CHAPTER IV

RESEARCH METHODOLOGY

4.1 Introduction

In the earlier chapters, the introduction and rationale of research topic was explained in detail and in the third chapter the selected company was introduced with their profiles. As the research is based on, the study of employee job satisfaction, with special reference to IT industry in Pune. Hence, the combination of research methodology techniques is being used in the present research. The Primary data was collected with the facts and findings of the related study. The questionnaire analysis would provide with the qualitative solution for the Research. In this chapter the research student aims in describing the methodology obtained for research and to focus on research design.

The research of “Employee Job Satisfaction” is a very crucial and sensitive study to be done in every industry. Most of the times the management is afraid to talk about the Employee Job Satisfaction, Retention Policies, Attrition Rate in the company and on the contrary the employees in the organization due to inadequate knowledge or authority to discuss are
uncomfortable in this topic. The methodology for researching and comparative analyzing the data collected from IT sectors was a challenging task for the researcher; hence researcher used following research methodology for her research work.

4.2 Statement of problem

Entire success of any organization depends on the Human resource. As IT Industry is booming ultimately increasing flow of foreign currency in the Country, generating employment opportunities and is the highest contributor in the country’s GDP. In 2011 the GDP was $1847.98 Billion. India’s GDP values 2.98% of the world economy.¹

India is on international Map because of contribution of IT Industry. As IT Industry is a service industry it is very important to take care of Human Resource. IT is suffering major problem like High Attrition rate, Productivity, Global competition which affects the business as a whole.

This sector though deals with the technical factors, people (i.e., machine and mind are considered to be different aspects.) and their contribution also has a major impact.

Only if the employees are satisfied they will give good result which will ultimately achieve the organization goals & maximize the profit of the organization. Utilizing the 6 M’s of management need Men (Human Resource) Money (Capital), Machine, Material (Resources), Method, Marketing.

The study on job satisfaction helps to know their preference and problem of the employees. Purpose of the study was to know the factors that influences the Job Satisfaction. So the needs of the employees were carefully studied by conducting survey on job satisfaction among IT Industry.

Job Satisfaction and attrition rate has inverse relation with each other. In job satisfaction there many different indicators which influence it. It can be Work Life Balance, Mental Health etc. There was a strong need to find out the causes of dissatisfaction of employee on their job.

4.3 Objectives of study

1. **To identify and measure the satisfaction level of the employees in IT Industry, Pune.**

   Job Satisfaction can be measured with different techniques available. Survey Method (Anonymous Survey), Interviewing, Brief Index of Affecting Job Satisfaction, Job Descriptive Index technique, MSQ, the Job Satisfaction Survey (JSS), and the Faces Scale. Which method to use depends on the level of complexity underling business issue? When it comes to IT Companies the combination of Job Descriptive Index and Job Satisfaction Survey was used to identify and measure the level of Job Satisfaction.

2. **To study and examine the role of employer relating to employee job satisfaction**

   Employer has a significant role in improving level of job satisfaction, retaining productive employees, reducing attrition rate. This objective has helped in studying the employer role on the platform of Job Satisfaction

3. **To study the factors responsible for Job Satisfaction**

   There are several major and minor factors which has direct and indirect impact on Job satisfaction. This objective has helped to identify the factor responsible for Job Satisfaction with respect to employees working in IT Industry in Pune.

4. **To study the possible impact of satisfaction of employees on their job performance.**

   Impact factor of job satisfaction on other factor could be positive or negative depending on the intensity of Job Satisfaction. This objective has helped in finding the relation between Job Satisfaction and Job Performance.

5. **To study the gap between employee expectation and perception level and the real picture.**

   The objective of finding a gap between employee expectation and perception will help to identify the level of Job Satisfaction one has in his/her job. When the expectation and perception matches then it is said to be highest Job Satisfaction, when it is not then it is alarming to the employer front.
4.4 Scope and Limitations of the study

4.4.1 Scope

1. The present study covers the different aspects of factors which influence Job Satisfaction in IT industry.

2. The Study is conducted in selected IT Companies in Pune region.

4.4.2 Limitations

A. The present research is limited to the IT Industry in Pune region only.

B. The research deals with only few aspects of Employee Job Satisfaction such as working condition, motivation, pay and promotion, HR Practices, Skills and ability, Communication and Motivation, Relationship with Managers and Colleagues, Job Factors itself.

4.5 Rationale and significance of the study

IT-BPO industry is considered as the largest job creator in the economy and the most attractive workplace for the youth.

The rationale behind this research effort must be spelled out clearly. This will enable readers to understand the motivation of the researcher in undertaking this task.

Everyone proclaims that human asset is the most important asset. On the other side they need to be satisfied in their job. Hence, it follows that Human Resource Management [HRM] adopted in these organizations influences level of job satisfaction in the employee working in the organization.

Looking at Pune is being a cosmopolitan hub of the country. And with the I.T. Sector and I.T. enabled services sector's mushrooming very fast. There is a need for making people comfortable at their work place with healthy work life balance and these things are achieved by effective HRM practices introduced & implemented by the organization.
4.6 Research Design Implemented by the Researcher

The Researcher has chosen exploratory method of research. This method acts as a range of experience or adds strength to the research which is already carried out. Mainly the Research Topic is qualitative based to examines contemporary real-life situations and provide basics for the application of ideas and extension of methods.

Steps followed for undertaking Research

![Research Process Diagram]

*1 Identifying Research Problem
*2 Reviewing of available literature
*3 Concepts and There measurement
*4
*5 Selecting research design
*6 Selecting tool for data collection
*7 Selection of Sample
*8 Collection of Data
*9 Processing and analysing data
*10 Preparing Report

Figure 3 – Research Process


The Researcher has applied the research in 20 different companies with specifically working in IT companies, Multinational, Small and medium IT companies.)
4.7 Sampling Process following for Research

1. Define the population
   It is aggregate of all elements defined prior to selecting the sample
   a. Element: Professional
   b. Sampling units: Working in IT Industry
   c. Extend: Pune, Maharashtra, India
   d. Time: 2008 -2012

2. Identify sampling frame
   Sampling frame is prepared taking into consideration data from different sources, NASSCOM, MCCIA, economic survey of Pune city, www.pune.org

Figure 4 – Sampling Process following for Research
3. Specify the sampling unit

The sampling unit is the basic unit containing the elements of the target population. Software professionals working in IT Industry in Pune.

4. Specify sample design

It indicates how the sample unit were selected. Non – Probability sampling technic was used for the present research.

5. Determine sample size

Sample size for the current study was determined by using mean method.

Five point liked scale was used to measure variables wiz working environment and nature of work, relationship with managers and colleagues, communication and motivation, pay and promotion, skills and abilities, job factors, HR practices.(the following formula was used to determine accurate sample size by mean method.

\[ n = \frac{z^2 s^2}{e^2} \]

\( n \) = Sample size
\( z \) = Standard score associated 95% of Level of confidence (1.96)
\( s^2 \) = Variance in data
\( e \) = Tolerance error (7.5%)

In order to determine variance in the data the following formula was used

\[ S = \text{range} \]

\[ 6 \]
Since five points scale was used to measure the variables minimum value was 1 and maximum 5. Thus, the range

= Maximum Value – Minimum value

= 5 - 1

= 4

\[ S = \frac{4}{6} = 0.66 \]

\[ n = \frac{z^2 s^2}{e^2} \]

\[ n = \frac{1.96^2 \times 0.66^2}{0.075^2} \]

\[ = 1.4 \times 0.812 \]

\[ = 0.273 \]

\[ = 296 \]

- Population size – 90,000+
- Desired Precision (Sampling error tolerance) – 7.5% i.e. 0.075
- Confidence level – 95% (Z value at 95% level is 1.96)
- Degree of Variability- Homogeneous Population
- Thus the sample size was rounded to 300
6. **Select the sample unit**

---

**Figure 5 – Sampling Plan for Research**

7. **Collect the data from the designated sample unit**

**Primary Data** –

a) **Sample Size:** -

Collection of Primary data form 20 different IT companies 10 MNC’s around 20 employees were interviewed from each company (200 Respondents) and 10 SME’s around 10 employees were interviewed from each company (100 Respondents).

b) **Expert opinion** – Opinion from different experts from IT industries (10 experts)

c) **Sampling Technique:** - The study used Random Sampling All these data has help in formulating as very comprehensive study. All sample units were being personally contacted and interviewed.

a) Questionnaires
b) Discussions
c) Interviews
Secondary Data –

Collection of secondary data for additional references is collected through the Medium of printed material by each company or through their official web-site. The data was also compiled through the sources like employee handbook, feedback forms and general yearly HR record from 2008 – 2012 from employee record book, MCCIA IT Directory as and when permitted.

a) Previous research
b) Books
c) Journals and magazines
d) Periodicals
e) Reports

1. Questionnaire –

In Phase I of the Research Methodology, researcher determined the particular questionnaire to be asked to employees as well as chief of each organisation selected. The questionnaire designed for the analysis of employee’s satisfaction survey was of close ended type with five scaling method. The questionnaire was based on various employee satisfaction drivers like working conditions, flow of communication, pay and promotion, HR policies implemented.

The questionnaires were so framed that the maximum information relating to the objectives may be extracted from the respondents, on various aspects of Job satisfaction. Most of the queries were to be responded on various scales. Close ended questions were asked so that the respondent time can be used optimally. A few of the questions were framed in such a way that the respondents may respond one or more options by tick mark. To cross check the response of the respondents, some questions were common with different wording. A few dummy questions were also asked while interview to the respondent to keep them at ease.

In phase – II of Research, the Researcher designed the questionnaire, in accordance to the analysis of Phase – I and a questionnaire were designed for Chief or Manager of selected five organizations securing satisfied results. This questionnaire was more over with a view of HR strategies and policy making.
2. Interviews –

In phase – I of research after the collection of questionnaires filled by the employees in the company, the Mock interview session was conducted by few HR Management students with the Researcher. After the completion of Analysis of Phase – I, the Interviews of Chief / Managers at senior level were planned from five selected companies and in Phase – II of research the overall research details, data obtained and conclusions were discussed with the Senior Professionals in HR and their opinion was valued in the thesis.

Qualitative Analysis

This based on interview with relevant professionals of various IT organizations, was done mostly with top management, i.e. Directors, VP, Managers, and concerned head. The interviews were taken in an unstructured form and further analysis/outcome has been suitably presented. The interviews were quite revealing and present a deep insight to the existing problem. This covered generally the main thrust/or strong points and weak links of the employees as well as core competencies of the organizations.

4.8 Hypothesis

Meaning of Hypothesis

The word hypothesis is a compound of two words ‘hypo’ and ‘thesis’. Literally hypo means under or below and thesis means a reasoned theory or rational viewpoint. Accordingly, hypothesis would mean a theory which is not fully reasoned. In other words, hypothesis is a theory entertained in order to study the facts and examine the validity of the theory.
Hypothesis for Research Presented,

H1 - There is a significant relationship between Employee Engagement and feeling of Kinship in the organization.

H2 - HR Practices working environment and nature of work, pay and promotion, skills and ability, communication, motivation, relationship with manager is significant predictors of job factor.

H3 - Employee expectation is not equal to employee perception i.e. there is a difference between employee expectation and employee perception. (Rs ≠ 0)

H4 - There is significant difference between male and female level of Job satisfaction

4.9 Sampling design

The sample selected for the presented research consist as follows –

Primarily 10 companies selected from MNC, 10 companies from SME’s IT Industry to enhance the scope of research.

Phase I - 300 employees together from 20 different IT companies selected.

Phase II - 10 Senior employees from 20 different IT companies selected.

The 20 companies from IT Sector, Pune for various HR practices used in these companies. These companies are into its flow of evaluating their HR functions through various methods such as questionnaire, surveys, employee engagement feedbacks, 360 degree Appraisals, personal interviews, quality circles and employee empowerment balance score card. This research of Employee Job Satisfactions studied for understanding and improving the quality of work life balance, Productivity, performance which would help the company grow. Basically, the purview of Employee Job satisfaction, comprises of various factors right from recruitment, training to retirement, it also comprises the factors affecting productivity, performance, growth in the organization, and statutory requirements. As the research scope is too large to be covered, the researcher has shortlisted some key areas.
According this shortlist, the following phases were designed:

**Phase – I**

The Research started with the implementation of Phase I, for which 20 companies were selected from IT Industry Pune. This included the employee job satisfaction survey of minimum 20 employees from each MNC and Minimum 10 employees from each SMEs company working in IT Industry. The employees selected were from various levels and various designations right from front office to senior officer and Managerial cadre. This survey included the Questionnaire of general questions related to factors influencing employee job satisfaction.

Relationship with managers and colleagues, working environment, HR Policies, Pay and Promotion, Motivation, communication, skills and abilities, Job itself in the organization. The copy of questionnaire is attached in Annexure # 1. After the survey was conducted in every company the Analysis was done by using SPSS 17.0, for the data collected and was interpreted accordingly. The overall result was plotted in the graphical Representation.
The Analysis of 20 companies is as under:

The selected companies working with IT Industry, showed the results which clearly reflects on the unawareness of theory and practice of Job satisfaction and HR functions by the regular full – time employees of the companies which indeed results in employees, absenteeism, low level of Morale and Job Satisfaction and ultimately low productivity.

In majority companies the Chiefs discussed many issues & need for the Employee Engagement. The HR Practices has a very close impact on the minds of the employees every company, as it was directly related to employees’ growth with financial and non-financial aspect.

Accordingly 10 unstructured questions were asked to the immediate managers and people working on high designation for understanding ´different approaches. These variables helped in understanding the major factor that influenced Job satisfaction.

**Phase – II**

It is observed that, sometimes the Company’s unique practices for its employees can favour and result in employee’s job satisfaction at the work place.

Every case study pertain the details, right from profile of the company, details of employees engaged in various designation, the importance of HR strategies in that company and the percentage of satisfied employees in the organization as per the result obtained in employee satisfaction survey, conducted by the Research Student. In the last stage of Phase – I the conclusions and recommendations were drafted.

In this phase the discussions were handled according to the preferences of the Employers, while discussing with the experts researcher came across various new aspects related to the topic and also new strategies which are implemented in the market today. Some parameters are mentioned as “A 4 Wheel Approach” by the researcher in recommendation chapter.
4.10 Summing Up

The study of the data collected through structural questionnaire and interviews, has brought to light various interesting facts and findings related to existing flexibility levels and influential performance drivers.

Several useful insights and learning’s have appeared from interview which were conducted with experts.

Limitations of the study have been brought out too. Some main creative recommendations have been finally suggested with recommendation for overall improvement of the organizations.

Finally, the methodology of the study has been designed and discussed in this chapter. The implementation of the research methodology is discussed in subsequent chapters.