Analysis of HR practices in the IT Sector
(With special reference to Bangalore City)

Shubha Muralidhar[1] and R K Gopal[2]

[1]Assistant professor, BMS College of Engineering, Bangalore
[2]Director, CMR Institute of Technology, Bangalore.

Abstract

The world of Human Resources is changing quickly. Human Resource Development is increasingly driven by customer demands, technology, intense competition and employees needs. This means that organizations which fail to measure effectively the qualitative areas of their business and human resources will lose a competitive edge. HR today is a key contributor towards solving organizational issues and achieving relevant business outcomes. The market scenario after the recession has lead to radical changes in the IT industry. From time to time there is a need for the researchers to pause and reflect on the status of the HR practices. Best HR practices will help the organization in bringing about radical improvement rather than incremental ones. The current study is an attempt to study and analyse the HR practices in the IT sector. The study identified two sets of main variables, the traditional HR practices and the modern HR practices. Further each main variable had sub variables under them which were used for analysing the HR practices. A focussed study was conducted to identify the best HR practices prevailing in the IT sector. Hence this paper has made an attempt to highlight the areas of HRM which need to be focussed for a better organizational climate.

Keywords: HR Practices, IT organizations

Introduction

The Information Technology (IT) sector in India holds the distinction of advancing the country into the new-age economy. The growth momentum attained by the overall economy since the late 1990s to a great extent can be owed to the IT sector, well supported by a liberalised policy regime with reduction in telecommunication cost and import duties on hardware and software. Perceptible is the transformation since liberalisation – India today is the world leader in information technology and business outsourcing. Correspondingly, the industry's contribution to India's GDP has grown significantly over a period of time. The sector has been growing at an annual rate of 28% per annum since 2001. Indian IT companies have globally established their superiority in terms of cost advantage, availability of skilled manpower and the quality of services. They have been enhancing their global service delivery capabilities through a combination of organic and inorganic growth

initiatives. The strong demand for electronic hardware and software in India has been fuelled by a variety of drivers including the high growth rate of the economy, emergence of a vast domestic market catering to the new generation of young consumers, a thriving middleclass populace with increasing disposable incomes and a relatively low-cost work force having advanced technical skills. The Indian IT sector has also built a strong reputation for its high standards of software development ability, service quality and information security in the foreign market- which has been acknowledged globally and has helped enhance buyer confidence. The industry continues its drive to set global benchmarks in quality and information security through a combination of provider and industry-level initiatives and strengthening the overall frameworks, creating greater awareness and facilitating wider adoption of standards and best practices.

The number of people employed in this sector has been consistently growing over the period of time. According the NASSCOM, the total number of employees in 2001 were about 430,114 and in 2009 the number has increased to 1,996,000. With such a huge number of employees working, it is essential for the right kind of HR practices to be in place. There many big software companies both at the local and the global level doing extremely well. They are constantly in the need of the right kind of people with the right kind of skill. Due to this there is a constant job hopping among the employees thus leading to a high rate of attrition. With people moving out, the intellectual capital of the organization reduces. There is need to harness this knowledge which is available within the organization. Proper HR practices will aid the IT sector in this process. Each organization does have a set of HR practices, but each of them needs to understand what is best for their employees and their organization. With benchmarking the HR practices across various IT organizations, it will help them to compare their practices with that of the others'. It will also further assist them in adopting the best practices in the current work environment and thus retaining the best talent by utilizing the results of the above study.

Thus from the above it can be ascertained that since the IT industry is growing geometrically, the number of people working in the sector are also on the rise. The IT organizations are predominantly responsible for bringing in many innovative HR practices. Each organization has umpteen numbers of practices which are sometimes not known if they are best or not. An elaborative attempt has not been made in the IT sector to study the HR practices. In India, the IT software and services industry has grown rapidly over the last decade. In 2005, it comprised about 650,000 employees and the prediction for the next five years, was that this number is expected to triple, to over 2 million persons (Karnik, 2005).

Review of literature

HR practices can be defined as any practice that involves enhancing competencies, commitment and culture. The practice can be seen or understood to take a form of a process, an activity, a norm, a rule, an accepted or expected habit or even a policy. Superior HR practices do indeed make a difference with respect to the employee performance and thus improve the overall business effectiveness. Good HR practices are those that contribute to one or more of the three C's: Competencies, Commitment and Culture. They need to be identified and implemented cost-effectively, reviewing and revising them from time to time to enhance their effectiveness and appropriateness (Rao, 1999). HR practices include: Manpower planning, recruitment and selection, orientation, training and development, performance appraisal, career planning, fringe benefits, reward and recognition, safety, health and environment policy, welfare benefits both within the statutory borders and beyond, suggestions scheme, promotion and transfers and exit policy. The effect of conditions like low wages, reduced leave, long work duration and cold work environment made the job unpleasant as observed by Sharan (1980). It is essential to improve all the above given conditions to enhance the satisfaction level. Bhushan (1968) also supported them by stating that high wages are responsible for higher job satisfaction. Fringe benefits and growth dimensions also have a positive correlation with job satisfaction. Higher pay, more freedom and job security along with less dominance and control will create job satisfaction. Chen (1995) examined the

difference in organizational climate and HR practices between American and Chinese companies in Taiwan and found that the climate in American companies is more open than in Chinese companies. There are also significant differences in job satisfaction and fairness issues. There is no significant difference in leadership styles and motivational forces. Alina and Rob (2008) investigate the relationship between Human Resource Management (HRM) practices and workers' overall job satisfaction and their satisfaction with pay. They found that several HRM practices raise workers' overall job satisfaction and their satisfaction with pay. However, these effects are only significant for nonunion members. Satisfaction with pay is higher where performance-related pay and seniority-based reward systems are in place. A pay structure which is perceived to be asymmetrical usually reduces the non union members' overall job satisfaction as well as satisfaction with respect to pay. Although HRM practices can raise workers' job satisfaction, if internal equity widens, then non union members may experience reduced job satisfaction.

IT organizations deal with issues mainly pertaining to highly educated employees (Baruch & Rosenstein, 1992). The IT industry faces numerous challenges of managing their human resources. While referring to the work force in the information technology organizations, Ferratt et al (2005) observed that human capital in the information technology organizations is to be as a strategic resource and its effective management represents an organizational capability.

Lester etal,(2002) has identified thirty two areas in the field of HRM relevant to the IT sector. Few of them are:

- Opportunities for Promotion and advancement,
- Trust and respect,
- Open and honest communication,
- Fair treatment,
- Challenges and interesting work,
- Competitive salary and so on.

Objectives of the study

✓ To study the HR practices across the cross section of IT organizations.

✓ To indicate the overall effectiveness of these practices.

✓ To identify the best HR practices and suggest strategies for continuos improvements.

Limitations to the study

This study aims to analyse the HR practices only in the IT sector. It can be further continued as a longitudinal study by comparing the HR practices across various. The study can yield unique results which can be further utilised for benchmarking projects. Moreover this study has considered the organizations situated only in Bangalore City.

Research methodology
Results and findings study

The variables identified for the purpose are as follows:

Traditional practices: Recruitment and Selection Training and development Compensation and fringe benefits Performance appraisal Work environment and Job satisfaction

Modern Practices: Employee wellness Career progression and retention Employee engagement Knowledge management Entertainment at workplace Talent Management

A detailed questionnaire was prepared with two parts. Part I covered the demographical details such as age, gender, no. of years of experience and so on. Part II covered various statements with respect to the variables. Each variable had statements which were assessed on a five point scale ranging from strongly agree to strongly disagree. Each variable had minimum of 6 items to maximum of 14 items under each. The reliability test for the questionnaire was done before going in for further tests. The questionnaire was administered to 218 employees of various IT companies. It also included people from different levels and different designations. Convenience sampling technique and snow ball sampling technique was used for the present study.

The results of the reliability test are shown in Table 1. Cronbach alpha is the coefficient of reliability.

It is commonly used as a measure of the internal consistency or reliability of a test score for a sample of respondents. Cronbach alpha will generally increase as the inter-correlations among test items increase, and is thus known as a consistency estimate of reliability of test scores.

In general a value of 0.7 is acceptable. (George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.). Boston: Allyn & Bacon).

Cronbach's alpha	Internal consistency
$\alpha \geq .9$	Excellent
$.9 > \alpha \geq .8$	Good
$.8 > \alpha \geq .7$	Acceptable
$.7 > \alpha \geq .6$	Questionable
$.6 > \alpha \geq .5$	Poor
$.5 > \alpha$	Unacceptable

According to the table given above Cronbach value of 0.7 is acceptable. The scores which are within the limits of the acceptable range are used for further statistical applications.

From Table-1 it can be seen that the alpha value for all the variables the alpha value is in the accepted range, but for the variable PA. In spite of the same it is considered for further study as it is one of the important components in HR. The analyses of all the eleven variables are discussed subsequently.

All the above variables are statistically reliable except the PA, which is Performance appraisal. The value of alpha 0.64 is marginally less than the accepted value of 0.70. Hence for further studies, this variable is also considered as performance appraisal is one of the important practices with respect to HR.

The table-2 shows the combined mean values and other descriptive statistics for all the variables. From the above table it is evident that the combined mean of the variables PA and CFBM is less than 3.5. All the other variables have a mean value of more than 3.5. This indicates that most of the employees are quite happy with the practices related to Recruitment and Selection, Training and Development, Work environment, Entertainment at workplace, Employee Engagement and Wellness, Knowledge management and Talent management. The mean values of other variables are in between 3.96 to 3.5. The higher mean value of a variable indicates fairly good HR practice, where as the lower values indicate that there is need to relook into them. For instance, the mean value of 3.96 for WEJS indicates that the employees seem to have a

Table 1: Table showing the Cronbach alpha values for all the variables

Sl. No.	Variables	No. of items	Cronbach Alpha Value
1	Recruitment & Selection (RAS)	13	0.76
2	Training & Development (TAD)	14	0.82
3	Compensation & fringe benefits (CFR)	8	0.88
4	Performance Appraisal (PA)	7	0.64*
5	Work environment and job satisfaction (WEJS)	11	0.90
6	Employee wellness (EW)	11	0.79
7	Career progression and retention (CPR)	9	0.75
8	Employee engagement (EE)	8	0.77
9	Knowledge management (KM)	7	0.84
10	Entertainment at workplace (EW)	10	0.77
11	Talent management (TM)	8	0.80

Table 2 : Table showing descriptive statistics for all the variables

	RASM	TADM	PAM	CFBM	WEJSM	EWM	CPRM	EEM	KMM	EAWM	TMM
N	218	218	218	218	218	218	218	218	218	218	218
Mean	3.84	3.75	3.45	3.41	3.95	3.73	3.69	3.84	3.97	3.50	3.82
Median	3.84	3.78	3.42	3.25	4.00	3.72	3.66	3.75	4.00	3.50	3.75
Mode	3.69	3.64	3.43	4.25	4.91	3.64	3.56	3.75	4.00	3.70	3.75
Std. Deviation	.45	.53	.44	.73	.66	.54	.42	.58	.53	.65	.64
Variance	.205	.278	.193	.528	.442	.297	.179	.338	.278	.419	.406
Skewness	-.311	-.267	-.366	.126	-.170	.059	-.336	.462	.255	.163	-.738
Std. Error of Skewness	.165	.165	.165	.165	.165	.166	.165	.165	.165	.165	.165
Kurtosis	-.557	.115	-.117	-.950	-.800	-.170	1.169	.209	.039	-.434	.694
Std. Error of Kurtosis	.328	.328	.328	.328	.328	.331	.328	.328	.328	.328	.328
Range	2.00	2.86	2.14	2.88	2.64	2.36	2.22	2.50	2.14	2.70	3.00

good work environment which leads to job satisfaction. This is a good indication as a good work environment is essential for any organization as it enhances efficiency and effectiveness. Similarly, the mean value of 3.66 for career progression and retention implies that policies with respect this practice must be enhanced further. Though the attrition rate has stabilized in the sector after the recession, still with a huge demand for the IT employees and growth multiplying this sector, the progression and retention strategies need to be strengthened. The combined mean value of CFBM and PAM are 3.41 and 3.45 respectively. The mode and the mean value for PAM is clustered around 3.4 which indicates that the deviation in response is very less. Whereas in case of compensation and fringe benefits, the mean value is 3.41 and the mode is 4.25. This indicates that there is a higher degree of deviation in the responses. This implies that there is a need to standardise the compensation practices across organizations.

The standard deviations with respect to other practices are much lesser indicating lesser dispersion in the responses.

Skewness measures the extent to which the values are scattered in the distribution. Skewness may be positive or negative. A distribution is said to be positively skewed when mean>median>mode and similarly a distribution is said to be negatively skewed when mean<median<mode. If the difference between mean and the median is very high it is inferred that the skewness is high and the values are more scattered on the distribution. In the above table we can seen that the difference between mean and median is not very high in most of the cases and hence the amount of asymmetry is not very high. The values are not very highly scattered along the distribution. As the value of skewness is between +1 and -1, it can be used for psychometric purposes. Kurtosis is peakedness of the distribution curve. The negative value of Kurtosis indicates that the curve is more flat and similarly a positive value of kurtosis indicates that the curve is more peaked. If the value is tending more towards zero, it indicates that the curve is more y

Hypothesis 1 : There is a significant difference in the mean opinion between gender and career progression and retention among IT employees.

Table 3 : The results of the t test conducted between gender and the variable CPR

		t	df	Sig. (2-tailed)
CPR	Equal variances assumed	1.195	216	.234
	Equal variances not assumed	1.549	190	.123

Results: One tailed 't' test for the above hypothesis was done at 95% significance level. The 't' value of 0.117 for the hypothesis statement is not statistically significant. Hence the hypothesis statement is rejected.

Discussions: The level of confidence is set at 95% and hence the level of significance would be 0.05. Since the p value of 0.234 is greater than the significance value, 0.05 the hypothesis is rejected. Hence from the above analysis, it can be inferred that there is no gender discrimination when it comes to career progression or retention of an employee. This can also be understood by the mean values which are given in the group statistics. All employees irrespective of the gender are considered equally. This implies that an employee who has right skills and attitude can progress in the organization. This is healthy sign and indicates a good HR practice followed in the IT organizations. The above point can also be further strengthened by various schemes which they provide for women during their maternity period. Work from home options, flexitime, facilities within the campus to take care of small children and so on. Promotional opportunities are provided equally to both male and female employees thus giving no scope for bias and prejudice.

Hypothesis 2 : There is no significant variance between experience and growth of an employee in the organization (Table 4).

Results: The hypothesis is tested with the help of ANOVA technique. The hypothesis is accepted at 99% significance level.

Discussions: The hypothesis is tested 99% significance level and from the above table it can be seen that the F value is lesser than 0.05 and hence the hypothesis is accepted. This infers that there is variation in the experience and growth of the employees. This implies that higher experience does not necessarily lead to higher growth or improvement in career. It suggests that experience may not be the key factor for career progression, but there could be other factors such as skill, expertise, commitment and so on which may play

an important role in career growth. It also signifies that the independent variable is not causing a significant variation in the dependent variable. Hence experience of the employee is independent of growth in the organization.

Hypothesis 3 : There is a significant difference between gender and employee engagement.

Table 5 : Results from the 't' test conducted between gender and the variable EE

		t	df	Sig. (2-tailed)
EE	Equal variances assumed	4.758	216	.000
	Equal variances not assumed	6.041	201.563	.000

Results: One tailed 't' test was conducted for the above hypothesis at 99% significance. From the results obtained the above hypothesis is accepted.

Discussions: The above table gives the 't' test between the gender and the variable Employee Engagement (EE). The test is conducted at 99% significance level and t value of 0.000 is highly significant. This implies that the women employees are more engaged than their male counterparts. They are more enthusiastic about their work and are fully involved in their work. Women express themselves cognitively and emotionally at workplace. An engaged employee will perform at high levels and works with passion. Hence from the above analysis it can be inferred that women tend to be more involved with respect to their job.

Findings and conclusion

The above study it indicates that there are a variety of innovative HR practices by the IT companies. The

Table 4 : Results from ANOVA between Experience and the variable CPR

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.588	3	2.529	17.295	0.000
Within Groups	31.296	215	0.146		
Total	38.884	218			

combined mean values of all the practices considered for the above study indicates a fairly good practice among the organizations. Compensation has a lower mean value when compared to other variables. It is more on the neutral plane thus not assisting any statistical implication. The reason for this could be the recession. Though most of the organizations are out of the recession, salaries were not hiked for a long period. Few of the perks extended to the employees were also withdrawn for sometime. This may be an important reason for the opinion of the employees with respect to Compensation and fringe benefits.

The mean value for Performance appraisal is slightly low. This indicates that there is a need to have more clarity on the appraisal system. Moreover the organizations must ensure that they have a potential appraisal system which is blend with the regular appraisal system. Potential appraisal helps the organization in succession planning and identifying employees to occupy senior positions. It also assists in deploying workforce in optimal teams in the right time, at the right place and with the right skills. It is important to create a workforce who understands the objectives, strategy and their contribution in executing a company's vision.

Equal employment opportunity Act is fully adhered to in the IT industry. According to this act, there should be no discrimination with respect to age, race, sex, religion etc of the employees. Employees in the organization grow irrespective of their gender. Career progression can be seen both among men and women. It is only the skill and expertise that is taken in to account and not the gender of the individual. This is an indicator of a good practice in the IT sector. This would motivate the women employees to be more productive.

It is by and large felt that with experience or more number of service in the organization, an individual moves up the ladder. This may not necessarily be true in the IT sector. This implies that there is scope for merit than seniority unlike the practice adopted in the Government sector. This may be lead to meritorious employees moving up the ladder, but the organization need to ensure growth for experienced employees. They can ensure this through proper training and development programmes provided the organization.

An "engaged employee" is one who is fully involved in, and enthusiastic about, his or her work, and thus will act in a way that furthers their organization's interests. It is a positive attitude held by the employees towards the organization and its values. The study here indicates that women are more engaged when compared to the male employees. Employee engagement is critical to the organization as it seeks to retain employees. As organizations globalise and become more dependent on technology in a virtual working environment, there is a greater need to connect and engage with employees to provide them with an organizational 'identity.'

Analysing the HR practices time and again is the key to develop clearly defined measures of competency and performance in human resource. Organizations need to match HR policies and practices with long-term business strategies required to compete in the global market place. It is critical to generate employee commitment and retention over the long-term. HR practices which are incremental and collaborative and provide the opportunity to employees to make decisions affecting their work and to share in the rewards of their creative efforts.

The distinct but generally a people-intensive business like software calls not only for different metrics but also for different management practices. Even a slight change in the employee productivity in software companies have a significant impact on shareholder returns. It goes without saying that managing people is a key task for any company. But in a people business, this task becomes central to success because employees represent both the main cost and a key driver of value creation. The people factor has been very important for the growth of the Indian software services industry, because the industry works on the human resources (HR) augmentation mode (Upadhya & Vasavi, 2006). Human Resource is life and blood of software companies as competent talent are the source for competitive advantage in these industries. The dynamic nature of the software industry due to the innovative methods of work culture like virtual office and virtual migration shows the need for different HR practices to this fastest growing industry

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