ABSTRACT

The present study entitled “Human Resource Development (HRD) in Telecom Industry in India with special reference to the Public and Private Sector Companies” has been undertaken by the Researcher to analyse the HRD Practices that are prevailing in the Indian Telecom industry. The Researcher undertook an empirical survey to attain this objective. The present research work has been divided into six chapters as the ‘Structure of the Study’. In the following pages an in depth discussion over the plan of the study has been drafted by the Researcher.

The first chapter being introductory segment highlights a comprehensive outline of the present construct. In this chapter, the Researcher has overviewed the earlier studies that have conducted in the field of HRD in different industries, different countries and on different aspects of the subject. This appraisal has been named as ‘Review of Literature’ and has helped in tracing the research gap at the disposal of the Researcher to determine the objectives for the study. Thus, the present study is based on the attainment of the following broad objectives:

1. To review the conceptual framework of the term ‘HRD’ and also to discuss its future prospects;
2. To study the overall growth and development of the telecom industry in India;
3. To examine the HRD Practices being followed by public and private sector telecom companies in India at managerial and non-managerial level;
4. To make a comparative study of public and private sector telecom companies in India in context of HRD Practices; and
5. To suggest remedial measures for improving the HRD practices in the telecom industry in India.

Along with the presentation of literature survey, and the research gap, an outline of the methodology that has been adopted for the study is discussed in detail. The companies that have been selected by the Researcher are Bharat Sanchar Nigam limited (BSNL) in public sector and Reliance Communication (RCOM) in private sector in the Indian telecom
industry. A survey questionnaire has been constructed and administered among the employees of BSNL and Reliance Communication at managerial and non-managerial level from the selected districts of Uttar-Pradesh (U.P.), viz; Agra, Aligarh, Bareilly, Moradabad and Rampur. Several hypotheses have been framed on the selected dimensions representing HRD practices and those hypotheses have been tested with the help of statistical tools applied by the Researcher.

Hence, this chapter flashed a broader outlook of the focal resolution for carrying out the present study by discussing the review of literature which helped the Researcher in gauging the research gap. Along with that the objectives, which enabled the Researcher to entail the research design for the research project. Sample size of the study, hypotheses and the limitations of the study has also been conversed exhaustively.

The next chapter in sequence is Chapter-II which brings forward the conceptual exposition of the term Human Resource Development (HRD) in an extensive and elaborative manner. The discipline of HRD was developed because the human resource management function failed to meet the new challenges of the 20th century. Human resource development is the process of developing the human resource working in an organization by modernizing their knowledge and upgrading their skills, attitudes and perceptions in order to meet out the changing trends of the globalised economy and also to utilize those developments for the attainment of the organizational goals. It is a subject gripping utmost importance at a national level, and it is much more of prodigious germaneness in a developing and the most populous country like India. Over the years, organizations worldwide are becoming cognizant with the prominence of human resource. The real life experiences substantiate the assumptions that no matter how automated the activities of an organization may become, it is extremely challenging to manage it unless the human efforts are integrated with them. This realization has propelled HRD as a major area of study. According to Prof. T.V.Rao, HRD is a continuous process to:

- Acquire or sharpen capabilities required to perform various functions associated with present and future needs of the job.

- Develop their general capabilities as an individual and enable them to exploit their inner potential.
Develop a congenial organizational climate in which dyadic relationship and team collaborations among sub-units are strong and contribute to the professional well-being of employees (Pareek and Rao: 1981).

Human Resource Development (HRD) is a positive concept as an area of managing human resources. It is based on the belief that it is imperative and constructive for an organization to invest in human beings to bring substantial benefits in the long run. It aims at the overall development of the human resource in order to contribute for the well-being of the employees, organization and the society at large. There are several concepts through which the HRD has gone through, from the Commodity concept, the factor of production, goodwill and paternalism, the era of concepts moves towards the humanitarian and human resource concept and finally reaching to the concept of HRD.

Since human resources is the life line of an organization and the process of developing this resource is highly significant for the managers to achieve the goals and targets of the organization. Therefore, HRD is needed by any organization that wants to be dynamic and a survivor in the present scenario of cut-throat competition. Implementation of Human Resource Development (HRD) is essential and advantageous for the organization. It improves the performance of employees through proper training and develops openness, trust, collaboration among the employees to identify the organizational needs and shows the path to move on for achieving the same.

It is seen that this chapter deals with the concepts and origin of HRD at length. The Indian perspective involves the study of the present conditions and also the objectives related to HRD. The next chapter deals with the overview of growth and development of the telecommunication industry in the past years till date.

The third chapter has been framed to describe a verbose outlook of the growth and development of Telecommunication Industry in India. The Indian telecom sector has evolved from the bygone days of “telephone on demand” to the advent of 3G telephony. Its history begins with the laying down of the first experimental electric telegraph line in Kolkata. In 1881, telephone services were introduced, with exchanges being opened in Kolkata, Mumbai, Chennai, Karachi and Ahmedabad. Following independence, all foreign telecommunication companies in India were nationalized to constitute the Posts, Telephone and Telegraph (PTT), and were under government control. The telecom sector has continued to register significant success and has emerged as one of the key factors responsible for India’s economic growth.
Telecom sector accounts for 1 per cent GDP of India in 2008 and contributes 30 per cent to India’s total service tax revenues, and gives direct employment to more than 400.000 million people. Since liberalization, Indian Telecommunication sector is one of the few sectors, which has perceived the most fundamental, structural and institutional restructurings. In recent times, Indian telecom market has emerged as one of the fastest growing telecom markets in the world. According to TRAI, the total subscriber base grew from Financial Year (FY) 2000 through Financial Year (FY) 2010 at a compound annual growth rate (CAGR) of 36.1 per cent to reach 621.3 million subscribers. In the past decade, the total Teledensity has risen above 50per cent, with the mobile segment leading this growth.

Telecommunication Industry is a boon for the socio-economic growth of a country. It is one of the main architects of the accelerated growth and progress of different segments of the economy. Narrowing access gaps and removing barriers to information dissemination are prerequisites for promoting equitable and sustainable development as well as political and social cohesion. Increasing connectivity is highly instrumental in improving governance, business communication, and security, response to emergencies and in the overall strengthening of the sociocultural ethos of the country. The advantages of the advent of telecommunications are manifold and explicitly verifiable from the phenomenal success of the sector. Urban and rural subscriber base, September 2010 were Telephone subscribers (Wireless: 826.25 million and Landlines: 34.87 million) in February, 2011, Cell phones: 791.38 million (February, 2011), Monthly cell phone addition: 20.20 million February, 2011, Tele-density: 69.29 per cent in February, 2011 while the Projected Tele-density is around one Billion i.e. 84 per cent of the total population in the year 2012.

Telecommunication sector in India is primarily subdivided into two segments namely-Fixed Service Providers (FSPs) and Cellular Services. Telecom Industry in India constitutes some essential telecom services like Telephone, Radio, Television and Internet. Indian Telecom Industry is specifically emphasizing on latest technologies like GSM (Global System for Mobile Communications) and CDMA (Code Division Multiple Access), PMRTS (Public Mobile Radio Trunking Services), Fixed Line and WLL (Wireless Local Loop). In India, we have a prospering market specifically in GSM mobiles service and the number of its subscribers is increasing day by day. Indian Telecom market provides a tele-density of 8.5 per cent as registered in the year 2004 which has been increased up to 69.29 per cent in February, 2011. With the successfully concluded auctions of the 3G and BWA spectrum, this growth is set to become even more pronounced. Indian telecom network has 787.29 million
connections as on 31st December 2010 with 752.20 million wireless connections, Indian telecom has become the second largest wireless network in the world after China. According to the data released by Telecom Regulatory Authority of India (TRAI), the number of telephone subscribers in the country reached up to 806.13 million at the end of January, 2011 from 787.28 million in December, 2010, thereby registering a growth rate of 2.39 per cent. The Wireline started to decline from 40.92 million in 2004 to 36.96 million in March, 2010 and 35.09 million in December, 2010, albeit it is becoming stagnant now. With this, the overall Teledensity (Telephones per 100 people) has touched 67.67. The wireless subscriber base has increased to 771.18 million at the end of January, 2011 from 752.19 million in December 2010, registering the growth of 2.52 per cent. Meanwhile, Indian Global System of Mobile Communication (GSM) telecom operators added 14.69 million new subscribers in February, 2011 taking the all-India GSM Cellular base to 555.06 million, according to the Cellular Operators Association of India (COAI). The GSM subscriber base stood at 540.37 million at the end of January, 2011.

The sector will witness up to US $ 55.95 billion investments and the market will cross the US $ 100 billion mark in 5 years expecting an annual growth of 12-13 per cent in coming years, according to the consultancy firm Boston Consulting Group (BCG).

Fourth chapter has been compiled with the purpose of exhibiting the profiles of the selected companies in the Indian telecom sector. In public sector, Bharat Sanchar Nigam Limited (BSNL) and in private sector Reliance Communication (RCOM) have been selected by the Researcher. Bharat Sanchar Nigam Limited (BSNL) was formed on October 1st, 2000, and is the world’s seventh largest Telecommunication company providing comprehensive range of services in India viz; CDMA and GSM mobile, Internet, Broadband, Carrier Service, MPLS_VPN, VSAT, VoIP services, IN services etc. Within a span of five years it has occupied the position of becoming one of the largest public sector units in India. BSNL has installed Quality Telecom Network in the country and now focusing on improving it, expanding the network, introducing new telecom services with ICT applications in villages and wining customer's confidence. BSNL is the only service provider, making focused efforts and planned initiatives to bridge the Rural-Urban Digital Divide ICT sector. In fact there is no telecom operator in the country to beat its reach with its wide network giving services in every nook & corner of country and operates across India except Delhi & Mumbai, the services are also reachable to the inaccessible areas of Siachen glacier and North-eastern region of the country. BSNL serves its customers with its wide bouquet of telecom services.
The main aim of the company is to be the leading Telecom Services provider by achieving higher rate of growth so as to become a profitable enterprise. Several services offered by the company to its customer base are: Cellular Mobile Telephone Services, Universal Telecom Services, Wi-MAX Services, WLL-CDMA Telephone Services, Internet Services, Third Generation Service- 3G, IPTV Service etc. During the year 2009-2010, the Company incurred a loss of Rs. 1,822.65 Crores, which is mostly attributed to the increase in expenditure due to wage revisions and reduction in revenue from services. The company while offering services and other measures has firm its place in market and has earned enormous reputation and honors. In the span of time since its establishment, the company has been the winner of several awards by the government to acknowledge its efforts and services.

Reliance Communications Limited (popularly called RCOM) is an Indian broadband and telecommunication company established with its main office in Navi Mumbai, India. RCOM, founded by Dhirubhai H Ambani (1932–2002), is the flagship company of the Reliance Group one of the leading business houses in India. Reliance Communications is India’s foremost and truly integrated telecommunications service provider. The ultimate mission of establishing RCOM is to attain the excellence in Communication Arena. Reliance Communications owns and operates the world’s largest next generation IP enabled connectivity infrastructure, comprising over 2,77,000 kilometers of fiber optic cable systems in India, USA, Europe, Middle East and the Asia Pacific region. The company has five segments: Wireless segment includes wireless operations of the company; Broadband segment includes broadband operations of the company; Global segment include national long distance and international long distance operations of the company and the wholesale operations of its subsidiaries; Investment segment includes investment activities of the Group companies, and Other segments which consists of the customer care activities and direct-to-home (DTH) activities. Reliance Communications Limited has its offices in Ahmedabad, Bangalore, Chandigarh, Chennai, Hyderabad, Jaipur, Kochi, Kolkata, Lucknow, Patna and Pune. It ranks among the top 5 telecommunications companies in the world by number of customers in a single country. Reliance Communications corporate clientele includes 2,100 Indian and multinational corporations, and over 800 global, regional and domestic carriers. The entry of new telecom operators in the market has intensified competition leading to downward pressure on prices. Company’s well planned capital investments, backed by a world class network, puts it in an enviable position in meeting the emerging competitive challenge among the telecom space. Thus, both the companies holds a strong footing in
public and private sectors of Indian Telecom Industry and are established with the mission of providing world class services to its customers and subscribers at the best possible rates and tariffs.

In the fifth chapter, the Researcher has discussed the empirical presentation of the survey study conducted through a survey questionnaire among the employees of BSNL and Reliance Communication at managerial and non-managerial level. The Sample size constitutes of 400 employees in total from both the organizations. In BSNL, there are 266 respondents in total i.e. 126 respondents from managerial level and 140 from non-managerial level. While in Reliance the number of respondents is 134 i.e. 78 belonged to managerial level and 56 employees to non-managerial level. Since the human resource is the most important and indeed an essential imperative for an organization to prosper and grow, their development is certainly an issue of concern for the management of any organization who retain them. In today’s knowledge based economy, the rules of doing business has dramatically and drastically changed, paving the way for people to occupy the center stage of the organization. The development of human resource carries a potential for the future and growth of the organization. Such a growth largely depends upon the attitude of the management and the employees towards the policies and Practices of human resource development (HRD). Such Practices paves the way to understand the other related Practices followed in the organization. The present study is exploratory in nature and aims to inspect and compare the HRD Practices as perceived by the employees at managerial and non-managerial level in Public and Private sector companies of the Telecom Industry in India. BSNL and Reliance Communications have been purposely selected for the present study keeping in view their role and contribution in shaping nation’s economic destiny at a global level. The supremacy of human resource and the urgency of its development make out a strong case for the evaluation of HRD Practices in BSNL and Reliance communication and entails to portray a comparative study of Public and Private sector companies in Indian Telecom Industry. A Questionnaire was developed on the guidelines of the model questionnaire developed by Rao and Abraham (1991) with some modifications relevant to the Telecommunication Industry. There were 32 statements in the questionnaire to be answered by the sample respondents. Respondents had to state the extent to which each of these statements was true to their organization. A Five point Likert’s rating scale was used for the instrument drafting. The scoring scale of the questionnaire was 5=Strongly Agree, 4=Agree, 3=Neutral, 2= Disagree and, 1=Strongly Disagree. The simple random sampling method was
used as sampling procedure to select the respondents. Five cities have been chosen from the State of Uttar-Pradesh, namely Aligarh, Agra, Bareilly, Moradabad and Rampur, where the survey has been conducted.

The tool measured the five dimensions which have also been the most important HRD Practices namely, Quality of Work life and Welfare measures, Organizational Development, Training and Development, Performance Appraisal and Participative Management. On the basis of these dimensions the hypotheses for the present construct have been formulated by the Researcher. There have been ten hypotheses in total that have been developed on the basis of the above mentioned dimensions for the employees in BSNL and Reliance at managerial and non-managerial level, which are as follows:

**H01:** There is no significant difference in the Quality of Work life and Welfare measures of employees in BSNL and Reliance Communication at managerial level.

**H02:** There is no significant difference in the Quality of Work life and Welfare measures of employees in BSNL and Reliance Communication at non-managerial level.

**H03:** There is no significant difference in the Organizational Development of employees in BSNL and Reliance Communication at managerial level.

**H04:** There is no significant difference in the Organizational Development of employees in BSNL and Reliance Communication at non-managerial level.

**H05:** There is no significant difference in the Training and Development of employees in BSNL and Reliance Communication at managerial level.

**H06:** There is no significant difference in the Training and Development of employees in BSNL and Reliance Communication at non-managerial level.

**H07:** There is no significant difference in the Performance Appraisal of employees in BSNL and Reliance Communication at managerial level.

**H08:** There is no significant difference in the Performance Appraisal of employees in BSNL and Reliance Communication at non-managerial level.

**H09:** There is no significant difference in the practice of Participative Management in BSNL and Reliance Communication at managerial level.
**H010:** There is no significant difference in the practice of Participative Management in BSNL and Reliance Communication at non-managerial level.

The Confidence Interval (CI) chosen for the present study is 95 per cent, i.e. level of significance is 0.05 per cent. The degree of freedom for the study has been calculated by applying the following formula:

The d.o.f for managerial level employees in BSNL and Reliance Communication is:

\[ \text{d.o.f} = 126+78-2 \]
\[ = 202 \]

The d.o.f for Non-Managerial level of employees in BSNL and Reliance Communication is:

\[ \text{d.o.f} = 140+56-2 \]
\[ = 194 \]

The total responses of all the 400 employees of both the companies and both the levels have been shown with the help of a table and their responses have also been shown along with their conversion in percentage form. The overall results of the survey are satisfactory, but there are certain differences found in HRD Practices among different levels of employees in both the organization. To test the validity of the results, the Researcher has used a student’s t-test performed through SPSS-17.

The formula for t-test:

\[ t = \frac{(\bar{X_1} - \bar{X_2}) - (\mu_1 - \mu_2)}{\sqrt{\frac{S^2}{n_1} + \frac{S^2}{n_2}}} \]

Where; \( \bar{X_1} \) = sample mean of the first group

\( \bar{X_2} \) = sample mean of the second group

\( \mu_1 - \mu_2 \) = difference between population mean (often \( \mu=0 \) but not always)

\( S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}} \) = standard error of the difference
The results of the t-test indicates that there is no significant difference among the employees of BSNL and Reliance Communication at managerial level regarding the practices of Quality of work life and welfare measures, Organizational Development, Performance Appraisal and Participative Management variables at 0.05 per cent significance level for a two-tailed test. Only the difference is witnessed on the grounds of training and development measure at managerial level of employees in BSNL and Reliance Communication. Whereas, at non-managerial level the difference among the employees in both the organization is found to be significant regarding Participative management only, and on rest of the dimensions the difference is found to be insignificant.

Therefore, as a whole after analysing the data the Researcher came to the conclusion that the employees in both the Public and Private sector at non-managerial level are treated almost same on the grounds of welfare measures and quality of work life, Organizational development, Performance appraisal and training and development while over the measure of Participation in Management the difference is found to be significant. Here at this point, the Researcher feels that the top management of the companies should think about this aspect seriously and allow some degree of participation from non-managerial section of employees to enable them to expose their comprehensibility and experience. The Researcher offers certain recommendations and suggestions to overcome these differences which could be beneficial for both the organizations in the next chapter of the thesis. At managerial level, the focus is needed towards the training and development measures in the said organizations for the successful implementation of HRD Practices in Public and Private sector of telecom industry in India.

The sixth and final chapter has been framed with the specific objective of discussing the findings of the study in detail and to offer suggestions that could be of great help for the professionals, policy makers and the academicians in the field of HRD. In this chapter the analysis of the survey has been discussed by the Researcher in depth, and the findings have been presented in resolute manner. The main findings of the Study on the basis of the dimensions selected in which the Researcher has classified the statements of the questionnaire are as follows:

- It is observed that the employees are given substantial importance and humanely treatment by the top management in both the companies, but the overall quality of work life and welfare measures provided to the employees in BSNL are found to be
average, and at the non-managerial level and there is a fair scope for improving it, while in Reliance Communication, it is found to be good at both the levels.

- The overall status of organizational development aspect is turned out to be very low in BSNL at managerial level, and at non-managerial level it is below average. Whereas, in Reliance, at managerial level the Organizational development is average, and at non-managerial level it is better than managerial one but need to be more developed.

- Training and development practices are excellent in BSNL, especially at non-managerial level. Whereas at Reliance communication it needs to improve a little bit to enhance the competency of their workforce. Employees have been seen serious regarding the adequate help they have been provided at work in both the organizations. But, in BSNL and Reliance both the management need to work upon organizing the appropriate training programs and should sponsor them according to the genuine needs of the employees.

- In BSNL, at non-managerial level the employees are satisfied with the training and development measures provided to them, but the findings show that at certain times, the organization may not reward the employees for their performance at managerial level. However, in Reliance, the overall picture of the rewards given and appraisal of the performance of employees is good and the management is active in identifying and utilizing the hidden potential of employees and also in making an objective assessment of their performances.

- The practices of encouraging and motivating the level of participation among employees in both the organizations is good and satisfactory, especially at non-managerial level in BSNL the practices are excellent but still the organizations have a fair scope for encouraging participative management in both the organizations.

This study highlights the gaps that have been analyzed by the Researcher, on the basis of responses retrieved by the employees of BSNL and Reliance at managerial and non-managerial levels such as, the inappropriate psychological climate, lack of arrangements for specific training programs, performance appraisal, less autonomy in working for employees at lower levels, awareness of policies followed in the concerned organizations, participative management, etc. The Researcher feels that these issues are not meant to be ignored and the management must take certain steps to overcome them with time so as to attain excellence in this competitive edge of globalization. Therefore some recommendations have been put forward by the Researcher in this regard, the suggestions have been divided into two
categories i.e. one is specifically based on the present analysis for the selected companies and the other category comprises the general suggestions which any organization/company could adopt for the successful implementation of HRD practices.

Suggestions for BSNL and Reliance Communication Ltd. offered by the Researcher are: The top management of BSNL and Reliance Communication, both must provide adequate welfare measures and a good working life to their employees especially at the managerial level. The employees need to be treated more humanely and in a friendly manner which could inculcate in them a sense of responsibility and trust. Open communications, equitable reward systems, healthy and congenial working conditions and a friendly environment i.e. free from any kind of bureaucracy will impact the performance of employees positively.

Moreover, job rotation and accurate job description would be helpful in this regard. The strong support from top-level managers should be provided to the employees of the company, by understanding their issues, by having discussions with them, by encouraging employees to offer new and creative ideas for work, by promoting cooperation and team-spirit in the organization, these issues could be sort out accordingly. Appropriate training programs and seminars may perhaps be arranged to educate the employees and prepare them to face the dynamic changes of the global business environment. Special training programmes should be undertaken for developing a professional cadre of managers in the various functional areas of management. The organization may possibly also implement the 360 degree feedback appraisal system. Appraisal of performance inculcates a motivational force among an employee to perform better, hence it is extremely important to adopt different modes to evaluate the performance and appraise them from time to time by the management for the betterment of the organization.

To improve the participation in management Knowledge development and training programs must be arranged by the top management to provide skills with a technique of group decision making and problem solving, in addition to it, a Rewards and recognition systems that are based on the performance of the organization should be designed to encourage employees to obtain information, improve their performance and to enhance teamwork. Power sharing practices could also be implemented to ensure the development particularly in decision making, either through parallel structure practices, such as quality circles, committees, survey feedback, or suggestion systems, or work design power sharing practices such as job enrichment and redesign, self-managing work teams, mini-business units, and participation on decision-making boards and committees that enable employees to
use and apply the information and knowledge effectively; key strategies include locating decisions at the lowest possible level in the organizations. Moreover, the management should delegate more responsibilities to their juniors, involve the employees in discussions of issues and problems of the company and welcome their suggestions and opinions open-heartedly. Nominate the representatives of employees to have a voice in decision-making and maintain a friendly and humble attitude towards them resulting in a congenial and cohesive working environment with competent, responsible and loyal team of employees in the organization.

General Suggestions

General Suggestions for other organizations and industries that could be helpful for the management to improve their HRD practices are:

- In public sector companies, the management should emphasize on the present personnel policies and include all those matters which affect the employees and govern their services, such as promotions, trainings, perks and allowances, welfare measures, etc.

- The managerial autonomy of public enterprises should be preserved through greater delegation of power and by reducing the number of civil servants and bureaucrats on their boards of directors.

- The management should practice job rotation in the organization which maintains the zeal among the employee to work sincerely and to learn new things with a sense of responsibility.

- Superiors should guide their juniors for their career growth and advancement. Top management should make such policies which ensures the employees development and make sure that the employees are aware with the policies so formulated.

- The policies of the organization should not be in ‘lock and key’

- Superiors should guide their subordinates and cooperate with them to enable the good team spirit and openness in the organization.

- A well-integrated sound training policy should be implemented in the organization. Although the training activities are undertaken by the companies, but still there is a need arises to redesign the training system in an innovative way to introduce highly specialized programs as a measure to improve and provide skills, knowledge and expertise in the functional areas.

- A scientific system for performance appraisal should be introduced which could identify the Key Performance Areas (KPA’s), and the qualitative and quantitative
requirement of the job. Besides, a proper rating system should be evolved to present a concrete picture of the appraisal conducted.

- The management should explore the possibilities to introduce new HRD mechanism with advanced techniques.