

# A Study on Factors Influencing On The Adoption Of Self-Supporting Banking Technology Services

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Abstract: Technology has completely changed the operation of banking sectors; bankers are trying to adapt the paradigm shift in banking. Further, strengthen customer service in areas of net and mobile banking to enhance customer confidence in these technologies'. In sum, apart from bringing technology to the doorsteps, banks need to get their act together to make things simpler and enjoyable. The banks should make more awareness program on SSBT services in order to attract and satisfy the customers by giving more services.

Keywords: Banking technology, E banking, SSBT

## 1. INTRODUCTION

Banking sectors are profit-seeking business firms dealing in money and credit. It is a financial institution dealing in money in the sense that it accepts deposits of money from the public, to keep them in its custody for safety and it deals in credit. Several changes in the banking service sector in India have been brought by Liberalization. The process of doing business in banks was forced by them to reconsider and equip self-supporting technology services. The usage of information technology (IT), broadly referring to computers and peripheral equipment, has seen tremendous growth in service industries in the recent past. The most obvious example is perhaps the banking industry, where through the introduction of IT-related products in internet banking, electronic payments, security investment, and information exchanges banks now can provide more services that are diverse to customers with fewer workforces.

The studies of (Amutha, 2016) examined the service quality of e-banking services and the opinion of the respondents in e-banking services by taking 90 sample respondents from commercial banks, Tuticorin District. The study found that the main difficulty for using ebanking facilities is less knowledge about the operations of banking facilities. Responses also feel the services of e-banking too complex to use and respondents believe the e-banking to be risky. He also recommends that the banks further need to take necessary y steps to educate the customers regarding the new technology and other services offered by the banks. (G. Anbalagan, 2017) studied new banking technological innovations of banking sectors in India for effective quality and services to the customers. This paper highlighted the point that the Indian banking sector introduced various innovations in banking namely, the arrival of cards,



Electronic clearing service (ECS), EFT, RTGS, NEF, Mobile banking, and online banking. He concluded that in the future, the banks in India will comprehend their customer, and the bank will be meeting their requirements.

Customer awareness, satisfaction level, and problems regarding various services by self-service providing machine by taking 300 sample respondents from customers using self-service providing machines in Coimbatore city. The study provided necessary to the bank management to increase customer satisfaction to improving service quality (N. Rameshkumar and Shanmugananda Vadivel 2016). (S. Bulomine Regi, 2017) studied the customers' perception towards technological banking and find out the problems faced by the customer. 600 samples were selected from the selected public sector, public sector, and overseas banks in Tirunelveli District. The study found that respondents are satisfied in some aspects and they want to continue in their respective banks. He recommends the banks improve security and safety access and make use of technology much easier.

(N.J. Kariyawasam and Nuradhi K. Jayasiri, 2016) analyzed the problems faced by customers during the use of internet banking. The study found that more than 50 percent of the respondents are in lack knowledge on accessing the internet, Lack facilities, and prefer traditional banking. They recommend the regulatory bodies and policymakers to improve customer's knowledge. (Magdalena Swacha-Lech, 2017) studied the main challenges facing the retail banking industry in the era of digitalization. The paper examined the factors and trends that are most disruptive for the modern banking industry, measures to be taken by the banks, and the main banking challenges. The basic research method used in the study is a review and the critical analysis of the study literature as well as the survey method. The study concluded that banks' ability to collaborate with non-traditional players will become essential to banks' survival and development.

In traditional banking services, people have to spend three to four hours to go for bank transactions sometimes cost of transactions was more than that of money deposited or withdrawn. The self-supporting banking technology allows customers to conduct financial transactions on a secure website. Nowadays User-Friendly Technology is becoming more popular among customers, most banks are providing e-banking facilities. Today, most customers are increasingly using the technological banking facilities available in the banking sector. It reduces cost and saves time. The customer's perceptive towards technological banking provides a convenient and effective way to manage finance that is easily accessible 24 hours a day in 7 days a week. On the other hand, online banking has certain problems such as lack of knowledge to operate the technology, set-up cost, legal issues, lack of relationship between banker and customer, security and privacy issues. For some people, User-Friendly Technology really simplifies their lifestyle, while for others it is very much threatening and complex. Therefore, in this context, it is necessary to study the perception of customers' challenges towards User-Friendly Technology.

## **OBJECTIVES OF THE STUDY**

The following objectives are focused in the study:

- 1. To identify the factors influencing the adoption of SSBT Services
- 2. To find out the problems faced by the customers while availing SSBT Services in banking

# 2. METHODOLOGY



Primary Data method of collection is used by distributing questionnaire to the customers under convenience sampling method. Secondary data were collected from internet, books and journals. Sixty respondents were selected from each bank under study area (20 respondents from Indian Bank, 20 from ICICI and 20 from KarurVysya Bank in Thanjavur). Simple percentage analysis was used for studying the variables connected with the study.

# ANALYSIS AND INTERPRETATION

Using an SSBT, customers can access their bank deposit or credit accounts in order to make a variety of financial transactions such as cash withdrawals, check balances, or credit mobile phones ATMs can be used to withdraw cash in a foreign country and in almost every occasion, the customer's primary goal is first and foremost to get cash. Seven SSBT services grouped under SSBT services are (1) Perceived Usefulness (PU), (2) Perceived ease of use (PEOU), (3) Privacy and security, (4) Reliability and Trust, (5) Efficiency, (6) Economical Aspects, (7) Demonstrability and trial ability. For this table of SSBT Services are measured by using a 5 point Likert scale with score of 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. The mean scores are calculated for each of the seven factors influencing the customers for adoption of SSBT services. Ranking the statements of the factors is carried out based on the mean score and the result is presented in Table 1.

Statements	Mean	Rank
Perceived Usefulness (PU)	25.52	1
Perceived ease of use (PEOU)	10.80	5
Privacy and security	6.98	6
Reliability and Trust	20.28	2
Efficiency	12.73	3
Economical Aspects	6.48	7
Demonstrability and trial ability	12	4

Table 1 Influencing Factors for Adoption of SSBT Services

Source: Primary data

From table 1, it is clear that the customers are mostly influenced by the perceived usefulness (25.52) of SSBT services, reliability and trust are the second preference of the respondents (20.28), efficiency is the third rank of preference (12.37). Others namely, Demonstrability and trialability, perceived ease of use, privacy and security, and economical aspects preferred by the customers are 12.73, 10.80, 6.98, and 6.48 respectively.

This study uses the technology acceptance model to address why customers accept or reject SSBT services and how the acceptance is influence by the SSBT service quality. Customer satisfaction is determined by the service quality rendered by the customers. The items used to measure the cognitive responses of the users were based on the items used in the previous researches. Eight SSBT services grouped under SSBT services are (1) Information provided by the bank, (2) Perceived ease of use (PEOU), (3) Privacy and security, (4) Efficiency of the bank, (5) Economical Aspects, (6) supporting factors, (7) Educating the customers (8) Educating the customers. This table of SSBT Services are measured by using a 5-point Likert scale with score of 5 for Excellent, 4 for Very good, 3 for good, 2 for fair, and 1 for poor. The mean scores are calculated for each of the eight-level of customers' satisfaction with SSBT services.



Statements	Mean	Rank
Information provided by the bank	13.85	2
Perceived ease of use (PEOU)	12.40	4
Privacy and Security	12.18	5
Efficiency of Bank	12.73	3
Economical Aspects	6.30	8
Supporting Factors	18.52	1
Educating the customers	9.03	7
Educating the customers	9.18	6

 Table 2 Level of Customer Satisfaction on SSBT Services

Source: Primary data

Table 2 shows that the customers are mostly satisfied with the supporting factors (18.52) of SSBT services, the information provided by the bank is the second preference of the respondents (13.85) and efficiency of the bank is the third customers' preference (12.37). Others namely, perceived ease of use, privacy and security, educating the customers, educating the customers, and economical aspects preferred by the customers are 12.40, 12.18, 9.18, 9.03, and 6.30 respectively.

Statements	Strongly disagree	Disagree	Neutral	agree	Strongly agree	total
Difficult to remember	5	15	13	24	3	60
PIN / Password	(8.3)	(25.00)	(21.7)	(40.00)	(5.00)	(100.0)
Lengthy procedure to do	3	13	28	13	3	60
transactions	(5.00)	(21.7)	(46.7)	(21.7)	(5.00)	(100.0)
Only limited services are		8	36	14	2	60
offered		(13.3)	(60.00)	(23.3)	(3.3)	(100.0)
Minimum balance requirement in account is high	2 (3.3)	7 (11.7)	20 (33.33)	23 (38.3)	8 (13.3)	60 (100.0)
Raising minimum balance required without intimation	2 (3.3)	10 (16.7)	32 (53.3)	13 (21.7)	3 (5.00)	60 (100.0)
Frequent changes in charges and minimum balance to keep	1 (1.7)	7 (11.7)	36 (60.00)	12 (20)	4 (6.7)	60 (100.0)

Table 3 Common Problems on SSBT services

Source: Primary data

It is quite clear from table 3 that 24 respondents (40.0 percent) agree with the statement that it is difficult to remember PIN/Password while using SSBT services and 36 (60 percent) respondents agree that SSBT services make frequent changes in charges and minimum balance to keep. 28 respondents (46.7 percent) on the statement that it has got the lengthy procedure to do transactions, 36 respondents (60 percent) on the statement that only limited services are offered, 32 respondents (53.3 percent) on Raising minimum balance required without intimation and 36 respondents (60 percent) on Frequent changes in charges and minimum balance to keep are supporting neither agree nor disagree.



Perceived ease-of-use (PEOU) – Davis defined this as "the degree to which a person believes that using a particular system would be free from effort" (Davis 1989). Five-point Likert scale as strongly disagrees (1), disagree (2), neutral (3), agree (4), and strongly agree (5) are used for the collection and analysis of the relevant data.

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total		
ATMs are not	2	9	25	17	7	60		
conveniently located	(3.30)	(15.0)	(41.7)	(28.3)	(11.7)	(100.0)		
Given card cannot be used in ATMS of all banks	3 (5.0)	13 (21.7)	32 (53.3)	10 (16.7)	2 (3.3)	60 (100.0)		
Maximum amount of withdrawal is restricted	1 (1.7)	8 (13.3)	25 (41.7)	23 (38.3)	3 (5.0)	60 (100.0)		
Lengthy queue before ATMs during peak hours	-	7 (11.7)	24 (40.0)	22 (36.7)	7 (11.7)	60 (100.0)		
Unexpected service failure of ATMs	1 (1.7)	1 (1.7)	25 (41.7)	27 (45.0)	6 (10.0)	60 (100.0)		
Fear of loss of ATM Card	2 (3.3)	5 (8.3)	28 (46.7)	22 (36.7)	3 (5.0)	60 (100.0)		
Wrong debit in A/c due to transaction failure		6 (10.0)	32 (53.3)	16 (26.7)	6 (10.0)	60 (100.0)		
Charges payable for the use of other bank's ATM		8 (13.3)	34 (56.7)	13 (21.7)	5 (8.3)	60 (100.0)		
Complex procedure for the rectification of wrong debits	2 (3.3)	15 (25.0)	8 (13.3)	1 (1.7)	26 (43.3)	60 (100.0)		

 Table 4 Perceived Ease of Use (PEOU)

Source: Primary data

It is evident from table 4 that 25 respondents (41.7 percent) on the statement that ATMs are not conveniently located; 32 respondents (53.3 percent) on the statement that the given card cannot be used in ATMs of all banks; 25 respondents (41.7 percent) on the statement that there is unexpected service failure of ATMs; 24 respondents (40.0 percent) on the statement that there use to be a lengthy queue before ATMs during peak hours; 28 respondents (46.7 percent) on the statement fear of loss of ATM Card; 32 respondents (53.3per cent) on statement Wrong debit in A/c due to transaction failure and 34 respondents (56.7 percent) on statement charges payable for the use of other bank's ATM have given a neutral response that means they are not supporting whether the statement is true nor false. Only 27 of the respondents agree with the statement unexpected service failure of ATMs and 26 respondents (43.3 percent) are strongly agree with the statement's complex procedure for the rectification of wrong debits.

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The popularity of Internet banking is growing rapidly as banking transactions are becoming faster and more convenient. However, there are certain problems associated with this facility these problems are explained in the following table:

Five-point Likert scale as strongly disagrees (1), disagree (2), neutral (3), agree (4), and strongly agree (5) are used for the collection and analysis of the relevant data.

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Restricted delivery of		2	15	8	1	26
services during off-time	-	(7.69)	(57.69)	(30.77)	(3.85)	(100.0)
Lack of speed and difficult to		3	17	5	1	26
get net connected	-	(11.54)	(65.38)	(19.23)	(3.85)	(100.0)
Difficult instruction and complicated links in bank's website	-	4 (15.38)	15 (57.69)	7 (11.7)	-	26 (100.0)
Help menu and demo in web		4	17	5		26
site are not sufficient to learn	-	(15.38)	(65.38)	(19.23)	-	(100.0)
Operating cost is not		3	17	6		26
affordable	-	(11.54)	(65.38)	(10.0)	-	(100.0)

Table 5 Problems in Internet Banking

Source: Primary data

It is quite clear from Table 5 that most of the respondents' answers to all of this Statement are neutral. For the statement restricted delivery of services during off-time out of 26 respondents 15 (57.69) are neutral for the statement restricted delivery of services during off-time, 17 respondents (65.38) are neutral for the statement lack of speed and difficulty to get net-connected, 15 respondents (57.69) are neutral with the problem of instruction and complicated links in bank's website, 17 respondents (65.38) has also given a neutral response for both the statement help menu and demo in the web site are not sufficient to learn and Operating cost is not affordable.

Mobile banking services access is mostly supporting and fastest way of making any account transaction. Five-point Likert scale as strongly disagrees (1), disagree (2), neutral (3), agree (4), and strongly agree (5) are used for the collection and analysis of the relevant data.

Table 6 Problems in Mobile Banking

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Inconvenience of keyboard and small display	-	3 (8.33)	24 (66.67)	6 (10.0)	-	36 (100)
High charges for mobile banking transactions	-	3 (5.0)	24 (40.0)	7 (11.7)	-	36 (100)
Restricted amount of transaction	-	6 (16.67)	25 (67.44)	3 (8.33)	2 (3.33)	36 (100)
Restricted delivery of	1	2	16	14	3	36



services during off time	(2.78)	(5.56)	(44.44)	(38.89)	(8.33)	(100)
Battery of mobile phone is exhausted unexpectedly	)	2 (5.56)	22 (61.11)	7 (19.44)	3 (8.33)	36 (100)

Source: Primary data

It is quite clear from the above table that most of the respondents' answers to all of this Statement are neutral. For the statement inconvenience of keyboard and small display out of 26 respondents, 24 (66.67 percent) are neutral, 24 respondents (66.67 percent) are neutral for the statement high charges for mobile banking transactions, 25 respondents (67.44) are neutral with the problem associated with a restricted amount of transaction, 16 respondents (44.44) have also given a neutral response for the statement restricted delivery of services during off time and lastly, 22 respondents give a responds neutrally for the problems associated with a battery of the mobile phone is exhausted unexpectedly.

## Suggestions

- 1. The banks should extent their prompt assistance towards familiarizing customers on engaging in e-banking activities.
- 2. The banks should focus on improving customer's knowledge on the available banking technology.
- 3. The banking system should also ensure more trust towards net banking and mobile banking to make improvement in the level of usage

# 3. CONCLUSION

Technology has completely changed the operation of banking sectors; bankers are trying to adapt the paradigm shift in banking. Further strengthen customer service in areas of net and mobile banking to enhance customer confidence in these technologies'. In sum, apart from bringing technology to the doorsteps, banks need to get their act together to make things simpler and enjoyable. The banks should make more awareness program on SSBT services in order to attract and satisfy the customers by giving more services.

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