CHAPTER 4
RESEARCH METHODOLOGY

4.1 INTRODUCTION

Research is a systematic unbiased and complete investigation into any problem of research. Research consists of different steps or stages and they are as follows:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Formulation of Research Problem</td>
</tr>
<tr>
<td>2</td>
<td>Deciding Research Design</td>
</tr>
<tr>
<td>3</td>
<td>Preparation of Questionnaire</td>
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<tr>
<td>4</td>
<td>Sample Selection</td>
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<tr>
<td>5</td>
<td>Data Collection, Processing and Analysis</td>
</tr>
<tr>
<td>6</td>
<td>Preparation of Final Report</td>
</tr>
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</table>

Thus from above it is visible that research is a systematic technique of analyzing a problem and drawing inferences. These steps are covered in the following section:

4.1 (A) FORMULATION OF RESEARCH PROBLEM

The first step in the research process is to identify the problem which researcher aims to solve or investigate. A problem well defined is half solved. The formulation of research problem involves certain elements. These are

1. Identifying the Problem
2. Review of Literature
3. Determining Objectives
4. Identifying Variables
5. Constructing Hypothesis

Problem identification gives direction of research. It helps in conducting and focusing research on the specific aspects of the problem. The research problem can be identified
through various sources such as research studies, brainstorming sessions, practical experience, reading books & literature, meeting, suggestions and so on. The various considerations in research problem are the interest of the researcher, his skills and competencies, resources availability, facilities available, quality of the research and so on. Research problem implies some problem faced by an organization or researcher and there is lack of clarity of the problem. There can be different alternative to overcome the problem.

Research problem can be identified through literature review and discussion with experts. Research problem can be broad which can be modified into specific one so that research is specific on the problem. Research problem should be converted into research question. Once the research questions are determined then based on this, research objectives can be finalized. Objectives can be broad and specific. Each objective can be broken into sub objective.

Literature review is one important source of determining the research problem on the basis of existing research or literature review. It is possible to develop some theme of the findings and then the findings of different researchers can be compared. Differences in the findings can be evaluated. The existing gap in the research can be found out.

Theoretical framework can be prepared and then conceptual guidelines are decided. For example theoretical framework explains different theories on the problem. Conceptual guidelines imply testing of one specific theory. Thus literature review helps in finding out the existing research gap on the topic of the study and based on this research is undertaken to fill the gap. The purpose of research is to add some additional knowledge on the problem or take research further from earlier research done by other researcher.

Formulation of research problem also involves identifying different variables which are measurable in the research. These variables can be independent variables, dependent variables and intervening variables. Variables help in measuring the findings of research. On the basis of research objectives, research hypothesis are finalized.
4.1 (B) DECIDING RESEARCH DESIGN

Research design is the most important aspect of any research. It helps in conducting research in the most scientific manner. It guides how research is done. There are different types of research design.

1. Exploratory Research
2. Descriptive Research
3. Casual Research

The choice of research design depends on the nature and type of research to be undertaken. The types can be explained in detail as follows:

1. Exploratory Research
Exploratory research is the initial research undertaken to explore something not known, such research is done on the basis of available literature. The sample size is limited and the sampling method is non-random sampling. Such research can be conducted for the purpose of problem identification and framing of research objectives.

2. Descriptive Research
Descriptive research describes nature and features of existing market conditions. Such research is generally based on primary data and sample size is large. The method of sampling is probability sampling. Such research is conducted to find out existing size of market, number of consumers, market share of different competitors and so on. It is mostly quantitative research.

3. Casual Research
Casual research describes the relationship between two variables i.e. dependent variable and independent variable. For example Advertising and Company Sales. Company Sales are dependent variable and Advertising is independent variable. Such research is undertaken to find out the nature of relationship i.e. positive, negative, strong, weak, etc.
The present research is a blend of exploratory research, descriptive research as well as casual research.

4.1 (C) DEVELOPING QUESTIONNAIRE

Questionnaire is a tool of data collection. It consists of various questions on problem of research. It is based on the objective of the research. It covers different types of questions such as open ended, close ended questions. A detailed questionnaire was prepared on the subject of research. Initially a draft questionnaire was prepared which was used for testing the possible results. Based on this final questionnaire was prepared. A copy of questionnaire is enclosed at end of report at Annexure

4.1 (D) SAMPLE SELECTION

Sample is a part of the universe selected for the purpose of the research work. There are two methods of sampling namely

Random Sampling – here the samples are selected on the basis of random number tables or by chance.

Non – Random Sampling – Whereas here the samples are selected on the basis of choice. The different methods of non random sampling are convenience sampling, judgement sampling, etc.

In the present research non random sampling is used. Samples are selected on the basis of convenience and personal judgement. The details of the sample are as such

<table>
<thead>
<tr>
<th>Description</th>
<th>SBI</th>
<th>IDBI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Officers</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Junior Officers</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>
The total size of the sample is 200 employees which are classified into Managers, Officers and Junior Officers/Administrative Assistants. From each bank the distribution of sample is Managers (20), Officers (30) and Junior Officers (50). Thus the combined samples are made up of Managers (40), Officers (60) and Junior Staff (100).

**4.1 (E) DATA COLLECTION / PROCESSING / ANALYSIS**

The questionnaire framed after the approval of experts for the survey was personally canvassed among the bank employees. The data collected was tabulated, processed for further analysis. Data was analysed with the help of different statistical tools.

**4.1 (F) REPORT WRITING**

The detailed research report was prepared on the basis of the research process described above. The findings of the research is prepared and presented in the thesis on the basis of guidelines provided by the J J T University. The report is sub divided into different chapterization. The different chapters prepared are Introduction, Literature Review, Organizational Details (Main Body), Research Methodology, Data Analysis, Findings and Discussions, Summary and Conclusion.
4.2 TOPIC OF RESEARCH WORK

The topic of research work is “A Comparative Study of Marketing of Financial Services between Commercial Banks and Industrial Banks”.

Financial services covers all the services provided by the financial institutions or banks such as loans and advances, deposits, over draft, discounting of bills, travelers cheques, locker facilities, transfer of money, ATM, merchant banking, insurance, mutual funds, venture capital, leasing, factoring, gold loan, housing loan, derivatives product, foreign exchange to name a few of them. However in the case of present research the focus is on marketing of mutual fund services by commercial banks and industrial banks.

Most of the banks have taken up the mutual fund schemes for providing better financial services to the customer with higher returns and investment options. The study focuses on how these banks market their mutual funds, what are their marketing tools used by these banks, what are their marketing strategies and how far are their marketing efforts are successful in realizing the goals of the organization i.e. be it either higher profit, higher sales, higher customer base and so on.

Researching on Marketing of Financial Services is most difficult and challenging due to the inherent nature of services such as intangibility, perishability, heterogeneity (variability), simultaneity, etc.
Further much research work is not done on this subject and therefore the present research assumes greater significance. It will help in understanding how banks are marketing their services.

Also, a comparative analysis will be done to find out the difference in marketing tools adopted by two different banks i.e. commercial banks and industrial banks.

### 4.3 SOURCES OF DATA

Research begins with the collection of data on the subject of the research.

Thus data when processed leads to information and the information adds knowledge to our thinking and understanding of the problem at and. This can be seen as below:
Thus, data leads to information and knowledge on the subject of research. The various sources of data can be classified as primary sources and secondary sources.

4.3 (A) PRIMARY SOURCES / PRIMARY DATA

The data which is collected from the respondents, field, and organization is called as primary data. Such data is not published or available through books magazines but it is unpublished data.

It is raw data which is then processed; analyzed and final results are drawn in the research. It is collected with the help of questionnaire which is prepared for the purpose of research.

Primary data is essential for any research study as it is latest or upto date and it indicates the practical side of research. Such data is combined with secondary data to bring meaningful results.
However collection of primary data is time consuming and expensive. There is also possibility of interviewer’s biasness and respondents biasness.

4.3 (B) SECONDARY SOURCES / SECONDARY DATA

Secondary data refers to all published data available on the subject of research. Such data is the base of any research. For example Literature review is nothing but the study of available published data.

Such data is extensively used in research for identifying the problem, formulation of research objectives, finding out the research gaps, etc.

There are multiple sources of secondary data and they are as follows:

1. Text Books
2. Research Papers
3. Magazines
4. Journals
5. Newspapers
6. Industry Annual Reports
7. Trade Directories
8. Project Work
10. RBI Publications

Thus there are many sources of secondary data, but the data may not be latest or upto date. It may not be exact or as per the needs of the research.
Hence such data is supplemented with primary data so that proper conclusions can be drawn from the data analysis.

Hence an ideal research should blend both primary and secondary data to draw meaningful results.

4.4 TOOLS USED FOR DATA COLLECTION

Data collection is done with the help of different tools. These are personal interview, questionnaire, observation, etc. to name a few of them.

4.4 (A) PERSONAL INTERVIEW

One of the most common methods of data collection is personal interview. The respondents are contacted personally to collect the data with the help of a structured questionnaire. A questionnaire was prepared based on the objectives of research and it was canvassed and circulated among the selected respondents. In the case of present
research the respondents were the employees of the banks which included managers, officers and junior staff.

4.4 (B) QUESTIONNAIRE

Questionnaire is a list of questions on the subject of the research. The questions can be open ended or close ended. In the case of this research majority of the questions were close ended so that analysis could be done appropriate and convenient. Questionnaire was prepared and tested for its validity and application on the basis of this questionnaire was modified and revised. Two different questionnaires were prepared one for the bank employees and other for the customers.

The questions were based on the ranking scale in the form of yes, no, can’t say and others. The questionnaire was divided into different parts covering different aspects of the marketing activities. A copy of the questionnaire can be seen at Annexure I.

4.4 (C) OBSERVATION

It is one method of collecting data. It is mostly used in qualitative research. It is based on personal observation. Observation method is commonly used to observe the behavior of consumers, sales personnel and other. Now a days it is done through electronic devices like camera and other equipments.

4.5 RESEARCH DESIGN

Research is based on research design. Research design helps in conducting research in most scientific manner. The different types of research designs are

1. Exploratory Research
Exploratory research aims at conducting research on some problems or facts which are not known. It is conducted to explore the causes or the nature and type of the problem. It is generally conducted at the initial stage of research and on the basis of the findings of
this research further research is conducted. The selection of sample is based on non random basis. The size of the sample is generally small.

2. Descriptive Research
Descriptive research is conducted to describe the size of the market or to describe the present status such as market size, market share and so on. The sampling method used is generally random sampling and the size of sample is large.

3. Casual Research
Casual research is conducted to describe the relationship between two or more variables i.e. dependent and independent variables. In the case of present research, marketing tools are independent variables and the banks performance (sales, profit) are dependent variables.

The research study is a combination of Descriptive Research and Casual Research. It also explains the relationship between different variables.

4.6 SAMPLING METHODS

Sampling refers to selection of some respondents from total universe. Sampling process consist of different steps. These steps are

4.6 (A) STEPS OF SAMPLING METHODS
1. Defining the universe
2. Define the target population and sample unit
3. Deciding the methods of sampling
4. Deciding sample size
5. Selection of sample

4.6 (B) METHODS OF SAMPLING

The different methods of sampling can be seen from the following chart

4.7 TOOLS USED FOR DATA ANALYSIS

Different statistical tools are used for data analysis. It included descriptive analysis as well as statistical analysis. To name a few of them they are as follows:
4.7 (A) MEAN/MEAN DEVIATION/STANDARD DEVIATION

Mean also called an average is the simplest form of descriptive statistics. It is a measure of central tendency. It describes average of entire data. In case of present research each question has certain scale like 5, 4, 3, 2, 1 and suppose 10 respondents are asked question then maximum score for each question is 50 and minimum is 10. Based on ratings average for each question can be calculated. E.g. 10 respondents are asked 10 questions.

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5*</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>5*</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
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<td>5</td>
<td>5</td>
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<td>6</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>5*</td>
</tr>
<tr>
<td>8</td>
<td>5*</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
<tr>
<td>Response</td>
<td>20</td>
</tr>
</tbody>
</table>

In this case the average of each is calculated and then compared. This is done with the help of mean deviation. The mean deviation indicates how much the number differs from a central point (or mean). The greater the mean deviation the more spread out of scores in the distribution. Another measure used is standard deviation. It is the square root of the sum of the differences in mean. It is better than mean deviation.

4.7 (B) CHI-SQUARE TEST

It is a test in which the test statistics has a chi square distribution. There are many forms if chi square test. It tests a null hypothesis that the frequency distribution of certain events observed in a sample is consistent with particular theoretical distribution.
The first step in this test is to calculate the chi square statistics. It is calculated by observing the difference between observed frequency and theoretical frequency distribution, then taking the square of each differences and then dividing by the frequency of each distribution.

The formula for calculating chi square test is:

\[ X^2 = \sum \frac{(O-E)^2}{E} \]

Where

O = Observed Frequency
E = Expected Frequency

The calculated value of the chi square is compared with the value of chi square table at given level of confidence and degree of freedom. When the calculated value is less than the tabulated value it implies that the results are consistent. In such case the null hypothesis is accepted. On the other hand when calculated value is greater than tabulated value then the null hypothesis is rejected and alternative hypothesis is accepted.

4.7 (C) IBM SPSS VER 20.0

It is one of the most popular statistical programme used for data analysis. It was called statistical package for the social science. Now it is known as statistical product and service solution. It can perform highly complex data analysis in research. It has four different windows namely Data Editor, Output Viewer, Syntax Editor and Script Window. Most of the tasks can be done with the help of menu and dialog boxes. It generally uses variety of graphs. It uses chi square test or chi square goodness of fit test. Some of such analyses are presented in chapter five of the research report.

4.7 (D) T – TEST
The T – test identifies and defines whether means of two groups (SBI bank & IDBI Bank) are statistically separate and un-related from each other. This analysis is taken into consideration whenever required to compare the means of two groups and find out the appropriate analysis for the justification of sample size and helping to conclude base upon the fact of significance and non significance aspect of a research.

4.7 (E) CORRELATION

Correlation is a statistical mechanism that defines the degree to which two securities move in support to each other. It is a technique used in statistics that gives us indication about relationship of variables and its togetherness. Correlation may be sometimes naturally done and it may at times comprise of not related correlations, sometimes strongly related and sometimes there is no basic element of correlation. A correlation thus describes the degree of combination of variables between two parameters. Once the correlation is determined it gives us the judgement about the relationship parameter between two variables and its movement capacity.

4.8 IMPORTANT TERMS AND CONCEPTS USED IN RESEARCH
Some of the important concepts used in the present research work are described in brief as such and they are as follows:

### 4.8. (A) MARKETING

The word marketing is a broad and comprehensive term which includes all resources and activities which are necessary to transfer or facilitate the flow of goods and services from manufacturing to the ultimate consumers. Marketing according to Philip Kotler is ‘Human activity directed at satisfying needs and wants through exchange process.’ The scope of marketing includes many activities that can be seen as below:

![Diagram showing marketing functions]

<table>
<thead>
<tr>
<th>Functions of Exchange</th>
<th>Functions of Physical Supply</th>
<th>Facilitating Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying</td>
<td>Transportation</td>
<td>Financing</td>
</tr>
<tr>
<td>Assembling</td>
<td>Inventory Management</td>
<td>Risk Taking</td>
</tr>
<tr>
<td>Selling</td>
<td>Warehousing</td>
<td>Standardization</td>
</tr>
<tr>
<td></td>
<td>Material Handling</td>
<td>After Sales Service</td>
</tr>
</tbody>
</table>

In addition to the above functions, modern marketing also included functions like

|-----------------------|-----------------------------|-----------------------|

The selling concept and modern marketing concept can be seen as below:
1. Selling Concept

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>MEANS</th>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products something had to be sold to customer.</td>
<td>Selling and Promoting</td>
<td>Profit through sales volume</td>
</tr>
</tbody>
</table>

2. Modern Marketing Concept

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>MEANS</th>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products to fill in customer needs something bought by consumer</td>
<td>Integrated Marketing Mix</td>
<td>Profit through customer satisfaction</td>
</tr>
</tbody>
</table>

Thus the concept has changed from selling to marketing. The main focus now being on the Three C’s of modern marketing namely Customer, Competition and Company

4.8 (B) SERVICES

Services are activities, benefits or satisfaction offered for sale or provided in connection with the sale of products. The important features of services are

<table>
<thead>
<tr>
<th>1. Intangible</th>
<th>2. Perishable</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Heterogeneous/Variable</td>
<td>4. Simultaneous</td>
</tr>
<tr>
<td>7. Inseparable</td>
<td>8. Demand Fluctuations</td>
</tr>
</tbody>
</table>

The different services belonging to tertiary sector of India’s economy comprises of many services, but to name a few of them that are popularly functioning in the market are Banking, Insurance, Education, Transportation, Housing, Tele Communication, Hospitality, Power, Retail, Medical Tourism, etc.
Services marketing are more challenging and complex because of its inherent nature of the services.

The challenges of marketing services are
1. Customers cannot see the services
2. Problem of sampling and standardization
3. Service package designing difficulty
4. Storage of service not possible
5. Time pressure on sales
6. Problem of delayed services
7. Maintenance of service quality
8. Minimization of customer interaction
9. Effective internal and external marketing
10. Making communication tangible

Hence the marketing of financial services by banks assumes great significance and importance to find out how banks provide services to customer and delivers customer satisfaction

4.8 (C) FINANCIAL SERVICES

Financial services are the backbone of a country as they play an important role in the economic development of an economy. It is the largest industry in the world in terms of business and earnings. Financial services refer to services provided to meet the financial needs of the people, business and government.

Financial services include different types of financial products like current account, saving account, insurance, mutual funds, merchant banking, real estate funds, venture capital, leasing, credit card, stock broker, investment banking, foreign exchange transactions, asset management, fund management, pension fund to name a few of them.
The service mix of financial services includes product, price, place, promotion, people, process and physical evidence. Banks in order to provide better services are creating some change in the marketing mix so that customers are benefited.

For example, earlier people used to go to bank to deposit or withdraw cash but today banks provide ATM, online banking, mobile banking to serve the customer better and faster. The present research is based on how these banks are marketing their financial services.

4.8 (D) COMMERCIAL BANKS (PUBLIC SECTOR BANKS)

Commercial banks are those banks in which government is the major shareholder (i.e. more than 50% of the holding). The shares of commercial banks are listed and traded on stock exchange. There are about 27 commercial banks in India which includes 21 nationalized banks and 6 state bank group banks (SBI and its five subsidiaries). State bank of India is the largest commercial bank in the country.

It is also a nationalized bank. Government nationalized Imperial bank in 1955. In the year 1964 the government nationalized 14 major commercial banks and at that 84% of the bank’s branches were under the control of the government. The next round of nationalization took place in 1980 when government nationalized six banks in the country.

As a result 91% of the bank’s branches were under the control of the government. Thus, total commercial banks in India count became 27. These banks account for 90% of the total banks in India. Thus, in Indian banking sector commercial banks dominated from the beginning only.

4.8 (E) INDUSTRIAL BANK (PRIVATE SECTOR BANKS)
Industrial banks are those banks where greater parts of their equity are held by private shareholders and not by the government. Banking sector in India was dominated by commercial banks. In the year 1990 government initiated the process of liberalization and allowed new industrial banks to enter the market. At present there are around 21 industrial banks that were established after 1991. The criteria for industrial bank was minimum net worth of around Rs. 200 crores, 25% of the equity should be owned by the promoter and within three years of operations the banks should raise capital from public and the net worth should be Rs. 300 crore. Some of the leading industrial banks that also later on became private sector banks are Axis Bank, DCB, Yes Bank, Kotak Mahindra Bank, IDBI Bank, IDFC Bank, South Indian Bank, Bandhan Bank, etc. The industrial banks have made great progress since 1991. There is rapid expansion of their bank branches in the country. There is also rapid expansion of their bank branches in the country. There is also continuous growth of business, deposits and profit of these banks. Industrial banks have introduced many innovative financial services. The higher efficiency and professional approach has helped these banks to capture larger market share. HDFC has become the largest industrial sector bank in the world. It is much more than many European banks such as Barclays, ING, RBS, Credit Suisse, Deutsche Bank. Only five European banks are worth more than HDFC.

4.8 (F) CHANNELS OF DISTRIBUTION

Channels of distribution assume great significance in the marketing of financial services as the services are the outcome of co-production between consumer and the service provider. Hence, managers need to make decisions about when and how the services can be made available to the customers and the role of the intermediaries in the actual delivery of services.

Further how to make services more tangible too the customers the distribution channels provide the following services such as:
1. Appropriate advice and guidance about financial service
2. Providing product solution to the customer needs
3. Maintaining customer relationship
4. Promoting sales of the product
5. Providing the necessary information about product features
6. Develop cross selling of different product mix to customers.

DISTRIBUTION CHANNEL OF FINANCIAL SERVICES – It can be seen as below

4.8 (G) E – COMMERCE

E commerce refers to use of electronic media or online marketing of services. Today many organizations are adopting multi channel distribution system to cater to large variety of customer.

There are various forms of direct marketing or online marketing. These are mail order, catalogue marketing, direct mail marketing, tele marketing, tele shopping channels, direct selling, marketing through mobile application, word of mouth, marketing through web.
Online marketing is beneficial to seller and buyer.

A) The benefit to sellers are
1. Wide market access
2. Constraint free market
3. Customized marketing
4. Better CRM
5. Higher productivity
6. Lower cost
7. Enhanced value to customer
8. Flexibility in marketing communication

B) The benefit to buyers are
1. Convenience shopping
2. Competitive buying
3. Higher bargaining power
4. Wider choice of options
5. Customized products and services
6. Greater transparency

4.8 (H) MUTUAL FUND

Mutual Fund is one of important financial services offered by banks. Bank acts as mutual fund advisor or agent. Banks sells units to customer and collects huge funds which are invested in profitable projects and returns are shared among all investors. The present research is based on marketing of mutual fund by SBI and IDBI.

4.8 (I) MARKETING MIX
Marketing mix is a combination of various marketing mix elements. A company changes its marketing mix to promote its products and reach out to large customers.
4.9 PERIOD OF THE STUDY

The period of the study is two years from December’ 2014 to December’ 2016. The two years included entire research process registration, course work of 20 days at JJT University campus, preparation of research, proposal, discussion and approval of the research proposal, writing research papers, literature review, preparation of questionnaire, data collection and field work, data processing, editing, tabulation, data analysis, testing of hypothesis, preparation of final research report, etc.