CHAPTER III

♦ Methodology
METHODOLOGY

The political uncertainty, the economic crisis in various Asian countries, the weak economy in Europe and global excess capacity in steel, have all contributed in making the present period an extremely difficult for the steel industry. But, there is good reason to believe that there will be growth in the steel industry in India. The per capita consumption of steel continuous to be extremely low and there is every expectation that this will grow substantially in keeping with India’s growing economic prosperity. India, today ranks 10th among the steel producing countries of the world.

Iron and steel play a dominant role in our day-to-day life. A small pin is made up of Iron and steel as well as a huge rocket is also a component of steel. It can be said that, Iron and steel is the backbone of the development of any economy. How can we achieve a bog target of steel demand as well as increase of production is the matter of strategy. These require effective development of human resources and their active involvement in all activities concerned with production. In the present complex environment, which is full of uncertainty, the operational management has got a limited role to play. With the entry of private entrepreneurs in Iron and steel industry in India and in a cut-throat competitive situation, only the active involvement of work force can only help any organization to deal effectively with any situation.

The challenges for the Indian steel industry in general and Visakhapatnam steel plant in particular, are thus not only for adhering to a programmatic planning and expansion but also for maintaining International standards through human resource development practices.
The steel giant is facing a litmus test for the maintenance of its pioneering position because other units have been able to make rapid progress in a big way. Thus, the strategies relating to the employees and their involvement need to be strengthened, streamlined and from a longer perspective for the development of the organization.

It hardly needs emphasized that success of any enterprise depends heavily on human resources. One cannot be sure of the future. The existing human resources, especially executives, supervisors and other staff, carefully keeping in view all the internal and external requirements to get prepared for future. This is only possible by increasing knowledge, will and capabilities of all the people in the organization especially the managerial personnel. A firm with updating and actively involving human resources can optimize all the resources and ensure survival and grow faster with higher profits and achieve excellence. Therefore, a constant review should be made not only with reference to human resources planning and development but also to ensure their active involvement more particularly Strategic Human Resource Management. This holds truer particularly in the case of a giant integrated steel plant like Visakhapatnam steel plant. Thus, identification and solution of problems for human resources’ involvement appear to be essential. Further, there is no intensive study related with strategic human resources involvement in industrial undertakings of such a nature. This underlines the importance of the present study.

**Objectives of the study**

The study has been done keeping in view of the specific objectives which constitute the framework for the enquiry.
1. To know the impact of Strategic Human Resource Management on business strategy in Visakhapatnam Steel Plant.

2. To analysis the influences of Strategic Human Resource Management on interpersonal relations.

3. To study the impact of Strategic Human Resource Management on training and development.

4. To elicit the opinion of the respondents on performance management system and to analysis its impact on Strategic Human Resource management.

5. To suggest measures for improvement pertaining to Strategic Human Resource Management in the organization of the study.

**Significance of the Study:**

This study will be a significant endeavour in the area of Strategic Human Resource Management in particular and this research will be beneficial to HR professionals and executives. It will also serve as a future reference for researchers on the subject of strategic human resources and it will lead the companies to attain organizational effectiveness. The rapid changes in the business environment remind that, for a business to survive, it has to focus on its core competencies in order to keep ahead of the competitors.

The field of Strategic Human Resource Management has evolved mainly in accordance to the fact that human resources need to be managed strategically for the firm in order to enjoy sustainable competitive advantage over competitors. As Visakhapatnam steel
plant is constantly expanding into new markets, the company needs new and highly developed workforce especially composed of HR and Marketing managers. Strengthening the employer-employee relationship is the strategic role of a human resources manager. However, there's more than meets the eye to doing this. Human resources managers formulate workforce strategy and determine the functional processes those are necessary to meet organizational goals and there by attaining organizational effectiveness.

Creating a work environment free from unnecessary hazards is a strategic role of every human resources manager. Reducing accidents through training employees and the proper use of complex machinery and equipment is one of the functional tasks associated with creating a safe work environment and developing executives to attain skills and individual qualities in order to contribute towards organizational effectiveness.

An employer's compensation and benefits structure partly determines the company's business reputation and image. In addition, the decisions that human resources managers make regarding pay scales and employee benefits can impact employee satisfaction, as well as the organization's ability to recruit talented workers. Job evaluation, labour market conditions, workforce shortages and budget constraints are factors that HR managers needs to consider in a strategic plan for pay and benefits. In addition, a strategy includes weighing an employer's choices between satisfying its workforce and pleasing the company's stakeholders.

Therefore, the human resources manager's strategic role is to combine elements of employee relations into the employer's
recruitment and selection strategy. Nevertheless, employee relations is such a large part of every discipline including salaries, benefits, safety, training and employee development that sustaining an employee relations program is an important element of human resources strategy. Implementing a workplace investigation process and enforcing fair employment practices are two components of an employee relations program. The strategic role of a human resources manager is to determine how to identify and resolve workplace issues, as well as how best to attract a diverse pool of applicants through effective recruitment and selection processes.

The challenge before is to develop internally consistent configurations of SHRM practice choices that help implement the firm’s strategy and enhance its competitiveness and effectiveness. There is a need for strategic flexibility along with strategic fit for the long-term competitive advantage and organizational effectiveness.

**Need for the Study:**

The steel industry is vibrant and growing in choices. This is the time that Company has great opportunity to reinvent itself not just as a Growth Company, but as a sustainable growth Company. Sustainable growth means meeting the short term commitments while investing to meet our long term Goals.

Sustainable growth means ensuring that each one in the organization continues to grow, too. The time is right for everyone to commit themselves to working together for this common purpose.
To establish foundation for the people to move forward towards a common direction the organization has launched a “Manifesto for growth” which lays the frame work to invent every part of the company in integrated, holistic way with the following building blocks.

1. Mission, Vision and Values
2. Strategies growth paths
3. Living the values
4. Working as a Global team
5. Enabling the peak performance
6. Building distinctive capabilities

Every organization must know how it conducts its business and it must be aligned to ensure that all are working towards the same goal in a way that is efficient and will allow the organization to be the best.

This includes developing an integrated system to guide business decisions and drive result. The system will link strategies, business, planning, management routines and individual performance management and rewards.

At this juncture, it becomes inevitable for the organization to design and implement the best and available strategies for achieving the organizational effectiveness. The present study is conducted on this ground, focusing on Visakhapatnam Steel Plant, one of the leading pioneers in the steel industry in India.

**Scope of the study:**

The present attempt is to make a case study of Visakhapatnam Steel Plant. The scope of the study is very wide because it covers the entire gamut of the field of human resource
management right from traditional personnel management practices to the present strategic HRM. It encompasses all the major activities such as human resource planning, recruitment, selection and placement, compensation management, employee development strategies, Industrial relations, employee welfare and social security and so on.

Organization should develop sound human resource policies. They are not only statements of management intentions and indicate the basic corporate approach towards human resources but also provide the much needed framework to guide actions of all managers in taking vital decisions on human resources. The procurement function includes processes like human resource planning, recruitment, selection and placement. Now the employees are to be reasonably and fairly compensated. What factors determine the wage structure, the methods and the mechanisms through which wage systems are worked out and incentive plans that are developed for employees form the subject matter of the compensation function. Human resource management which of late occupies the central place of the field. Industrial relations refer to the group relations between management and workers and they cover an aspect like which plays vital role in the performance of the individual which is inter-liked with organizational performance. These aspects also form an important aspect of the study.

The organization is more than twenty years old and has seen almost all phases of HRM right from the traditional approaches to the existing strategic HRM. Today the company formulates its policies strategically to retain the top position in the market and
the study on these lines would throw the light into the present HR scenario.

The scope of the study could also be viewed as narrow. For it covers only one organization. This need not be a limitation of the study. On the other hand, the in-depth case study approach lends itself to incisive analysis and comprehensive coverage to get better insight into the issues of Strategic of Human Resource Management.

**Reliability of the Schedule:**

**Cronbach's alpha**

Cronbach's alpha is a measure of internal consistency that is, how closely related a set of items as a group. For conceptual purposes, the formula for the standardized Cronbach's alpha is given below.

$$\alpha = \frac{N \cdot \overline{c}}{v + (N - 1) \cdot \overline{c}}$$

Here N is equal to the number of items, c-bar is the average inter-item covariance among the items and v-bar equals the average variance.

The researcher has administered the alpha scale method of reliability analysis for each and every dimension. Table (3.1) shows how the statements are related to one another for each and every dimension.
Table 3.1 Reliability Tests

<table>
<thead>
<tr>
<th>Dimension Name</th>
<th>Alpha</th>
<th>Cases</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Strategy</td>
<td>0.703</td>
<td>500</td>
<td>11</td>
</tr>
<tr>
<td>Training and Development</td>
<td>0.736</td>
<td>500</td>
<td>13</td>
</tr>
<tr>
<td>Performance Management</td>
<td>0.721</td>
<td>500</td>
<td>13</td>
</tr>
<tr>
<td>Inter-personal Relation</td>
<td>0.89</td>
<td>500</td>
<td>10</td>
</tr>
<tr>
<td>Overall</td>
<td>0.723</td>
<td>500</td>
<td>47</td>
</tr>
</tbody>
</table>

The alpha coefficient for the 47 items is 0.723, suggesting that the items have relatively high internal consistency.

**Data Interpretation:**

An attempt is made to analyze and understand the perceptions of the sample respondents about SHRM in Visakhapatnam Steel Plant. The data were fed to the computer. The tabulations and the results for analysis were done with the help of SPSS (Statistical Package for Social Sciences) version 14, MINITAB version-14 and Microsoft Excel for Statistical measurements such as simple percentages and mean values etc. Normal test (Z-test) is conducted to establish the mean significant difference between the two categories of the respondents on the entire dimension related SHRM by Gender, Nativity, Mother tongue as well as Marital Status. ANOVA test is administered to know the significant difference in the opinion of the different categories of the respondents irrespective of their department qualification, religion and Cadre.
Correlation analysis is administered to know the relationship between the dimensions of SHRM and age, experience and salary. Also, correlation between each and every dimension is also administered.

Factor analysis is conducted to group the dimensions into single factor.

Further, these tests incorporate box plots, Individual value plots and screen plot. For simple percentage the researcher drawn, bar diagrams, multiple bar diagrams, doughnut diagram, pie-chart etc to get the clear representations.

**Box Plot:**

The box plot explains the variation of the data and also shows the average value, median value, highest value, lowest value, 25th percentile and 75th percentile as well as the outliers of the data as shown below
**Individual Value Plot:**

An individual value plot was used to assess and compare individual data points. This graph plots each data point for each group, making it easy to spot outliers and see distribution shape. Display options include symbols for the mean and the median.

![Individual Plotted Scores with The Mean Increase](image)

**Sampling:**

The universe for the study is one of the largest public sector under taking located in Andhra Pradesh namely “Visakhapatnam Steel Plant”. Since the sector chosen as a universe is a steel industry and it is largely manpower intensified and holds 4997 permanent employees. There are different categories of employees in the organization. These different categories are broadly classified into three categories namely junior level executives, middle level executives and top/senior level executives.
Data collection:

Different methods are adopted for investigation of the different aspects relating to the sample. Firstly, official records relating to the policies and procedure, various schemes and forums facilities and environment existing to promote employee involvement are verified and studied as one of the sources of data.

After the collection of the preliminary data and review of literature, the researcher has designed a questionnaire for the purpose of the study. The questionnaire contains in all about 47 items besides the items eliciting the personal information of the respondents. Every item is provided with five alternative responses on the pattern of the liker’s five-point scale.

Chapterisation:

The present study is organized into six chapters as given below:

Chapter 1: Introduction

Chapter 2: Review of Literature

Chapter 3: Methodology

Chapter 4: Profile of the organization

Chapter 5: Data Analysis and Interpretation

Chapter 6: Findings, Suggestions and Conclusion

Limitations:

Since the important method used in the enquiry is the case study, it has all the limitations associated with the method.
The generalization of the study cannot be expected to have universal application. Even when we try to apply to the organization of similar nature, these must be applied with caution.

The limitations of the study may briefly stated as follows:

1. During the collection of information, it was found that respondents were rather hesitant and ambivalent in providing the desired information and sometimes respondents tolerated to discuss in some cases.

2. The study being a case analysis of Visakhapatnam Steel Plant; its conclusion need not necessarily apply to all public and private sector steel plant in India. While this does constitute limitations of the study, one can’t deny the fact that Visakhapatnam Steel Plant Human Resource Management machinery may have some of implications for all the plants SAIL.

3. The file keeping and record maintenance was not systematic. Even the data published in the annual reports has not been systematically analyzed to help in understanding different aspects of study. The researcher had to make indefatigable efforts to collect relevant information by running ‘pillar to post:

4. Employees were hard pressed for time in view of the job demands and rigorous work schedule. The researcher had to persuade them for sparing time for responding to the questionnaire. When he found that the respondents were not in a position to spare adequate time for the purpose, he had to request them to allot time. Establishing rapport with the respondents posed a problem initially. To overcome the
suspicion of the executives to explaining the nature and purpose of the study.

5. Data collection required great degree of persuasion on the part of the researcher in making the employees part with information pertaining to organization activity and work situations.

6. The location of the organization and the internal plant layout which is spread over a large acreage of land (27,000 acres) posed serious logistics problem. Often, movement from one department to the other got delayed owing to non-availability of conveyance resulting in loss of valuable time.

7. Though the study aims at examining role stress among respondents in service sector in Visakhapatnam Steel Plant, the in depth analysis is restricted to selected organization only due to time and resource constraints of the researcher.

8. The data for the present study is collected from executives only. The opinions of the executives of the selected organization are not covered in the analysis.

The successful conduct of research study rein forces the validity of the old adage "all is well that ends well"