EVERY ERA WITNESSES THE DEVELOPMENT OF NEW TECHNOLOGIES.

Present era is an era of Information Technology. India is not exception to this. Since 1980 onwards the Information Technology (IT) software and service industry has emerged as biggest contributor towards India's exports. If same global business scenario continues, this industry can contribute up to 35% of country's total exports and 7.7% of G.D.P. Impressive growth rate of software sector as a whole, as well as its increasing share in the various national parameters has been possible mainly due to software exports. Software sector has become country's engine of growth in terms of employment, foreign exchange, development of infrastructure, foreign investment etc. India's software exports had grown at rates consistently above 50% during the past two decades.

The national IT taskforce had set a target of U.S. $50 billion annual export of IT software and services by the year 2008. The export segment has registered steady increase up to 2007. Growth rate of software exports was remarkably high and ahead of domestic software. Export share of software services as a whole also registered steady increase. Extra ordinary high growth of India's software exports has been contributed by the services portion, virtually making the industry as "Software Services Export Industry". Comparatively share of India's exports in product is low. This is
mainly due to cost advantage. The demand for India’s software services arises mainly from cost advantage. India concentrated on ’Customized Software Services’ rather than ’Packaged Products’. As pointed out by National Association of Software Services Companies (NASSCOM) India’s market share in the global packaged software during 1998-99 was less than one percent where as in the customized software it was as high as 18.5 %. Thus India’s software export is dominated by software services which have always remained high. Of late companies like I Flex, Infosys, and Wipro have developed various products.

Attainment of this growth was possible only with the help of Human Resource. In the year 2002 around 1.15 lakh people were involved in software industry. By 2004 this figure reached 2 lakh. In case of IT enabled services this growth was much faster around the year 2000. There were hardly 25,000 people employed earlier but by the year 2002 the figure had reached one lakh and by 2004, 2 lacks. The growth in future is expected to continue at the same rate. If we consider profile of the people involved, it is 67% engineers, 13% post graduate and 20% are bachelor degree holders.

So India has to tune its manpower development strategy to meet this dimension. Domain knowledge in financial services and banking and other related fields like Pharmaceuticals, Bio-informatics,
coupled with management capability to advice on business process reengineering became the requirements of the industry.

It became necessary for Human Resource (H.R.) policies to respond to these dynamics. To capture and utilize India's strength effectively a robust and flexible Human Resource Development Planning was essential. To facilitate the requirement of continuous growth, human Resource requirement need to be planned in advance and needs to be continuously accommodative and comprehensive. Thus Human Resource Planning and Development became the thrust areas, as far as IT industry is concerned.

NEED AND SIGNIFICANCE OF THE STUDY OF HUMAN RESOURCE IN I.T.

India's strategic advantage in development of IT industry was size of population, which ensured cheap availability of work force. Other advantage was sixty percent of the graduates had functional knowledge of English and the natural time advantage.

India's specialization in software has been driven by wage advantages that is the project leaders and support programmer If working in the U.S.A. are required to be paid $54000/- and $37000 /- respectively 4 where as working in India are paid just $23000 and $
8000/- respectively. This vast wage difference prevails in all categories of IT professionals.

Along with this infrastructural cost i.e. acquisition of land, building, installation charges and other related costs are low. Overall administrative and maintenance costs are also very low as compared to countries like U.S.A. and Canada. This made India IT Hub in just two decades. Places like Bangalore, Mumbai, Pune and Hyderabad have developed as important centers for I.T. industry. Many companies have acquired quality certification. More and more vendors in the U.S.A. prefer to get their software development undertaken in India. In 2003, 62% of our exports were to U.S.A.

Thus India became a major destination for outsourcing by U.S.A. and other countries for its quality and cost advantage as. It was also compounded by burgeoning supply of educated youth seeking employment in private sector and weakened bargaining power of trade unions. Thus labour absorbing potential of IT industry became significant.

Last decade of 20th century witnessed advancement in the computer processing power and its easy use which coincided with dramatic price decline leading to wide spread acceptance of it as a business tool. Consequently IT related business is also going through transition. Demography of developed countries like U.S.A., European countries and Russia is also changing leading to shortage of
workforce. So India must fine tune its man power development strategy to make use of this opportunity. Though India has no doubt skill and language advantage, it still requires Human Resource Development (H.R.D.) planning to suit the requirements of time.

Though Indian IT professionals have made their niche in the world market and India at present is producing large number of I.T. professionals, quality of their work is still the cause of concern. Though U.S.A. and other countries are outsourcing their work to India, we should not be complacent and loose sight of the fact that, we have to catch up with fast advancement in the technology and its impact on IT industry. There is need to build strong technical skills and the domain knowledge in addition to computer skills. Major problem before industry is getting people with requisite skills, continuously training them on developing technology and motivate them.

**MAJOR OBJECTIVES OF THE STUDY**

Though Human Resource is important for all types of organizations, Indian IT industry is unique in this respect. It is a global industry. India has advantage over countries like China and Japan due to proficiency in English language. Along with low wages, other factors like low infrastructural costs are attracting multinationals to set
up bases in India for their software and back office operations. If we consider development from 1980 to 2006, availability of professionals simply could not match the tremendous rate at which the IT industry was growing and changing. The biggest challenge therefore was to get required professionals and to retain them.

From 2007 due to the global economic meltdown, started mainly because of the sub prime crises of U.S. economy, many IT companies have closed down and some have merged. Heavy weights in India like TCS, Wipro, and Infosys are also experiencing down trend in growth and revenue.

The role of H.R. departments has been continuously changing over the years. Major objectives of this study are:

1. How HR departments have moulded themselves to meet the requirements of IT industry.
2. To identify factors influencing recruitment.
3. To Study changing appraisal and reward systems.
4. To identify existing best practices being adopted by IT industry.
5. To study strategies for retaining talent.
6. To find out the status of women and their future in IT industry.
7. To study future strategies in HR issues in IT industries considering its trends.
HYPOTHESIS

1. H.R. practices in I.T. industry are proactive, positive and fair enough in compensation package.
2. H.R. functions are changing to suit the working of software industry.
3. Retaining high talent has emerged as a limiting factor.

SCOPE OF THE STUDY

Over the years Pune has emerged as an info tech hub. It has large number of educational institutions taking care of skilled manpower. It is home to well known IT giants like Wipro, Infosys, Cognizant, i-flex etc. Close proximity to financial capital, rapidly improving infrastructure, good climate and co-operative attitude of the local community has made Pune one of the most sought after commercial destination in the country. So this city has been selected for the purpose of field-work.

SELECTION OF SAMPLE

Industries have been selected from the list prepared by Software Technology Park (STP) Pune. STP Pune has the list of
companies related to IT industry. Besides software industry, the list also covers call centers, Business Process Outsourcing (BPOs), supporting industries like networking, medical transcription, graphic designing, anti-piracy hardware, hardware vendors systems and web hosting etc which are not in the scope of this research. While selecting the industries, researcher has selected the industries established between the decades from 1995 to 2005 and engaged only in software development. After analysing the list with reference to above parameters 40 industries were short listed out of which 18 have been selected for in depth study.

Though industries have been selected on simple random basis, sample selected represents the industries engaged in development of all areas of software development. Thus sample represents industries engaged in areas like Development of software, Customization, Maintenance, AutoCAD services, ERPS, GPS, Embedded Software and Animation. It also covers units engaged in Telecom Domain, Product development for Government departments and Training.

An exhaustive questionnaire covering all aspects of functioning of software development industry was prepared. E-mails were sent to all concerned industries. Researcher took the appointments of the respondents by contacting them telephonically, conducted their interviews and collected the information. The interviews were
conducted of Chief Executive Officer (CEOs) or senior executives from the organization. It has been generally observed by researcher that some industries were reluctant to respond and those who responded were hesitant to divulge information on certain issues.

It was also necessary to validate the claims made by companies by counter checking them with their employees opinions. For this purpose a separate questionnaire was prepared. The questionnaire was prepared with an aim of not only collecting the data on issues related to functioning of the company but an attempt was also made to collect some information on social and personal issues. The employees from the categories like senior developer, modular leaders, senior managers, first level managers and trainees were selected. Employees representing 18 companies have been selected. Sample consists of 90 respondents covering all positions. To get their opinions some employees were interviewed personally. In maximum number of cases they preferred telephonic interviews. All of them gave the interviews on the condition that their names would not be disclosed.

Focus of the study would be how HR departments have changed their approach to adapt to new challenges and ever changing work environment.
To collect the necessary data from the sample units, a detailed questionnaire covering all functional areas was prepared. The managers or senior executives of H.R. departments were approached and were requested to fill in the questionnaire.

A separate questionnaire was prepared to get the views of the employees on H.R climate and H.R practices being actually observed by them, as against the claims by the company.

INTERVIEWS

To get views, interviews were conducted of H.R managers, CEOs and also of willing employees. This could generate additional information about their H.R policies, practical difficulties encountered by them in adopting certain policies and future plans of the respective companies. In case of employees it basically helped in understanding the attitude and their perceptions.

ANALYSIS OF THE DATA

The data was statistically analysed using simple and multiples frequencies as this was the most appropriate method for the kind of
data obtained for arriving at the Hypothesis. Tables, Pie diagrams and graphs have been extensively used to present the data.

USE OF LIBRARY

For collecting secondary data various books on Human Resource Management have been referred. But as far as information on I.T industries is concerned, as it is most vibrating and comparatively a new field, the information is collected from reputed journals, newspapers, published reports of the companies and web sites. Articles written by experts in the field like Mr. Achut Godbole, Mr. Kiran Karnik and views expressed by CEOs like Mr. Naryan Murthy, Mr. Nandan Nilkeni and Mr. Aziz Premej are also referred.

LIMITATIONS OF THE STUDY

1. Software development companies have been selected for purpose of this study.

2. Secrecy is the major problem in I.T. industry. For the researcher it was a challenging task to convince the H.R. executives and managers that data being collected is only for academic purpose.
In some cases respondents were not ready to co-operate. Some companies flatly refused on the pretext that they do not share such data. Some were ready to answer, but on certain questions they simply refused to disclose the information. At the same time some managers were very co-operative. I must state here that they gave the interviews at length.

3. As far as employees were concerned they were ready to respond only on the condition of anonymity. But all those interviewed gave good response to the questionnaire, no questionnaire was received incomplete.

4. While doing field work, researchers experienced that it was comparatively easier to collect data from small and medium industries.

5. Responses to e-mails were surprisingly negligible.