Chapter 4
Research Methodology

4.1 Introduction:-

A research methodology defines what the activity of research is, how to proceed, how to carry the research work systematically. Research methodology is the study of how to perform scientific research.

In other words Research is the systematic and objective identification, collection, analysis, dissemination, and use of information for the purpose of improving decision making related to identification and solution of problems. The success of any research depends on the methodology followed in the study. The present study thoroughly attempts to follow the systematic and scientific approach to undertake the study.

4.2 Origin of research problem:

Due to the fast developing knowledge economy related to technology, services and globalization, innovation is at present given high priority both in politics, businesses and research institutions. Innovativeness is basic requirement to generate innovation in business organization. So far as business innovation is concerned it can be in terms of new technology, new techniques of production, new sources and types of raw material, novel machinery, new labour saving devices, new packaging techniques and packaging materials, new way of advertising, product development, new application of the existing product and even developing a new market.

Today service sector is playing an important role for business and looking to changing time demands the maximum innovation for service activities. It covers Innovative design and presentation techniques, new forms of differentiation, positioning, and advertising, Innovative distribution and customer service methods. It is to help a company develop new value added services, enter new markets, and create new
market segments/categories, new distribution methods, and new forms of customer service and customer partnership. Marketing Communication can also be more effective with Innovation Strategies.

India being a world’s second largest country so far as population is concerned having a huge potential for financial services, but at the same time India is also consider as a country of diversity and differences. It is very difficult to woo the Indian customer because standardized marketing strategies cannot work like in case of other country. However the Good thing for banking sector is that the Indian customers are changing in terms many dimension. Even the macro environment of our country is also changing very fast in this globalize world. The success of private as well as public banks depends on how effectively they create a long value chain through innovative practices and initiatives. But it is always difficult to measure the innovativeness of particular organization and its impact on its performance. The present study attempts to measure the innovativeness of banks and its impact on performance.

4.3 Scope of Study

The study has been carried out in Anand District and Kheda District. The data have been collected from 100 Branch Manger’s of public and private banks and 455 branch employees. The study also collected data from customers of each branches of bank to measure the individual & group level innovation from customer point of view.

4.4 Objectives of Study

1. To identify the antecedent of individual innovation (Branch manager) in respect to branches of commercial banks.
2. To compare the innovative practices in branches of public and private banks at group level.
3. To compare the innovative practices in branches of public and private banks at individual level (Branch manager).
4. To assess the impact of individual innovation (Branch mangers) on group innovation.
4.5 Hypotheses of Study

1. There are similar antecedent of individual level innovation in branches of public and private banks.
2. There are similar antecedent of group level innovation in branches of public and private banks.
3. There is a significant difference of innovative practices in branches of public and private banks.
4. Individual innovation is positively co-related with group innovation.

4.6 Type of Study

The study use primary data to fulfill the objective of the study. Secondary data have been used as a literature review to understand the various aspects of the study and to design the tool of data collection.

4.7 Nature of Research Work

Descriptive research designed has been used to study the linkages between the Individual & Group level innovations of selected branches of banks which include customer satisfaction. The present study used structured methodology consist of well defined objectives, hypothesis and data collection methods that make this study descriptive in nature.

4.8 Sampling Method

The population of the study is the total number of bank branches exist in Anand & Kheda district out of which total 100 branches of public & private banks have been
randomly selected for the study. To study the Individual & Group level innovation of selected branches of Bank, 400 customers of selected banks have been randomly selected and administered a questionnaire. Around 475 questionnaires have been administered to the employees of the banks through non probability purposive sampling in Anand and Kheda District. Out of these around 455 have been received and which was found full completed and taken for analysis. 100 questionnaires for each bank manager have been administered personally to the manager of each bank in Anand and Kheda District. In which all questionnaires were found complete and directly taken for further analysis.

4.9 Duration of the Study:

Time taken for dissertation is from September, 2011 to July, 2015; first of all the objectives & hypothesis of the study have been formulated and then decided to collect data randomly of the branches banks innovativeness. Pilot interview of every bank manager have been conducted and finally formulated the structured questionnaire in the mid of June, 2013, after that data from managers’ & employees’ and customers have been collected up to July, 2014. At the end of July, 2015 the whole thesis is about to complete.

4.10 Data Collection

On the basis of extensive literature review of past studies carried out and published in Indian as well as international scholar journals. Data of the studies are collected through the structured questionnaire from the managers’, employees & customers’ of Banks. Interview of bank managers have been taken with structured questionnaire. Structured questionnaire has been administered personally to all the managers of banks and personally handover to employees & customers.
4.11 Data Scaling, Measurement technique and Reliability

Data analysis starts from Data filter/ data cleaning, physical verification, coding, tabulation, cross tabulation, data reading, and descriptive analysis and lastly advanced statistical analysis is done.

For measuring the Individual and Group innovative behavior of manager and employees, the scale which was referenced by Gillian Rice in his research in the year Dec., 2004 was as under:

<table>
<thead>
<tr>
<th>Likert scale item</th>
<th>Sources</th>
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<tbody>
<tr>
<td>My boss feels that I am very creative in my job.</td>
<td>Ganesan and Weitz (1996)</td>
</tr>
<tr>
<td>I experiment with new approaches to doing my job</td>
<td>Ganesan and Weitz (1996)</td>
</tr>
<tr>
<td>I am on the lookout for new ideas from all the people with whom I interact as part of my job</td>
<td>Ganesan and Weitz (1996)</td>
</tr>
<tr>
<td>I believe that I am currently very creative in my work</td>
<td>Amabile et al. (1996)</td>
</tr>
<tr>
<td>I try to be as creative as I can in my job</td>
<td>Ganesan and Weitz (1996)</td>
</tr>
<tr>
<td>I would like to learn some new skills that will help me to be more effective at work</td>
<td>Mumford and Gustafson (1998)</td>
</tr>
<tr>
<td>When I perform well, I know it's because of my own desire to achieve</td>
<td>Oliver and Anderson (1994)</td>
</tr>
<tr>
<td>When new trends develop in my workplace, I am usually the first to get on board</td>
<td>Ganesan and Weitz (1996)</td>
</tr>
<tr>
<td>My work is so personally rewarding for me that I am indifferent to special incentives provided by management</td>
<td>Amabile et al. (1996)</td>
</tr>
</tbody>
</table>

The same scale has been applied in the study.

The IOI scale which was generated by H.K. Tang, (An inventory of organizational innovativeness) from that some variables have been included in the research study for measuring group level manager innovativeness.
Employee group level innovativeness the scale which was generated by West and Farr, 1990 has been further addressed by Anderson and King, 1993 and 1996. With the help of scale given in research of N.R. Anderson and West (Climate for work group innovation), from that some variables have been included in the research study.

The reliability shows in the following table:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s Alpha</th>
<th>No. of variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager: Individual innovativeness scale</td>
<td>0.683</td>
<td>9</td>
</tr>
<tr>
<td>Manager Group innovative scale</td>
<td>0.927</td>
<td>26</td>
</tr>
<tr>
<td>Employee’s individual innovative scale</td>
<td>0.878</td>
<td>9</td>
</tr>
<tr>
<td>Employee’s group innovative scale</td>
<td>0.957</td>
<td>40</td>
</tr>
<tr>
<td>Customer satisfaction scale</td>
<td>0.891</td>
<td>24</td>
</tr>
</tbody>
</table>

4.12 Data Analysis

With the help of questionnaire data have been collected (Manager’s, employee’s and Customer’s). The incomplete data must be filtered and then coding starts. For profile frequency and percentage have been used for Managers, Employees and Customers.

For Data Analysis of managers five point (Likert) scale is used (where 5 = strongly agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly Disagree). We have analyze two variables Individual Innovativeness and Work Environment by using frequency, mean and applying t-test for comparative analysis of public and private sector bank, and overall innovativeness of both the variables by using t-test.

For Employees data analysis seven point scale is used where (7= highly innovative, 6= Very Innovative, 5= Innovative, 4= Moderately Innovative, 3= Somewhat Innovative, 2= less innovative and 1= very less innovative). We analyze the variable in two parts Innovative Work Environment and Employees Individual Innovativeness by using frequency, mean, t-test for comparative analysis of public and private banks, demographic analysis according to Age, Qualification, and
Degree with the help of mean, standard deviation and significance. Correlations between different variables of public and private banks have been conducted.

For Customer’s data analysis independent t-test and ANOVAs is carried out for comparison of customer’s satisfaction of public and private sector bank.

**4.12 Limitations of the study**

Any study cannot be without limitations either because of limitations of techniques of investigations used or the recourse constraints. The study includes some selected branches of banks of Anand and Kheda district therefore, the findings of the study related to individual & group level innovation in banks may not be the same in other district, state or country. As I check the individual & group level innovation only through questionnaire and not include any practical things to measure it. The study includes individual (managers) & group (employees) level innovation but we ignore the other higher authorities. The study analyzed on basis of size wise classification only. Some respondent might not understand properly though attempt has been made to explain the concept before executing the questionnaire in each case. Further study is also suffering from some general limitations like constraints of time and difficulties in data collection. However, attempts have been made to collect data that are more representative and bring meaningful conclusion considering the objectives of the study.