Has No physical and geological barriers
- Reduces in the number of frauds

Under e-banking, the following services are available to the customers:

1. Bill payment: with the help of websites, the banks enable the customers to pay their bills such as electricity, water bills, etc., in just a few simple steps. Online bill payments are convenient, secure and provide the best security platforms to keep secure. Different methods are provided by the companies to keep the information such as user-name passwords, security layers that help protect hackers from attacking, protection process such as encryption, ecological and environment-friendly. They allow us to compile our bills in one place.

2. Fund transfer: A customer can transfer funds from one bank account to another or even from different banks in a day or two. E-transfer helps transfer without the direct intervention of bank's staff. No physical contact is required, direct deposits, ATM withdrawals, and online bill payment services can be made.

3. Shopping: nowadays, with every transaction comes to the favourite purchases made by every individual, be it purchasing clothes, accessories or anything, people find this job to be the easiest out of all. It allows us to buy and sell over the internet using a web browser. It evokes the physical interaction of the market. This is called business-to-consumer online shopping. Also, other stages are performed such as B2C and B2B online.

Online applications

Different applications are used by different banks to transact online. Some of the apps used by SBI banks are



Factors affecting e-banking transactions:

Various factors affect e-banking transactions are as follows:

- **Pricing:** A customer gets attracted when he/she receives a lesser price than what is readily available in the market. Therefore, pricing is the most important part of e-banking transactions. It is a decision given by the market by several determinants, for instance, assets and liabilities of the composition, management and production. It enables the bank to allow its funds and payments productively not to keep the funds idle.
- **Ease of operation:** Every person prefers to stay at home and order online, than go to the store and buy it. It provides an easier way of operating our activities, with just a few simple steps.
- **Brand Loyalty:** When a person buys from the same brand time and again, knowing the size and the price, the person sometimes does not like to go to the store and buy the product physically. So, he tries to buy from the same brand online. This makes him a repeated purchaser and ultimately brand loyal.
- **Security:** Even after so advancement of the technology, major failures and frauds have been committed, which created a lack of trust among the users of the banks, to face some difficulties. This reduces the number of transactions, hence playing an essential role in the factors affecting the level of e-banking transactions.
- **Awareness:** One important part of conducting transactions online is the level of awareness among people. This enables different people to develop different perceptions regarding e-banking transactions.

2. Literature review

Dospinescu, Anastasiei, and Dospinescu (2019) presented the relationship between the new technology implemented in the banking sector and how much the customers are aware of them. The research was carried out on a sample of 148 bank cardholders in Romania from the Millennials and Generation Z; still, awareness about the E-banking services to customers is needed as many of the E-banking facilities are not used by the customers.

Sharma (2017) used the primary data collected from private and public sector banks in Bhopal and discussed the impact of innovative technology on customer satisfaction. The study concluded that except for reliability, private sector banks are more satisfactory than public sector banks. Customers prefer public sector banks only because of trust.

Sanuja Shree, Gurusamy, and Balaji (2019) empirically examined the intention among young customers of public and private banks in Chennai about mobile banking usage. There are five factors: convenience, benefit, deliberation, safety and trust, which influence the customer's intention to use mobile banking services. The occupational status of the customer has the overall impact on the usage of banking services.

Bhelly & Sunil (2019) discussed the role of information technology in financial services in India, and the study tried to analyse the progress of internet banking in India. The study concluded that due to the information technology, the face of Indian banking has completely changed, and banking services have become more convenient for the customers.

Vincent et al. (2016) found out the factors that influence the financial performance of the commercial bank in Kapsabet town. A positive relation among mobile banking and financial performance of the bank has been identified in the study. Mobile banking has increased customer loyalty and convenience.

Ali and Kalu (2016) evaluated the impact of ATM service on the delivery of banking services in Nigeria. The author concluded that ATM transactions significantly impact the demand deposit, but they didn't impact saving and time deposits. Customers should be provided training about the usage of ATM services to develop e banking services.

Jaiswal and Kamal (2019) discussed e-commerce usage and its impact on people and the economy. This study has tried to determine the determinants of satisfaction among the customers related to e-banking services. Privacy and security are the major challenges encountered in the study, which can be turned into an opportunity by the public and private sector banks.

Mohammad Masukujjaman (2016) analyzed the perception of bankers on green banking in Bangladesh. Although the cost of green banking is high, bankers found it compatible with the environment. It was also found that Islamic Shariah-based banking and green banking have a good connection.

Sabhaya and Bhalala (2014) evaluated the impact of benefits and problems of e-banking on banks. The banking industry without information technology can't be thought, nor will the bank exist without it. The financial market has become more competitive nowadays, and the latest technology helps the bank compete in the market with other players.

Mohanraj (2018) discussed the role of HRD and the framework, which helps employees grow, and the author identified that sustainable growth could be achieved by social development.

Ananadaraman (2018) concluded that e-banking services have helped the economy grow, and also it is easy for the customer to use banking services through internet banking. It has become essential for banks to provide e-banking services to customer.

Ajay Kumar Mohanty (2014) noted the problems faced by the customer while using internet banking in the paper, and in the study, he found that information is easily available about the e-banking services, but there is a high risk of fraud.

Asiyanbi and Ishola (2018) scrutinised the effect of e-banking administrations on consumer loyalty of chosen bank clients in bank offices situated in Challenge, Dugbe, Agbeni, Gbagi, Ojoo, and Secretariat areas in Ibadan city. The review used a cross-sectional study plan and a comfort examining procedure. One hundred bank clients were reviewed through a self-report survey. Four exploration questions and two speculations were tried using Pearson relationship examination and t-test for autonomy at $p \leq 0.05$. The outcomes uncovered high use of electronic financial items ATM (98%), web banking (85%), electronic exchange (97%).

Singh (2012) explained the evolution of the banking system in India and the drawbacks of e-banking. The introduction of IT has completely changed the banking system, and the banking system has adopted a new working process.

Ullah, Ahmed, and Hashmi (2013) noted that electronic reform in the banking sector in Pakistan is essential for the upliftment of the economy. Due to the low literacy usage of CRM being limited in Pakistan, electronic reform will ease the banking process and help the economy rise.

Malik (2010) tried to identify the usage of ATM services and the factors that can make the ATM service more effective. In the study, the author found the use of ATMs more comfortable for customers, and also the value-added services such as online payment through cards enhances the services.

Khurana (2014) analyzed whether the quality of service provided is related to customer satisfaction, and he found that it acts as an essential input that reflects the long-run business.

Aswin Raj and Rao (2018) analyzed the connection between innovation execution in the financial area and clients: how they know about the advancements and how they are using it. Information for this review was gathered from the clients of different Banking Sectors under the Reserve Bank of India. A basic rate investigation and pie diagram will be finished. As indicated by examiners, 30 examples are gathered, and their understandings are given. Discoveries propose that a large portion of the clients of banks use ATM office. So, the banks need to give mindfulness of the E-banking administrations. The paper is of not many papers that focus on innovation improvement in the financial industry.

Hammoud, Bizri, and Baba (2018) examined the dimensions of the e-banking that satisfies the customer, and they found that there are several factors ease in using, efficiency, responsiveness that influence customer's satisfaction, but reliability is the major factor.

2.1. Research gap

Several studies have been conducted on customer's satisfaction with the use of e-banking, its impact on the economy and the banker's perspective towards e-banking. Nowadays internet banking has completely changed the working nature of banks, and also it has influenced customers. This study has tried to analyze the overall banking services provided to the customers i.e. loan, locker, basic banking facilities and customer's satisfaction. The customers need to be aware of the online banking services to use them; this study also tries to find out the awareness level among customers about the services, which banks provide online. Customer's satisfaction depends on the bank's services, so what factors influence the behaviour of a customer are addressed in the study.

2.2. Research objectives

Research objectives undertaken to conduct the study are as follows:

- To understand the various banking services.
- To understand the relationship between the banking services provided and the customer satisfaction derived.
- To identify the multiple factors responsible for customer behaviour.
- To understand the level of awareness among the customers regarding the offline and online banking services provided to customers.
- To analyse the factors and find out the major responsible factors.

3. Research methodology

There is an impact of banking services on customer satisfaction. The research carries exploratory and descriptive research designs. This study contains specific research questions and demographic information-related questions. This study contains primary and secondary data.

3.1. Data collection & empirical context

Primary data were collected by preparing a questionnaire containing two parts: section 1 and section 2. The primary data were collected by preparing a five-point Likert scale to various significant variables and their impact on customer satisfaction.

Section 1. Section 1 contains 16 questions, with personal and demographic information of customers. The customers show a subjective approach towards the questions, as here he/she has to define according to himself/herself. This section also contains dichotomous questions, which helps the respondent respond only in two ways; no third way is added to confuse the respondent.

Section 2. The second section contains 24 questions based on the Likert scale, showing the level of satisfaction based on the factors.

Sample size. A sample size of 110 customers has been selected.

Study area. The target set of customers are the users of SBI bank, sector 5 branch, Gurgaon, Haryana.

Population. Population refers to a specific group of the units, such as individuals, households, organisations, and similar, that are targeted for definite study. The respondents are users of SBI, providing useful information to analyse the data.

Sampling frame. After defining the population, the next step is to identify the sample frame. The sampling frame is the process of listing the elements to draw the actual sample. For this, the list of various branches of SBI Gurugram was considered.

Sampling procedure. Non-Probability sampling methods were used for data collection. Under this sampling procedure, the convenience sampling procedure is appropriate for this research.

Sampling size. Several factors, such as money, time, statistical methods, population size and so on, depend upon the question of sample size. For this thesis, as per the research convenience, 150 samples were taken and out of which 110 responses were considered final.

3.2. Measurement of variables

After completing the data collection, questionnaires were checked for completeness. Using SPSS software, at first, variables were developed, and data were entered accordingly. For this research a multivariate statistical analysis was used. Likert scale was used for rating responses. Each testimonial was measured by 5- point Likert scale: 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree. Similarly, dependent and independent variables were measured by focusing on Cronbach's alpha (must be above 60%). ✓

3.3. Statistical tools used

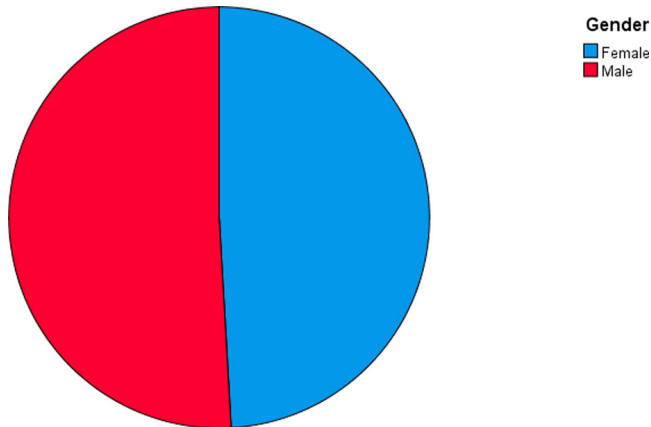
To develop the questionnaire, a google questionnaire was created and filled by the respondents.

To analyse the data, SPSS software was used. Different measures such as reliability tests and factor analysis were done. Reliability test, Factor analysis, Descriptive statistics and Correlation were used for statistical analysis.

4. Data analysis & interpretation

4.1. Demographic information

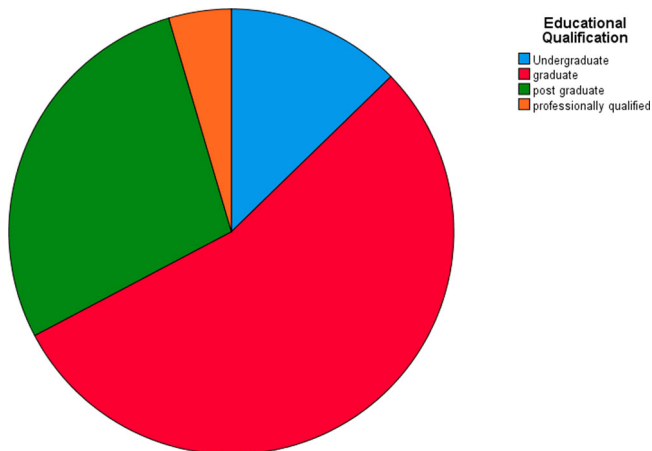
(1) Gender



Inference:

- The above pie chart represents the ratio of the female and male gender of the respondents who have responded to the questionnaire.
- This depicts fair conduct. No gender biasness is done while conducting the survey. There is an almost equal attempt to the questions answered.
- The factors responsible show that the product information and the level of knowledge are important equally for both ends.

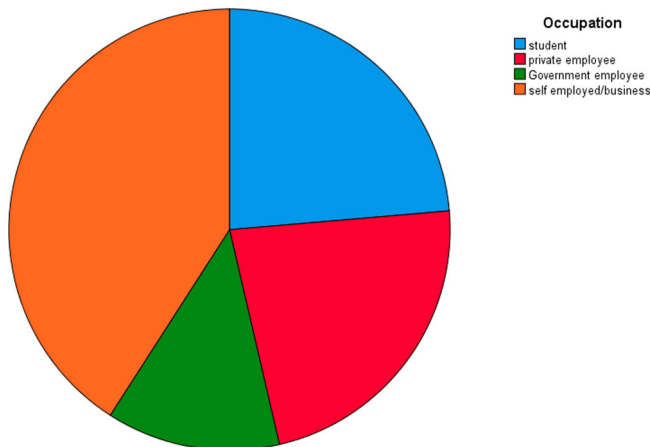
(2) Educational qualification:



Inference:

- The pie chart represents the respondents’ educational qualifications.
- Most of the customers represent the graduate section of the respondents. After which the green part is for postgraduates.
- This means most of the respondents have the basic knowledge, and some are getting educated.
- There is a very less percentage of professionally qualified individuals; therefore, the banks have to consider more on graduated people.
- Most people are educated and have full knowledge and awareness, more technological changes would be adapted by the people. Hence, improvise as and when required.

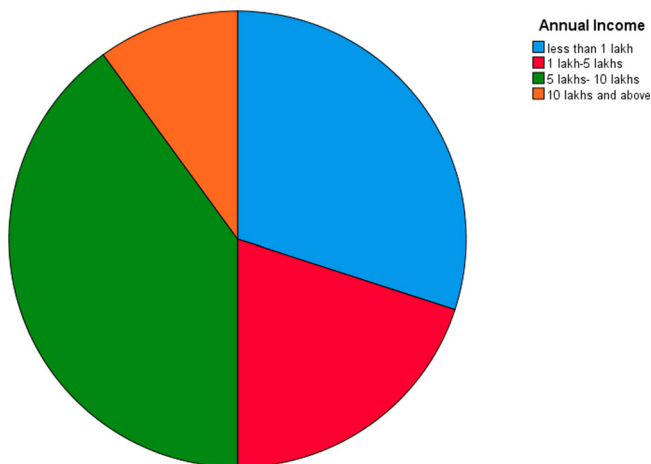
(3) Occupation:



Inference:

- The occupation of the customers is mainly self-employed or running businesses.
- Only a certain number of people are government employees.
- Most of the people are self-employed; hence the banks should make schemes which are more profitable from the business point of view, more schemes related to recurring deposits account should be made.
- The benefits of the current account should be told to spread awareness and information regarding firms and businesses.

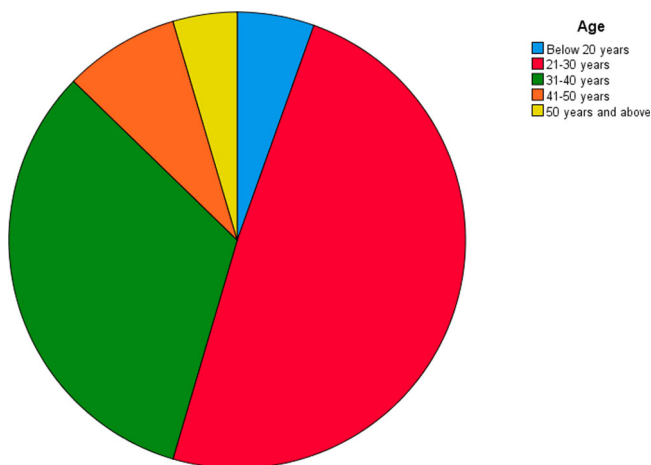
(4) Annual income



Inference:

- About 40% of the respondents have an income ranging between 5 lakhs and 10 lakhs.
- The majority here explains that the standard of living and lifestyle is quite simple and towards growth.
- People would tend to save more and spend less.
- The banks should provide for more schemes for savings accounts, fixed deposits accounts, wherein the people would save more for their growth and development.

(5) Age:



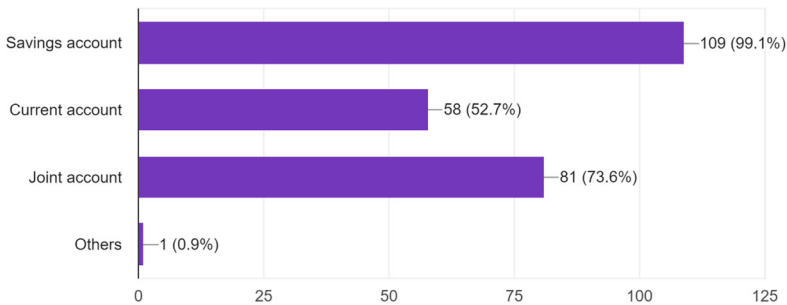
Inference:

- The age group with the majority share is of the age bracket 21 years to 30 years.
- This clearly defines that the study is reliable for the young respondents that have access to banking services.

- Moreover, the age group of 31 years to 40 years also adapts to the changing technological needs of the people.
- Also, people with age lying between 21 and 40 years have shown more interest than other age groups.
- This means that adolescent and adults tend to grow and are more adaptable to the changes in technology.
- These people would prefer e-banking to the traditional ways and the net banking apps. So, the main focus of the banks should be on these age groups to gain their majority share.

4.2. Customer related information

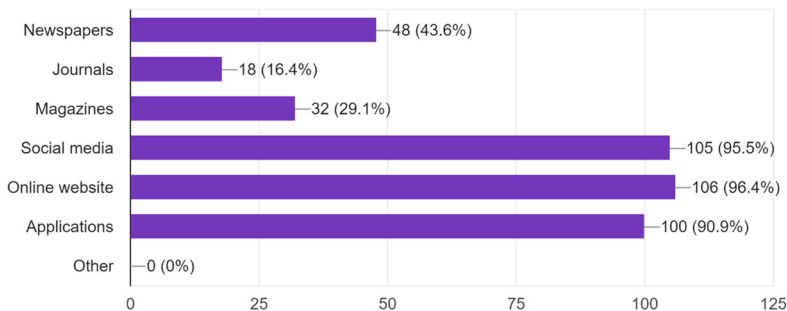
(1) What kind of bank accounts do you have?



Inference:

- About 99.1% of the total respondents have savings accounts.
- Only 1 customer has responded as other accounts.
- The basic need of the customer is to have a savings account in the bank.
- Since the savings account is like a mandatory account, banks should provide more offers and schemes relating to these accounts more often in this era of netbanking.
- This might also happen because the government has introduced Pradhan Mantri Jan Dhan Yojana that a person can open up to a maximum of 10 banks accounts.

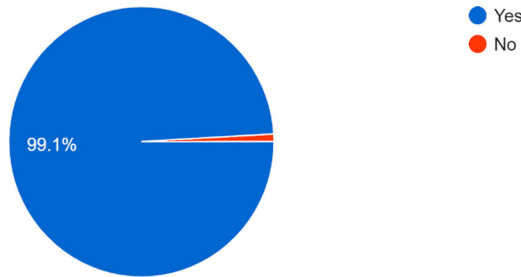
(2) How do you get awareness about the banks and their services?



Inference:

- People have their main concentration towards social media, online website and applications of the banks.
- These three components allow the customers to keep them updated and aware of the banking services.
- To bring developments, the banks should focus on internet mediums than offline mediums to promote and bring out new updates to the public-social mediums such as facebook, Instagram and other banking apps.

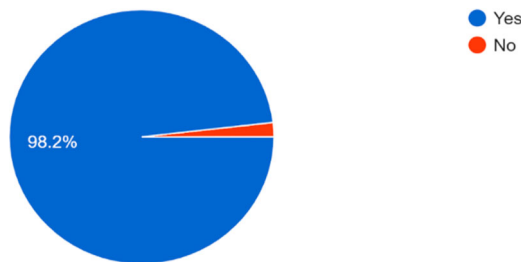
(3) Are you aware of the e-banking services provided by the banks?

*Inference:*

About 99.1% of the total respondents are aware of e-banking services.

This means that the banks have a good approach towards providing awareness to the people; this could be done by radio, newspapers or any other social media platform.

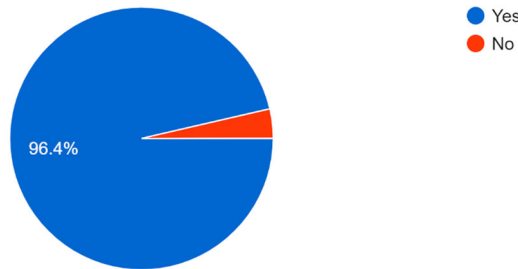
(4) Do you use internet banking services provided by the banks?

*Inference:*

- The respondents have 98.2% as the percentage of the people using internet banking services, which means only the 2% of the respondents need to be focused to make use of internet banking services.
- Almost every respondent uses such services provided by the banks.
- This means no such promotions and advertisements are required to market the products and services.

- Internet mediums are fair enough to provide awareness and updates of the banking services.

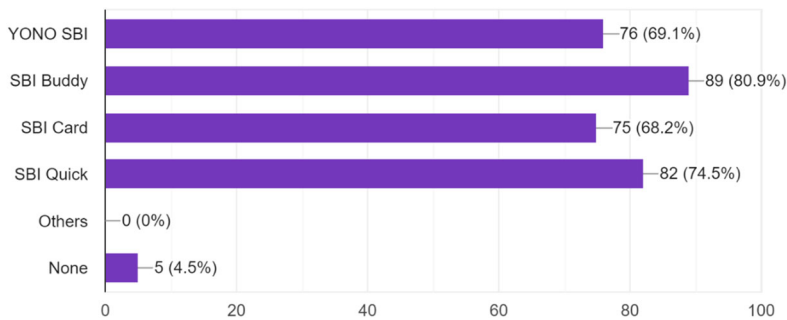
(5) Are you aware of SBI apps?



Inference:

- About 96.4% of the respondents are aware of the SBI apps.
- This means a good percentage of people believe to be updated and get awareness related to the SBI apps.
- This means people are satisfied and aware of the apps; no additional expenditure should be done to spread awareness to the public.

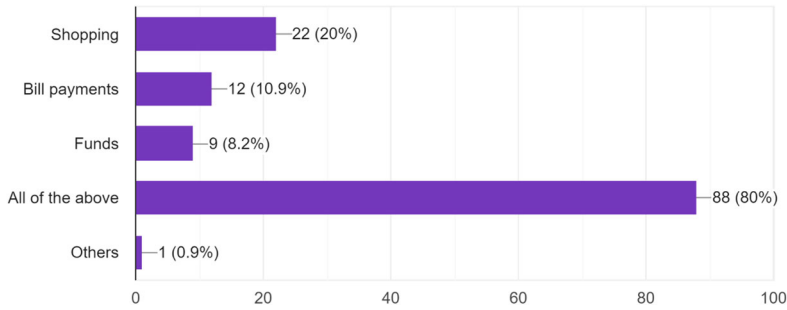
(6) Which SBI apps do you use?



Inference:

- Almost every respondent uses the banks provided by the SBI banks.
- Only 4.5% of people do not use any of the apps.
- Other than these four given apps, no other apps are used by the respondents.
- SBI Buddy is the most preferred app.
- This is because it is one-stop for all the banking services; no other phone numbers or contacts to be made other than this app.
- The banks should add more features to this app to be a MUST amongst all the other apps.
- Similarly, the banks to avoid unnecessary expenditure on unused apps.

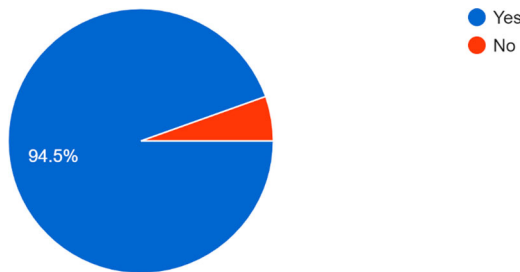
(7) For which payments do you use e-banking services?



Inference:

- A certain percentage of people only make payments and shop online.
- About 80% of the dataset people like to perform all the above-mentioned activities : shopping, bill payments and transfer of funds.
- One person out of all respondents still perceives not making online transactions of the mentioned payments.
- People find it easy to transact online and hence prefer each payment to be done by the apps only.
- Be it any payment; people try to do with such online platforms.
- This implies that the banks should focus more on reducing the unnecessary steps to log in the details and make easier ways like scanning of bar codes to make it simple for the general public.

(8) Do you think using an online medium lets you set your own terms and perceptions?

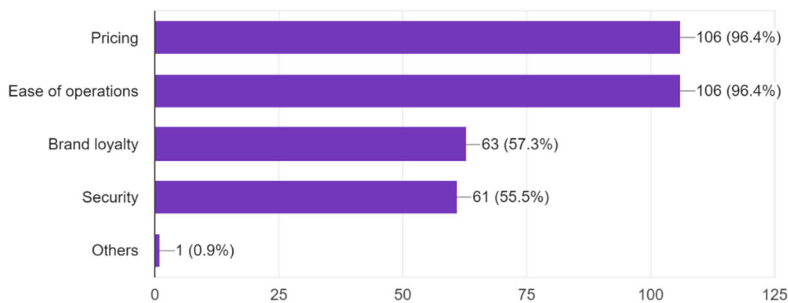


Inference:

- 94.5% of the customers believe that online medium lets you set your own terms and perceptions.
- As in the online system, there is no physical interaction as to why anybody else’s permission or ideas would be considered. It is just my way, no other way.
- Most of the respondents feel that it is a very systematic and easy process, because one can simply download the apps, log in the details and they remain forever till the time the data are not deleted.

- By this process, it becomes easier to set terms and conditions on its own and the work is done according to the time and efforts as per the customer. He/she does not have to physically go to the banks and withdraw the money, or even if it is about RTGS of a minimal amount.
- Nobody stands in a queue; it is just a few minutes.
- Nowadays, with the help of UPI, banks have made it even easier.

(9) What are the factors that affect your e-banking transactions?



Inference:

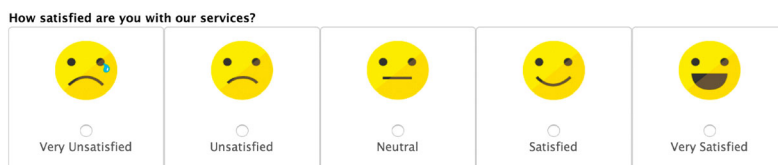
- There is an equal percentage of pricing and ease of operations.
- This means that the customers give equal importance to these two factors, which is 96.4%.
- Other two factors have a significant impact on e-banking transactions: brand loyalty and security.
- Factors such as costs and privacy have also been an important part, but to avoid these factors, we have used these such factors so that there is an easy understanding of the factors.
- This helps us know that the most important factors are pricing and ease of operations, which means that the banks have to make such schemes and policies that involve price to be lowered and operations to be made easy.

In section 2 of the questionnaire wherein these 4 factors have been expanded and marked as 22 factors to get a detailed view of them. These 22 factors show the level of satisfaction derived from availing services of the banks. Customer satisfaction is nothing but the utility derived by the customers on availing and using the services. The more is the level of satisfaction, the more the customers use the service and engage themselves. Therefore, there is a direct relationship between the level of customer satisfaction and banking services. This would imply a positive correlation between the two variables.

4.3. Responses for the section 2 in the questionnaire

In the questionnaire, the questions were asked in a format containing questions in a Likert scale. Using the Likert scale enables the respondents to have a broader view of

the subject matter. When a Likert scale is created, it defines levels and makes it easier for the respondent to answer the question. The respondents here get a broader view of the question itself and can measure the level of satisfaction in terms of the scale given and can answer as per their level of satisfaction. Therefore, the analysis and interpretation are made by using the Likert scale.



4.4. Analysis and interpretation

Reliability tests. A reliability test is conducted to measure the degree to which the data/element is reliable and consistent over a period.

It can also vary depending on whether it is over time, across items, and different researchers, showing three different tests- test-retest, internal consistency and inter-rater reliability.

Reliability test of the data. The reliability test of the data is conducted in the SPSS software, the different factors affecting the level of satisfaction of the customers.

There were 22 different factors on which the reliability test was conducted.

Reliability statistics

Cronbach's alpha	No of items
.797	24

Source: Author's compilation.

Since the value of Cronbach's Alpha is greater than 0.7, it shows that the factors chosen are reliable, as Cronbach's alpha should vary between 0.7 and -0.8 . Hence, it can be proved that there is consistency in the responses.

A separate section prepared in the questionnaire, apart from the demographics section, was to measure the level of satisfaction of consumers with banking services. To eliminate the excess factors, 22 closely related variables have been reduced using the factor analysis. The factor analysis helps reduce the unnecessary variables in a research problem to only the majorly dominant variables. A seven-factor solution was derived from the factor analysis using SPSS (Statistical Package for Social Sciences). The principal component method has been used with extraction and rotation. The correlation of the variables has been explained by the table of correlations derived.

Hence, factor analysis has been an effective way to analyse the factors.

Communalities

	Initial	Extraction
Level of product knowledge available	1.000	.636
Quality of response to customer questions	1.000	.785
Understanding of customers' needs	1.000	.663
Availability of information	1.000	.584
Ease of operations	1.000	.922
Presentation and communication of information	1.000	.717
Updates and notifications	1.000	.783
Timeliness of service delivery	1.000	.922
Quality of delivery	1.000	.788
Sharing of status	1.000	.739
Increase in productivity	1.000	.767
Accomplishment of tasks	1.000	.725
Cashbacks and offers	1.000	.712
Satisfaction with internet banking	1.000	.922
Satisfaction with mobile banking	1.000	.599
Satisfaction with cards systems	1.000	.800
Satisfaction with traditional approaches	1.000	.690
Process simplification	1.000	.749
Speed of the processes	1.000	.536
Reliability on banks	1.000	.561
Wireless transactions	1.000	.694
Cost of transactions	1.000	.711
Lack of assistance	1.000	.744
Security concerns	1.000	.606

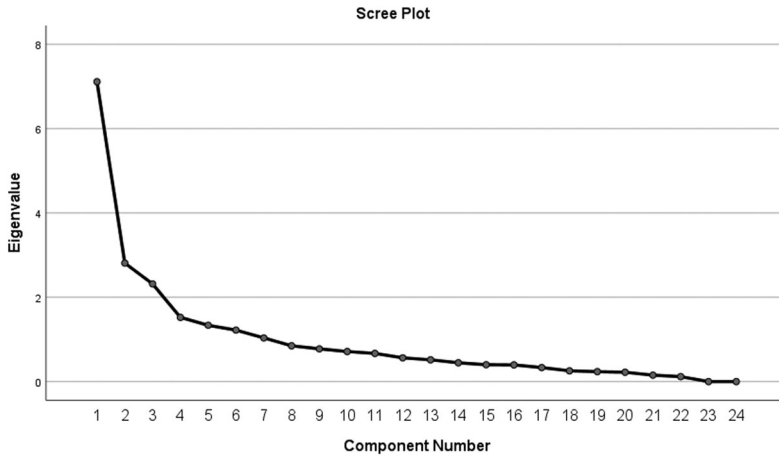
Extraction method: principal component analysis.

Total variance explained

Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.112	29.634	29.634	7.112	29.634	29.634
2	2.810	11.710	41.344	2.810	11.710	41.344
3	2.317	9.655	51.000	2.317	9.655	51.000
4	1.523	6.345	57.345	1.523	6.345	57.345
5	1.335	5.563	62.908	1.335	5.563	62.908
6	1.221	5.086	67.994	1.221	5.086	67.994
7	1.036	4.316	72.310	1.036	4.316	72.310
8	.848	3.535	75.845			
9	.776	3.235	79.080			
10	.714	2.973	82.053			
11	.668	2.785	84.838			
12	.564	2.350	87.188			
13	.517	2.154	89.341			
14	.447	1.861	91.202			
15	.401	1.669	92.871			
16	.395	1.648	94.519			
17	.332	1.383	95.903			
18	.255	1.064	96.967			
19	.236	.983	97.950			
20	.221	.922	98.872			
21	.153	.637	99.509			
22	.118	.491	100.000			
23	-3.049E-16	-1.270E-15	100.000			
24	-4.543E-16	-1.893E-15	100.000			

Extraction method: principal component analysis.

Source: Author's compilation.



Source: Author's compilation

Component matrix

	Component						
	1	2	3	4	5	6	7
Level of product knowledge available	.397	-.262	.490	-.257	-.014	-.058	.316
Quality of response to customer questions	.621	-.178	.598	-.021	.000	.064	.076
Understanding of customers' needs	.362	-.117	.480	.258	.290	-.315	.195
Availability of information	.546	.180	.238	-.355	-.149	-.211	.066
Ease of operations	.881	-.043	-.343	.041	.019	.013	-.154
Presentation and communication of information	.463	-.119	.188	-.361	.419	.364	-.118
Updates and notifications	.059	-.003	.339	.690	.355	-.237	-.073
Timeliness of service delivery	.881	-.043	-.343	.041	.019	.013	-.154
Quality of delivery	.748	-.170	-.187	-.082	.214	.329	.057
Sharing of status	.617	-.166	.354	.391	-.089	.136	-.162
Increase in productivity	.619	-.129	.141	.014	-.544	-.114	-.194
Accomplishment of tasks	.668	-.077	.101	-.094	-.402	-.263	-.155
Cashbacks and offers	.552	-.277	.395	-.209	.103	.346	.010
Satisfaction with internet banking	.881	-.043	-.343	.041	.019	.013	-.154
Satisfaction with mobile banking	.600	.105	-.172	.390	.196	-.016	-.083
Satisfaction with cards systems	.134	.217	-.040	.383	-.316	.395	.575
Satisfaction with traditional approaches	.047	.513	.242	.242	-.336	.439	-.038
Process simplification	.628	.253	-.408	.055	.138	.021	.319
Speed of the processes	.561	.144	-.401	.033	.024	-.162	.109
Reliability on banks	.550	.205	-.093	-.102	-.134	-.280	.319
Wireless transactions	.320	.615	.180	-.190	.191	-.287	.161
Cost of transactions	.109	.757	.151	-.103	.223	.049	-.203
Lack of assistance	.106	.727	.318	.042	-.134	.006	-.289
Security concerns	.020	.748	.022	-.142	.107	.110	.037

Extraction method: principal component analysis.
7 components extracted.

Source: Author's compilation

4.5. Correlation between the customer satisfaction and other variables

(1) Customer satisfaction with internet banking and mobile banking

Correlations		Satisfaction with internet banking	Satisfaction with mobile banking
Satisfaction with internet banking	Pearson Correlation	1	.567**
	Sig. (2-tailed)		.000
	N	110	110
Satisfaction with mobile banking	Pearson Correlation	.567**	1
	Sig. (2-tailed)	.000	
	N	110	110

**Correlation is significant at the 0.01 level (2-tailed).
Source: Author's compilation

- The correlation coefficient here is 0.567, which shows a strong correlation between the variables.
- Also, it shows a positive correlation between them.
- Therefore, if the level of satisfaction would increase with mobile banking, it would also increase with internet banking and vice versa.
- Also, the significance level is 0, showing that the value shows a significant correlation between the variables.

(2) Satisfaction between internet banking and card systems:

Correlations		Satisfaction with internet banking	Satisfaction with cards systems
Satisfaction with internet banking	Pearson Correlation	1	.081
	Sig. (2-tailed)		.398
	N	110	110
Satisfaction with cards systems	Pearson Correlation	.081	1
	Sig. (2-tailed)	.398	
	N	110	110

Source: Author's compilation.

- The value of the correlation coefficient here is 0.081.
- This shows a positive correlation between the two variables.
- The value lies between 0.1 and–0.5, which shows a weak correlation between the two variables.
- Therefore, if the level of satisfaction with internet banking increases, the satisfaction with cards will also increase, but not as much as the level of satisfaction with internet banking.
- Also, the significance level is 0.398, greater than 0.01, which means that this value is not that significant.

(3) Satisfaction with internet banking and traditional approaches:

Correlations		Satisfaction with internet banking	Satisfaction with traditional approaches
Satisfaction with internet banking	Pearson Correlation	1	–.018
	Sig. (2-tailed)		.851
	N	110	110

(Continued)

Continued.

Correlations		Satisfaction with internet banking	Satisfaction with traditional approaches
Satisfaction with traditional approaches	Pearson Correlation	-.018	1
	Sig. (2-tailed)	.851	
	N	110	110

Source: Author's compilation.

- The value of the correlation coefficient is -0.18 .
- This shows a negative correlation among the variable.
- This means that when the level of satisfaction with internet banking increases, satisfaction with the traditional approaches decreases.
- Also, the significance value is 0.852 , which is greater than the assumed value of 0.01 ; therefore the factor is insignificant.

(4) Satisfaction with mobile banking and cards system:

Correlations		Satisfaction with mobile banking	Satisfaction with cards systems
Satisfaction with mobile banking	Pearson Correlation	1	.144
	Sig. (2-tailed)		.134
	N	110	110
Satisfaction with cards systems	Pearson Correlation	.144	1
	Sig. (2-tailed)	.134	
	N	110	110

Source: Author's compilation.

- The value of correlation coefficient is 0.144 .
- This shows a positive correlation between the two factors.
- But the value shows a weaker positive correlation.
- This means that if the level of satisfaction with mobile banking increases, the satisfaction with the cards system would eventually increase and vice versa.

(5) Satisfaction with mobile banking and traditional approaches:

Correlations		Satisfaction with mobile banking	Satisfaction with traditional approaches
Satisfaction with mobile banking	Pearson Correlation	1	.041
	Sig. (2-tailed)		.669
	N	110	110
Satisfaction with traditional approaches	Pearson Correlation	.041	1
	Sig. (2-tailed)	.669	
	N	110	110

Source: Author's compilation.

- The value of correlation coefficient is 0.41 .
- This shows a weaker relationship between the two.

- This means a positive correlation between the level of satisfaction derived from mobile banking and with the traditional approaches.
- This shows a significant value of 0.669, which is greater than the assumed value, therefore, not more important.

(6) Satisfaction with cards system and traditional approaches:

Correlations		Satisfaction with cards systems	Satisfaction with traditional approaches
Satisfaction with cards systems	Pearson Correlation	1	.306**
	Sig. (2-tailed)		.001
	N	110	110
Satisfaction with traditional approaches	Pearson Correlation	.306**	1
	Sig. (2-tailed)	.001	
	N	110	110

**Correlation is significant at the 0.01 level (2-tailed).

Source: Author's compilation

- The value of the correlation coefficient is 0.306.
- This means that there is a positive correlation.
- The significance value here is 0.01, which is highly significant as it lies between 0 and 0.01.
- Therefore, there is a direct relationship between satisfaction with the cards system and satisfaction with the traditional approaches.

4.6. Extracted factors from factor analysis

(1) Level of product knowledge available:

The level of product knowledge available to the bank helps the customer get as much information as he can get before he/she is buying any service from the bank or not.

(2) Quality of response to customer questions:

An image is created in the minds of a consumer when he/she refers to the queries solved by the website/customer care services of the company. In the same way, banking services also get ratings in the customers' minds and sometimes on the website as to how the banks connect to the customers and build a rapport.

(3) Understanding of customer needs:

In consumers' market, understanding customer needs is a crucial element to survive. What consumer demands and needs are where the focus of any supplier should be. As with the changing needs, the banks evolved with cards and ATMs, now with online banking.

(4) Availability of information:

The amount of information available online helps increase customer satisfaction because when a customer gets access to the favourable information, he gets more attracted towards the information, which enables him/her to buy more of that product/service.

(5) Ease of operations:

With the evolution in banking, there is always an improvement added. When people couldn't carry much cash or didn't want to carry the cash, the banks introduced the

system of cards. Now, with net banking . Nwith mobile banking service banks make it so easy for customer that he does not have to open a laptop or a desktop to make a transaction, simply on the phone, with just one tap, the person can transact even if the other is miles away.

(6) Presentation and communication:

The availability of information and the knowledge with the parties is not enough; one should know how to present and communicate the facts and figures known to them.

(7) Updates and notifications:

Earlier, people had to go through websites repeatedly to see the changes. Now, the banks have implemented the system of updates and notifications, which help the customer keep updated and notified of the newest changes and offers, so that the customer does not lose interest instead, develops more.

The 22 factors have now been reduced to above mentioned 7 dominant factors, which are responsible for increasing customer satisfaction based on the factor analysis.

Based on the analysis, these 7 are the factors contributing to customer satisfaction. To win the customers, the banks should fulfil the customers' needs keeping in mind the level of satisfaction with all the factors.

5. Conclusion & practical implications

There is a positive correlation between the factors affecting customer satisfaction provided by the banking services. Therefore, banks should influence the customers to use e-banking services, and the banks themselves should keep on updating and upgrading the services to create a fruitful relationship between the customers and the banks.

5.1. Practical implications

Banking sector Agriculture is a major contributor to the Indian economy. The bank should enhance the level of product knowledge available to customers to know the benefits of savings with the bank. Moreover, the tele-caller facilities should be provided to resolve the customer questions and queries on time and comprehend the needs and desires of customers.

5.2. Recommendations for bank

To avail the information to the customers as much as possible.

To ease the banking operations.

To present and communicate the information effectively to their customers.

To provide customers the updates and notifications timely.

Disclosure statement

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ORCIDVikas Garg  <http://orcid.org/0000-0002-1421-5980>**References**

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