

A Statistical Evaluation of E-CRM Implementation in Public and Private Sector Banks

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Abstract

The Customer Relationship Management (CRM) is a concept that was introduced in the field of marketing during mid-1980s. The term ‘Customer Relationship Management’ was introduced by Berry in 1983. The primary reason behind the emergence of CRM was the losing relevance of other marketing strategies. The researchers also concluded that retaining the firm’s existing customers is more profitable rather than attracting new ones. This led to the introduction of ‘relationship marketing’ which later resulted into a more comprehensive system termed as ‘customer relationship management.

Keywords: Customer, Bank, CRM, Marketing, Commercial

1. Introduction

CRM practices in providing efficient customer service to be able to enhance customer relationships. Through customer relationship management, the company can expect higher profits as compared to their competitors who are not employing such strategy. There is a general misconception that marketing is more relevant in a production- oriented business of tangible goods and not so in a service oriented industry like bank, transport etc. It, therefore, necessitates the present banking system to promote effective marketing strategies so that there will be full utilizations of the deposits as well as credit.

Marketing strategy implies development of an action plan to achieve the marketing objectives. Just highlighting marketing in the cozy atmosphere of high offices and issuing directives to subordinate offices emphasizing its importance would not serve the purpose. Marketing strategies involves skill and concerted effort on the

part of the management to evolve tools and techniques, which are understood and accepted throughout the organization in furtherance of the marketing cause.

According to Granroos, marketing strategy in the case of services may consist of 1. Traditional External Marketing 2. Internal Marketing 3. Interactive Marketing. Traditional external marketing consists of usual four 'Ps' viz., Product, Price, Place and Promotion of marketing mix. Internal marketing implies that the service firm must effectively train and motivate its customer friendly employees as well as all the supporting service personnel to work as a team to provide customer satisfaction. Interactive marketing emphasizes that the perceived service quality is highly dependent on the quality of buyer/seller interaction. It describes the skill of employees in handling customer contact and covers delivery of the product in a most satisfying manner.¹

Bank marketing is concerned with the exchange relationship between the bank and its customers where customer service and quality are the key linkages of such relationship. In 1990s, the banking industry took a turn towards liberalization, privatization and globalization exposing them to unprecedented competition. The banks that rediscover the customers through the cutting edge known as Relationship Banking are able to do a good business.

Customer service is the most important duty of the banking operations. Prompt and efficient service with smile will develop good public relations, reduce complaints and increase business. The most important requirement for financial institutions like commercial banks is to understand and anticipate customers' needs. The key to successful attraction of customers will not only by the knowledge of the customers' needs but also the ferreting out of customers' potential wants and the strengthening of the consultative sales activities which address them.

Customers' satisfaction largely depends on the extent to which their needs and expectation are being fulfilled. Customers have various expectations for banks to consider. Some of the expectations relate to the quality of the bank personnel. Some may relate to the place where the bank is rendering the services and some to the sequence and the flow of services involved in their rendering. Hence, the delays in customer services flow not only out of defective systems, but also due to attitudes of employees. Even if the systems are modified, unless the employees' attitudes change, the desired

result cannot be achieved

2. Qualification And Measurement of Satisfaction Level In E-CRM Practices

There are normally two approaches to measure satisfaction. These approaches may be termed as the 'global' approach and the 'summation approach'. The global approach is concerned with eliciting generalised, undifferentiated evaluation of the vocation, whereas the 'summed' approach elicits the reactions or attitudes of the individuals to specific aspects of the work situation, which are then summated to obtain an overall index of liking or disliking⁴. The traditional mix is composed of four P's namely Product, Price, Place and Promotion⁵.

To measure the satisfaction of customers on CRM practices collectively of Commercial Bank in Erode District, Rensis Likert's summated scaling technique was adopted. thirty statements, six each from five 'P's, were prepared based on literature and discussions with Senior Managers of Commercial Bank and academic experts. These statements relating to marketing mix were incorporated in the questionnaire used for the study. The information required to measure the customer satisfaction on marketing programme of Commercial Bank concentrate on all five components of CRM practices. All the five components were combined together to arrive at the satisfaction score which reflects the success of overall marketing effort of Commercial Bank. The respondents were asked to indicate their opinion regarding each statement in the Likert's 5 Point Scale. In this study 5, 4, 3, 2, 1-scale values were used to measure the satisfaction level of customers. A rating of 5 indicates that the respondent is 'Highly Satisfied', a rating 4 indicates that the respondent is 'Satisfied', a rating 3 indicates that the respondent is 'Neutral', a rating 2 indicates that the respondent is 'Dissatisfied' and rating 1 indicates that the respondent is 'Highly Dissatisfied' about the various products and services provided by the Commercial Bank. The total score of each statement was calculated for all the thirty statements using the above scoring procedure.

3. Distribution of Respondents Based on Level of Satisfaction

The score of 600 respondents were calculated. An individual score is the mere summation of the scores secured from the 30 statements. The expected score of the

respondents ranges from 30 to 150. The average score is 60. The respondents were grouped into three categories based on their average scores viz, Low, Medium and high. Those who have scored between 30-60 were classified as ‘Low’ (i.e. their level of satisfaction with the CRM practices of Commercial Bank is low), those respondents who have scored between 61-120 were classified as ‘Medium’ and those respondents who have scored between 121-150 were classified as ‘High’.

Table 1.1 gives the distribution of the total respondents by their level of satisfaction towards CRM practices in Commercial Bank.

TABLE 1.1

DISTRIBUTION OF RESPONDENTS BASED ON LEVEL OF SATISFACTION OF E-CRM PRACTICES

Level of Satisfaction	Private sector			Public sector		
	Number of respondents	Per cent	Average score	Number of respondents	Per cent	Average score
Low	21	21.0	208.0	165	33.6	212.44
Medium	54	54.0	223.3	215	43.0	201.65
High	25	25.0	222.1	120	24.0	208.68
Total	100	100	223.4	500	100	221.4

Table 1.1 shows that out of 600 sample respondents, the satisfaction level of private sector banks constitute 100 sample respondents and public sector banks have 500 sample respondents whose satisfaction in coming in the category of medium / high.

Relationship Between Independent Variables and Satisfaction Level

The relationship between independent variables namely Age, Gender, Marital status, Educational qualification, Occupation, Annual income, Type of account, Annual

accounting summary, Frequency of visit and satisfaction scores of customers were examined. Significance of the relationship of all the above nine variables with the opinion of customers regarding their satisfaction was analysed by applying the statistical techniques such as Chi-square test, Analysis of Variance(F-test), 'Z' test and Multiple Regression analysis.

Chi-square test was used to know the association between each independent variable with dependent variable.

To test the relationship between the each independent variable with dependent variable 'F' and 'Z' tests were used. 'F' test was used to test the average score of three or more sample groups. 'Z' test was used to test the average score of two sample groups.

Age and Level of Satisfaction

Age is an important factor, which may influence customer satisfaction. However, the relationship between customer satisfaction and age is uncertain. Table 1.2 gives information regarding the age group of respondents and their level of satisfaction.

To test the hypothesis, which states that the customers' satisfaction level in commercial Bank under different age groups does not differ significantly, Chi-square test was applied. The respondents were classified as follows: Group A: up to 30 years; Group B: 31-50 years; and Group C: Above 51 years.

TABLE 1.2

AGE AND LEVEL OF SATISFACTION: CHI-SQUARE TEST

Private sector	Level of Satisfaction			Total
	Low	Medium	High	
Age				
Group A	4 (12.5)	11 (34.3)	17 (53.12)	32 (100)
Group B	8 (17.1)	33 (70.2)	6 (12.7)	47 (100)
Group C	9 (42.8)	10 (47.6)	2 (9.5)	21 (100)
Total	21 (21.0)	54 (54.0)	25 (25.0)	100 (100)
Chi-square value = 2.110				

Public sector	Level of Satisfaction			Total
Age	Low	Medium	High	
Group A	21 (21.0)	35 (33.3)	49 (46.6)	105 (100)
Group B	70 (28.0)	124 (49.6)	56 (22.4)	250 (100)
Group C	74 (51.38)	56 (38.8)	14 (9.72)	144 (100)
Total	165 (33.0)	215 (43.0)	120 (24.0)	500 (100)
Chi-square value = 3.860 (Figures in parentheses represent Percentage)				

Table 1.2 indicates that in case of private sector banks among the three Groups of the respondents the satisfaction of the respondents belonging to Group A (53.12%) is higher than the other two Groups.

Table 1.2 indicates that in case of public sector banks among the three groups of the respondents the satisfaction of the respondents belonging to Group A (46.6%) is higher than the other two Groups. Group A customers are more satisfaction in private sector banks when compared to public sector banks.

The calculated value of Chi-square (2.110) exceeds the table value (13.277) for 4 degrees of freedom at 1% level of significance. Hence, the hypothesis is accepted.

Therefore, it is concluded that there is no an association between the age of customers and their level of satisfaction on private sector banks.

The calculated value of Chi-square (3.860) exceeds the table value (13.277) for 4 degrees of freedom at 1% level of significance. Hence, the hypothesis is accepted. Therefore, it is concluded that there is no an association between the age of the customers and their level of satisfaction on public sector banks.

Average Satisfaction Score of Customers on The Basis of Age

The average satisfaction score of the three Groups of respondents classified based on their age is given in the table1.3

TABLE 1.3

AGE AND SATISFACTION SCORE: F-TEST

Age	Number of respondents	Per cent	Average Score	F-Value
Private Sector				
Group A	32	32.0	211.11	2.394*
Group B	47	47.0	212.04	
Group C	21	21.0	219.41	
Total	100	100.0	223.41	
Public Sector				
Group A	105	21.0	220.11	1.705*
Group B	250	50.0	221.21	
Group C	144	29.0	216.81	
Total	500	100.0	221.41	

Table 1.3 indicates that the average score of the respondents belonging to Group C (219.41) is higher than that of Group B (212.04) and Group A (211.11) in private sector

banks. To the hypothesis that the average score of the three groups of respondents classified based on their age is the same “F” test was applied.

It is found that the calculated value of “F” (2.394) is more than the table value (13.277) for 2 degrees of freedom at 1% level of significance. Hence, the hypothesis is accepted. Therefore, it is concluded that there is a no significant relationship between age of respondents and their satisfaction scores.

Table 1.3 indicates that the average score of the respondents belonging to Group B (221.21) is higher than that of Group A (220.11) and Group C (216.81) in public sector banks. To the hypothesis that the average score of the three Groups of respondents classified based on their age is the same “F” test was applied.

It is found that the calculated value of “F” (1.705) is more than the table value (13.277) for 2& 722 degrees of freedom at 1% level of significance. Hence, the hypothesis is accepted. Therefore, it is concluded that there is a no significant

relationship between the average score of the three age groups of customers and their satisfaction.

Gender and Level of Satisfaction

There may be variation in the level of satisfaction depending upon the gender of the customers. Generally, female customers are found to be more satisfied with the services offered by banks, as they do not have high expectations.

Table 1.1 gives information regarding the gender of customers and their level of satisfaction with CRM practices in commercial bank.

To test the hypothesis that the level of satisfaction of different groups of the respondents classified based on their gender does not differ significantly, Chi-square test was applied.

TABLE 1.4

GENDER AND LEVEL OF SATISFACTION: CHI-SQUARE TEST

Private sector	Level of Satisfaction			Total
Gender	Low	Medium	High	
Male (A)	10 (20.8)	19 (39.5)	19 (39.5)	48 (100)
Female(B)	11 (21.15)	35 (67.3)	6 (11.5)	52 (100)
Total	21 (21.0)	54 (54.0)	25 (25.0)	100 (100)
Chi-square value = 11.407				
Public sector	Level of Satisfaction			Total
Gender	Low	Medium	High	
Male (A)	81 (34.6)	82 (35.1)	71 (30.3)	234 (100)
Female(B)	84 (31.5)	133 (50.1)	49 (18.4)	266 (100)
Total	165 (33.0)	215 (43.0)	120 (24.0)	500 (100)
Chi-square value = 14.196				

From the table 1.4 it is found in the case of private sector bank, the medium and high level of satisfaction, the percentage of male customers are (79.0%) higher than that of female customers (78.8%).

From the table 1.4 it is found in the case of public sector bank, the medium and high level of satisfaction, the percentage of female customers (68.5%) which is higher than that of male customers (65.4%). male costumers are more satisfaction in private sector banks when compared to public sector banks.

The calculated value of chi-square (11.407) exceeds the table value (9.21) for 2 degrees of freedom at 1% level of significance. Hence, the hypothesis is not accepted. Therefore, it is inferred that there exists a significant association between the gender and level of satisfaction in private sectors banks.

It is found that the calculated value of chi-square (14.196) exceeds the table value (9.21) for 2 degrees of freedom at 1% level of significance. Hence, the hypothesis is not accepted. Therefore, it is inferred that there exists a significant association between the gender and level of satisfaction in public sectors banks.

Average Satisfaction Scores of Customers on The Basis of Gender

The average satisfaction score of the two groups of sample customers based on gender is presented in the table 1.5.

TABLE 1.4

GENDER AND SATISFACTION SCORE: Z-TEST

Gender	Number of respondents	Per cent	Average Score	Z-Value
Private Sector				
Male (A)	48	48.0	225.31	2.776
Female(B)	52	52.0	221.70	
Total	100	100.0	223.41	
Public Sector				
Male (A)	234	46.8	221.11	4.237*
Female(B)	266	53.2	220.80	
Total	500	100.0	221.42	

* Significant at 1%

Table 1.5 shows that the average satisfaction score of the male customers (225.31) is higher than the average satisfaction score of the female customers (221.70) in private sector banks. To test the hypothesis which states that the satisfaction score of the respondents based on their gender is the same, “Z” test was applied.

It is found that the calculated value of “Z” (2.776) exceeds the critical value of “Z” (2.57) at 1% level of significance. Therefore, the hypothesis is not accepted. It is proved that there is a significant relationship between the two groups of customers and their satisfaction scores.

Table 1.5 shows that the average satisfaction score of the male customers (221.11) is higher than the average satisfaction score of the female customers (220.80) in public sector banks. To test the hypothesis which states that the satisfaction score of the respondents based on their gender is the same, “Z” test was applied.

It is found that the calculated value of “Z” (4.237) exceeds the critical value of “Z” (2.57) at 1% level of significance. Therefore, the hypothesis is not accepted. It is proved that there is a significant relationship between the two groups of customers and their satisfaction scores. It is concluded that, male customers have scored high level of satisfaction in private sector banks when compare with female customers in public sector banks.

Summary

In this chapter, satisfaction level of customers about CRM practices in commercial Bank; necessary primary data are gathered using questionnaires. For which, 30 statements have been prearranged in the questionnaires by using Rensis Likert’s 5 point rating scale technique. Such a collected data have been analysed with the help of various statistical tools like, Chi-square test, ‘F’-test, ‘Z’-test and Contingency Co-efficient at 5% level of significance. Further Multiple Regression Analysis has been applied.

It was found that out of 600 respondents, private sector 100 sample respondents satisfaction level of 79 (79.0%) customers was medium/high. The average score of 100

sample customers was 223.41. Public sector 500 sample respondent's satisfaction level of 335(67.0%) customers was medium/high. The average score of 500 sample respondents was 221.42. The reasons for the moderate score may be that majority of the schemes announced by the bank have not reached the customers in full.

Reference

[1].NaserAzada And Fatemeh Ahmadi Assistant(2015) "The Customer Relationship Management Process: Its Measurement And Impact On Performance" *Uncertain Supply Chain Management* 3 (2015) 43–50

[2].Dr. P. Anbuoli, T. R. Thiruvén Kat Raj (2014)"A Study On Customer Relationship Management In Banks" *Proceedings Of The Intl. Conf. On Information, Engineering Management and Security,2014 [Iciems 2014]*

[3]. Yu-Chiang Wang, Shu-Te University, Kaohsiung City, Taiwan Yi-Feng Yang,(2015), "The Impact And Interaction Effect Of Hr And It Applications On The Performance Of Customer Relationship Management In The Banking Industry: An Empirical Study Of Five Taiwanese Banks", *Information Resources Management Journal*, 28(3), 29-41, July-September 2015

[4].Zaidan A. Zaidan Dhman,(2011)"The Effect Of Customer Relationship Management (Crm) Concept Adoption On Customer Satisfaction" A Thesis Submitted In Partial Fulfillment Of The Requirements For The Degree Of Master Of Business Administration 2011-1432 H

[5].Sunil Kumar Roy,(2014)" Factors Affecting (Crm) Practices In Commercial Banks", *International Journal Of Current Research* Vol. 6, Issue, 11pp10344-10351,November, 2014

[6].Dr. T. Satya Narayana Chary R.Ramesh(2012)"Customer Relationship Management In Banking Sector- A Comparative Study" *KkimrcIjrhrm* Vol-1, No-2 Dec-Feb 2011-2012 - Issn: 2277 -1190

[7].Atul Parvatiyar & Jagdish N. Sheth,(2001)"Customer Relationship Management: Emerging Practice, Process, And Discipline", *Journal Of Economic And Social*

Research 3(2) 2001, 2002 Preliminary Issue, Pp 1-34

[8].SA Malik Shahzeb Ali(2011) “On The Use Of Customer Relationship management (Crm) In The Banking Industry: A Qualitative Cross-Case Analysis Between The Banks In Pakistan And The Uk” Thesis]. Manchester, UK: The University of Manchester; 2011

[9].Md. Rashid Farooqi, ShardaKumari, & Dr.Mohd. Shoeb(2013) “Recent Trend Of E-Crm In Commercial Banks Of India” Bihar International Journal Of Application Or Innovation In Engineering And Management Issn 2319- 4847 Volume 2, Issue 4, April 2013.

[10]. Rootman, M Tait, G Sharp(2012)“Bank Managers’ Views On Relationship Marketing”Journal of Contemporary Management Volume 8 Pages 315 – 336

[11]. Arun Kumar Agariya, Deepali Singh(2012)“Crm Index Development And Validation In Indian Banking Sector”10 International Journal Of Customer Relationship Marketing And Management, 3(2), 10-32, April-June 2012

[12]. C. Padmavathy, V.J. Sivakumar (2012) “Dimensions Of Crm Effectiveness And Its Effect On Relationship Quality ”India.International Journal Of Customer Relationship Marketing And Management, 3(1), 1-17, January-March 2012.

[13]. Nirmaljeet Virk, Prabhjot Kaur (2012) “Customer Satisfaction: A Comparative Analysis Of Public And Private Sector Banks In India”International Knowledge Sharing Platform Information Vol 2, No.3, 2012.

[14].Das, S. K. (2012). Customer relationship management in banking sector: a comparative study of SBI and other nationalised commercial banks in India. Arth Prabandh: A Journal of Economics and Management, 1(6), 2278- 0629.

[15].Pal, S. (2018). A Study on Customer Relationship Management Practices in Banking Sector. Multidisciplinary International Journal.

[16].Madhoushi, M., Saghari, F., & Madhoushi, Z. (2011). Survey of customer knowledge management impact on customer relationship management:(Iranian study). International Journal of Business and Social Science, 2(20).

[17].Agrawal, S. (2017). Impact of Customer Relationship Management on Indian Banking Sector (No. 2017-06-10).

[18].Charles Makanyeza, Lovemore Chikazhe, (2017) "Mediators of the relationship between service quality and customer loyalty: evidence from the banking sector in Zimbabwe", International Journal Statistical Analysis of Customer Relationship Management Practices in Public and Private Sector Banks of India 14 of Bank Marketing, Vol. 35 Issue: 3, pp.

[19].Aydin, S. and Özer, G. (2005), "The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market", European Journal of Marketing, Vol. 39 No. 7/8, pp. 910-925.