

A Study of E-Banking Services in Public Sector Banks in India

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Abstract

Bankers in India provide ease of service by utilizing information technology for safe and appropriate transaction services. With this paradigm change in view, this research paper embodies the analysis of three dimensions/factors of e-banking: accessibility, convenience, and security, and the impact of these factors on customer satisfaction. The study is based on the secondary and primary data collected with a structured questionnaire from 165 respondents in the vicinity of the district of Palwal, Haryana. The public sector banks and respondents were selected using the criteria of the convenience sampling method. The data was collected on 17 statements of inherent three dimensions on a 5-point Likert scale and three statements of customer satisfaction dimension. The collected data was subjected to inferential statistics and dimension reduction/factor analysis. The results indicate a positive contribution of three latent variables towards the overall satisfaction of customers of public sector banks in India.

Keywords: e-banking, ATM, public sector banks, customer satisfaction

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1. INTRODUCTION

Banks in India are classified into four categories i.e., (i) commercial banks (PSU Banks, Private Banks, Payments Banks, and Foreign Banks), (ii) small finance banks, (iii) payments banks, and (iv) cooperative banks (rural cooperatives & Urban Cooperatives) (Singh, 2023). The public sector undertaking (PSU) banks, which have the confidence of customers across India and account for US\$ 1602.65 billion out of US\$2481.21 billion banking sector assets during 2020-21 (IBEF, 2022), initiated ease of service in the aspect of flexibility, efficiency, simplicity, accessibility, convenience/simplicity, and adequate security with the usage of information & communication technologies (ICT) in line with the digital policy of Government of India. Public sector banks in India witnessed two major trends in the last two decades – (i) the merger of small & loss-making banks with their parent banks or other public sector banks to enhance financial performance and to have better control, (ii)

increasing use of information & communication technologies (ICT) in all customer-facing & internal operations of banks to achieve the mission “digital India, and to reduce, human errors, paperwork, and the cost of operations and extended banking services at the door of customers with ease (Dhananjay, 2015). The first trend is evident from the fact that during the year 1980. The number of PSU banks was 20, having 18,083 branches. In 2022, the number was reduced to 12 banks & 80,573 branches (Department of Financial Services, 2022). State Bank of India (SBI) has taken the lead with respect to the usage of ICT-based services. Today, all the PSU banks are using e-banking & other ICT-based services, which is evident from the Unified Payment Interface (UPI) transactions statistics. UPI processed 5.95 billion transactions worth over ₹10 trillion in May 2022, compared to 5.58 billion transactions amounting to ₹9.83 trillion in April 2022. UPI was launched in 2016 (Panda, 2022).

Many terms are used for ICT-based services in the banking industry. Jadhav (2022) reported that ten types of digital payment systems are available to Indian banks. These are (i) banking cards, (ii) Unstructured Supplementary Service Data (USSD), (iii) Aadhaar Enabled Payment System (AePS), (iv) Unified Payment Interface (UPI), (v) Mobile Wallets, (vi) Bank Pre-Paid Cards, (vii) Point of Sale (POS) Terminals, (viii) Internet Banking, (ix) Mobile Banking, and (x) Micro ATMs. However, this is not the universal classification even within India. Common term e-banking encompasses information-only systems, electronic information transfer systems, full information transfer systems, automatic teller machines, credit/debit cards, smart cards, bill payment systems, mobile banking, fund transfer systems, buying entry tickets, etc. The popularity of these systems and services is augmented by the Indian banking regulator, Reserve Bank of India (RBI), by creating/ developing or approving new categories of organization and products based on the application of ICT with an objective of achieving stated central government goals of inclusive growth across all sections of societies. Keeping this in view, the research paper attempts to analyze the awareness and satisfaction of e-banking services among customers of different demographics in tier-III cities and semi-urban areas of the National Capital Region (NCR), New Delhi.

This study has the following main objectives related to awareness of e-banking services and the impact of various dimensions of e-banking services on customer satisfaction, as listed below.

- i. To study the awareness and usage of e-banking services among the customers of public sector banks.
- ii. To study the relationship of e-banking on the customer satisfaction of public sector banks.
- iii. To analyze the perception of e-banking services for different categories of respondents as per their age, gender, income, educational qualification, types of account, e-banking services of customers, and relation of the identified factors, namely accessibility, convenience, and security with customer satisfaction.

2. LITERATURE REVIEW

This section presents a review of the literature on e-banking services of Public Sector Banks in India with a view to finding gaps in the literature and preparing a questionnaire for data collection along with data analysis methods.

Doddaraju (2013) analyzed the banking services and customer satisfaction of public and private sector banks in the Anantapur District of Andhra Pradesh State, India. Based on analysis of variance (ANOVA) results, the researcher concluded that private-sector banks provide better services than public-sector banks. Therefore, the public sector needs to enhance its services to attract customers. Yadav and Ravindra (2017) studied the banking environment and customer satisfaction towards e-banking services among the customers of Rewari District in the State of Haryana in India. They concluded that the majority of customers were satisfied with ATM services, electronic clearance (EC), electronic Fund transfer (EFT), online banking, deposit services, card services, and credit services. However, the level of satisfaction was higher among female customers. Their conclusions are based on chi-square test. They suggested that public sector banks should increase ATM services in small towns and villages to achieve the objectives of financial inclusion and cashless transactions in rural India.

Singhal (2017) studied the factors influencing customers and their overall satisfaction with the services of public and private sector banks. Based on ANOVA analysis, the researcher concluded that rural customers differ significantly from urban customers in their awareness level and usage level of e-banking. It is observed that urban male youth have higher awareness and usage of e-banking. In contrast, rural women are noticeably aware of e-banking, but their use level is very low. Kant et al. (2017) investigated service quality dimensions, customer satisfaction, and corporate image in Indian public sector banks using the Structural Equation Model (SEM). Researchers found that tangibility and assurance dimensions were the most important customer satisfaction factors. Customers were satisfied with service quality and corporate image in the Indian banking sector. Researchers found a positive impact of responsiveness on customer satisfaction. They suggested improving service quality would increase corporate image through customer satisfaction in the Indian banking sector.

Reeta and Asht (2016) analyzed the various e-banking services and the challenges banks face in approving the technology. Researchers found that almost all e-banking services are provided by banks, but customers have concerns about the security of transactions. They suggested technical default needs the attention of bankers, and the government should enhance expenditure on infrastructure. Kadam and Yelikar (2013) evaluated the e-banking scenario involving public sector banks in India and concluded almost all PSU banks are offering similar traditional services via the e-banking route. However, a scope exists for public sector banks to distinguish themselves through their e-banking service. The international offering of e-banking services also provides another opportunity for them to increase their e-banking services. Thangapandi and Gobinath (2016) measured the degree of importance related to various service quality dimensions like reliability, responsiveness, empathy, tangibility, and assurance among the customers. They compared the public, private, and foreign banks based on customers' expectations and perceptions of quality of services. The interval between the customers' expectations and perceptions of the responsiveness dimension was higher for the three categories of banks. In foreign banks, reliability was higher, and in private-sector and public-sector banks, assurance dimensions were higher.

Saravanan and Leelavathi (2020) focused on exploring the impact of E-banking variables on Customer Attitude and customer satisfaction in the Chennai District of

Tamil Nadu, India. They concluded that dimensions such as efficiency, privacy, service quality, and website design contribute maximum towards customer satisfaction. Kundu and Datta (2015) analyzed the relationship between e-banking services and customer satisfaction. They observed a significant relationship between e-service quality, trust, and customer satisfaction. They also found that internet banking privacy and fulfillment were the key service quality factors that affected trust. In all, they suggest that banks should enhance the features of privacy of operation of the customers. Karthikeyan and Krishnan (2021) focused on the awareness level of Axis Bank customers regarding e-banking services and problems. Researchers concluded that the majority of the respondents were aware of ATM services, and ATM services are the leading e-banking services used by the customers, followed by POS, Mobile Banking, EFT, and internet banking.

Madhavan and Vethirajan (2020) analyzed customer satisfaction and perception of e-banking services and the interrelationships among the various dimensions of e-banking service quality of public sector and private sector banks in Puducherry, India. They found a significant difference between perceptions of services among different demographic segments. Kaur and Kiran (2015) examined how e-banking consumers perceive the e-banking services of public, private, and foreign sector banks operating in India. The results revealed that customers perceive that foreign banks' quality of services is better than private and public sector banks. Differences are analyzed for testing differences using ANOVA.

Priyanka (2017) examined that e-banking helps overcome the drawbacks of the manual system as it provides the facility of storing, consolidating, analyzing, and presenting data as the customer wants with speed and accuracy. This research paper focused on technologies used in e-banking, their advantages and challenges, and legal issues-IT Act 2000. Singh and Bassi (2017) evaluated customer satisfaction with internet banking in public and private sector banks. Researchers found that banks should provide attractive, secure, and easy-to-use services. Tadesse (2018) examined the impact of 25 ATM attributes related to ATM services and identified key attributes and factors that influence customers' satisfaction with ATM banking. Kant et al. (2017) investigated service quality dimensions, customer satisfaction, and corporate image in Indian public sector banks using the Structural Equation Model (SEM). Researchers found that tangibility and assurance dimensions were the most important customer satisfaction factors. Customers were satisfied with service quality and corporate image in the Indian banking sector. There was a positive impact of responsiveness on customer satisfaction. Bishnoi (2013) measured customers' perceptions regarding Automated Teller Machine (ATM) /Debit Card. The researcher concluded that ATMs were very convenient during travel, reduced cash requirements, and had no extra cost from the bank side.

Further, the perception of customers between public and private sector banks' ATM services did not differ significantly. Kothari (2018) found no significant difference between private and public bank employees adopting internet banking. He further concluded that internet banking is efficient, enhances the performance and quality of services, and is easy to use, which leads to better productivity and customer satisfaction.

Rengarajan et al. (2018) interpreted the customer perception of digital payments comparatively between the private sector and public sector banks with

regard to the usage and awareness of digital payments. Researchers found a positive correlation between awareness and use of digital payments between the Private and Public sector Banks. Public sector banks were weaker in introducing and implementing digitalization than private sector banks. Kumar (2017) compared the public and private sector banks in the context of customer relationship marketing strategies and customer loyalty impact. He found that banks in the City of Hyderabad, India, were driven to adopt Customer Relationship Marketing Strategies (CRMSs) to increase customer loyalty. Public sector banks need to be more concerned about devising CRMSs.

Banker et al. (2020) observed that e-banking consumers were classified into three clusters, and their behavior for each cluster differed. One cluster's behavior was positive, and they accepted the changes. The behavior of cluster two was negative, and they were not ready to accept changes, and the behavior of cluster three was a mixture of both clusters. Insan and Kumari (2015) investigated customers' satisfaction with internet banking. Researchers found that the customers of Sirsa (North-west, India) were using internet banking services like loans and credit cards. People were aware of and satisfied with the internet banking services provided by their banks. Researchers suggest banks should deal politely with customers, providing extra benefits to internet banking users. Ray (2018) studied various factors and the impact of the banks' service attributes on customers' satisfaction with private and public sector banks in Dinajpur, Bangladesh. Researchers found that customers are highly satisfied with the tangibility dimension for both private and public sector banks. The customers were more satisfied with private banks than with public sector banks. He found the lowest satisfaction with empathy in public and private sector banks and suggested that focusing on customers' intended services is key to achieving business success.

Table 1. Summary of Reviewed Research Papers

Author	Type of Data	Methods of Data Analysis	Findings
Doddaraju (2013)	Primary data	Covariance and standard deviation	Private sector banks' services are better than public sector banks.
Yadav and Ravindra (2017)	Primary data	Chi-square test	Almost all customers were satisfied with the services provided by the banks, like ATM services, ECs, fund transfers, online banking, deposit services, etc.
Singhal (2017)	Primary data and secondary data	Descriptive statistics & ANOVA	Researchers found that accessibility, reliability, and security positively and significantly contribute to overall satisfaction.
Kant et al. (2017)	Primary data	Structural equation model	Researchers found a positive impact of responsiveness on customer satisfaction.
Reeta and Asht (2016)	Secondary data	Percentage, average, trend analysis, and compound annual growth rate (CAGR)	It was found that customers were feeling unsafe and unsecure.
Kadam and Yelikar (2013)	Secondary data	Descriptive analysis and histogram	All the public sector banks offer almost similar extent of e-banking services.

Author	Type of Data	Methods of Data Analysis	Findings
Thangapandi and Gobinath (2016)	Primary and secondary data	Credit/Deposit ratio analysis	Compare private and public sector banks with SERVQUAL analysis for responsiveness, reliability, empathy, assurance, and tangibility.
Saravanan and Leelavathi (2020)	Primary and secondary data	Correlation & regression analysis	They determined that the dimensions such as efficiency, privacy and website design contribute maximum towards customer satisfaction.
Kundu and Datta (2015)	Primary and secondary data	Factor analysis, Reliability test, ANOVA, etc.	There was a significant relationship between e-service quality, trust, and customer satisfaction
Karthikeyan and Krishnan (2021)	Primary and secondary data	Percentage and Garrett ranking	Most respondents were aware of the ATM services followed by POS, Mobile Banking, EFT, and internet banking.
Madhavan and Vethirajan (2020)	Primary data	Descriptive analysis, ANOVA, t-test, correlation.	The significant difference between the perception of services among different demographic segments was concluded.
Kaur and Kiran (2015)	Primary data	Factor analysis, regression analysis, and ANOVA	The customers perceive that foreign banks' quality of services is better than private and public sector banks
Priyanka (2017)	Secondary data	Review of literature	Focused on technologies used in e-banking, advantages and challenges, and legal issues-IT Act 2000.
Singh and Bassi (2017)	Secondary data	Review of literature	Researchers found that banks should provide attractive, secure, and easy-to-use services.
Tadesse (2018)	Secondary data	Review of literature	ATM is the key factor for influencing customer satisfaction.
Bishnoi (2013)	Primary data	Mean, SD, ANOVA	The researcher concluded that ATMs were very convenient during travel, reduced cash requirements, and had no extra cost from the bank side
Kothari (2018)	Secondary data	Review of literature	Internet banking is efficient, enhances the performance and quality of services, and is easy to use, which leads to better productivity and customer satisfaction.
Rengarajan et al. (2018)	Primary data	Correlation, Regression, cross tabulation, Anova	A positive correlation exists between awareness and usage of digital payments in the case of the private and public sector Banks
Ray (2018)	Primary & Secondary Data	Descriptive analysis and inferential analysis	The customers were more satisfied with private banks than with public sector banks. The lowest satisfaction was for empathy in both public and private sector banks.
Banker (2020)	Primary data	Reliability analysis, Factor analysis, Cluster	observed that e-banking consumers were classified into three clusters, and

Author	Type of Data	Methods of Data Analysis	Findings
		analysis, KMO, Bartlett, ANOVA	their behavior for each cluster was different
Insan and Kumari (2015)	Primary & Secondary Data	Descriptive analysis	Customers were aware and satisfied with the internet banking services provided by their banks
Kumar (2017)	Primary data	Discriminant validity, Confirmatory factor analysis	Customer relation parameters were highly correlated with customer loyalty.

Source: Compiled by authors.

Research Problem

It is evident from the literature review and its summary in Table 1 that most of the studies of e-banking services in India are based on yes and no types of responses and analyses limited to frequency analysis and ANOVA or t-test. The present study, though based on a relatively small sample size, is based on mainly Likert-type data and consists of all possible statistical analyses as per the nature of data.

3. METHODOLOGY

This section presents the research methodology, including the target population, sampling framework, sample size, instrument of data collection, research hypothesis, methods of data collection, and methods of data analysis & presentation of results.

3.1. Sample Size

It is an exploratory study with a sample size of 272, considered adequate for an error margin of 5%, population proportion of 50%, and 90% confidence level. Accordingly, 280 respondents from the target population were approached to complete the questionnaire. Out of 280 responses, only 165 respondent's data were valid and used in this study. The reasons for the rejection of the filled-in questionnaire were large missing values, inconsistent recorded observations, and lack of respondents' knowledge about the meaning of statements. The response would have been better if the questionnaire had been converted to local language.

3.2. Data Collection

This study is based on the primary data as well as secondary data. Primary data was collected with the help of a well-structured questionnaire by using different methods of contacting respondents. Secondary data was collected from the reports, magazines, and research papers/ articles. Primary data was collected from respondents who were customers of public sector banks via emails, monkey surveys, direct interviews, and oral telephonic interviews.

3.3. Methods of Data Analysis

Data were subjected to descriptive and frequency analysis for categorized data. For scaled-ordered data, reliability analysis is applied before subjecting the data to

testing various hypotheses using ANOVA, t-test, and factor analysis. New variables resulting from factor analysis were further subjected to regression analysis. To carry out factor analysis, the reliability coefficient values, KMO and Bartlett test are also calculated.

4. RESULT AND DISCUSSION

This section presents the analysis of primary data collected via a structured questionnaire in the following subsections. The first section 4.1. presents descriptive statistics of demographics followed by descriptive statistics analysis of types of accounts and e-banking services availed by respondents. The following section, 4.2., embodies the results of testing various hypotheses with respect to demographics, followed by factor analysis and testing of hypotheses of latent factors accessibility, convenience, security, and customer satisfaction and regression analysis in the last section 4.3.

4.1. Descriptive Statistics of Demographics

This section presents the descriptive statistics of demographics, namely gender, age, monthly income, e-banking services & duration of using e-banking services, educational qualification, and type of accounts and awareness of e-banking services. The results are presented as the frequency distribution of respondents per demographic in tables and the percentage of values. Table 2 presents frequencies of awareness and gender. It can be seen from the data that 91.5% of respondents are aware of the e-banking services of public sector banks, and male and female respondents are evenly distributed (55.8% male and 44.2% female).

Table 2. Frequency Distribution of Respondents as per Awareness of E-Banking Services and Gender

Awareness of E-Banking	Frequency	Gender	Frequency
Yes	151 (91.5)	Male	92 (55.8)
No	14 (8.5)	Female	73 (44.2)
Total	165 (100)	Total	165(100)

Note: Figures in brackets are percentages of the total. Source: Compiled by authors.

Table 3 embodies the distribution of the respondents as per age, educational qualification, and monthly income. The majority of the respondents (49.1%) are of the age group 26 years to 35 years and are either graduates (34.5%) or postgraduates (30.3%). The most prominent monthly income category is 20,000 to 30,000.

Table 3. Frequency Distribution of Respondents as per Age, Educational Qualification, and Monthly Income

Age (in years)	Frequency	Educational Qualification	Frequency	Monthly Income (₹) (US\$)	Frequency
< 25	38 (23.0)	Illiterate	7 (4.2)	Below ₹10000 (US\$135.25)	34 (20.6)
26 - 35	81 (49.1)	Upto+2	42 (25.5)	₹10001-20000 (US\$135.25-270.50)	31 (18.8)

Age (in years)	Frequency	Educational Qualification	Frequency	Monthly Income (₹) (US\$)	Frequency
36 - 45	27 (16.4)	Graduates	57 (34.5)	₹ 20001- 30000 (US\$ 270.50-405.75)	54 (32.7)
46 – 55	7 (4.2)	Postgraduates	50 (30.3)	₹ 30001- 40000 (US\$ 405.75-541)	22 (13.3)
>55	12 (7.3)	Professional Degree	9 (5.5)	Above ₹ 40000(US\$541)	24 (14.5)
Total	165 (100)	Total	165 (100)	Total	165 (100)

Note: Figures in brackets are percentages of the total.

Source: Analysis of primary data collected by authors.

Table 4 shows the frequency distribution of the respondents as per most used e-banking services (ATM, mobile banking, Debit cards) and duration of using e-banking services. ATM users are the highest among respondents, followed by mobile banking and debit cards (Aderonke and Ayo, 2010). Most respondents have been using e-banking services for over 20 months, while only two have used them for less than ten months.

Table 4. Frequency Distribution of Respondents as per Kind of Major E-Banking Services and Duration of Using E-Banking Services

E-Banking services	Frequency	Duration of using E-banking services	Frequency
ATM	123	0 – 10 months	2 (1.2)
Mobile Banking	87	10 – 15 months	28 (17.0)
Debit card	86	15 – 20 months	4 (2.4)
		More than 20 months	131 (79.4)
		Total	165 (100)

Note: Figures in brackets are percentages of the total.

Source: Analysis of primary data collected by authors.

The frequency distributions of the respondents/customers/users for types of accounts and e-banking services received in the past and presently receiving are given in Table 5.

Table 5. Frequency Distribution of Respondents as per Types of Accounts and E-Banking Services Received by You in the Past and Present

Types of accounts	Frequency	E-banking services received by you in the past and presently receiving	Frequency
Current account	54	ATM	123
Saving bank account	151	Internet Banking	72
Salary account	71	Mobile Banking	87
Fixed Deposit Accounts	11	Debit Card	86
Recurring Deposit Accounts	2	Form 26AS	1
PPF Account	10	Credit Card	33
Home Loan Account	6	Resetting password	2
Vehicle Loan Account	7	Bank Draft	6
Personal Loan Account	10	EFT	12
Demat Account	6	Interest Details	14
Other Account	3	Others	0

Source: Analysis of primary data collected by authors.

It is evident from the data that almost all customers have savings bank accounts (151) and salary accounts (71), while very few have recurring deposit accounts (2). On the other hand, 123 respondents used ATM services in the past and present, followed by mobile banking (87) and debit cards (86), while Form 26AS usage is much less in the past and present.

4.2. Inferential Statistics of Demographics

This section presents the mean perception score of 17 statements (details of the statement are given in the appendix) for different demographics along with p-values for testing the difference mean perception score and standard error of the mean for different categories of demographics.

The mean perception score of 17 statements, standard error, and median values for gender (male and female) are calculated and presented in Table 6. The mean perception score of the male respondent is the maximum for statement S4 (3.98) and minimum for statement S7 (2.95). The mean perception score of female respondents is maximum for statement S16 (3.85), followed by S15 (3.84) and minimum for statement S7 (3.23). The mean perception score for all statements, except four, is not statistically different for males and females. It can be seen from the table that the mean score for both males and females is more than 2.95.

Table 6. Mean Perception Score of the Respondents as per Gender

St. no.	Mean Perception Score		p-value
	Male	Female	
S1.	3.73±0.123	3.41±0.115	0.067
S2.	3.78±0.119	3.64±0.119	0.416
S3.	3.70±0.091	3.26±0.134	0.006*
S4.	3.98±0.107	3.53±0.128	0.008*
S5.	3.52±0.145	3.82±0.107	0.113
S6.	3.36±0.130	3.77±0.118	0.024*
S7.	2.95±0.147	3.23±0.124	0.150
S8.	3.20±0.137	3.42±0.087	0.185
S9.	3.33±0.134	3.32±0.167	0.958
S10.	3.48±0.130	3.29±0.140	0.322
S11.	3.47±0.114	3.81±0.121	0.044*
S12.	3.53±0.133	3.59±0.103	0.748
S13.	3.50±0.128	3.74±0.115	0.177
S14.	3.55±0.119	3.33±0.149	0.232
S15.	3.92±0.103	3.84±0.132	0.593
S16.	3.83±0.090	3.85±0.089	0.856
S17.	3.67±0.110	3.73±0.119	0.750

Source: Analysis of primary data collected by authors.

Mean perception scores for five age categories are presented in Table 7. It can be inferred from Table 7 that the null hypothesis (H0: There is no difference between mean perception score of 17 statements for five age categories) is rejected for 9 statements, and for the remaining 8 statements, there was no evidence against the null hypothesis.

The mean perception score of the statement for the respondents under 25 years of age is maximum for statements S5 & S9 and minimum for statement S1. The mean

perception score of 26–35-year-old respondents is maximum for statement S15 and minimum for statement S7. For the next category of respondents, i.e., 36–45 years, the mean perception score is maximum for statement S4 and minimum for statement S7. The mean perception score of 46-55 years respondents is maximum for statement S15 and minimum for statement S6. The mean perception score of respondents of 55 years and above is maximum for statement S4 and minimum for statement S6.

Table 7. Mean Perception Score of the Respondents as per Age (in Years)

SN	Mean Perception Scores					p-value
	Below 25	26-35	36-45	46-55	>55	
S1.	3.21±0.233	3.56±0.110	4.04±0.164	4.29±0.286	3.58±0.260	0.017*
S2.	3.95±0.177	3.51±0.127	3.81±0.177	3.71±0.360	4.25±0.250	0.094
S3.	3.76±0.122	3.31±0.132	3.70±0.176	3.29±0.360	3.67±0.142	0.132
S4.	3.89±0.150	3.44±0.127	4.33±0.141	4.00±0.436	4.33±0.284	0.001*
S5.	3.97±0.171	3.65±0.133	3.85±0.175	4.00±0.436	2.00±0.348	0.000*
S6.	3.63±0.218	3.84±0.090	3.48±0.209	2.86±0.404	1.75±0.329	0.000*
S7.	3.34±0.152	3.05±0.151	3.11±0.229	3.57±0.429	2.00±0.408	0.021*
S8.	3.58±0.187	3.21±0.120	3.44±0.202	3.43±0.429	2.58±0.260	0.069
S9.	3.97±0.166	3.07±0.161	3.41±0.240	3.57±0.429	2.58±0.313	0.003*
S10.	3.82±0.176	3.28±0.133	3.56±0.187	3.71±0.522	2.25±0.446	0.002*
S11.	3.58±0.212	3.59±0.116	3.85±0.190	3.71±0.421	3.33±0.188	0.694
S12.	3.71±0.199	3.53±0.114	3.93±0.130	3.43±0.369	2.50±0.469	0.005*
S13.	3.82±0.223	3.52±0.118	3.89±0.154	3.57±0.429	2.92±0.336	0.091
S14.	3.82±0.216	3.25±0.136	3.70±0.191	3.57±0.528	3.08±0.149	0.082
S15.	3.32±0.207	4.02±0.101	4.00±0.200	4.43±0.369	4.17±0.167	0.003*
S16.	3.76±0.143	3.79±0.080	4.04±0.181	4.00±0.309	3.83±0.271	0.650
S17.	3.63±0.175	3.74±0.108	3.93±0.199	3.71±0.421	3.08±0.358	0.215

Source: Analysis of primary data collected by authors.

The mean perception scores for five educational qualification categories of the respondents for 17 statements of the study are compiled in Table 8. It can be inferred from Table 8 that null hypotheses (H0: There is no significant difference between mean perception score for 17 statements with respect to five categories of educational qualification) are rejected for 7 statements, and no evidence is found for the remaining 10 statements. The mean perception score of illiterate respondents is maximum for statements S4 & S11 and minimum for statements S14. The mean score of upto+2 qualified respondents is maximum for statement S4 and minimum for statement S5. For the graduate category, mean perception is maximum for statement 5 and minimum for S7. For the postgraduate (PG) category, the mean perception score is maximum for statement S15 and minimum for statement 14. The maximum mean perception score for the professional category is for statement 15, and the minimum is for statement S7.

Table 8. Mean Perception Score of the Respondents as per Educational Qualification

S.N.	Mean Perception Score					P value
	Illiterate	Upto+2	Graduate	PG	Professional	
S1.	3.00±0.436	3.55±0.193	3.77±0.150	3.40±0.131	4.11±0.261	0.130
S2.	3.43±0.528	3.95±0.152	3.61±0.150	3.76±0.147	3.33±0.408	0.385
S3.	3.43±0.297	3.62±0.113	3.70±0.135	3.20±0.171	3.44±0.338	0.126

S.N.	Mean Perception Score					P value
	Illiterate	Upto+2	Graduate	PG	Professional	
S4.	3.86±0.340	4.07±0.146	3.82±0.137	3.46±0.174	3.89±0.261	0.101
S5.	3.57±0.202	2.79±0.225	4.07±0.141	3.86±0.121	4.00±0.289	0.000*
S6.	3.43±0.481	2.83±0.218	3.77±0.130	3.82±0.124	3.89±0.351	0.000*
S7.	3.29±0.286	2.74±0.234	3.19±0.161	3.28±0.164	2.56±0.338	0.168
S8.	3.29±0.474	2.83±0.210	3.56±0.128	3.40±0.134	3.22±0.222	0.022*
S9.	3.14±0.553	3.12±0.211	3.54±0.172	3.34±0.195	2.89±0.423	0.470
S10.	3.43±0.571	3.17±0.210	3.70±0.158	3.34±0.158	2.78±0.222	0.113
S11.	3.86±0.340	3.05±0.167	3.91±0.123	3.72±0.154	3.67±0.408	0.002*
S12.	3.57±0.429	3.07±0.214	3.88±0.144	3.58±0.107	3.67±0.333	0.011*
S13.	3.43±0.202	3.17±0.196	3.86±0.155	3.68±0.135	3.78±0.324	0.042*
S14.	2.86±0.261	3.33±0.173	3.86±0.163	3.18±0.173	3.44±0.338	0.022*
S15.	3.71±0.360	3.95±0.127	3.77±0.164	3.92±0.142	4.22±0.364	0.740
S16.	3.43±0.297	3.98±0.143	3.74±0.105	3.86±0.111	4.00±0.167	0.375
S17.	3.43±0.487	3.55±0.168	3.84±0.132	3.62±0.148	4.11±0.261	0.388

Source: Analysis of primary data collected by authors

The mean perception scores of the 17 statements in the context of five categories of monthly income (₹/US\$) of respondents are presented in Table 9. It is evident from the p-values that the null hypothesis (H0: There is no significant difference between mean perception score for 17 statements with respect to five categories of monthly income) is rejected for 15 statements, and for the remaining 2 statements, there was no evidence against the null hypothesis. It is evident from the analysis presented in Table 9 that respondents' perception scores are not the same for the majority of statements of accessibility, convenience, and security. Secondly variation in the values of statements is more visible in the context of income categories compared to categories of other demographics.

Table 9. Mean Perception Score of the Respondents as per Monthly Income (₹/US\$)

S. N.	Mean Perception Scores					p-value
	Below ₹ 10,000 (US\$135.25)	₹ 10,001-20,000 (US\$135.25-270.50)	₹20,001-30,000 (US\$ 270.50-405.75)	₹30,001-40,000 (US\$ 405.75-541)	> ₹ 40,000 (US\$541)	
S1.	2.85±0.243	3.45±0.196	3.89±0.094	3.86±0.221	3.87±0.202	0.000*
S2.	3.47±0.220	3.94±0.153	3.87±0.121	3.14±0.257	4.00±0.233	0.016*
S3.	2.91±0.233	3.55±0.112	3.78±0.108	3.45±0.235	3.71±0.204	0.002*
S4.	3.03±0.241	4.06±0.113	3.96±0.109	3.50±0.244	4.33±0.187	0.000*
S5.	3.53±0.180	4.06±0.167	3.57±0.173	4.05±0.203	3.12±0.320	0.024*
S6.	3.21±0.223	4.00±0.185	3.78±0.101	3.64±0.214	2.79±0.318	0.000*
S7.	3.47±0.204	3.48±0.190	2.96±0.175	2.64±0.259	2.63±0.287	0.012*
S8.	3.21±0.192	3.68±0.156	3.11±0.169	3.27±0.199	3.38±0.224	0.230
S9.	2.62±0.203	4.32±0.149	3.17±0.194	3.59±0.225	3.13±0.291	0.000*
S10.	2.85±0.212	4.16±0.168	3.48±0.144	3.41±0.225	2.96±0.310	0.000*
S11.	2.94±0.174	3.87±0.184	3.65±0.157	4.00±0.147	3.83±0.206	0.001*
S12.	3.09±0.181	4.03±0.182	3.65±0.124	3.91±0.217	3.08±0.294	0.028*
S13.	3.44±0.228	4.19±0.182	3.54±0.134	3.36±0.214	3.46±0.248	0.000*
S14.	2.82±0.255	4.10±0.188	3.28±0.141	3.68±0.241	3.71±0.175	0.000*
S15.	3.79±0.210	3.32±0.199	3.87±0.130	4.41±0.142	4.29±0.175	0.001*
S16.	3.65±0.173	3.81±0.142	3.83±0.102	3.77±0.160	4.21±0.134	0.133
S17.	2.97±0.200	4.00±0.174	3.83±0.102	3.86±0.178	3.88±0.258	0.000*

Source: Analysis of primary data collected by authors.

The mean perceptions cores, along with standard errors of duration of using e-banking services, are given in Table 10. It can be inferred from the table that the null hypothesis (H₀: There is no significant difference between mean perception score for 17 statements with respect to four categories of duration of the usage of e-banking services) is rejected only for 2 statements. For the remaining 15 statements, there was no evidence against the null hypothesis. Therefore, it can be inferred that statements of accessibility, convenience, and security are perceived by the respondents in the same way, irrespective of their duration of usage of e-banking services.

Table 10. Mean Perception Score of the Respondents as per Duration of Using E-Banking Services

S.N.	Mean Perception Scores				p-value
	0-10 months	10-15 months	15-20 months	More than 20 months	
S1.	3.50±0.500	3.86±0.204	3.75±0.750	3.53±0.097	0.543
S2.	2.50±0.500	3.71±0.205	3.00±0.000	3.76±0.096	0.213
S3.	3.00±1.00	3.36±0.194	4.00±0.707	3.53±0.088	0.561
S4.	2.50±0.500	3.71±0.217	4.25±0.750	3.80±0.092	0.292
S5.	4.00±0.000	2.89±0.264	3.50±0.866	3.82±0.096	0.003*
S6.	4.00±0.000	3.68±0.236	3.00±0.408	3.52±0.101	0.658
S7.	2.50±1.500	2.79±0.259	3.50±0.289	3.13±0.110	0.470
S8.	3.00±1.000	2.96±0.249	3.50±0.289	3.37±0.092	0.341
S9.	2.50±0.500	2.68±0.268	2.50±0.500	3.50±0.113	0.011*
S10.	3.00±0.000	2.93±0.192	3.00±0.000	3.51±0.111	0.117
S11.	3.50±0.500	3.25±0.203	2.75±0.250	3.73±0.094	0.065
S12.	3.50±0.500	3.21±0.208	3.50±0.866	3.63±0.096	0.355
S13.	2.50±0.500	3.39±0.254	3.00±0.707	3.69±0.093	0.192
S14.	2.50±0.500	3.54±0.202	4.25±0.750	3.43±0.107	0.363
S15.	3.00±1.000	3.96±0.174	3.00±0.707	3.91±0.092	0.214
S16.	3.25±0.000	3.75±0.142	3.25±0.750	3.87±0.071	0.443
S17.	2.75±0.707	4.04±0.196	2.75±0.479	3.66±0.090	0.085

Source: Analysis of primary data collected by authors.

4.3. Data Reduction/Factor Analysis & Regression Analysis

This section presents the results of factor analysis of 17 statements along with reliability coefficient, KMO, Bartlett test of sphericity, descriptive analysis of factors, regression analysis between customer satisfaction (dependent variable) and accessibility, convince, and security.

4.3.1. Factor Analysis

In all, 17 statements are used for factor analysis to extract factors designated as independent variables, and 3 statements relating to customer satisfaction are analyzed to extract factors designated as dependent variables. The identified factors, the rotational component matrix, and communality are given in Tables 11, 12, and 13. As evident from the results given in Table 11, the criteria for deriving latent factors was the number of fixed factors (3 in this case), not the eigenvalues (>=1). For the

three statements of customer satisfaction dimension, the criterion of extracting factors was eigenvalue greater than one. Since there is only one factor, the computation of rotational components matrix and communalities is not feasible. The details of variation explained by different factors are presented in Table 11 (for three factors) and Table 12 (for one factor).

Table 11. Factor Analysis-Total Variance Explained (17 Statements)

CT	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.85	34.41	34.410	5.85	34.41	34.410	4.42	26.01	26.01
2	2.42	14.23	48.643	2.42	14.23	48.643	3.61	21.22	47.228
3	1.79	10.50	59.144	1.79	10.50	59.144	2.03	11.92	59.144
4	1.18	6.959	66.102						
5	0.92	5.390	71.492						
6	0.84	4.964	76.457						
7	0.58	3.432	79.888						
8	0.55	3.237	83.125						
9	0.50	2.914	86.039						
10	0.49	2.883	88.922						
11	0.41	2.384	91.306						
12	0.33	1.938	93.244						
13	0.31	1.811	95.055						
14	0.29	1.732	96.787						
15	0.23	1.334	98.121						
16	0.18	1.077	99.199						
17	0.14	0.801	100.000						

Note: Extraction Method: Principal Component Analysis., CT = Components.

Source: Analysis of primary data collected by authors.

Based on VARIMAX rotation analysis and factor loading, as given in Table 13, three factors are identified. They were used to extract the factors, and the rotated component matrix was used for factor loadings and deciding on factors. These three factors are named as Accessibility, convenience, and security. The values of communalities are above the threshold level except for statement 2.

Table 12. Factor Analysis-Total Variance Explained (3 Statements)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.950	65.000	65.000	1.950	65.000	65.000
2	0.624	20.801	85.801			
3	0.426	14.199	100.000			

Note: Extraction Method: Principal Component Analysis., CT = Components.

Source: Analysis of primary data collected by authors.

Table 13. Factor Analysis–Rotational Component Matrix and Commuality

S.N.	F1	F2	F3	Commuality
S1.	0.103	0.631	0.296	0.496
S2.	0.149	0.350	0.381	0.290
S3.	0.067	0.833	0.082	0.705

S.N.	F1	F2	F3	Communality
S4.	-0.111	0.837	0.211	0.757
S5.	0.785	0.218	0.063	0.668
S6.	0.657	-0.117	0.123	0.460
S7.	0.624	-0.307	0.317	0.580
S8.	0.791	0.040	0.174	0.658
S9.	0.573	0.505	-0.223	0.634
S10.	0.584	0.612	-0.133	0.734
S11.	0.601	0.338	0.258	0.542
S12.	0.739	0.350	-0.011	0.668
S13.	0.732	0.178	0.110	0.579
S14.	0.285	0.684	-0.121	0.564
S15.	0.065	-0.178	0.762	0.617
S16.	0.071	0.199	0.759	0.621
S17.	0.326	0.318	0.523	0.481

Source: Analysis of primary data collected by authors.

4.3.2. Reliability Coefficient, KMO, Bartlett Test of Sphericity

Before beginning the process of extracting factors, several tests need to be done to determine the suitability of the sample data for exploratory factor analysis. These are the Kaiser-Meyer-Olkin (KMO), Bartlett's Test of sphericity, and Cronbach's alpha (reliability coefficient). Kaiser-Meyer-Olkin (KMO) is conducted to measure the suitability of sample data. At the same time, Bartlett's Test of sphericity is executed prior to extraction or factor formation to ensure the suitability of data for exploratory factor analysis. For the data set used in this study, the value of Kaiser-Meyer-Olkin (KMO) is 0.795, and Bartlett's test of Sphericity was also significant. The values of Cronbach's alpha are greater than 0.70 for combined and individual factors. The value of Cronbach's alpha (reliability coefficient), Kaiser-Meyer-Olkin (KMO), the measure of sampling adequacy & chi-square value of Bartlett's test of sphericity, and the number of statements for each factor are given in Table 14. The value of KMO suggests that the degree of common variance is middling. Bartlett's test indicates that the sample inter-correlation matrix did not come from a population in which the inter-correlation matrix is an identity matrix. That is to say, all indexes are adequate for conducting the factor analysis.

Table 14. Reliability Coefficient, KMO, and Bartlett Test Output

Reliability Coefficient – Cronbach's Alpha	KMO	Bartlett test
0.869 (All three factors)-17	0.795	Chi-square -1417.53, DF= 136, p-value= 0.000
0.798 (Accessibility)-8 (Cause)	0.773	Chi-square – 674.11, DF = 45, p-value = 0.000
0.757(Convenience)-5 (Cause)	0.689	Chi-square - 118.880, DF =3, p-value = 0.000
0.528 (Security)-4 (Cause)	0.577	Chi-square – 95.221, DF = 6, p-value = 0.000
0.728 (Customer Satisfaction)-3 (Effect)	0.656	Chi-square – 106.56, DF = 3, p-value =0.000

Source: Analysis of primary data collected by authors.

4.3.3. Descriptive Analysis of Factors Designated as Independent and Dependent Variables

This section presents a descriptive analysis of four factors extracted as a result of factor analyses with respect to different demographics, along with p-values of testing of hypotheses. P-values are calculated using a t-test and Analysis of Variance

(ANOVA) depending on the number of categories of the demographic variables. The analysis is presented in Table 14.

Demographic Gender: It can be inferred from the p-values given in Table 14 that accessibility and convenience are perceived significantly different by male and female respondents. On the other hand, security and satisfaction are perceived equally important by male and female respondents.

Demographic Age: It is evident from the p-values given in Table 14 that accessibility, convenience, and security features are perceived significantly different by the respondents of five age groups, but for satisfaction level, all five groups are at par, and data did not exhibit a statistically significant difference.

Demographic Educational Qualification: It is evident from the p-values given in Table 14 that accessibility and customer satisfaction features are perceived significantly different by the respondents of five educational qualifications, but for convenience and security for all five educational qualification groups are at par, and data did not exhibit a statistically significant difference. This means respondents with higher educational levels need more improvement in e-banking services. This is also evident from the mean score values.

Demographic Monthly Income: It can be seen from the p-values given in Table 14 that accessibility, convenience, and security features are perceived significantly different by the respondents of five monthly income groups, but for the customer satisfaction factor, all five monthly income groups are at par, and data did not exhibit a statistically significant difference. It means respondents with all monthly income groups are equally satisfied and need improvement in the e-banking services for all the independent/cause factors. This is also evident from the variations in mean score values.

Demographic Duration of Using e-banking Services: It can be seen from the p-values given in Table 14 that all four dimensions, i.e., accessibility, convenience, security, and customer satisfaction, are perceived as equal by the respondents of four groups based on the duration of using the e-banking services. The reason could be the ease of use of e-banking services during the COVID-19 era and compulsion due to lockouts, which also coincides with the data collection period.

Table 14. Mean Perception Score Values of the Respondent as per Age, Educational Qualification, Monthly Income, and Duration of Using E-Banking Services

Demographic: Gender						
Factors	Female	Male				p-value
Accessibility	0.21±0.09	-0.16±0.11				0.017*
Convenience	-0.24±0.13	0.19±0.08				0.005*
Security	-0.01±0.11	0.01±0.10				0.899
Customer satisfaction	-0.07±0.11	0.06±0.11				0.414
Demographic: Age						
	< 25 years	26-35 years	36-45 years	46-55 years	> 55 years	p-value
Accessibility	0.30±0.15	0.04±0.10	0.07±0.14	-0.00±0.35	-1.41±0.39	0.000*
Convenience	0.18±0.14	-0.26±0.13	0.35±0.13	0.14±0.31	0.29±0.12	0.022*

Security	-0.43±0.18	0.04±0.10	0.24±0.20	0.36±0.37	0.34±0.29	0.024*
Customer satisfaction	0.07±0.19	0.08±0.11	-0.03±0.20	-0.61±0.39	-0.036±0.17	0.304
Demographic: Educational qualification						
	Illiterate	Upto+2	Graduate	PG	Prof. degree	p-value
Accessibility	0.05±0.34	-0.69±0.20	0.32±0.11	0.22±0.08	-0.07±0.26	0.000*
Convenience	-0.25±0.28	0.18±0.10	0.17±0.13	-0.31±0.17	-0.00±0.22	0.078
Security	-0.32±0.38	0.16±0.15	-0.15±0.15	0.16±0.13	0.38±0.26	0.364
Customer satisfaction	-0.84 ±0.56	-0.14±0.16	0.35±0.11	-0.16±0.13	-0.01±0.43	0.006*
Demographic: Monthly Income (₹/US\$)						
	< ₹ 10,000 (US\$135.25)	₹ 10,001- 20,000 (US\$135.2 5-270.50)	₹20,001- 30,000 (US\$ 270.50- 405.75)	₹30,001- 40,000 (US\$ 405.75- 541)	> ₹ 40,000 (US\$541)	p-value
Accessibility	-0.12±0.12	0.61±0.15	-0.91±0.14	0.13±0.14	-0.53±0.28	0.000*
Convenience	-0.80±0.23	0.29±0.11	0.17±0.09	0.01±0.23	0.36±0.17	0.000*
Security	-0.25±0.22	-0.38±0.17	0.12±0.12	0.01±0.18	0.58±0.11	0.003*
Customer satisfaction	-0.39±0.15	0.04±0.20	0.11±0.13	0.31±0.18	-0.04±0.23	0.088
Demographic: Duration of Using E-Banking Services						
	<10 months	10-15 months	15-20 months	>20 months		p-value
Accessibility	-0.07±0.32	-0.41±0.21	-0.34±0.34	0.10±0.09		0.092
Convenience	-0.70±0.18	-0.06±0.17	0.21±0.61	0.02±0.09		0.738
Security	-0.45±0.90	0.22±0.16	-0.08±0.70	-0.01±0.09		0.214
Customer satisfaction	-0.70±0.27	0.17±0.18	-0.33±0.96	-0.01±0.09		0.533

Source: Analysis of primary data collected by authors.

4.3.3. Regression Analysis

The outputs of multiple linear regression analysis between accessibility, convenience, & security (independent variable) and customer satisfaction (dependent variable) are presented in Table 16 for three different linear regression algorithms. The result includes the regression equation, t-value, p-value of regression coefficient, coefficient of determination (Adjusted R²), and p-value of coefficient of determination.

It is evident from the values of the standardized regression coefficient that all the independent factors have a positive relation with the dependent variable. Based on the t-value and p-value, it can be inferred that all regression coefficients are statistically significantly different from zero at a 5% level of significance. It means we reject the following three null hypotheses with respect to regression coefficients and accept alternative hypotheses.

$H_0: \beta_i = 0$, for $i = 1, 2, 3$ (Null Hypotheses)

$H_1: \beta_i \neq 0$, for $i = 1, 2, 3$ (Alternative Hypotheses)

The values of Adjusted R² and its corresponding p-values indicate high goodness of fit of multiple linear regression equation. The results of all three

algorithm methods (Enter method, Stepwise method, Forward method) are almost similar.

Table 15. Regression Analysis of Overall Satisfaction of Customers About the Services Provided by Banks

Regression Algorithm	Regression Equation, t-values, p-values (in brackets)				Adjusted R ² / p-value	
Enter Method	Y=	0.000	+0.178 X ₁	+0.343 X ₂	+0.279 X ₃	0.213
		(1.000)	(0.011)	(0.000)	(0.000)	(0.000)
Stepwise Method	Y=	0.000	+0.178 X ₁	+0.343 X ₂	+0.279 X ₃	0.213
		(1.000)	(0.011)	(0.000)	(0.000)	(0.000)
Forward Method	Y=	0.000	+0.178 X ₁	+0.343 X ₂	+0.279 X ₃	0.213
		(1.000)	(0.011)	(0.000)	(0.000)	(0.000)

Note: X₁ = Accessibility, X₂ = Convenience, X₃ = Security & Y = Customer Satisfaction.

Source: Analysis of primary data collected by authors.

5. CONCLUSION

The number of public sector banks accounts for 2/3rd the assets of the banking sector in India. It is preferred by customers across the country, though marginally less efficient than private sector banks. With a view to improving financial positions and cost of operation, the government merged many banks and started implementing ICT-based tools. The following conclusions are drawn based on the analysis of the data collected.

The testing of null hypotheses reveals differences among various segments of the sampled respondents with respect to different features of e-banking services. These differences are more among income groups and groups based on educational qualifications and least in the case of duration of services used. It indicates that education and income level better differentiate the meaning of statements and also real latent variables.

Testing of the hypothesis of final latent variables (accessibility, convenience, and security) exhibits a similar trend but with some variation, as evident from the p-values in Table 14. All three hypotheses, the difference between the mean scores of accessibilities, connivance, and security, are rejected for the respondents' age and income categories. Accessibility null hypotheses are rejected for all demographics except the duration of the e-banking services. On the other hand, null hypotheses of satisfaction are rejected only for the groups of respondents based on educational qualification.

The result of multiple regression analysis between satisfaction as the dependent variable and accessibility, convenience, and security as the intendant variable is given in Table 15. All the regression coefficients of three intendant variables are positive and have p-values less than 0.05. Therefore, it is concluded that all three independent variables contribute significantly. The value of R-Square, though small in magnitude, supports the goodness of fit of multiple regression equation as evident from the p-values.

The study's sample though small in but was belongs the strata of the population which were not explored earlier by the researchers in the Indian context. The

exhaustive analysis makes it amenable for meta-analysis in the future along with other future studies.

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APPENDIX

Nomenclature of Statements/Variables/Parameters

No.	Description of Statements/ Parameters/ variables	Loaded on
S1.	E-Banking service providers have the essential ability and knowledge to perform the services.	Convenience
S2.	If there is problem then bank staff provides immediate help and response to customers.	Security
S3.	E-Banks give attention to the users and advise other options for them to complete the transaction.	Convenience
S4.	Banks provides 24 hour e-based monitoring and assisting of e-banking services that need immediate assistance.	Convenience
S5.	Banking services related to protection of customer personal information, financial losses and risk of fraud are easily accessible.	Accessibility
S6.	Provide information to customers in their language.	Accessibility
S7.	The design implementation is done keeping customers language in line with of written and spoken by customer.	Accessibility
S8.	Transitions are very efficient and accessible.	Accessibility
S9.	Response of employees in solving problem of customer's is satisfactory.	Accessibility
S10.	Accessibility of transaction is much faster than traditional banking channels.	Convenience
S11.	Customer can access their accounts from anywhere and at any time using different channel.	Accessibility
S12.	No long queue while using E-Bank services at the service counter in bank premises.	Accessibility
S13.	E-Banking services are easy to use and understand.	Accessibility
S14.	Customers have freedom from risk and doubt about security.	Convenience
S15.	E-banking services will provide compensation for any losses due to security reason.	Security
S16.	You are satisfied with the security system of e-banking service providers.	Security
S17.	Security factor is main cause for adoption of e-banking services.	Security
Customer satisfaction		
CS1	Would you recommend your bank to your friends, relatives and associates?	Satisfaction

No.	Description of Statements/ Parameters/ variables	Loaded on
CS2	What do you feel about overall service quality of your bank?	Satisfaction
CS3	Your overall opinion about the services provided by banking industry.	Satisfaction