



# E-BANKING – TRANSFORMATIONAL CHANGE IN TRADITIONAL BANKING A FOCUS ON CUSTOMER PERCEPTION TOWARDS SELECT PUBLIC AND PRIVATE BANKS IN NAGAPATTINAM DISTRICT

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## ABSTRACT

*The study highlights the customer perception towards E-banking services and service quality of two prime banks in two sectors. The study was conducted in Ngapattinam district of Tamilnadu with 250 respondents in each bank was chosen for the study. Questionnaire was used to collect data from the respondents. Respondents were surveyed on demographic traits and dimensions of service quality to compare the quality of service between the banks.*

*E-banking necessity was analysed through newly introduced products of the banks. The study concluded with a positive impact on e-services and some immediate action on factors by the banks of customer interest. Respondents concern with E banking services was to have a safe and secured banking. At present the banking sector lacks in providing a secured banking function to its customers due to the present threat it faces from the hackers.*

**KEYWORDS:** E-Banking; Dimensions; Perception; Expectation; Service quality; Gap; Reliability; Tangibility

## 1. INTRODUCTION

Information and Communication Technology (ICT) came into picture in the year 1980s' in banking industry. There were different phases introduced during the evolution of ICT in the banking sector. Banks were focusing on automating the laborious accounting process and the functions performed at back office operations like maintenance of deposits, calculation of interest, and maintaining of ledger accounts at the first phase of ICT development. New generation private sector banks was started by opening up in the third phase, these banks opening the branches with small network under the computerized environment and they introduced the networking concept and centralized operations. After centralized banking system the banks have already captured substantial business, core banking solution was introduced and instead of branch-customer the bank customer concept was introduced. In core banking Anywhere, Anytime and Anyhow (AAA mantra) was implemented under which the customer carried out his own required transactions through automated teller machine (ATM), mobile banking, internet banking, and phone banking. Now banks provide flexible options to the customers at very less operational costs through ATMs and internet banking.

Interbank connectivity is the fifth stage of development of ICT, now the concept of "bank-customer" has further improved to "banking industry-customer" because inter-bank and inter-branch connectivity has been possible through "Real Time Gross Settlement System". In a competitive environment computerization, information technology and automation of services are key issues. Technological advancement has totally changed the scenario of banking sector, however, the implementation of IT in banking without undertaking appropriate Business Process Re-engineering (BPR) exercise will not prove to be fruitful. Now customers are facilitated to carry out most of the transactions without having to visit the branch premises through channels like tele-banking, remote customer enquiry terminals, kiosks, internet banking, ATMs, mobile banking, and phone banking E-banking is the term that signifies and encompasses the entire sphere of technology initiatives that have taken place in the banking industry. E-banking is a generic term making use of electronic channels through telephone, mobile phones, internet etc. for delivery of banking services and products. The concept and scope of e-banking is still in the transitional stage.



## 2. SERVICE QUALITY

Quality is a key requirement in every field. The basic concept of quality is “Meeting the Need of Customer”. In most generalized way the Quality term can be defined as “The inclusion of all specified features and characteristics as defined for product or service and its ability to satisfy the given needs as per the requirement of user”. Customer perception relates with customer satisfaction and service quality. Service quality is affected by the service quality attributes like Reliability, tangibility, assurance, responsiveness, and empathy. Customer satisfaction is measured by the customer expectation and customer perception, which may change from person to person.

Service Quality = Perception – Expectation

## 3. OBJECTIVES OF THE STUDY

1. To observe some of the demographic traits of the respondents in the study area.
2. To highlight various E- banking services provided by public and private banks.
3. To determine the preference of customers regarding the E-service quality in select banks

4. To compare E-banking service with traditional banking service in terms of customers perception.

## 4. PERIOD OF STUDY AND AREA

The primary data was collected for a period of 6 months from June 2019 to December 2019 from the bank customers of two major banks in the Nagapattinam District restricted to town limit.

## 5. SELECTION OF SAMPLE BANKS

In order to select the banks, a list of top 10 banks existing in India. Thereafter, one bank in each category, having the maximum number of branches was selected. The banks selected were ICICI from private sector bank and SBI from public sector bank. ICICI being India’s Universal bank and it is second largest private sector bank having nationwide network. SBI is selected for the study because it is India’s premier nationalized bank and also largest bank operating in India.

(Source: Indian Business Directory, Banking Industry,)

## 6. DATA ANALYSIS AND INFERENCE

TABLE 6.1 EDUCATIONAL STATUS OF THE RESPONDENTS

Sl. No.	Educational Status	No. of Respondents	Percentage
1	Upto Higher Secondary	50	10.0
2	Graduate	237	47.4
3	Post graduate	101	20.2
4	Professional degree	94	22.1
5	Illiterates	18	0.036
	Total	500	100.0

Source: Primary data

**INFERENCE:** Table 6.1 depicts that among the 500 respondents, 47.4 per cent i.e 237 of the total respondents come under the category of graduate level of education. 101 respondents have completed post graduate level and they accounted 20.2 per cent of the total. 0.036 per cent of the respondents are illiterates. 10 per cent of the respondents completed

upto higher secondary level of education. It is inferred from the data that everyone has account in the bank, but the rate of accessibility differs according to their qualification.



**TABLE 6.2 OCCUPATION OF THE RESPONDENTS**

Sl. No.	Occupation	No. of Respondents	Percentage
1	Employees	142	28.4
2	Business	165	33.0
3	Profession	74	14.8
4	Students	46	9.2
5	Housewife	20	4.0
6	Retired	38	7.6
7	Agricultural and others	15	3.0
	Total	500	100.0

Source: Primary data

**INFERENCE:** Table 6.2 indicates that 28.4 per cent of the total respondents are employees. 165 respondents are businessmen and accounted 33 per cent of the total. It also showed that 74 respondents were professionals and they accounted 14.8 per cent on total. 9.2 per cent of the total respondents were

student, 4 per cent of the total respondents were housewife, and 7.6 per cent of the total respondents were retired persons. Only 3 per cent of the total respondents are doing agriculture and other work. At present bank has become inseparable from mankind.

**TABLE 6.3 RESIDENTIAL AREA OF THE RESPONDENTS**

Sl. No.	Residential Area	No. of Respondents	Percentage
1	Urban	422	84.4
2	Rural	78	15.6
	Total	500	100.0

Source: Primary data

**INFERENCE:** Table 6.3 shows number of respondents from urban and rural areas and their percentage to total. It indicates that 84.4 per cent of the total respondents are from urban area and minor

percentage of respondents is from rural area, 15.6 per cent on the total. Urban people access to banking services more often than rural people due to easy accessibility.

**TABLE 6.4 RESPONDENTS' OPINION ABOUT NEED FOR E-BANKING SERVICES**

E-Banking Services	Public Bank	Private Bank	Total
Vital	47	58	105
	18.8%	23.2%	21.0%
Essential	128	111	239
	51.2%	44.4%	47.8%
Desirable	45	52	97
	18.0%	20.8%	19.4%
Cannot say exactly	30	29	59
	12.0%	11.6%	11.8%
Total	250	250	500
	100.0%	100.0%	100.0%

Source: Primary data

**INFERENCE:** It is clearly evident from Table 6.4 that 18.8 per cent of the respondent from public sector bank and 23.2 per cent of the private sector bank respondents stated that e-banking is vital. Advancement in ICT has brought a vast change in the

banking sector in the recent period. A tough competition exists between public and private sector banks as to its service and quality of rendering the same. E- banking is regarded as very essential by the customers in the fast moving life style.



**TABLE 6.5 RESPONDENT'S PREFERRED E-BANKING SERVICES**

E-banking services adopted	Public Bank	Private Bank	Total
ATM	219 87.6%	209 83.6%	428 85.6%
Credit card	124 49.6%	138 55.2%	262 52.4%
Mobile banking	78 31.2%	123 49.2%	201 40.2%
Debit card	198 79.2%	208 83.2%	406 81.2%
Internet banking	68 27.2%	72 28.8%	140 28%
Electronic clearing services	12 4.8%	18 7.2%	30 6%
Electronic fund transfer	21 8.4%	17 6.8%	38 7.6%
Online tax accounting	15 6%	11 4.4%	26 5.2%
Interactive voice response	4 1.6%	5 2%	9 1.8%
Centralized banking	6 2.4%	4 1.6%	10 2%
Online Fax Accounting System	4 1.6%	6 2.4%	10 2%
Foreign Exchange System	3 1.2%	5 2%	8 1.6%
RTGS	2 0.8%	3 1.2%	5 1%
Total	250 100%	250 100%	500 100%

Source: Primary data

**INFERENCE:** Out of 500 sample respondents a good majority (85.6%) of the respondents are using ATM services. 87.6 per cent of respondents from public sector bank and 83.6 per cent of respondents from private sector bank are using ATM services at the foremost. 49.6 per cent of respondents from public sector bank and 55.2 per cent of respondents from private sector bank are using Credit card facilities, 31.2 per cent of respondents from public

sector bank and 49.2 per cent of respondents from private sector bank use mobile banking. Debit card services are used by public and private bank customers as 79.2 and 83.2 per cent respectively. Availability of banking products is plenty but public lack the awareness about these services and also the trust on these services due to insecurity. Safe and secured banking is expected by the public for their hard earned money.

**6.6 PREFERENCE TOWARDS INTERNET BANKING**

	Public Bank	Private Bank	Total
To pay monthly commitments towards savings, EB Bill etc	19 27.94%	25 34.72%	44 31.43%
Check the account balance	15 22.06%	21 29.17%	36 25.71%
Transfer of funds (NEFT, RTGS)	27 39.71%	20 27.78%	47 33.57%
Change Password, Purchase bank product and others	7 10.29%	6 8.33%	13 9.29%
Total	68 100.0%	72 100.0%	140 100.0%

Source: Primary data



**INFERENCE:** It is revealed from the above table that 27.94 per cent of customers of public sector bank and 34.72 per cent of customers of private sector bank preferred to use internet banking for payment towards personal monthly commitments like EB bill, EMIs etc, 22.06 per cent from public bank and 29.17 per cent of customers from private bank liked to use internet banking to check their account balance.

39.71 per cent of customers of public sector bank and 27.78 per cent of customers of private sector bank preferred internet banking for transfer of funds. It is concluded that most of the public bank customers use internet banking for transfer of funds and most of the private bank customers use internet banking for monthly obligations.

**TABLE 6.7 PERCEPTIONS TOWARDS E-BANKING SERVICES**

Perception	Public Bank	Private Bank	Total
Time saving and speedy	53 21.2%	56 22.4%	109 21.8%
Convenience and user friendly	90 36.0%	89 35.6%	179 35.8%
Cheaper	25 10.0%	26 10.4%	51 10.2%
Easier	60 24.0%	59 23.6%	119 23.8%
Anywhere and Anytime	22 8.8%	20 8.0%	42 8.4%
Total	250 100.0%	250 100.0%	500 100.0%

Source: Primary data

**INFERENCE:** Innovation in ICT has brought many revolutions in the operating functions of the banks towards its customers and clients. Time saving and speedy work is considered to be one of the boon in the banking sector, nearly 21 and 22 percent of the respondents feel this factor as benefit to them,

following the same convenient and user friendly program is much welcomed by the respondents, 35 and 36 percent of the respondents in both the banks prefer the same. Advancement leads to easy and smooth functioning of the industry.

**TABLE 6.8 PROBLEM IN USING CENTRALIZED BANKING SERVICES**

Opinion	Public Bank	Private Bank	Total
Yes	89 35.6%	100 40.0%	209 41.8%
No	161 64.4%	150 60.0%	291 58.2%
Total	250 100.0%	250 100.0%	500 100.0%

Source: Primary data

**INFERENCE:** From the Table 4 can be concluded that though backed by some minor problems people like to overcome them and use the technology very

efficiently in their fast moving life style. Here it is evident that maximum of the respondents revealed that problems are only passing away.



**TABLE 6.9 COMPARISON OF E-BANKING WITH TRADITIONAL BANKING**

Aspects	Excellent	Good	Fair	Poor	Very poor	Total
Cost reduction	64	271	99	37	29	500
	12.8%	54.2%	19.8%	7.4%	5.8%	100%
Efficiency	212	218	25	24	21	500
	42.4%	43.6%	5%	4.8%	4.2%	100%
Saving Time	227	204	19	14	36	500
	45.4%	40.8%	3.8%	2.8%	7.2%	100%
Secrecy	135	172	36	40	117	500
	27%	34.4%	7.2%	8%	23.4%	100%
Quality of Service	179	207	30	28	56	500
	35.8%	41.4%	6%	5.6%	11.2%	100%
Complaint Resolution	78	139	49	60	174	500
	15.6%	27.8%	9.8%	12%	34.8%	100%

Source: Computed from primary data

**INFERENCE:** The table highlights the merits of modern banking with traditional banking. Present banking system is enhanced and improved in time saving, efficiency, quality of service and cost reduction aspects. Above stated factors is ranked as excellent by the respondents in maximum numbers. It

is concluded that all the selected aspects in E-banking services are better than traditional banking system except complaint resolution, which needs a serious look in to the factor, since safety and security is the prime factor which the customers expect from the services offered to them.

**TABLE 6.10 SERVICE GAP IN OVERALL SELECTED FIVE DIMENSIONS**

Sl. No.	Service Quality Dimensions	Expected	Perceived	Gap	Percentage
1.	Reliability	2.41	2.29	0.12	17.14
2.	Tangibility	2.64	2.49	0.15	21.43
3.	Responsiveness	2.49	2.33	0.16	22.86
4.	Empathy	2.72	2.58	0.14	20.00
5.	Assurance	2.6	2.47	0.13	18.57
	Total	12.86	12.16	0.7	100.00

Source: Computed from primary data

**INFERENCE:** The table portrays the total expectation score of the five broad dimensions selected. It stood at 12.86 in the case of expected level and 12.16 at perceived level. This indicates that the customers' expectation desired level is higher than the perceived level implying the lower supply of services by the sample banks when compared to the customers' expected level of services. Therefore quality gap is found in the services. Dimension wise, the highest service gap is being found in the case of Responsiveness (22.86) which indicates that it is the

foremost dimension of expectation of the customers. The service quality gap is found to be the least in the case of reliability (17.14).

## 7. HYPOTHESIS

- **H0:** "There is no significant difference between the expectations and perceptions of customers of either banks"



**TABLE 7.1 COMPARISON BETWEEN EXPECTATION AND PERCEPTION OF CUSTOMERS OF BANKS**

Sector of Bank		Mean Score	S.D.	Square of S.D.	Standard error	Z-value
Public Bank	Expectation	2.15	0.5261	0.2767	0.34271	7.1182
	Perception (Satisfaction)	2.69	0.4892	0.2393		
Private Bank	Expectation	2.38	0.4826	0.2329	0.4228	6.5941
	Perception (Satisfaction)	2.67	0.4237	0.1795		

Source: Computed from primary data

**INFERENCE:** The estimated value of Z-statistic is greater than standard value 1.96 at 5% level of significance for both sector banks. Therefore the null hypothesis is rejected and it is concluded that there is a significant difference between expectations and

perceptions of customers of both sector banks towards e- banking service.

**H0:** There exist no significant association between Occupation and Preference towards E-Banking Services

**TABLE 7.2 Association between Occupation and Preference towards E-Banking Services**

E-Banking Services	Occupation							Total
	Employees	Business	Profession	Student	Housewife	Retired	Agricultural and others	
ATM	56	52	28	22	11	13	5	187
	29.9%	27.8%	15.0%	11.8%	5.9%	7.0%	2.7%	100.0%
Credit card	32	63	20	4	4	10	3	136
	23.5%	46.3%	14.7%	2.9%	2.9%	7.4%	2.2%	100.0%
Debit card	22	17	14	8	2	6	3	72
	30.6%	23.6%	19.4%	11.1%	2.8%	8.3%	4.2%	100.0%
Mobile banking	20	16	9	9	1	6	2	63
	31.7%	25.4%	14.3%	14.3%	1.6%	9.5%	3.2%	100.0%
Internet banking	6	14	1	3	1	1	1	27
	22.2%	51.9%	3.7%	11.1%	3.7%	3.7%	3.7%	100.0%
Other services	6	3	2	0	1	2	1	15
	40.0%	20.0%	13.3%	0.0%	6.7%	13.3%	6.7%	100.0%
Total	142	165	74	46	20	38	15	500
	28.4%	33.0%	14.8%	9.2%	4.0%	7.6%	3.0%	100.0%
Chi- square test	38.843							
Sig	.004							
Hypothesis	Rejected							

Source: Computed from primary data

**INFERENCE:** The calculated chi square value is (38.843) and p value (.004) at 5 per cent significance level is .004. The test proves to be significant. This means that there is significant association between the preferences of different occupational groups

towards E- banking services. Therefore, the null hypothesis (Ho) is rejected.



## 8. SUGGESTIONS

1. Banks should organize training programme to give proper training to customers for using e-banking services and create a trust in the mind of customers towards security and safety of their accounts.
2. Make their sites more user friendly. Customers should be motivated to use E-banking facilities more by providing a platform, from where the customers can access different accounts at single time without extra charge.
3. Banker should be made available internet banking facility in all rural branches to cover up the rural areas with ATMs, mobile and telebanking, so that the people in rural areas can also avail better services.
4. The public sector banks can improve their quality of services, as far as online banking activities are concerned, since they lack behind the private sector banks in this segment.
5. The private sector banks need to improve the level of transparency and also the level of safety and security of online transactions, since some of the customers are skeptical about the level of confidentiality of their transactions.
6. In general usage of E-banking by the customers is very low. An attempt by the banks for changing the same should be made by stressing on the benefits of E-banking.

## 9. CONCLUSION

The banking industry is becoming more and more multifaceted as a result of liberalization and globalization. With hostile marketing strategies for making business opportunities, banks have developed innovative products, keeping in view the needs of different classes of individual customers. Banks may pursue a feedback system to know the customers' expectations for improving the level of customer satisfaction to the maximum level. E-banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide. Today, the click of the mouse offers customers banking services at a much lower cost and also empowers them with unprecedented freedom in choosing vendors for their financial service needs. No country today has a choice whether to implement E-banking or not given the global and competitive nature of the economy. This study observes the perception level of customers towards the service quality by the public and private sector banks with the popular and extensively used instrument SERVQUAL consisting of five dimensions of service quality. From all of this, we have learnt that information technology has empowered customers and businesses with information needed to make

better investment decisions. At the same time, technology is allowing banks to offer new products, operate more efficiently, raise productivity, expand geographically and compete globally. E-banking is a borderless entity permitting anytime, anywhere and anyhow banking. This facilitates us with all the functions and many advantages as compared to traditional banking services. During this step of the process, controls that could mitigate or eliminate the identified risks, as appropriate to the organization's operations, are provided. With rapid advances in telecommunication systems and digital technology, E-banking has become a strategic weapon for banks to remain profitable.

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