



**CUSTOMER PERCEPTIONS OF NEW AGE OF INDIAN BANKING SYSTEM TOWARDS  
INTERNET BNAKING USAGE  
(A Study with special reference to the Chennai city-Tamil Nadu)**

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**Abstract**

**Purpose:** *The main objective of this study is to indicate Customer awareness new age of Indian banking system and socio-economic conditions of the banks' customers and to assess the underlying dimensions of internet banking usage in Chennai City.*

**Design / Methodology:** *The study aim is Exploratory and analytical in nature.*

**Implications:** *Banking sector play vital major role for economic development of the country and technology has a great positive impact on banking sector. It is believed that it may replace traditional method of banking (physical presence) soon in the near future.*

**Originality:** *Customers can now access their account and transact sitting at home and office. For banks, internet banking has emerged as strategic source for achieving higher efficiency, faster operational cycle and reduction of various costs by reducing paper-based transactions and labour-intensive techniques with computerized processes. This all lead to higher profitability to banks.*

**Findings:** *The concluded that awareness has significant effect a positively correlated on intention to use of internet banking.*

**Key Words:** *Customer awareness, New Age in banking, Internet banking, Internet Usage, Service quality and Customer Service etc.*

**Introduction**

Banking sector play vital major role for economic development of the country and technology has a great positive impact on banking sector. Rapid advancement of science and technology in 21<sup>st</sup> century has made our daily life much easier and more comfortable. Excellent development of technology has a great positive impact on banking sector. Internet banking was first introduced in the year 1983 in UK and introduced in India by ICICI bank in 1998. It can be defined as the modern process or practice of conducting financial transaction through the use of internet in our computer, smart phones or tablet by accessing through the bank's websites. It is also known as e-banking, online banking, net banking or virtual banking and one of the most convenience platforms of doing business for banks, organizations, societies, groups or individual gains without physically presenting at the bank. It can be presumed that almost everything can be done through the use of internet today. It saves our time, money and energy. However, banks' customers encounter so many obstacles in the process of internet banking and it has got certain drawbacks of high risks, lack of computer knowledge and awareness, internet connectivity problems and cost and language issues. Internet banking is greatly practicing in Chennai city of Tamil Nadu. The main objective of this study is to indicate the socio-economic conditions of the banks' customers and to assess the underlying dimensions of internet banking variables in Chennai. It is believed that it may replace traditional method of banking (physical presence) soon in the near future.

## New Age of Banking System In India

The following the new age banking system used in India as follows

1. Internet Banking (IB)
2. Real Time Gross Settlement (RTGS)
3. National Electronic fund Transfer (NEFT)
4. Electric Purse Service (EPS)
5. Immediate Payment Service (IMPS)
6. Unified Payments interface (UPI)
7. Mobile Banking (MB)
8. Cloud Banking (CB)
9. Retail Banking (RB)
10. Blockchain Technology (BT)

### Review Matrix

The following review matrix used for the research

**Mohd Thas Thaker (2021)** According to the researcher, survey questionnaires were distributed among the clients of Islamic banks in two major states, namely Kuala Lumpur and Selangor. The data was analysed with the partial least squares (PLS) method, and the theoretical framework for this study is led by the unified theory of acceptance and use of technology 2 (UTAUT2). According to the findings, clever PLS analysis produced three key outcomes: variables such as performance expectancy, effort expectancy, price value, facilitating situations, and habit have a favourable influence on behavioural intention. The researchers stated that the study will be ground-breaking in terms of identifying characteristics that influence customers' continued acceptance of IB.

**Raza, S. A (2020)** Based on distinct conceptions, an exclusive study attempts to investigate the structural relationship between Internet banking service quality, electronic customer pleasure, and electronic customer loyalty. In this study, a quantitative technique is used to collect data from 500 bank customers in Pakistan using structured questionnaires, and the theoretical model is tested using partial least square structured equation modelling (PLS-SEM). According to the study, service quality is highly significant in every society since it has become the foundation for how customers interpret online banking and, ultimately, how it interacts and operates with online services. The researcher concluded that the Internet banking industry is effective in developing effective marketing strategies, establishing long-term connections with clients, and gaining a competitive advantage in the market.

### Research Methodology Matrix

S.NO	Methodology	Instruments
1	<b>Population of the study</b>	Bank customers of those who are using Internet banking in Chennai city
2	<b>Method of Data Collection</b>	Sample survey method. Convenient Non –Random sampling method was adopted
3	<b>Technique of Data Collection</b>	Structure Questionnaire technique
4	<b>Secondary Data Collection</b>	Secondary Data: Textbooks, newspapers, journals, magazines and associated websites were used to gather secondary data in this study.
5	<b>Determination of Sample Size</b>	A total of 200 copies of questionnaire were issued as equally to students, trader, working group etc I greater Chennai. Finally, 115 questionnaires were considered

		for the study
6	<b>Data Collection Period</b>	From 1.3.2022 to 20.3.2022
7	<b>Sample Size</b>	115 Sample
8	<b>Types of Data</b>	Primary and secondary data.
9	<b>Scaling Technique</b>	Five Point Likert scale
10	<b>Statistical Package</b>	(SPSS) Version 21.0.

#### IV Statistical tools used for the study

1. Percentages Analysis
2. Descriptive Statistics
3. Test of Normality
4. Factor analysis and
5. Regression Analysis

#### Research Gap

Because Internet banking is a new concept, there are few research studies on the subject. Various authors' literatures on online banking and mobile banking were discussed in this chapter. In their research, they discovered a number of factors and measures. Many studies have shown the importance and necessity of internet banking in India and around the world. According to the assessments, there are numerous elements that need to be investigated in order to fully understand the expansion and reach of Internet banking in India. If the government places a high priority on financial inclusion, Internet Banking could be a viable delivery route. As a result, there is a need to close the gap that this study aimed to close. Overall, it was concluded that the review of the national and international literature observed the effective measures to enhance the reach of Internet Banking in India and identified the gap.

#### Objectives of The Research

The following of the Objectives Framed for the research as follows

1. To identify the socio-economic conditions of the Bank customer in Chennai City.
2. To analyse the underlying dimensions of Internet Banking (IB) Variables.
3. To explore dominant dimensions of significant between Appositeness Guarantees Factor and other factors Convenience Assurance Factor (CAF), Service Utilisation Factor (SUF) and Cost-Effective Factor (CEF).

#### Analysis and Discussion

##### Personal Profile of Internet Banking Customers

In any research, the personal profile of the respondent has importance on the subject matter of the study. In this study, primary data collected from the respondents includes various demographic variables such as, age, gender, marital status, educational qualification, monthly family income, bank category, Source of information about Internet Banking services and how often do you use Internet Banking services. The demographic variables are subjected to percentage analysis and descriptive statistics analysis and results are indicates in table.

**Table – 1, Socio - Economic Profile of The Respondents**

<b>Demographic Profile (N = 115)</b>	<b>Description</b>	<b>Frequency</b>	<b>Percentage</b>
Gender	Male	76	66.1
	Female	39	33.9
Marital status	Single	90	78.3
	Married	25	21.7
Educational Qualification	UG	78	32.2
	PG	37	67.8
Monthly Family Income	Below 25,000	44	38.3
	25000 to 35000	22	19.1
	35000 to 45000	32	27.8
	45000 to 60000	9	7.8
	Above 60000	8	7.0
Bank Category	Public Sector Bank	63	54.8
	Private Sector Bank	52	45.2
Source of information about Internet Banking services	News Papers	14	12.2
	Friends	47	40.9
	Relatives	5	4.3
	Magazine	6	5.2
	Bank Employees	10	8.7
	Others	33	28.7
How often do you use Internet Banking services	Every day	18	15.7
	Once in two days	10	8.7
	Once in a week	11	9.6
	Twice a week	10	8.7
	Once in a month	8	7.0
	Whenever required	58	50.4
Descriptive Statistics (Age)	Mean		21.843
	Std. Deviation		5.937
	Minimum		18
	Maximum		47

Table 1 reveals that majority of the respondents are male (66.1%), followed by female (33.9%). Majority of the respondents are Single (78.3%) followed by married (21.7%). Majority of the respondents are UG (67.8%) followed by PG (32.2%). Maximum numbers of respondents are earning monthly family income (Rs.) below 25,000 (38.3%) followed by between 35000 to 45000 (27.8%), Between 25000 to 35000 (19.1%), between 45000 to 60000 (7.8%), Above 60000 (7.0%). Majority of the respondents are using public sector bank (54.8%) followed by private sector bank (45.2%). Majority of the respondents are friends (40.9%) followed by others (28.7%) newspapers (12.2%) bank employees (8.7%) magazine (5.2%) relatives (4.3%). Majority of the respondents are whenever required (50.4%) followed by every day (15.7%) once in a week (9.6%) once in two days (8.7%) twice a week (8.7%) once in a month (7.0%). The average age (Years) of the respondents is 21.843 years with the standard deviation of 5.937 and age ranging from minimum 18 maximum 47 of descriptive statistics.

### Exploratory Factor Analysis - Internet Banking (Ibank)

The factor analysis a determination has been made to classify the internet banking of the bank customers. Sixteen variables are mentioned in the questionnaire therefore the data decrease is done through the application of factor analysis by principal component process and the succeeding results are obtained.

**Table – 2,Internet Banking (Ibank)**

Items	Mean	SD	Communalities	Variance (Eigen Value)	Loadings	Cronbach's Alpha
<b>Appositeness Guarantees Factor (AGF)</b>						
IBANK (10)	4.087	0.904	0.748	22.716 (3.635)	0.822	0.898
IBANK (13)	4.191	0.897	0.757		0.723	
IBANK (16)	4.261	0.849	0.781		0.671	
IBANK (07)	4.078	0.929	0.719		0.662	
IBANK (12)	4.148	0.851	0.652		0.521	
IBANK (04)	4.235	0.841	0.626		0.487	
<b>Convenience Assurance Factor (CAF)</b>						
IBANK (02)	4.061	0.976	0.795	21.008 (3.361)	0.818	0.902
IBANK (14)	4.087	0.987	0.826		0.761	
IBANK (05)	4.113	0.886	0.763		0.629	
IBANK (15)	4.096	0.858	0.754		0.597	
IBANK (06)	4.217	0.856	0.723		0.531	
<b>Service Utilisation Factor (SUF)</b>						
IBANK (11)	4.113	0.876	0.832	18.434 (2.949)	0.761	0.861
IBANK (09)	4.148	0.861	0.788		0.701	

IBANK (01)	4.409	0.847	0.773		0.694	
<b>Cost Effective Factor (CEF)</b>						
IBANK (03)	4.009	0.987	0.773	13.463 (2.154)	0.797	0.705
IBANK (08)	4.043	0.995	0.789		0.675	
Total Variance = 75.620%						
Cronbach's Alpha = 0.950 for 16 itmes						
Kaiser-Meyer-Olkin Measure of Sampling Adequacy. = 0.927 (Bartlett's Test of Sphericity Approx. Chi-Square = 1395.126; df = 120; Sig. = 0.000)						

Table 3 shows that Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.927, Bartlett's Test of Sphericity with approximate chi square value 1395.126, df = 120 and p = 0.000 are statistically significant at 5 percent level. Therefore, appropriate for exploratory factor analysis and that the 16 items have exhibited the communalities variances from 0.626 to 0.832. In addition, the 16 variables are reduced into 4 predominated groups. It is found that the variable exhibits the total variance 75.620%.

High Mean value of internet banking was recorded for the variable IBANK (04) Mean = (4.235) and lowest standard deviation S. D = (0.841). Followed by IBANK (01) Mean = (4.409), S.D = (0.847); IBANK (16) Mean = (4.261), S.D = (0.849); IBANK (12) Mean = (4.148), S.D = (0.851); IBANK (06) Mean = (4.217), S.D = (0.856); IBANK (15) Mean = (4.096), S.D = (0.858); IBANK (09) Mean = (4.148), S.D = (0.861); IBANK (11) Mean = (4.113), S.D = (0.876); IBANK (05) Mean = (4.113), S.D = (0.886); IBANK (13) Mean = (4.191), S.D = (0.897); IBANK (10) Mean = (4.087), S.D = (0.904); IBANK (07) Mean = (4.078), S.D = (0.929); IBANK (02) Mean = (4.061), S.D = (0.976); IBANK (14) Mean = (4.087), S.D = (0.987); IBANK (03) Mean = (4.009), S.D = (0.987); IBANK (08) Mean = (4.043), S.D = (0.995).

The most dominant factor is factor 1 with the described variance of 22.716 with Eigen value of 3.635 and it has six variables associated to the internet banking such items are "IBANK (10), IBANK (13), IBANK (16), IBANK (07), IBANK (12), IBANK (04)." It has been labelled as "**Appositeness Guarantees Factor (AGF)**".

Followed dominant factor is factor 2 with the described variance of 21.008 with Eigen value of 3.361 and it has eight variables associated to the internet banking such items are "IBANK (02), IBANK (14), IBANK (05), IBANK (15), IBANK (06)". It has been labelled as "**Convenience Assurance Factor (CAF)**".

Followed dominant factor is factor 3 with the described variance of 18.434 with Eigen value of 2.949 and it has three variables associated to the internet banking such items are "IBANK (11), IBANK (09), IBANK (01)". It has been labelled as "**Service Utilisation Factor (SUF)**".

Followed dominant factor is factor 4 with the described variance of 13.463 with Eigen value of 2.154 and it has two variables associated to the internet banking such items are "IBANK (03), IBANK (08)". It has been labelled as "**Cost Effective Factor (CEF)**".



**Table – 3, Test of Normality And Descriptive Statistics**

IBANK	Mean	SD	Variance	Skewness	Kurtosis	Kolmogorov-Smirnova		Shapiro-Wilk	
						Statistic (df = 115)	Sig.	Statistic (df = 115)	Sig.
AGF	25.000	4.29198	18.421	-1.546	4.009	0.138	0.000	0.874	0.000
CAF	20.5739	3.87312	15.001	-1.326	2.714	0.145	0.000	0.884	0.000
SUF	12.6696	2.28543	5.223	-1.464	3.253	0.185	0.000	0.844	0.000
CEF	8.0522	1.74136	3.032	-1.309	2.552	0.192	0.000	0.857	0.000
Lilliefors Significance Correction									

The descriptive statistics of higher mean value and lesser standard deviation values are robust in nature and prove that the data is normally distributed among the internet banking of the study area. The Kolmogorov-Smirnova Test of normality and Shapiro-Wilk Test of normality prove that the data is normal and fits for the higher order multivariate analysis. The Mean, Standard Deviation, Variance, Skewness and Kurtosis of internet banking dimensions have normal distribution and reliability in it.

**Table – 4, Regression Analysis of Internet Banking**

Dependent Variable	Significant Predictors	Mean (SD)	F-Value	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	B (t-Value)	Sig.
AGF		25.000 (4.291)	<b>79.922</b>	<b>0.827</b>	<b>0.684</b>	<b>0.675</b>		
	CAF	20.573 (3.873)					0.296 (3.284)	<b>0.001*</b>
	SUF	12.669 (2.285)					0.430 (5.077)	<b>0.000*</b>
	CEF	8.052 (1.741)					0.195 (2.672)	<b>0.009*</b>
<b>P Value of &gt;0.05* - (CAF, SUF, CEF all Factor significantly influencing the CAF)</b>								
<b>Notes: *Significant @ 5% Level.</b>								

Table 4 reveals that R = 0.827, R Square = 0.684, Adjusted R square = 0.675 according to the above. This means that the independent variables of CAF, SUF, and CEF have an influence on the dependent factor of AGF of internet banking customers, and that F-value = 79.922 and P = 0.000 are statistically significant at the 5% level, according to the above table. As a result, it is determined that independent variables are sufficient for the AGF to have exploratory potential of bank customers. The presence of individual impact over the dependent components is indicated by a strong regression fit. The results of

the Coefficients of CAF ( $t = 3.284$ , beta value = 0.296,  $p = 0.001$ ), SUF ( $t = 5.077$ , beta value = 0.430,  $p = 0.000$ ) and CEF ( $t = 2.672$ , beta value = 0.195,  $p = 0.001$ ) are statistically significant at the 5% level, according to the table. As a result, it is concluded that the CAF, SUF and CEF have a favourable and significant influence on bank customers AGF in terms of their internet banking.

## Conclusion

To conclude, the bankers failed that to focus the certain group of the society like as income on middle and upper middle, to provide the information relating on IB services for their customers in the developing nation. Also, the banker should be provided the adequate education to their customers about IB facilities. Customers can now access their account and transact sitting at home and office. For banks, internet banking has emerged as strategic source for achieving higher efficiency, faster operational cycle and reduction of various costs by reducing paper-based transactions and labour-intensive techniques with computerized processes. This all lead to higher profitability to banks. The concluded that awareness has significant effect a positively correlated on intention to use of internet banking.

## References

1. Bashir, I., & Madhavaiah, C. (2015). Consumer attitude and behavioural intention towards Internet banking adoption in India. *Journal of Indian Business Research*, 7(1), 67–102.
2. Factors Affecting the Internet Banking Adoption. (2020). *Jurnal Ekonomi Malaysia*, 54(3), 1–15.
3. Giovanis, A. N., Binioris, S., & Polychronopoulos, G. (2012). An extension of TAM model with IDT and security/privacy risk in the adoption of internet banking services in Greece. *EuroMed Journal of Business*, 7(1), 24–53.
4. Manoharan, S., Katuk, N., Hassan, S., & Ahmad, R. (2021). To click or not to click the link: the factors influencing internet banking users' intention in responding to phishing emails. *Information & Computer Security*, 30(1), 37– 62.
5. Mohd Thas Thaker, H., Mohd Thas Thaker, M. A., Khaliq, A., Allah Pitchay, A., & Iqbal Hussain, H. (2021). Behavioural intention and adoption of internet banking among clients' of Islamic banks in Malaysia: an analysis using UTAUT2. *Journal of Islamic Marketing*, 13(5), 1171–1197.
6. Naeem, M. (2020). Developing the antecedents of social influence for Internet banking adoption through social networking platforms: evidence from conventional and Islamic banks. *Asia Pacific Journal of Marketing and Logistics*, 33(1), 185–204.
7. Perera, K. M. M. K. (n.d.). Factors Affecting Usage of Internet Banking in Sri Lanka: *The Case of Local Private Commercial Banks in Colombo District*.
8. Rahi, S., & Abd.Ghani, M. (2019). Integration of DeLone and McLean and self-determination theory in internet banking continuance intention context. *International Journal of Accounting & Information Management*, 27(3), 512–528.
9. Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. *The TQM Journal*, 32(6), 1443–1466.
10. Robinson, C. J., & Moore, W. (2011). Attitudes and Preferences in Relation to Internet Banking in the Caribbean. *SSRN Electronic Journal*.
11. Shanmugam, M., Wang, Y.-Y., Bugshan, H., & Hajli, N. (2015). Understanding customer perceptions of internet banking: the case of the UK. *Journal of Enterprise Information Management*, 28(5), 622–636. doi:10.1108/jeim-08-2014-0081
12. Yee, B., & Faziharudean, T. M. (2010). Factors Affecting Customer Loyalty of Using Internet Banking in Malaysia. *Journal of Electronic Banking Systems*, 1–22.





13. Yeşildag E. (2019). Chapter 13 Factors Affecting Internet Banking Preferences and Their Relation to Demographic Characteristics. *Contemporary Issues in Behavioral Finance*, 187–203.
14. Naeem, M. (2020). Developing the antecedents of social influence for Internet banking adoption through social networking platforms: evidence from conventional and Islamic banks. *Asia Pacific Journal of Marketing and Logistics*, 33(1), 185–204.