Chapter Three

METHODOLOGY
Methodology

Methodology refers to a systematic step and planning. Scientific investigation involves careful and proper adaptation of research design, used to standardized tools and tests, sampling techniques, sound procedures for collecting data, its careful scrutiny and tabulation and then finally application of appropriate statistical techniques. Methodology is the key element in carrying out any kind of research. Methodology is of a paramount importance in any scientific inquiry, as the validity, reliability of the facts primarily depends upon the system of investigation.

Edwards (1971) believed that "in research we do not haphazardly make observations of any and all kinds but rather our attention is directed towards those observations that we believe to be relevant to questions we have previously formulated". This contention reflects the point that researches should be well planned and must be carried out using sound means and techniques for investigations.

In the light of the above facts and also the nature of the present research problem, the following steps were taken for enhancing the efficacy and objectivity of the research.

Sample.

Mohsin (1984) contested that "sample is a small part of the total existing events, objects or the information whereas sampling is a process through which a small portion from the population is selected". A sample is any number of persons selected to represent the population according to certain rules. A good sample is one which is unbiased and true representative of the whole population.
Keeping in view the objectives of the present study 151 employees of the Godrej InfoTech Limited (IT unit, Delhi) were selected. Godrej InfoTech Ltd. is one of the leading companies of Godrej India Limited. Godrej InfoTech Ltd has a pool of technical and functional consultants trained in application implementation and optimization to help customers get maximum benefits from their IT services. The main tasks of Godrej InfoTech Ltd are to provide:

Database Management Outsourcing (DMO) [Remote DBA]
Database Resources Management Outsourcing (DRMO)
Database Project Management Outsourcing (DPMO)

They have competency to take over complete IT Outsourcing from the clients. Company has open culture, flat management and innovative HR practices which help them to achieve their vision to 'be a world class provider of high quality information technology solutions'.

Purposive sampling technique was used in selection of the sample for the present study. The sample included 151 employees, out of which 87 males and 64 female employees were selected.

**Sample Distribution**

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of sample</th>
<th>Percentage (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>151</td>
</tr>
<tr>
<td>Male</td>
<td>87</td>
<td>58%</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>64</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>151</td>
</tr>
<tr>
<td>Below 29 year</td>
<td>70</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>Above 29 year</td>
<td>81</td>
<td>54%</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.1 shows the demographical characteristics of respondents. 58% of respondents were male and 42% of the respondents were females. When respondents were divided on the basis of their age, 54% of the respondents were above 29 years of age and 46% respondents were less than 29 years of age.

**Tools used:**

In order to achieve the objective of the study the following tools were used in the study:

**1- Work-Commitment Scale:**

To understand and measure level of employees' work commitment, a scale developed by Shaukat and Ansari (1998) was used. This scale is based on three dimensions proposed by Meyer & Allen (1991) viz.,

(i) Affective commitment which involves employee's emotional attachment to identification and involvement with organization,

(ii) Continuance commitment which refers to commitment based on cost that employees associate with leaving the organization.

(iii) Normative commitment that refers to employee's feeling of obligation to stay with the organization.

Based on the afore mentioned three dimensions, they had framed items and thereafter proper, editing of items were made. Finally, the scale contained 15 items on the pattern of a Likert type scale having 7-point response category ranging from ‘1’ strongly disagree to ‘7’ strongly agree response categories. Split-half reliability \( r = .80 \)
and validity Co-efficient $r = .76$ are quite high, hence, scale is said to be highly reliable and valid.

### 2- Organizational Change Measure (OCM):

A self developed questionnaire was used to measure Organizational Change.

Items to assess individuals' perception of change were developed after consultation with experts and an extensive literature search. Initially 30 items were generated to measure the perception of organizational change. These items were concerned with three dimensions of change i.e. structural change, technological change, and cultural change. A pilot study was conducted to finalize the reliability of the items. After item analysis only 18 items were retained for final composition of questionnaire, on the basis of significant item total correlations. Apart from this dimension wise item analysis was also done and the results showed significant correlations.

The reliability of the test was determined by Split-half method which has been shown in the following table:

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural change</td>
<td>.97</td>
</tr>
<tr>
<td>Technological change</td>
<td>.97</td>
</tr>
<tr>
<td>Cultural change</td>
<td>.99</td>
</tr>
<tr>
<td>Whole test</td>
<td>.99</td>
</tr>
</tbody>
</table>

Table –Showing Reliability of questionnaire (OCM).
Finally, the Scale contained 18 items on the pattern of a Likert type scale having five response categories ranging from ‘1’ strongly disagree, ‘2’ disagree, ‘3’ undecided, ‘4’ agree to ‘5’ strongly agree. Reliability $r=.99$ and the scale validity was confirmed with experts ratings. Panel of four judges finalized the content validity of the scale.

**Procedure:**

The study is conducted in Godrej InfoTech Limited (IT unit), located at Delhi. Researcher met the HR Managers personally to get their permission for the data collection. 151 employees of the IT unit were selected for the study as sample. The investigator gave the instructions related to questionnaire and the employees were also instructed to read the instructions of each questionnaire carefully. Participants were assured that their responses would be kept confidential and it would be used only for research purpose.

**Data Analysis:**

After collecting data, it was tabulated and further analysis was done. For the analysis of data selection of suitable statistical method is utmost important. Selection of statistical method depends upon the type of data and the design of the proposed research. In the present study organizational change is the independent variable and work commitment is the dependent variable. Apart from this independent variable, other variables have also been taken into consideration such as gender and age. Keeping in view the objectives of the present study, the following statistical techniques were used to analyze the data:
1. t-test was used to find out the significance of difference between the groups on work commitment and organizational change.

2. Stepwise Multiple Regression was used to identify the predictors of organizational change in total sample, male and female groups of employees and employees below and above 29 years of age individually.

Investigator has used SPSS (Statistical Package of Social Science) 16.00 version for undertaking “t-test” and “Stepwise Multiple Regression” analyses.