

## Customer Loyalty in Retail Banking –A Structural Equation Modeling (Sem) Approach

<sup>1</sup>DR V.MAHALAKSHMI , <sup>2</sup>Mr R.MURALI,

*Assistant Professor, Department of Management Studies, Saranathan College of Engineering, Tiruchirappalli, Tamil Nadu, India.*

*Assistant Professor, Department of Management Studies, Saranathan College of Engineering, Tiruchirappalli, Tamil Nadu, India.*

*\*Corresponding Author: DR V.MAHALAKSHMI , Assistant Professor, Department of Management Studies, Saranathan College of Engineering, Tiruchirappalli, Tamil Nadu, India.*

### ABSTRACT

Indian Retail Banking system consists of Public Sector banks, Private Sector banks, Regional rural banks, Rural and urban cooperative banks. The financial and economic conditions in the country are far higher to any other country in the world. In the Indian situation, the public and private banks contend with each other in magnetizing the customers. It is broadly perceived that competition in the Indian banking sector has amplified since the commencement of the financial sector reforms in 1992. In the multifarious competition it is more consequential for the public and private banks belonging to the Indian inception to enhance their services which will determine their business development. With an intention to gratify the prospective customers, banks should adopt a retention strategy to retain the existing customers and to draw new customers. The banks now focus on attracting the customer by enhancing their services and diversifying their activities. The researcher has developed a model for Customer loyalty in retail banking with major dimensions. The model was developed using Structural Equation Modeling. A sample of 1040 respondents was selected from Chennai, Coimbatore, Salem and in Trichy districts of Tamilnadu, South India. The revealed results would be helpful for retail banking sectors.

**Keywords:** Customer Loyalty , Retail Banking , Customer Relationship , Customer Interaction.

### INTRODUCTION

Over the past few years, Indian banking system has majorly went revamp and modernization. The Indian banking sector nurtured appreciably in size, spread and scope of activity over the last three decades. The new infrastructure adopted by the banking system is mainly comprised of information technology (IT) products and services. A business can be victorious only if it has a stable customer foundation. An overall race is on to “mobilize” banking. Banks around the globe have been working energetically to progress their mobile applications and to influence their websites for customers’ smart phones and tablets. The banks nowadays focus on attracting the customer by enhancing their services and diversify their activities. Apart from the traditional banking services, the agency services otherwise termed as non- banking and general utility services are gaining its momentum. After the introduction of globalization policy, service sector has been given much importance and is attracted much by

the customers. It is a splendid truth to accept the change of a country from the developing status to developed status. It is possible not only by the industrial growth but also the growth of the service sector. Among various services, the banking service proves to be more vital for the development of an economy as well as the living standards of the general public. Banking sector need to consistently work in the creating Customer Loyalty for retaining the potential customer’s. Undoubtedly, a loyal customer is a fundamental part of the continued growth of any business.

### REVIEW OF LITERATURE

**Ponnam, A., Ponnam, A., Paul, R., & Paul, R. (2017).**

The service value dimensions connected to Indian banking context are customer intimacy, product leadership, service equity, perceived sacrifice, service quality, and operational excellence. The authors could empirically prove that except for operational

excellence and service quality, all the other value dimensions exhibited variation in importance over time. Results reveal that customers in the early stages of relationship value tangible value dimensions and the ones in advanced stages of relationship value intangible dimensions.

### **Makanyeza, C & Chikazhe, L. (2017).**

The study found that service quality, satisfaction and corporate image all have positive direct effects on loyalty. It was also found that satisfaction and corporate image all mediate the effect of service quality on loyalty. A cross-sectional survey of 310 bank customers was conducted in Chinhoyi, Zimbabwe. A questionnaire with Likert type questions was used to collect data. Customers were randomly intercepted as they walked out of five major banks. Structural equation modelling was used to test the proposed relationships.

### **Yadav, M. K., & Rai, A. K. (2017).**

The Study compares the satisfaction and service quality in select public and private sector banks. The study also identifies the area where the banks need to focus. The research design is descriptive as the research is intended to conclude and suggest measures to zero down on the service quality gaps in select public and private sector banks. The result shows a positive relationship between service quality and customer satisfaction. Service quality dimensions (tangibility, reliability, responsiveness, assurance and empathy) show wide service quality gaps. The comparative study of public sector banks and private sector banks show superiority of private sector banks over public sector banks in customer satisfaction and performance of service delivery.

### **Kant, R., Jaiswal, D., & Mishra, S. (2017).**

The researcher aimed to identify the dimensions of service quality (SQ) in the banking sector and examine the effect of SQ dimensions on customer satisfaction (CS), and therefore the effect of CS on corporate image (CI) in the selected public sector banks (PSBs) in India. The sample of the study consists of 640 retail customers of PSBs in the National Capital Region (NCR) of India and the data were collected through a structured questionnaire using a 7-point Likert scale based on purposive sampling. Therefore, the authors empirically validate a measurement model using structural equation modelling (SEM) through path

analysis. The findings revealed that ‘tangibility’ and ‘assurance’ dimensions were most important predictors of CS among all five dimensions of SQ. In addition, the results also validate that CS is an important antecedent for influencing CI, and therefore CS acts as a linkage between SQ dimensions and CI in the Indian context. Finally, the research article presents the conclusion, implications and limitations and the possible directions for further research.

### **John, B. M. (2017)**

The present paper evaluates the level of service quality in commercial bank in Kerala. The study also attempted to ascertain the dimensions of service quality in banks. . The present work finds out that tangibility and assurance as the foremost dimensions of service quality with their key influence on the customers. But, both the parameters of responsiveness and empathy show a lower level of satisfaction among the customers. It is suggested to the banking sector that apart from ensuring the trust of customers, it should improve their operations in providing highly advanced technological services to the customers with easy access and instant delivery features. . Thus, by providing enhanced quality in the banking services, the banks would be able to create a whole gamut of satisfied customers which would ultimately lead to further the efficiency and performance in the banking landscape.

## **RESEARCH OBJECTIVES**

- To examine the dimensions responsible for Banking Customer retention
- To Frame a structural model for Banking Customer Loyalty
- To find out the Inter correlation between the Customer Perception , Customer Relation , Customer Interaction ,Customer Retention & Customer Loyalty

## **RESEARCH METHODOLOGY**

A Sample of 1040 respondents were selected from Chennai, Coimbatore, Salem and in Trichy districts, based on the convenience of the researcher through adopting convenience sampling method Using 50 Pilot data Confirmatory factor analysis was conducted to find out the model fit. Data analysis was performed using IBM SPSS 20.0 and Structural Equation modeling was done through IBM AMOS 20.0.

**STATISTICAL TOOLS USED**

Confirmatory Factor Analysis, Structural Equation modeling, Cluster Analysis, Multiple Regression, Pearson Correlation.

**DATA ANALYSIS AND INTERPRETATION**

**Reliability Statistics**

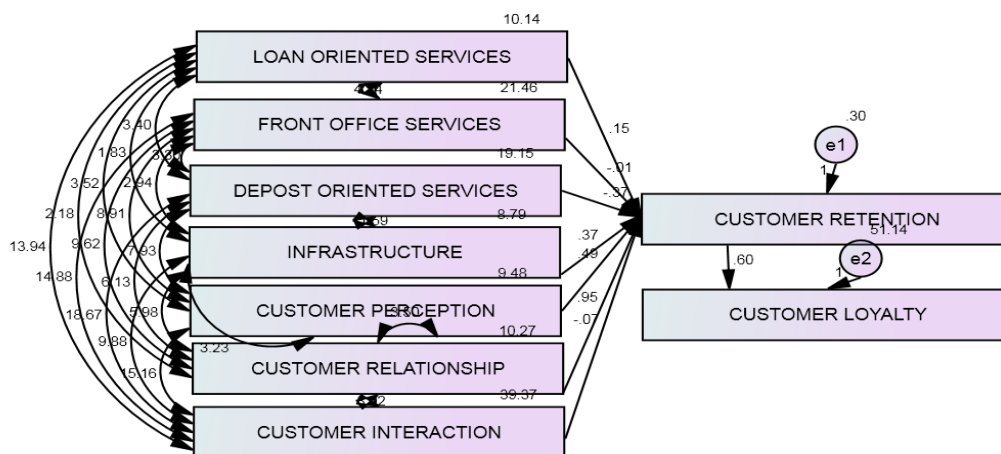
**Table 1**

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |

**Structural Equation Modeling**

|      |    |
|------|----|
| .925 | 67 |
|------|----|

Cronbach's alpha is calculated by correlating the score for each scale item with the total score for each observation and then comparing that to the variance for all individual item scores: The resulting  $\alpha$  coefficient of reliability vary from 0 to 1 in providing this overall estimation of a measure's reliability. The minimum  $\alpha$  coefficient between 0.65 and 0.8 or higher indicates good internal consistency between the data.



**Figure 1**

**Table 2. Regression Weights: (Group number 1 - Default model)**

|                    |      |                           | Estimate | S.E. | C.R.    | P    | Label |
|--------------------|------|---------------------------|----------|------|---------|------|-------|
| Customer retention | <--- | Loan oriented services    | .151     | .009 | 16.569  | ***  |       |
| Customer retention | <--- | Front office services     | -.010    | .008 | -1.196  | .232 |       |
| Customer retention | <--- | Deposit oriented services | -.370    | .018 | -20.540 | ***  |       |
| Customer retention | <--- | Infrastructure            | .374     | .023 | 16.049  | ***  |       |
| Customer retention | <--- | Customer perception       | .487     | .016 | 31.210  | ***  |       |
| Customer retention | <--- | Customer relationship     | .955     | .010 | 92.458  | ***  |       |
| Customer retention | <--- | Customer interaction      | -.073    | .008 | -9.229  | ***  |       |
| Customer loyalty   | <--- | Customer retention        | .597     | .061 | 9.786   | ***  |       |

**INTERPRETATION**

The model which assumed was proved statistically by the usage of appropriate statistical test like the chi-square. The goodness of fit (GFI) and adjusted goodness of fit index

(AGFI) should be nearing to one or one indicates that the model is a good fit. In this model the obtained GFI is 0.981 and AGFI is 0.879 which is nearing one and indicates that the model is a good fit. The CFI value 0.993 which is nearing to one signifies the fit of the model.

**MULTIPLE REGRESSION**

**Table 5**

| Model Summary |                   |          |                   |                            |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model         | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1             | .816 <sup>a</sup> | .666     | .663              | .33795                     |

a. Predictors: (Constant), LOS, INF, FOS, CP, CREN, CI, CR, DOS

This is the proportion of variance in the dependent variable (**Customer Loyalty**) which can be explained by the independent variables, The model summary table shows R-Square for

this model is 0.666. This means that 67 percent of the variation of Customer Loyalty (dependent variable) can be explained from the 8 independent variables. The table also shows

the adjusted R-square for the model as .663.

Table 6

The ANOVA table, as displayed in the above referred to as explained variance. The

| ANOVA <sup>b</sup>  |            |                |      |             |         |                   |
|---|------------|----------------|------|-------------|---------|-------------------|
| Model   |            | Sum of Squares | df   | Mean Square | F       | Sig.              |
| 1   | Regression | 234.526        | 8    | 29.316      | 256.684 | .000 <sup>a</sup> |
|   | Residual   | 117.750        | 1031 | .114        |         |                   |
|   | Total      | 352.276        | 1039 |             |         |                   |
| a. Predictors: (Constant), FOS, DOS, CR, CP, INF, CI, CR, LOS |            |                |      |             |         |                   |
| b. Dependent Variable: CL                                     |            |                |      |             |         |                   |

table shows the F ratio for the regression model that indicates the statistical significance of the overall regression model. The F ratio is calculated the same way for regression analysis as it was for the ANOVA technique. The variance Independent variable that is associated with dependent variable (Customer Loyalty) is

remainder of the total variance in Independent variable that is not associated with dependent variable is referred as unexplained variance. The larger the F ratio the more will be the variance in the dependent variable that is associated with the independent variable. The F ratio = 256.684

Table 7

| Coefficients <sup>a</sup>               |                                  |                             |            |                           |        |      |
|---|----------------------------------|-----------------------------|------------|---------------------------|--------|------|
| Model                                   |                                  | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|   |                                  | B                           | Std. Error | Beta                      |        |      |
| 1                                       | (Constant)                       | .507                        | .088       |                           | 5.795  | .000 |
|   | <b>Front office Services</b>     | .244                        | .036       | .278                      | 6.875  | .000 |
|   | <b>Deposit oriented Services</b> | -.814                       | .085       | -.874                     | -9.554 | .000 |
|   | Customer Retention               | .541                        | .079       | .552                      | 6.856  | .000 |
|   | <b>Customer Perception</b>       | .409                        | .056       | .433                      | 7.303  | .000 |
|   | Infrastructure                   | -.070                       | .062       | -.073                     | -1.141 | .254 |
|   | Customer Interaction             | .432                        | .071       | .355                      | 6.091  | .000 |
|   | Customer Relationship            | .053                        | .056       | .055                      | .942   | .346 |
|   | Loan Oriented Services           | .030                        | .032       | .032                      | .913   | .361 |
| a. Dependent Variable: Customer Loyalty |                                  |                             |            |                           |        |      |

INTERPRETATION

The coefficient for Loan **Oriented Services** (0.032), which is not significant, since its p-value is 0.361, which is greater than 0.05.

The coefficient for **Front office Services** (0.278) which is significant, since its p-value is 0.000, which is smaller than 0.05.

The coefficient for **Deposit oriented Services** (-0.874) which is significant, since its p-value is 0.000, which is smaller than 0.05

The coefficient for **Infrastructure** (-0.073) which is not significant, since its p-value is 0.000, which is greater than 0.05

The coefficient for **Customer Perception** (0.355) which is significant, since its p-value is 0.346, which is greater than 0.05

The coefficient for Customer Relationship (0.055) which is significant, since its p-value is 0.000, which is smaller than 0.05

The coefficient for Customer Interaction (0.355) which is significant, since its p-value is 0.000, which is smaller than 0.05.

The coefficient for Customer Retention (0.552) which is significant, since its p-value is 0.000, which is greater than 0.05.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_j X_k$$

$$\text{Customer loyalty} = 0.507 + 0.244(\text{Front Office Services}) - 0.814(\text{Deposit Oriented Services}) - 0.541(\text{Customer Retention}) + 0.409(\text{Infrastructure}) - 0.70(\text{Customer Perception}) + 0.432(\text{Customer Interaction}) + 0.053(\text{Customer Relationship}) + 0.030(\text{Loan Oriented Services})$$

From the above table, it is inferred that the Front Office Services, Deposit oriented services, Infra-structure facilities, Customer Relationship services, Customer interaction attributes and Customer retention strategy belong to the first cluster of respondents. The respondents in

## Customer Loyalty in Retail Banking –a Structural Equation Modeling (Sem) approach

second cluster opined that Bank charges for its services alone, among the various banking

services. The Bank charging for its services is having less effect among the respondents

**Table 10 . PEARSON CORRELATION**

|                              |                     | CUSTOMER RETENTION | CUSTOMER LOYALTY |
|------------------------------|---------------------|--------------------|------------------|
| <b>CUSTOMER PERCEPTION</b>   | Pearson Correlation | .499**             | .277**           |
|                              | Sig. (2-tailed)     | .000               | .000             |
|                              | N                   | 1040               | 1040             |
| <b>CUSTOMER RELATIONSHIP</b> | Pearson Correlation | .956**             | .219**           |
|                              | Sig. (2-tailed)     | .000               | .000             |
|                              | N                   | 1040               | 1040             |
| <b>CUSTOMER INTERACTION</b>  | Pearson Correlation | .480**             | .449**           |
|                              | Sig. (2-tailed)     | .000               | .000             |
|                              | N                   | 1040               | 1040             |
| <b>CUSTOMER RETENTION</b>    | Pearson Correlation | 1                  | .490**           |
|                              | Sig. (2-tailed)     |                    | .000             |
|                              | N                   | 1040               | 1040             |

\*\**. Correlation is Significant at the 0.01 level (2 tailed)*

### INTERPRETATION

- Pearson correlation coefficient for Customer Perception and Customer Retention is 0.499\*\*, which is significant ( $p < .001$  for a two-tailed test), based on 354 complete observations
- Pearson correlation coefficient for Customer Perception and Customer Loyalty is 0.277\*\*, which is significant ( $p < .001$  for a two-tailed test), based on 354 complete observations.
- Pearson correlation coefficient for Customer Relationship and Customer Retention is 0.956\*\*, which is significant ( $p < .001$  for a two-tailed test), based on 354 complete observations
- Pearson correlation coefficient for Customer Relationship and Customer Loyalty is 0.219\*\*, which is significant ( $p < .001$  for a two-tailed test), based on 354 complete observations
- Pearson correlation coefficient for Customer Interaction and Customer Retention is 0.480\*\*, which is significant ( $p < .001$  for a two-tailed test), based on 354 complete observations.
- Pearson correlation coefficient for Customer Interaction and Customer Loyalty is 0.449\*\*, which is significant ( $p < .001$  for a two-tailed test), based on 354 complete observations.
- Pearson correlation coefficient for Customer Retention and Customer Loyalty is 0.490\*\*, which is significant ( $p < .001$  for a two-tailed test), based on 354 complete observations.

### FINDINGS

The Results indicate that there is a strong relationship between customer relation and customer loyalty. The Bank charging for its services is having less effect among the respondents on building customer loyalty. All the dimensions are having association with Customer loyalty out of which front office services does not support well when related with Customer loyalty. However when regressed Customer Loyalty with front office services , the results seems to be positive .Customer interaction and Customer retention is having good impact in creating customer loyalty in Indian retail banking. Infrastructure does not support well towards the customer loyalty.

### MANAGERIAL IMPLICATIONS AND CONCLUSION

Due to the Rising Income of the people, living standards and expectations of the customers towards the banking services is very high. The Indian retail banks have to advance and amplify the services which will make the customers loyal. From the study it is observed that, Front office services do not have impact on Customer loyalty. In the front office/Customer Service section, additional counters may be incorporated to serve the customers well. Bank charges and penalties need to be revised by considering the customer retention. Monthly average balance, Number of Transactions in ATM and Surcharges can be modified according to the convenient of the customers. However UPI and Mobile based transactions is doing well in India after the initiative of Digital banking. An exceptional strategy need to be incorporated for grabbing the lost customers again by providing

## Customer Loyalty in Retail Banking –a Structural Equation Modeling (Sem) approach

rewards/incentives for card based /online transactions. The Researcher has found as strong alliance between Customer relationship and customer loyalty.

### SCOPE FOR FURTHER RESEARCH

The dimension of the study can be further extended towards Internet banking ,Demat services and mobile application services, Service quality , Employee Organizational Citizenship behaviour ,behavioral attributes of customers, product quality , Bank reputation etc.,

### BIBLIOGRAPHY

- [1] Ponnampalani, A., Ponnampalani, A., Paul, R., & Paul, R. (2017). Relative importance of service value by customer relationship stages: Evidence from the Indian retail banking. *International Journal of Bank Marketing*, 35(2), 319-334.
- [2] Makanyeza, C., Makanyeza, C., Chikazhe, L., & Chikazhe, L. (2017). Mediators of the relationship between service quality and customer loyalty: Evidence from the banking sector in Zimbabwe. *International Journal of Bank Marketing*, 35(3), 540-556.
- [3] Yadav, M. K., & Rai, A. K. (2017). Exploring the Relational Impact of Service Quality on Customer Satisfaction. *Ushus-Journal of Business Management*, 14(4), 17-31.
- [4] John, B. M. (2017). DYNAMICS OF SERVICE QUALITY IN THE INDIAN BANKING SECTOR. *Indian Journal of Commerce and Management Studies*, 8(1), 59.
- [5] Kant, R., Jaiswal, D., & Mishra, S. (2017). The Investigation of Service Quality Dimensions, Customer Satisfaction and Corporate Image in Indian Public Sector Banks: An Application of Structural Equation Model (SEM). *Vision*, 21(1), 76-85.

**Citation:** DR V.MAHALAKSHMI , Mr R.MURALI,, "Customer Loyalty in Retail Banking –a Structural Equation Modeling (Sem) approach". (2018). *Journal of Banking and Finance Management*, 1(2), pp.15-20.

**Copyright:** © 2018 DR V.MAHALAKSHMI. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.