CHAPTER - 3
CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

A research design is a plan of the research project to investigate and obtain answers to research questions. Three types of research designs identified from the literature are exploratory, descriptive and explanatory (Cooper, Schindler\(^1\)) 2001. In the beginning of the study an exploratory research was undertaken by an in-depth review of literature in order to identify the research problem, constructs and to formulate hypotheses. Descriptive research design was used in the next stage of the research for the purpose of describing the profile of the respondents and to determine the frequencies, percentages, mean and standard deviation of the measures used in the study. Descriptive research could not explain the relationship among variables (Zikmund 2000\(^2\)) and therefore, to establish relationship and association between variables used in the study, explanatory research was used.

Survey method using a structured questionnaire was used for collecting primary data from the respondents because it offers a more accurate means of evaluating information about the sample and enables the researcher to draw conclusion about generalising the finding from a sample to a population. The study also made use of secondary data collected from published sources such as reports of RBI and recommendation of various customer services committees.

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Various aspects of research design used in the study are explained in detail below in this chapter.

3.2 RESEARCH DESIGN AND METHODOLOGY

3.2.1 Objectives of the Study

The study has the following major objectives:

1) To study the impact of personnel (their behavior, knowledge, efficiency and involvement) on customer satisfaction of SBI and HDFC Bank.

2) To understand the impact of process (banking processes, CSD, punctuality, call centers, electronic services, etc.) on consumer satisfaction in the two banks.

3) To explore the role, importance and impact of physical infrastructure (IT infrastructure, ATMs, seating arrangements and parking etc.) on consumer satisfaction in the two banks.

4) To analyze the impact of income, occupation, gender and age on the customer satisfaction of SBI and HDFC Bank.

3.2.2 Hypotheses of the Study
| Hypothesis 1 | There is no significant difference between the customers satisfaction of the two banks on the basis of personnel services. |
| Hypothesis 2 | There is no significant difference between the customers satisfaction of the two banks on the basis of banking processes. |
| Hypothesis 3 | There is no significant difference in the customer satisfaction level of the two banks on the basis of banking infrastructure. |
| Hypothesis 4 | There is no significant difference in customer satisfaction level of the two banks on the basis of income level. |
| | a) There is no significant difference between the customers of the two banks in the income level 0-25K. |
| | b) There is no significant difference between the customers of the two banks in the income level 25-50 K. |
| | c) There is no significant difference between the customers of the two banks in the income level 50-1lakh. |
| | d) There is no significant difference between the customers of the two banks in the income level above 1 lakh. |
| Hypothesis 5 | There is no significant difference in customer satisfaction level of the two banks on the basis of occupation. |
| | a) There is no significant difference between the customers of the two banks in the occupation of services. |
| | b) There is no significant difference between the customers of the two banks in the occupation of business. |
| | c) There is no significant difference between the customers of the two banks in the occupation of professional. |
| | d) There is no significant difference between the customers of the two banks in the occupation of student. |
| | e) There is no significant difference between the customers of the two banks in the occupation of housewife. |
| | f) There is no significant difference between the customers of the two banks in the occupation retired. |

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<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Statement</th>
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| **Hypothesis 6** | There is no significant difference in customer satisfaction level of the two banks on the basis of gender.  
   a) There is no significant difference between the male customers of the two banks.  
   b) There is no significant difference between the female customers of the two banks. |
| **Hypothesis 7** | There is no significant difference in customer satisfaction level of the two banks on the basis of age.  
   a) There is no significant difference between the customers of the two banks in the age group 0-35 years.  
   b) There is no significant difference between the customers of the two banks in the age group 36-59 years.  
   c) There is no significant difference between the customers of the two banks in the age group of 60 years and above. |
| **Hypothesis 8** | There is no significant difference in the overall customer satisfaction level of the two banks. |

### 3.2.3 Research Area- Lucknow

Lucknow is the capital city of Uttar Pradesh the most populous state of India. It has a total population of 4,815,601 lakh spread across an area of 3244 square kilometre. The vibrant city is witnessing an economic boom and features amongst the top ten fastest growing non major metropolitan cities of India.

The study conducted in 2010 by the Assocham Placement Pattern (APP) on 'Job Trends in the Four Metros' analysed the trend of job openings in 60 cities and 32 sectors from a sample size of 2,40,314 employment opportunities created during the period April-August 2010. The results of the study ranked Lucknow, 6th among cities in India and second amongst the tier two cities after Pune for fastest job-creation.

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The Rapid growth of the economy of Lucknow is being seen as the gateway to the development of the banking industry in the city\(^5\). Lucknow has a total of 33 banks\(^6\) with 475 offices Lucknow spread across the expanse of the city.

### 3.2.4 Population

Since the research is a comparative study of the customer satisfaction level of SBI and HDFC Bank the population of the study will be all the customers of SBI and HDFC bank in Lucknow. As none of the branches reveal the exact number of their customers and also because the numbers of customers keep changing everyday an approximate number of customers were calculated (Table: 3.1).

**Population of SBI**

Total branches of State Bank of India pan India is 10,000 and the total customer base pan India- 100 Million. So approximately total customers per branch is 10,000 multiplying this figure with the total branches in Lucknow we get 4,50,000 (45* 10,000) (Table: 3.1).

**Population of HDFC Bank**

Similarly for HDFC Bank the total customer base pan India is 25 million or 250,00,000 and total branches pan India are 2544 branches in Lucknow are 14 so the approximate customers in Lucknow are 1, 37,578 (Table : 3.1).

### 3.2.5 Sample Size

The total population of 5, 87,578 customers are a very large number therefore conducting a census study was practically impossible. Taking into consideration that one or two branches might be added by the time this research is completed, a total sample from SBI was taken as 480 and from HDFC 160 customers. Thus the total sample size is 640 customers. (Table: 3.2).

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\(^6\) Public, private and foreign scheduled commercial banks.
### Population of the Study

<table>
<thead>
<tr>
<th></th>
<th>SBI</th>
<th>HDFC</th>
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<tbody>
<tr>
<td>Total Branches in India</td>
<td>10,0007 (ten thousand)</td>
<td>2544 (two thousand five hundred and forty four)</td>
</tr>
<tr>
<td>Total customers pan India</td>
<td>100 million or 10, 00, 00,000 (ten crore)</td>
<td>25 million8 or 2,50, 00,000 (two crore fifty lakhs)</td>
</tr>
<tr>
<td>Branches in Lucknow</td>
<td>45(forty five)</td>
<td>14 (fourteen)9</td>
</tr>
<tr>
<td>Total customers in Lucknow</td>
<td>4,50,000(45*10)</td>
<td>1, 37,578   (14 * 9,827)</td>
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</table>

**Population of the Study**  
(Total customers of SBI and HDFC in Lucknow) 5, 87,578

### 3.2.6 Sampling Technique and Design

- In order to make sure that customers all over Lucknow are included in the study and customers from various age groups and from various income levels are included in the sample a Multi Stage sampling technique was undertaken.

- In the first stage Cluster Sampling is undertaken in which the entire city of Lucknow is divided into four zones (Annexure: II/Figure: 11.1). From each zone the 3 biggest branches of SBI are selected, making it a total of 12 branches (27 percent of total branches in Lucknow). For HDFC 1 branch each is selected from each zone making it a total of 4 branches (29 percent of total branches in Lucknow) (Table: 3.3).

- As customers of various age groups and income level have different requirements from the bank it was thought appropriate to go in for Stratified Sampling in the second stage of sampling. As stratified sampling enables a researcher to draw inferences about specific subgroups that may otherwise get lost in a more generalized random sampling. Secondly, utilizing a stratified sampling method can lead to more efficient statistical estimates.

- Accordingly 40 customers are chosen from each branch. (Figure: 3.1 and 3.2.)

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These 40 customers were further stratified into 4 groups of 10 customers each. Each group representing one of four monthly income levels; 0 to -25,000, 25001 to 50,000, 50,001 to 1 lakh and 1 lakh and above. (Figure: 3.3).

Again each of these 10 customers are further stratified on the bases of the age group they fall into; i. e, 3 out of 10 from the age group 0-35 years representing the youth, next 3 will be from age group 36-59 representing the middle aged and the last 2 will represent the senior citizen customers that is above 60 years of age. (Figure: 3.3).

<table>
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<tr>
<th>Table: 3.2 Sample of the Study</th>
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<tr>
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<tr>
<td>Total customers in Lucknow (population)</td>
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<tr>
<td>Total Sample Size</td>
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<tr>
<th>Table : 3.3 Areas in Various Zones in Lucknow</th>
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<tr>
<td>ZONES</td>
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<tr>
<td>Areas in Zone 1</td>
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<td>Areas in Zone 2</td>
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<tr>
<td>Areas in Zone 3</td>
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<td>Areas in Zone 4</td>
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</table>
Figure: 3.1
Cluster Sampling-State Bank of India
Figure: 3.2
Cluster Sampling - HDFC Bank
Figure: 3.3
Stratified Sampling for HDFC and SBI

40 customers
From each branch

- 10 customers within income range (0-25,000) per month
- 10 customers within income range (25,001-50,000) per month
- 10 customers within income range (50,001-1,00,000) per month
- 10 customers with income above 1,00,001 per month

- 4 customers within age group (0-35)
- 4 customers within age group (36-59)
- 2 customers with age 60 and above
### 3.2.7 Questionnaire Design

- **Step 1** - A schedule with a set of 30 statements related to various bank services which are imperative for customer satisfaction was prepared. This questionnaire was sent for peer review to 10 different people (3 bankers, 4 professionals, 3 retired, housewife and student respectively). The peers were requested to go through the statements and to add any service point/s which they felt has been left out. They were also requested to suggest any kind of improvement or deletion in the existing statements.

- **Step 2** - Based on the feedback by the peers, another questionnaire was prepared with 45 statements, each related to various bank services which were deemed imperative for customer satisfaction. This questionnaire was again sent to 30 different people (6 bank professionals, 6 private service apart from banking, 6 students, 6 retired and pension earners, 6 self-employed or business men, and 6 housewife). Each one of them was asked to rate on the Likert 5 point scale to the extent to which they agree or disagree that a particular service gives them satisfaction.

- **Step 3** - The score obtained by each of the service statement as given by the 30 peers was added up.

- **Step 4** - Each of the 45 statements were divided into these three broad service dimension – People, Process and Physical Dimensions. (Figure: 3.4) and the top ten in each category was chosen to be a part of the final questionnaire (Annexure: III /Table: 11.1; 11.2 and 11.3).

- **Step 5** - The final questionnaire thus included 60 service related questions. Out of which 30 measured customer expectation from the bank and the next 30 customer actual experience / perception/ observation with either HDFC or SBI. (Annexure: I).

- **Step 6** - The scale used in the final questionnaire was a 5 point Likert scale with the following values: 1 -Fully Agree, 2-Agree, 3- Neutral, 4- Disagree, 5- Fully Disagree.

- **Step 7** - Six other questions related to the profile of the respondent, two questions related to the name of the bank and its branch and one question related to the overall satisfaction level from the bank service were also included in the final questionnaire. The customers were also asked to rank the 3 dimensions in terms of their importance in customer’s service in a bank.
3.3 LIMITATIONS OF THE STUDY

The study has been done with utmost sincerity and all possible measures have been taken to get accurate and error free results. But still the study might suffer from certain limitations. Some of the possible limitations of the study are as follows:

1. The sample size of the current study is 640. Though this sample size meets the minimum requirement. However the researcher may use a bigger sample size to find out more about service quality, customer satisfaction and customer loyalty in the retail banking settings in future.

2. Other variables such as price, variety of products, rate of interest etc may influence customer decision making process in the retail banking industry.

3. The respondent coverage in this study consists of only Lucknow. The generalizations to a wider population or industry and cultural issues should be taken with caution.

4. The study is limited to respondent’s views in Lucknow and should not be generalized geographically elsewhere.
5. This research is limited to studying the role of the services in HDFC and SBI. The results should not be interpreted for any other banks or even for HDFC and SBI in other cities.