

International Journal of Advance Research in Computer Science and Management Studies

Research Article / Survey Paper / Case Study

Available online at: www.ijarcsms.com

HRM - The Key to Success for IT Industry

Sana Mahewish

Dept. of Management Studies

KITS, Ramtek

Dist. Nagpur, India

Abstract: The Indian IT industry has been one of the most dynamic industries in India. A bunch of upstarts a decade back unleashed a trail of achievements, which inspired dreams from Bangalore to the Silicon Valley and today has created the most compelling brand-the Indian IT professional. In this Industry more attention is paid to fast changing technology and processes to keep pace with the fast changing technology, very little attention is given to most vital source of this Industry, i.e. Human Resource. Human Resource in this industry is vital for productivity and quality of the products. For most organizations, however, human resource management still takes a back seat to more technical matters. This paper is divided in three parts, in the beginning difference of HRM in software and non-software sector has been discussed. In the second part challenges of IT industry have been discussed, while some tools of improvement are suggested in part three. If only some elements of this article prove to be applicable to organizations the software sector in India, software organizations need to radically rethink their approach to staffing, supporting and managing software development professionals.

Keywords: HRM; IT Industry; Features; Challenges; Role.

I. INTRODUCTION

The new millennium is an era of global service economy. We can say that 20th century was manufacturing economy; the 21st century is being experiencing the emerging of service-based economy in which every conceivable element will be software enabled element. Such reality confirms insatiable demand for software talent. India's ability to train well-qualified English speaking talent rapidly has been boon to global corporation. Indian companies increased their share of Global IT spends.

In the knowledge era and skill based economy, it has become imperative that human resource become one of the most essential ingredient of the success. The growth of software companies worldwide depends on its people and the intellectual capital it possesses.

Much has been said about human resource element for any organization. As it is only the live resource out of the four M's (Man, Machine, Material & Money), it is only the deciding factor of success if all other factors remains constant. But though there are some basic differences of human resource elements of software sector and non-software sector industries, and so the difference is there in Human Resource Management. Some of the differences discussed herewith.

II. FEATURES OF HUMAN RESOURCES IN IT INDUSTRY

Education Background

Software industry has intellectual highly qualified workforce compared to traditional manufacturing concern, which may have middle level educated workers at shop floor level. Basic qualification required for software professional is graduate and even at the most of places it is either engineering graduate or post-graduate in computer application.

Fast changing Technology and Training

“Knowledge workers” has become a buzzword in today’s IT scenario. Software sector is rapidly changing its technology, manufacturing process, methods, customers’ needs, etc. while its counterpart using manufacturing technology which run uninterrupted without much change for a long time. Such fast technological development in IT requires continuous up gradation of employees to keep pace with changing scenario. This has led to an increase in the number of man– days training per organization. The data says the software export companies had over 7500 man-days of training per organization, per person per organization average was six days. Domestic companies incidentally spent lesser number of man-days on training over 750 man-days per organization with an average of two days per person per organization.

Manpower Strength

Human resources (Manpower) strength required or working in software sector is very less compare to traditional manufacturing concern. A survey conducted by Dataquest in year 2000-01 says total human resource strength of IT industry as a whole stands at 4,25,690. A company-wise break-up of these figures reveals nearly 525 companies constituting 35% of the IT industry employ an average of 58 peoples of each. 750 companies constituting 50% of industry employ an average of 726 people each. At least 40 companies have more than 1000 employees; while some big companies like TCS, Wipro and Infosys have staff more than 5000 each.

Compensation

If you talk about compensation, software industry has got very average salary compare to their counterpart.

Average Age Group

Average age of employees in the software sector is about 25-30 year, which is much lesser than that of traditional industry, which is approximately 40-45 year.

III. HRM CHALLENGES FOR SOFTWARE INDUSTRY***A. Employee turnover***

One of the serious concerns is the stability of workforce. The software industry suffers about 20 to 30% attrition rate every year. The study suggests that average software engineer had 2 years’ experience but had actually made 1.75 – job change.

B. Environmental Challenges

IT sector faces frequent ups and down (Boons and recession) which led to challenge to HR department to manage workforce. Very fast technological up gradation requires high skilled and multi-skilled workforce who can constantly work in high pressure of meeting deadlines.

C. Work Culture

Another difference is highly stressful environment experienced by software professionals. A study made by Khumashira, Kamda and Miyake (1989), which showed the stress score of software engineers to be higher than those of other professionals. Factors in the work situation contributing to the overall high stress score where pace of the work and overtime. Fujigaki (1990) reported that especially during requirement analysis and debugging, i.e. under conditions of time pressure, strain level rose. In another study (Ivaancevich, Napiel and Wetherbe, 1983, 1985) problems in communication, time pressure and overload were identified as typical stressor among software professionals.

D. Job Requirement and Adaptability

E. In addition, job of software development requires high intellectual demands. The job requires high involvement and requires continuous learning and upgrading of knowledge. It is very involving and requires permanent acquisition of knowledge and learning (Brodbeck, Sonnentag, Heinbokel, Stolte and Frese, 1992, Walz, Elam and Curris, 1993)

F. Retaining Employees

Retaining and motivating “Knowledge workers” has been a primary aim for many employers. These individuals are assets who appreciate in value through the skills, knowledge and experience they acquire during their time in the organization. When they leave, the business loses an essential elements of intellectual capital. Often the loss is compounded when they join a competition. The company then faces the challenge and cost of replacement. The Corporate Advisory Board of Washington DC has identified the cost of replacing a technical expert in IT, project management or marketing as 1.75 times the individual’s annual salary.

G. Team Vs. Individual Approach to Treat Employees

Majority of software are product in teams and so employee’s role and effort in team is necessary for quality work. Person may be very good as an individual but how he works in a team has prime importance in software field, and so the must be appraised according to efforts and involvement in team activities.

IV. ROLE OF HR MANAGER

- » For success of development projects in software, how the human resources are organized and managed become the crucial factors. HR Manager has to provide prompt and timely support.
- » The software manager has responsibility to effectively manage the human relations of the software team, in addition to technical demands. He has to trust to become a manager of choice. Similarly, Software team has to ensure team effectiveness. In this role, HR manager can devote energies to development of soft skills in the software members. They are to integrate 3 Q’s, i.e. mental, emotional and spiritual quotients. It is IQ (Intelligence Quotient) through which we solve problems and with which we manipulate and control our environments. Then EQ (Emotional Quotient) which identifies the situations we are in and behave appropriately. EQ is adapting intelligence. Now Danah Zohar has added SQ (Spiritual Quotient). She says it is the ultimate intelligence of the leader. This allows leader to see broader picture, access to deep meaning purpose, value and a long – term perspective or commitment to the future.

We are witnessing an explosive growth in the size and complexity of problems that software can address. Software organization and their environments, which include their market conditions, customers, suppliers and recruitment base for future employees, are also experiencing complex interactions, as well as the implications of rapid changes in technology. But there is an important distinction between acknowledge complex interactions and understanding or controlling them.

- » For HR professionals, one thing is certain: traditional approach that was conceived in cultures emphasizing command and control are giving way to new approaches characterized by employee commitment, cooperation and communication. Companies with rigid structures will be swept away. Companies, which are empowering employees, letting workers manage everything from budgets to inventory control, often without direct oversight from top management will survive.
- » HR professionals in software sectors need to re-evaluate their concepts and polices on which they are based. They also will have to change the implementation strategy. The trust has shift to planning and identifying of strategic talented men, develop retention strategies. These strategies could be:
 - Assess organization climate.
 - Measure sources of turnover.

- Increase employee involvement and ownership
- Focus on building relationship among the employees at work
- Identify how employment practices differ from the competitors
- Hold managers accountable for retention in their respective departments
- Make work arrangements flexible for higher commitment and productivity
- Strategies for work-life balance
- Develop commitment for the organization
- Pay higher compensation contingent upon organizational performance. Manger's to understand that different people are motivated by different incentives and thus to customize the same and respond to generational values.
- Respect cultural diversity with cultural due diligence approach
- Reduce status distinction
- Extensive training and development initiatives
- Extensive sharing of financial and performance information throughout the organization
- Celebrate small achievement as this keep the motivation level high, people feel recognized and rewarded. Celebrations bring people together and strengthen relationships.

If we see from the employees' point of view there is clear evidence that good management rests squarely on four foundations. They are:

- Having a manager who shows care, interest and concerns for each of them.
- Expectation must be clear
- Job specification and job description must fit accordingly
- Right recognition and appreciation at right time must be there.

Study shows that employees of dozen or more industries teams rated managers highly on these four factors were more productive and more profitable. They had lower employees' turnover and higher customer satisfaction ratings.

The most HR policies take little account of these basic elements of good management practices. Instead good management is defined in terms of control, co-ordination and correction rather than care, concern and encouragement.

V. TOOLS FOR IMPROVEMENT

Employee volunteer programme is tool to improve productivity of employees. Such programmes suggest that participation in volunteer activities provides some benefits for both employees and employer. Volunteer programme energises employees and they can better take on the challenges of the job. Similarly establishment of contact, increase more skill are benefits of volunteer programmes. HR managers can develop employee volunteer programmes to meet specific workforce needs. The data suggest that employees who volunteer time believe that such experience benefit them personally and improve their ability to perform their work duties. There were slight differences in programme type, with those employees involved in programmes characterized by high management support and commitment tending to perceive that they reap high overall rewards for their volunteer activities. The perceived impact of volunteer activities on employees included; an improved ability to cope with job

challenges, the development of contacts and skills that can be used on-the-job; improved self-esteem and a sense of pride. These factors can increase employees ability to be proactive problem-solvers on-the-job.

As software development job is stressful, high intrinsic work motivation is required which may make them prove to the development of reducing stress if they work in a stressful environment. Different methods must be developed to motivate employees and boost their morale.

Unfortunately, researchers and managers within the software community tend to share a belief that success depend on the ability to predict changes in the environment and to develop rational plans to cope with these changes. Predictability, however' is a property of simple system. Really is different – an environment is not a simple system, is not predictable, is not entirely knowable, and is definitely not controllable by the software manager or software organization.

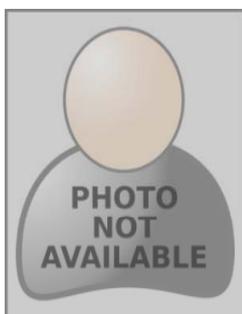
VI. CONCLUSION

Due to many organizational and environmental factors, the human resource functional area has become very complex. The information requirements of managers and employees have also undergone a dramatic change. Those business organizations will survive and prosper which will treat Human Resource as a strategic resource. Nevertheless, the importance of the designing human resource practices within a framework that considers teams rather than groups of individuals has important implications for software organizations addressing the issue of human resource management. Such implications should become increasingly important as the global nature of the software industry make the attraction and retention of good people, so central to competitive success, more difficult. For most organizations, however, human resource management still takes a back seat to more technical matters. Even within those organizations will well-established human resource strategies, the full benefits of good people may not be realized if software teams are managed as groups of individuals.

References

1. "E-year human resource". Dataquest, July 15, 2000, pp.244-57
2. Graeme Buckingham "Same Indifference" People Management, 17th February, 2000, pp 43-47
3. Gray D. Geroy, Philip C. Wright, Laura Jacoby, Towards conceptual framework of employee volunteerism: An aid for the human resource manager, Management Decision, 38/4 (2000), pp 280-86, MCB university Press.
4. Jeferey Plefer, Human Equation Building profits by putting people first, Harvard Business School Press.
5. Michael J. Nowak, Charles E. Grantham, "The Virtual Incubator : Managing human capital in the software Industry", Research Policy, 29 (2000), pp. 125-34
6. NASSCOM, H.T. Careers, New Delhi, 8.10.2003
7. Sabine Sonneentag, Felix C. Broadbeck, Torten Heinbokel and Wolfgang Stolte, "Stressor- burnout relationship in software development teams" Journal of Occupational and Organizational Psychology (1994), pp.327-40. Printed in Great Britain by the British Psychological Society

AUTHOR(S) PROFILE



Sana Mahewish is a Research Scholar from India, pursuing her Ph. D. in Management from Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur. She has done Master in Business Administration in 2010 from Datta Meghe Insititute of Management Studies (DMIMS) Nagpur. She has done her Graduation in Science faculty from S.K. Porwal College, Kamptee. She has 4 years' experience in academic and currently she is working with Kavikulguru Institute of Technology & Science (KITS) Ramtek as an Assistant Professor in Department of Management Studies. She is specialized in subjects like Orginsational Behaviour, Human Resource Management, Marketing Management, Operations Management and Business Legislation. She has published several motivational articles in 'The Hitavada' Newspaper. She has presented research papers in National Conferences and published papers in International Journals.