CHAPTER 2

RESEARCH DESIGN

This chapter enshrines the research design, embodying population, sample, sources of data, data collection tools, field work, tools and techniques used for data analysis and interpretation, chapterization, abbreviations and operational definitions of concepts used in the study.

Being a fact finding study, describing, recording, analyzing and interpreting the condition that exists, it is descriptive cum analytical research.

2.1 Population

The population for the study consists of the total banks in Chennai and their customers. Of the total banks, the following six banks namely SBI, IOB, ICICI, HDFC, STD Chartered, CITI control more than sixty percent of the deposits and loans\(^1\) in Chennai. Hence the study is confined to these six banks. The details of the number of branches of these six banks in Chennai are as follows.

<table>
<thead>
<tr>
<th>Name of the Bank</th>
<th>Number of Branches</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBI</td>
<td>88</td>
</tr>
<tr>
<td>IOB</td>
<td>84</td>
</tr>
<tr>
<td>ICICI</td>
<td>38</td>
</tr>
<tr>
<td>HDFC</td>
<td>13</td>
</tr>
<tr>
<td>Std Chartered</td>
<td>5</td>
</tr>
<tr>
<td>CITI</td>
<td>2</td>
</tr>
</tbody>
</table>

Since the researcher was denied access to the data regarding the total number of retail customers and the total number of bank officials in the said six banks, the sample size is taken as 600 for customers and 90 for bank officials, details of which is given below.

2.2 Sampling Plan

a) Sampling Unit: The target respondents consists of retail banking customers and bank officials across the identified six banks

b) Sampling size: The proposed sample size of retail banking customer and bank officials are as follows:

\(^1\)Business Today Survey on India’s best banks dated December 22, 2009, p. 53 and BT-KPMG Study data.
Table 2.2 Distribution of proposed sample

<table>
<thead>
<tr>
<th>Bank</th>
<th>Proposed Sample Size</th>
<th>Bank Officers of Management Cadre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Customer</td>
<td>100</td>
</tr>
<tr>
<td>SBI</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>IOB</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>ICICI</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>HDFC</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Std.Chartered</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>CITI</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>600</td>
</tr>
</tbody>
</table>

The sample size was determined based on suggestions given by bank manager, account holders and statisticians. The following factors played a key role in deciding on the sample size, namely, time taken by respondents to fill up the questionnaire, the number of respondents willing to part with information, resources required and the working hours of the bank.

c) **Sampling Procedure:** For administering the interview schedule, both to retail banking customers and bank officials, convenient sampling basis was adopted.

d) **Modus Operandi for administering questionnaire:** The researcher planned to meet the respondents across banks in person on different days during Aug 2010 to March 2011 to collect data.

2.3 Data Collection

a) **Data type and source:** Both primary and secondary data were used for the study.

Primary data was collected through interview schedule and interaction with bank customers and bank officials of management cadres.

Secondary data was garnered from several website, RBI publication, Banking Ombudsman publication, various studies carried out earlier in this area, books, reports-published and unpublished- and journals for carrying out and substantiating the study.

b) **Tools used for data collection:** Two interview schedules, one for retail banking customers and another for bank officials, were initially prepared based on previous
literatures and in consultation with a few bank officials, retail banking customers in Chennai and statisticians. The interview schedule was designed to capture the demographic data of the respondents, their behavior and perception pertaining to several aspects of banking.

c) **Pilot Study:** With the two germinal schedules, a sample of twenty five bank customers and ten bank officials were selected for the pilot study.

Based on the feedback, few questions sounding obscure and cloudy, were fine tuned to impart clarity and connote distinct meaning. A few questions of nebulous nature were weeded out fully. Then in consultation with bank managers, account holders and statisticians, the schedules were finalized and given a concrete shape. The final interview schedule for retail customers contained 28 questions and the interview schedule for bank officials enlisted 20 questions. A copy of the final interview schedules is appended in Appendix 1 and Appendix 2.

d) **Field Work:** For collecting the information from customers, the researcher met the customers in the banks and fixed up appointments with them for administering the interview schedule. Later, as per convenience of the customers, the researcher approached them at their residence/offices for collecting information as warranted in the interview schedule.

In the case of bank officials, the researcher met them as per their appointments given, both during banking and non-banking hours to get their interview schedule filled in.

2.4 **Researcher’s predicament in the data collection phase**

The researcher confronted multitude of impediments in marshalling information from bank officials and customers.

A handful of bank officials turned down the interview schedule citing time constraints and work pressure as reasons. They had to be convinced across several meetings in person. A majority of the bank officials were met after banking hours. Some of the bank officials declined to furnish information without the approval of their head offices located in far off places.

In the case of retail banking customers, quite a few shied away the interview schedule. Many did not want to part with the information as it pertains to their pecuniary status. The
researcher had to persuade them by assuring confidentiality. In many cases, the appointments given by customers were abruptly cancelled and the researcher had to seek afresh. Later, as per convenience of the customers, the researcher approached them at their residence/office for garnering information.

2.5 Tools used for analyzing the data

The following tools were administered for analyzing the data mustered through the interview schedule.

1) Descriptive Analysis
2) Ranking Analysis
3) Four and Five point Scaling Analysis
4) Average or Mean Score technique
5) Chi square test
6) ANOVA-Analysis of Variance
   Tests of Normality
   Levene statistic
7) Gap Analysis- t-Test
8) Simple Regression
9) Multiple Regression- Forward Stepwise method
10) Correlation Analysis

Explanation of the above tools is sketched in Chapter 5. The analysis was executed using Statistical Package for Social Science [SPSS] version 19. In carrying out the test, if p value is <=0.05, it is significant, otherwise, not significant
2.6 Chapterization

Chapter 1: Introduction

This chapter consists of introductory information on customer relationship management in banks, statement of the problem, objectives of the study, hypotheses framed to achieve the objectives, scope, limitations and usefulness of the study followed by a summary.

Chapter 2: Research Design

This chapter anchors the details regarding population, sampling plan, data type and their sources, tools used for data collection, collection procedure, list of statistical tools employed, chapterisation, abbreviations and operational definitions of concepts used in this research.

Chapter 3: Review of Literature

This chapter provides a detailed review of existing literature on customer relationship management and the various research studies carried out on banks, both within and outside India.

Chapter 4: Retail Banking Industry in India

This part of the study throws light on the Indian Retail Banking Industry from past to present.

Chapter 5: Data Analysis and Interpretation

This chapter contains a detailed analysis of the perception of retail banking customers and bank officials on the several facets contributing to successful banker customer relationship.

Chapter 6: Summary of Findings

This chapter encapsulates the findings of this study.

Chapter 7: Suggestions and Conclusion

This section tables the suggestions to all concerned with banking for improving banker-customer relationship.
2.7 Abbreviations

1. ABB- Any Branch Banking
2. ATM- Automated Teller Machine
3. CMS- Complaint Management System
4. CRM- Customer Relationship Management
5. CTP - Customer Touch Points
6. CTS- Cheque Truncation System
7. DMAT- Dematerialization
8. DP- Depository Participant
9. DPS- Depository Participant Services
10. DTH- Direct To House
11. E-Banking- Electronic Banking
12. ECRM- Electronic Customer Relationship Management
13. ECS- Electronic Clearing Service
14. EFT- Electronic Fund Transfer
15. EPOS- Electronic Point of Service
16. EPS- Electronic Payment System
17. FPS- Financial Planning Services
18. GCC- Green Channel Counter
19. HDFC- Housing Development Finance Corporation
20. ICICI- Industrial Credit and Investment Corporation of India
21. INFINET- Indian Financial Network
22. IOB- Indian Overseas Bank
23. IVRS- Interactive Voice Response System
24. KB- Kiosk Banking
25. LOS- Loan Origination Software
26. MICR- Magnetic Ink Character Recognition
27. NRI- Non Resident Indian
28. PMS- Portfolio Management Services
29. RBI- Reserve Bank of India
30. SBI- State Bank of India
2.8. Operational Delineation

**Any Branch Banking:** It is a facility to customers to operate their account from any networked branch. The branch where the customer maintains his account is the base branch, and the branch from where he carries out his transactions is referred to as the remote branch. Facilities available under ABB encompass cash withdrawal, cash deposit, fund transfers, deposit of local cheques and procurement of demand drafts or pay orders.

**Bancassurance:** This stems from French Origin [banc + assurance] and refers to selling insurance products through banks’ established distribution channels.

**Carding:** These are sites found on the internet, where fraudsters buy and sell access to bank accounts, stolen card numbers, dumps from magnetic strips and even personal profiles.

**Cheque Truncation System [CTS]:** It is the conversion of physical cheque into electronic form for transmission to the drawee bank branch along with information like data on the MICR band, date of presentation, presenting bank, etc. This eliminates the associated cost of physical movement of cheques and reduces the time required for their collection.

*Prescription relating to alterations/ corrections on cheques cleared under the image based CTS:*

RBI has prohibited alterations/corrections on the cheques (except for date validation purposes, if required) to curtail cheque frauds and give protection to the customer as well as banks. For any change in the payees’ name, amount in figures or words, fresh cheque leaf should be issued by the customer.

**Status of CTS implementation in India:** RBI has implemented CTS in New Delhi and Chennai with effect from 1st February 2008 and 24th September 2011 respectively. After migration of the entire cheque volume from MICR system to CTS, the traditional MICR-based cheque processing has been discontinued in these two locations. Based on the advantages realized by the stakeholders and the experience gained from the roll-out in these centres, RBI decided to operationalize CTS across the country, accordingly, grid based CTS clearing has since been started in Chennai by including a few banks from Coimbatore and Bengaluru with effect from
march 2012. RBI has also envisaged to bring all the bank branches in the states of Tamil Nadu, Kerala, Karnataka, Andhra Pradesh and the union territory of Puducherry under Chennai grid in a phased manner. [Source: www.rbi.org.in]

**Cloud Computing:** It is a general term for anything that involves delivering hosted services over the internet.

**Complaint Management System:** It is a web based complaint management system where customers can register their ATM related complaints, and those relating to pensions, inoperative accounts, safe-vaults and NRI accounts.

**Core Banking:** Core banking applications help provide complete front end and back end automation of banking operations. This enables banks achieve centralized processing and provide anywhere, anytime 24 x 7 nonstop services, not possible with traditional localized branch automation systems that are available only during their working hours. This application helps integrate the bank to the do-it-yourself view. They provide automation across multiple delivery channels.

**Cross selling:** It is the process of selling more number of a bank’s multiple products to a customer. It takes the central stage as a logical marketing approach to expand their retail segment. Cross selling considerably reduces customer acquisition costs, servicing costs and marketing and communication costs, thereby substantially increases the spread for banks. It also builds up customer loyalty. When the number of products a customer purchases from a bank spurts up, the probability of loosing that customer to a competing bank diminishes.

**Customer Advocacy:** This goes beyond customer satisfaction. In this stage, the customer becomes the ambassador of the banking products and services, which adds to the credibility and image of the bank.

**Customer loyalty:** If a retail customer is satisfied and each interaction of the customer with the bank is a satisfying experience, the customer comes back to the same bank for repeat transactions and for purchasing additional bank products. This situation is termed customer loyalty.

**Customer Touch Points [CTP]:** Bankers and customers have to interact with each other. Customers get a particular experience wherever they come in contact with a bank, its employees, products, services or any other channel of interaction. All these interactions constitute customer touch points.
**Data Mining**: It is the process of analyzing large data sets from different perspectives and summarizing it into useful information that can be used to increase revenue, cut cost or both.

**Data Warehouse**: It is a database used for reporting and data analysis. The data stored in the warehouse are uploaded from the operational systems [such as marketing, sales etc]. The data may pass through an operational data store for additional operations before they are used in data warehouses for reporting.

**Demat**: It stands for Dematerialization. It is the process by which an investor gets his physical certificates converted into electronic form into his account with the Depository Participant (DP).

**Depository Participant Services [DPS]**: It is an organization which holds the customers’ securities in the form of electronic book entries. It is exercised at the behest of shareholders through a depository participant [DP]. In order to avail the services of the depository, an investor has to open an account with the DP. A depository can transfer securities, as per the investor’s instructions, without physical handling of securities, through the electronic mode. The DP maintains the details of securities purchased and sold by the investor. The DP also provides the investor a statement of holdings which is similar to a bank pass book.

**E-banking**: It stands for electronic banking which connotes providing banking products and services through e-channels such as internet, mobile banking etc.

**ECRM**: It is an integration of people, processes, knowledge and customers with the help of information technology.

**Electronic Clearance Service [ECS]**: It is a retail payment system that facilitates bulk payments [such as dividends] and bulk receipts [such as utility payments]. The above two aspects are handled by the constituents of the system as follows:

a) **ECS [Credit]**: This facilitates bulk payments, where an institution makes payments to several retail customers. Examples are payment of salaries to employees, payment of dividend/interest warrants to investors.

b) **ECS [Debit]**: It is the opposite of ECS [Credit] where many individuals pay to one firm or utility. Here the accounts of the various customers of the utility in various banks are debited and the amounts are credited to the utility company’s account with a particular bank.
**Electronic Payment System:** It is a payment solution which provides an end to end electronic funds transfer with speed and efficiency.

**Electronic Point of Service [EPOS]:** It is a combination of hardware and software networked with the banking system to provide access to the customer. Touch screens and bank ATMs are widely used examples of such interfaces.

**Financial Planning Services:** These are meant for high net worth individual customers who may not have time or the needed expertise to plan their finances properly even for duration as long as 20 years or after retirement.

**Green Banking:** These are the latest initiatives by banks, where in the banks which have successfully commissioned their windmill projects, use the power thus generated in their branches/offices. This reduces their dependence on polluting thermal power to the extent of renewable power generated by the banks’ windmills.

**Green Channel Counter [GCC]:** It is an innovative step taken by banks towards changing the conventional paper based banking to the card based “Green Banking” focusing on reduction of paper usage as well as conserving transaction time. It seeks to change the behavior of customers from voucher based banking to card based transactions.

**Identity Thefts:** It is the misuse of personal data or documents in order to impersonate another individual to carry out illegal or fraudulent activities. Example, to abuse the victims banking facilities.

**INFINET:** This is acronym of Indian Financial Network. It is the communication backbone for the Indian banking and financial sector. All banks and financial institutions are members of the INFINET, which functions as a closed user group.

**Interactive Voice Response System [IVRS]:** It is a computer server with hardware and software for handling calls and giving recorded responses to customers/callers. It can handle a number of pre-defined enquiries automatically and give replies to a number of routine queries and can give information to callers by getting the same from the data base.

**Internet banking:** They refer to banking services offered through the web. Through internet banking, one can access information about transactions and balance status, request for drafts/transfer of funds and cheque books, give instructions to stop payment of cheques, issue standing instructions and request for issue and renewal of term deposits.
Kiosk Banking: It is a technological device operated at internet enabled PC [Kiosk] with biometric validation. It supports online/real time transactions.

Loan Origination Software [LOS]: This is a web enabled online software for processing and sanctioning of auto loan, home loan, education loan and personal loan proposals and help banks in risk mitigation through de-dupe functionality, which would avoid duplication as it is capable of identifying similar customers’ details in the LOS data base of existing customers.

Magnetic Ink Character Recognition [MICR]: It is a technology to process changes. In a cheque the bottom area is termed MICR band. It contains
1. Cheque number: They are the first six digits in the MICR band.
2. MICR code: It is a nine digit code, of which, the first three digits represent city, the second three digits represent the bank, the last three digits represent the branch. Every bank branch is allotted a unique MICR code.

Mobile banking: It refers to an array of banking services offered over the mobile phone like fund transfer, enquiry services, demat account enquiry, cheque book request, bill payment, mobile top up, DTH exchange, payment of premium and tax etc.

No frill account: A no frill account is a zero balance account offered to under-privileged people with no additional/ extra features attached to it [like no online account, no cheque book, etc]. A zero balance account can be offered to any privileged customer who has his salary account in the same bank.

Offsite ATMs: These are ATMs located and operated outside the bank premises.

Onsite ATMs: They are those that are stationed and function within the vicinity of the bank.

Portfolio management services: They refer to investment related services offered to high end individual investors.

Remat: it stands for rematerialization. It is the process of converting an investor’s electronic shares back to physical shares.

Smart Money Account: It is a unique fixed deposit linked to a savings or current account where the customer can enjoy the higher returns of a fixed deposit and yet retain the flexibility of using money through the linked account.

SMS Unhappy Service: It is a mobile and web based service for customer grievance redressal. Any customer, who wants to lodge a complaint, sends an SMS “Unhappy” to a specified number. The bank responds to the number by calling back the customer on the same mobile number and
records the details of the complaint and sends to respective branches that are required to resolve within 48 hours.

**Tele banking:** Tele banking services offers the convenience of anytime, anywhere banking to the customers. The customer can check his account balance and have his latest transaction faxed. Tele banking is available 24 hours a day, 7 days a week. The system is simple to use and secured. The customer can obtain information guided by the interactive voice response system.

**Telegraphic Transfers [TT]:** This is also known as wire transfer and is a popular medium for quick money transfers.

The above provision is applicable to the cheques cleared under the image based CTS only with effect from 1st December 2010. It is not applicable to the cheques cleared under other clearing arrangements for the present.

**Web Interface:** With the penetration of broadband and internet and easy availability of computers, web interface is proving to be the most economical, convenient and accessible interface between a bank, its employees and customers. They form the platform for not only online product information but also provide a complete service solution. All requirements of a customer can now be met through web portals. The adoption of credit/debit cards and net banking has made this interface more useful.

**2.9 Chapter Summary**

The study was performed with the help of secondary and primary data provided by retail banking customers and bank officials. The research makes use of the data provided by them. The researcher personally gathered the data. The chapter which follows provides an insight into relevant research that has been done in the past.