Customer Satisfaction on Mobile Banking: A Study With Reference to Selected Districts of Tamilnadu

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Abstract - Technology is the primary key to move towards providing integrated banking facilities to consumers. Indian banks have been late starter in the acquisition of technology for automation of procedures and the un-segregated banking facilities. This paper mainly deals about the customer satisfaction on mobile banking in and around Gobichettipalayam and Sathyamangalam. Mobile banking is an application of mobile accessing which offers the customers with the support required to be able to bank anywhere, anytime using a mobile handheld gadget and a mobile facility such as Short Message Service (SMS). Banks can also use enable banking for increasing the efficiency of their employees and create a platform for better customer service and improve relationship with their customers. The data has been collected from 105 respondents. The main tool used for data collection is the questionnaire. The analysis used in this study includes Cross tabs, Friedman test, Mann- Whitney U test and Kruskal Wallis test. To create trust in the minds of customers, the security concerns should be solved. It has been observed that most of the female respondents are aware of various services offered, the mobile banking services are mostly used by College students and most of the mobile banking users have average trust in technology. The bank should take measures to raise awareness about mobile banking and access to remote villages with local language services and customer friendly banking programs that are easy to use so as to make the customer to feel good and reduce the complexity of mobile banking.

I. INTRODUCTION

Innovation can be our closest companion which has become the way of life. Mobile Banking is the greatest innovation that enables the customer to perform banking activities at any time and everywhere. This helps to increase the customer base for the bank and saves time for the customers. Mobile banking is cost effective and provides faster transactions. It captures new market segment and increases the efficiency of banks. As the needs and expectations grow day by day, the bank is running towards satisfying the customers.

Mobile and wireless market has been growing swiftly around the world and continues to grow very rapidly. Mobile phones have become a vital part of communication tools for almost everyone. Most banking relationships still begin and continue in the branch. As all of the banking activities, such as conducting financial transactions with their financial institutions, allowing users to transfer money, conduct credit card payments anywhere, access financial

account information, etc., were offered through mobile banking services.

Hence there is a great potential for banks to move more into digital space. The awareness level of the customers, how they perceive the service, determine the variables that influence the adoption of mobile banking and identify what customers actually want in mobile banking so as to increase customer satisfaction.

II. OBJECTIVES OF THE STUDY

- To identify the awareness level of the bank customers about mobile banking services.
- To examine the factors affecting the use of mobile banking services with bank customers.
- To analyze the level of customer satisfaction for various services offered by the banks through Mobile Banking.

III. SCOPE OF THE STUDY

The scope of the study is to the various mobile banking services such as Money Transfer, Transaction status, Customer convenience, Prepaid Mobile Recharge, SMS Alert, Refund Facility, Charges for card usage, Language and Information content, customer feedback services and the level of customers in and Gobichettipalayam and Sathyamangalam on these mobile banking services has been analyzed. Further, the level of customer satisfaction towards the various mobile banking services provided by the different category of banks were examined and the appropriate suggestions has been put forth based on the research findings for the development of mobile banking services in future.

IV. LITERATURE REVIEW

Ms. Shilpa. D, Veena K.P (2018) analyzed the Customer Satisfaction on Acceptance of Mobile Banking Services offered by State Bank of India. The main objective of the study is to examine the current scenario of mobile banking services in India and to analysis the reasons for customers' adoption of SBI mobile bank services. The study has been conducted with 100 customers of SBI in Mysore city. The demographic profile of SBI customers were gathered and their usage of SBI mobile banking services. The study is

carried out mean, standard deviation, Non parametric test like Mann-Whitney. The study results revealed that Customers were very satisfied with the use of mobile banking services provided by the SBI.

A.Thilagaraj(2018) analyzed the Customer Satisfaction Towards Mobile Banking. The main objective is to identify the satisfaction on using mobile banking. The data has been collected from 100 customers in Chennai city using simple random sampling. The study is carried out using percentage and Chi-square analysis. The result have shown that as the transactions can be made any time which attracts the customers to use the service offered by mobile banking. Knowledge about mobile banking should reach the customers so as to increase the usage.

Ambily Jose, G.S. Gireesh Kumar, Roshna Varghese(2017) analyzed the Factors that Influences the Customer for the Adoption of Mobile Banking The survey has been made among 150 respondents using primary data in Ernakulam District. The study is carried out using regression and ANOVA. The customer's demographic profile were also analyzed. The study result showed that the mobile banking is easy to use and efficient but the customers face difficulty in using the service anywhere and anytime due to non-availability of network and that should be rectified by the service providers.

Ataur Rahman, Mahamudul Hasan and Md. Amin Mia (2017) analyzed the Mobile Banking Service Quality and customer satisfaction. In this study customer satisfaction is taken as dependent variable and reliability, responsiveness, assurance is taken as independent variable. The study has been conducted with 166 customers in Bangladesh by using Simple random sampling. The study is carried out using descriptive statistics, Pearson correlation and multiple regressions. The study results showed that the independent variables are the main factor for customer satisfaction. The dependent variable is not considered as the key indicator for customer satisfaction.

V. RESEARCH METHODOLOGY

Descriptive Research

The type of search used is descriptive research. The features are depicted as well as the sample population behavior. It usually includes studies and surveys that plan to distinguish between facts. Its purpose is to collect data about current conditions. Decide and inform about the way things are. It has no ability to what it is, and can only assess what is there now. The main objective in the use of descriptive research is to portray the idea of circumstance as it exists during the study and to investigate certain cycles of wonders. The research methodology identifies the motivation behind exploration, how it continues and what contributes to the goal in relation to the objectives for the research.

Data Collection

The data collection for the research includes both primary and secondary sources of data.

Primary Data

Information collected for the first time by a specialist for a particular reason. These are reliable. These include questionnaires, test surveys, individual meeting, etc. The basic information used to collect data is through the questionnaire.

Questionnaire: It is an economic way of accumulating information.

Sample Size and Design

A sample of 105 customers as respondents are chosen in and around Gobichettipalayam and Sathyamangalam, in order to collect the primary data from them.

Sampling

The process of choosing part of the total population. The reliability of the search results depends on the extent of the researcher's choice of -a sample population.

Sample Size: Number of individual in the sample.

Sampling Framework: List of individuals or persons covered in the study.

Non Probability Sampling

It is a kind of assessment where not all individual from the populace has a known likelihood of being chosen in Non-probability the sample. sampling represents a group of sampling techniques that help researchers to select units from a population that they are interested in studying. A core characteristic of non-probability sampling techniques is that samples are selected based on the subjective iudgment of the researcher. rather than random selection (i.e., probabilistic methods), which is cornerstone of probability sampling techniques.

Convenience Sampling

Convenience sampling is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand. This type of sampling is also known as grab sampling or availability sampling. There are no other criteria to the sampling method except that people be available and willing to participate. Using this technique, they can observe habits, opinions, and viewpoints in the easiest possible manner.

Statistical Tools Used

- Cross tabs
- > Friedman Test
- ➤ Mann Whitney U test
- Kruskal Wallis Test

VI. DATA ANALYSIS AND INTERPRETATION

FACTORS AFFECTING USAGE OF MOBILE BANKING SERVICES- FRIEDMAN TEST

Null Hypothesis (H_0) : The various factors affecting the usage of Mobile Banking services are not significantly different.

Alternate Hypothesis (H_1) : The various factors affecting the usage of Mobile Banking services are significantly different.

TABLE 1

RANK OF VARIOUS FACTORS AFFECTING USAGE OF MOBILE
BANKING SERVICES

Particulars	Mean Rank
Convenient way for making payment to utility bills	5.11
Offers reward points	5.03
Faster service	5.00
QR code scan provide a fast and convenient service	4.95
More marketing support	4.68
Reliable enough for transactions	4.56
Easy access in your area	3.34
Education needed in promoting mobile banking	3.32

From the above table, it is found that the factor Convenient way for making payment to utility bills(5.11), is the highest which is followed by Mobile Banking offers points(5.03), mobile banking offers services(5.00),QR code scan provides a faster service(4.95), Mobile Banking offers more marketing support(4.68) and is Reliable for transaction(4.56) and the education needed in promoting mobile banking services(3.32) has the lowest level.

LEVEL OF SATISFACTION WITH THE MOBILE BANKING SERVICES- FRIEDMAN

Null Hypothesis (H₀) : The Level of satisfaction with various Mobile Banking services are not significantly different.

Alternate Hypothesis (H_1) : The Level of satisfaction with various Mobile Banking services are significantly different.

TABLE 2

RANK OF LEVEL OF SATISFACTION WITH MOBILE BANKING SERVICES

PARTICULARS	MEAN RANK
MONEY TRANSFER	6.54
Mobile Banking services	6.06
Transaction status	5.90
SMS Alert	5.85
Prepaid Mobile Recharge	5.74
Customer convenience	5.63
Language and Information content	5.60
Customer feedback services	4.74
Charges for card usage	4.59
Refund facility	4.35

From the above table, the level of satisfaction with various service offered by mobile banking in which mobile transfer(6.54) is the highest and is followed by Overall Mobile Banking services(6.06), Transaction Status(5.90),SMS alert(5.85),Prepaid Mobile recharge(5.74) Customer convenience(5.63) and Customer feedback service(4.74) has the lowest satisfaction level.

MANN – WHITNEY U TEST

OVERALL SATISFACTION WITH MALE AND FEMALE - MANN- WHITNEY U TEST

Null Hypothesis (H_0) : The overall satisfaction of male member is not significantly different from the female member.

Alternate Hypothesis (H_1) : The overall satisfaction of male member is significantly different from the female member.

TABLE 3 MEAN RANK FOR OVERALL SATISFACTION WITH GENDER

Gender of the respondent	N	Mean Rank	Sum of Ranks
Male	65	52.35	3403.00
Female	40	54.05	2162.00
Total	105		

TABLE 4
TEST STATISTICS FOR OVERALL SATISFACTION WITH GENDER

Particulars	Total score
Mann-whitney u	1258.000
Wilcoxon w	3403.000
Z	279
Asymp. Sig. (2-tailed)	.780

Interpretation:

From the above table, the asymptotic significant value for Overall Satisfaction with the gender of the respondents using Mann – Whitney U test shows a value of .780 which is greater than 0.05. Variation in mean is because of unassignable causes. Thus as per the decision rule accept null hypothesis. Therefore, the overall satisfaction between male and female are not significant different.

KRUSKAL WALLIS TEST

OVERALL SATISFACTION AND THE EDUCATIONAL QUALIFICATION - KRUSKAL WALLIS TEST

Null Hypothesis (H_0) : The overall satisfaction across various educational group are not significantly different.

Alternate Hypothesis (H_1) : The overall satisfaction across various educational group are significantly different.

TABLE 5

MEAN RANK FOR OVERALL SATISFACTION AND THE EDUCATIONAL QUALIFICATION

Educational Qualification	N	Mean Rank
School level	2	38.00
College level	97	53.72
Professional level	6	46.42
Total	105	

Interpretation:

From the above table, it is found that the asymptotic Significant value for Overall satisfaction across various education group using Kruskal Wallis Test is .660 which is greater than 0.05. Thus as per the decision rule accept null hypothesis. Overall Satisfaction across various Educational group are not significantly different.

OVERALL SATISFACTION AND THE PROFESSION OF THE RESPONDENT - KRUSKAL WALLIS TEST

Null Hypothesis (H_0) : The overall satisfaction across various Professional level are not significantly different.

Alternate Hypothesis (H_1) : The overall satisfaction across various Professional level are significantly different.

 $\label{eq:table 6} \mbox{MEAN RANK FOR OVERALL SATISFACTION AND THE} \\ \mbox{PROFESSIONAL LEVEL}$

Profession of the respondent	N	Mean Rank
Student	69	47.97
Business	21	60.93
Teacher	4	73.25
Civil Engineer	2	28.75
Software Engineer	9	69.44
Total	105	

Interpretation:

From the above table, it is found that the asymptotic Significant value for Overall satisfaction across various Professional level using Kruskal Wallis Test is .059 which is greater than 0.05. Thus as per the decision rule accept null hypothesis. Overall Satisfaction across various Professional level are not significantly different.

OVERALL SATISFACTION AND THE VARIOUS AGE GROUP OF THE RESPONDENT - KRUSKAL WALLIS TEST

Null Hypothesis (H_0) : The overall satisfaction across various age group are not significantly different.

Alternate Hypothesis (H_1) : The overall satisfaction across various age group are significantly different.

TABLE 7

MEAN RANK FOR OVERALL SATISFACTION AND THE VARIOUS AGE GROUP

Age of the respondent	N	Mean Rank
Below 20	15	37.83
20 - 40	74	52.84
41 - 60	15	68.47
Above 60	1	60.50
Total	105	

Interpretation:

From the above table, it is found that the asymptotic Significant value for Overall satisfaction across various age group using Kruskal Wallis Test is .051 which is greater than 0.05. Thus as per the decision rule accept null hypothesis. Overall Satisfaction across various Age group are not significantly different.

OVERALL SATISFACTION AND THE VARIOUS INCOME LEVEL OF THE RESPONDENT - KRUSKAL WALLIS TEST

Null Hypothesis (H₀) : The overall satisfaction across various income level are not significantly different.

Alternate Hypothesis (H_1) : The overall satisfaction across various income level are significantly different.

TABLE 8

MEAN RANK FOR OVERALL SATISFACTION AND THE VARIOUS INCOME LEVEL

Monthly Income	N	Mean Rank
Below 20000	67	47.87
21000 - 40000	29	60.71
41000 - 60000	6	53.25
Above 60000	2	86.25
Total	104	

Interpretation:

From the above table, it is found that the asymptotic Significant value for Overall satisfaction across various Income level using Kruskal Wallis Test is .097 which is greater than 0.05. Thus as per the decision rule accept null hypothesis. Overall Satisfaction across various income level are not significantly different.

VII. FINDINGS

- 95% of the female are aware of various services offered by Mobile Banking. The awareness of various services between male and female are significantly different.
- 100% of the respondents with the age group above 60 are aware of various services offered by Mobile Banking.

- 83.5% of the respondents with the educational qualification of college level are aware of various facilities offered by Mobile Banking.
- 100% of the respondents whose income level is between 41000 60000 are aware of various facilities offered by Mobile Banking.
- 100% of the respondents who are Software Engineer in their profession are aware of various services offered by Mobile Banking.
- 45% of the female makes monthly transaction using mobile Banking services
- 50% of the respondents who are at professional level use mobile Banking transaction monthly.
- 43.5% of the respondents who are students uses Mobile Banking transaction monthly.
- 45.9% of the respondents with the age group between 21 40 years use Mobile Banking transactions monthly.
- 66.7% of the respondents with the income level between 41000 600000 use Mobile Banking transactions monthly.
- 60% of the male have average trust in technology with Mobile Banking.
- 66.7% of the respondents at professional level have high trust in technology.
- 76.2% of the respondents who are doing business have average trust in technology with Mobile Banking.
- 80% of the respondents with the age group between 41 60 have average trust in technology with Mobile Banking.
- 66.7% of the respondents whose income is between 41000 60000 have average trust in technology.
- The factor convenient way for making payment to utility bills (5.11), is the highest factor that influence the use of Mobile Banking services.
- Money Transfer (6.54) is the factor that has highest level of satisfaction with the various facilities offered by Mobile Banking.
- Variation in mean is because of unassignable causes.
 Therefore, there is no significant difference between male and female.
- The respondents whose education qualification is college level has the highest overall satisfaction with Mobile Banking services. Overall Satisfaction across various Educational group are not significantly different
- The respondents whose Profession is Software Engineer has the highest overall satisfaction with Mobile Banking services.
- The respondents whose age group is between 41 − 60 years has the highest overall satisfaction with Mobile Banking services.

• The respondents whose monthly income is between 21000 - 40000 has the highest overall satisfaction with Mobile Banking services.

VIII. SUGGESTIONS

- Banks can advertise about the usage of services related to mobile banking to the consumers, which helps them to connect their values, experience and belief system.
- To create trust in the minds of customer, the issues such as security concerns should be solved.
- The bank should take measures to raise awareness about mobile banking and access to remote villages with local language services and customer friendly banking programs that are easy to use so as to make the customer to feel good and reduce the complexity of mobile banking.
- It is significant for the banking sector to coordinate with mobile service providers to ensure network coverage in order to provide convenient service to all areas of the country with mobile banking services.
- To improve the service quality, transparency, accountability, quality of customer service, safety and confidentiality, 24 hours facilities for customers and individual attention to customers, customer information should be enhanced.
- As Mobile Banking customers are at risk in receiving fake SMS messages, the bank should ensure with the customer and should concentrate more on the technological infrastructure.

IX. CONCLUSION

The present study focused on customer satisfaction towards mobile banking. The majority of the above analysis with the customers were positive about the factors influencing Mobile Banking services so as, the Mobile Banking Services brought closer to people making it easy to handle without delay and limited time constraints. Mobile phones have created lot of ways to expand business transactions and have created a various business opportunities by expanding wireless communications. Mobile Banking provides faster service, more marketing support, easy access, offers reward points and convenient for making payment. To increase more customer base security issues has to solved and here is a need to generate awareness among the users about the various service offered.

REFERENCES

- [1] Ms. Shilpa. D, Dr. Veena K. P(2018), "Customer Satisfaction on Adoption of Mobile Banking Services: A Study with Special Reference to State Bank of India", IOSR Journal of Business and Management, Volume 20, Issue 1. Pg 44-50.
- [2] A.Thilagaraj(2018), "Customer Satisfaction Towards Mobile Banking – A Study", Indian Journal of Applied Research, Vol-8. Issue-2.
- [3] Ambily Jose, Dr. G.S. Gireesh Kumar, Dr. Roshna Varghese(2017), "Factors Influencing Customer Adoption of Mobile Banking Services With Special Reference To Ernakulam

- District", IOSR Journal of Business and Management, Volume 19, Issue 11, PP 41-47.
- [4] Ataur Rahman, Mahamudul Hasan and Md. Amin Mia (2017), "Mobile Banking Service Quality and customer satisfaction" The cost and Management, Volume 45, Number 2.
- [5] Mr. M. Mohanraj, Dr. A. T. Jaganathan (2017), "A Study on Customer Attitude towards Mobile Banking with Special Reference to Erode District", International Journal of Trend in Scientific Research and Development, Vol-2, Issue-1.
- [6] Alice Mueni Mwendwa, Elizabeth Nambuswa Makokha, Gregory Simiyu Namusonge(2016) "Effect of Mobile Banking in customer satisfaction in selected Banks in Trans – Nzoia Country", International Journal of Recent Research in Commerce Economics and Management, Issue – 4, Vol.3.
- [7] Amola Bhatt and Shahir Bhatt (2016) ,"Factors affecting customer adoption of Mobile Banking services", Journals of Internet Banking and Commerce, 21(2) Pg.1-22.
- [8] Jawdat Mohammad Al-Tarawneh(2016), "Factors influencing the adoption of Mobile banking services in Jordan from the perspective of customers: Overview and Pilot study", International Journal of Scientific and Research Publications, Volume 6, Issue

- [9] LalithaBalakrishan, V. Sudha, (2016), "Factors affecting Mobile Banking services—An Empirical Study", ISBR Management Journal, Volume1, Issue2.
- [10] Muhsina Jannat and Imran Ahmed (2015), "Factors Influencing Customer Satisfaction of Mobile Banking Services: A Study on Second - Generation Banks", European Journal of Business and Management, Vol.7, No.26.
- [11] Heba Khalil Asfour and Shafig I. Haddad (2014), "Impact of Mobile Banking on Enhancing Customers' E-Satisfaction: An Empirical Study on Commercial Banks in Jordan", International Business Research, Vol. 7, No. 1.Pg:145-169.
- [12] Kumari Kahandawa, Janaka Wijayanayake (2014),"Impact of Mobile Banking Services on Customer Satisfaction: A Study on Sri Lankan State Commercial Bank", International Journal of Computer and Information Technology, Volume 03 – Issue 03.
- [13] Faisal Iddris (2013), "Barriers to Adoption of Mobile banking: Evidence from Ghana", International Journal of Academic Research in Business and Social Sciences, Vol. 3, No. 7.
- [14] Md. Zahangir Alam, Monzur Morshed Patwary and Muhammad Abdur Rahim (2013), "Mobile Banking: The Bangladesh Experience", Journal of Marketing and Computer Research, Vol. 1.
- [15] Ulun Akturan, Nuray Tezcan (2012), "Mobile banking adaption of the youth market: Perceptions and intentions" Marketing Intelligence & Planning, Vol. 30 Iss: 4 pp. 4 4.