Human Resource Management Practices in IT Industry: A Complex Adaptive Systems Perspective*

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The Study argues that Complex Adaptive System (CAS) Theory is closely aligned with the prevalent knowledge and information on the unique nature of human resources management practices of Information Technology industries in India. As such, this can be regarded as a more advanced theory on Human Resource Management in comparison to the Resource Based View (RBV). The research is based on a Qualitative study made of 15 IT Companies operating in India and globally, and the inferences drawn from their HR Practices are presented and discussed from a CAS perspective of Human Resources Management.

Keywords: Complex Adaptive Systems, Resource Based View, HR Practices, Information Technology Industry

1. Introduction

Resource Based View of HRM Practice

As far as the question of interrelationship between the performance of an organization and Human Resource Management is concerned, the "Resource Based View" can be taken as a conventional means for theorizing the same. According to Wright and McMahan (1992), this theory treats human resources as a pool of skills that can provide a resource to serve as a sustained competitive advantage. In a sense this theory provides a strong theoretical foundation to the subject of Human Resource Management. Interestingly enough, in the pedagogy of strategic Human Resource Management, this resource based theory does not find any adequate place rather there is a lot of reservation on this view.

Resource Based View (RBW) originally emanated from economics, later it was applied to the field of strategic management and subsequently is being applied to the field of Human Resource Management. There are two basic assumptions on which the theory is based. They are namely, 'Firm Resource Heterogeneity' and 'Firm Resource Mobility'. The argument which is presented here states that organizations

*We regret to inform our readers that Prof. Kumuda Tripathy recently passed away. She was also one of the journal editors and made significant contribution in that capacity. Her presence will be missed by the academic world.

consist of bundles of unique resources. There are four criteria which are more or less prevalent in any firm; they are value, rarity, inimitability and non- substitutability. Both, the unique resources and criteria together bring in sustained competitive advantage to the firm itself. As such, this Resource Based View in its application to the field of Human Resource management appears to be very persuasive for it is firmly rooted in the conventional or traditional approach to the strategic management of an average Industry.

The CAS Perspective of HRM Practices

The Information Technology Industry is not an average one; it is the latest in the entire foray of industries; hence, an advanced theory has to be there in place as well. The Human Resource Management practice of Information Technology industry necessarily has to be contemporary and advanced; and which would essentially overcome the lacunae of The Resource Based View of HRM. Therefore, there is a necessity of developing an alternative perspective of Human Resource Management and exactly this has been worked out in the present research work by following the frame work provided by the theories in natural sciences, which is widely known as Complex Adaptive System (CAS) Theory, as in contrast with Resource Based View (RBV).

CAS theory advocates that the natural social phenomena are complex and because of this predictability becomes elusive. Any entity can become a Complex and Adaptive system if it fulfils four criteria:i.it must consist of many agents acting parallely,ii.there has to be continuous shuffling of these agents,iii.the agents should have diminishing value of utility and iv.agents should have capacity for recognizing patterns and should have capability of anticipating and learning. Based on this, the researcher in the present research paper makes an attempt to argue that Complex Adaptive System (CAS) Theory is pretty closely aligned with the prevalent knowledge and information on the unique nature of human resources management practices of Information Technology industries in India. As such, this can be regarded as a more advanced theory on Human Resource Management in comparison to the Resource Based View (RBV)

Resource Based View has its roots basically in the literature of organizational economics, mainly as has been promulgated by Ricardo, Stumper, and Penrose. Like any other economic theories which deal with industrial organizations, this theory has a fundamental assumption i.e., the ultimate purpose for which an organization functions in the "profit" and to maximize "profit". Secondly, the Resource Based View is also founded on the assumption that individual organizations are unique and each organization has its distinctive pool of resources, which are purely internal. Here it is important to note that traditional literature on strategic management had never attributed such a significant position to internal resources other than labor, capital, and land. Even then, by extensive use of various mathematical models, it has been demonstrated these above mentioned three resources have declining return to the organization over the period of time. As in contrast with this, the Resource Based View regards internal organizational resources as the real source of: "Sustained Competitive Advantage". In this sense, any strategy as such is always directed at the fitment of internal resources of the organization with the kind of opportunities that the organization gets from the external business market as such. In other words, the Resource Based View treats the resources of the organization as the instruments

which consistently provide "Sustainable Competitive Advantage" to the profit maximization. If so, the crucial question is how it does happen? It happens through optimal resource endowments and deployments of the organizational resources and these organizational resources are by nature, –can neither be duplicated nor can be substituted "... Thus, in a Resource Based View, the critical problem faced by the firm is how to maintain the distinctiveness of its product or for its identical products, its low cost position, while not investing so much in obtaining this difference as to destroy above normal returns.[12]

The most important point to ponder here, is that the internal resources of an organization if they are neither duplicable nor substitutable, then they have to be defined to validate the kind of assumptions which are advanced so far. In this context, Lado and Wilsonde(1995) define resources as "all the input factors, both tangible and intangible that are owned or controlled by the firm as in contrast with internal resources, the organizational capabilities which are the dynamic, non finite mechanisms that enable the firm to acquire, develop, and deploy its resources to achieve superior performance relative to other firms which includes culture, learning and routines." Further it is argued that both 'internal resources' and 'organizational capabilities' construe the 'organizational competencies'.

However, apart from the above definition there are two more definitions of resources available to us. According to Wernerfelt(1984), resources are "those tangible and intangible assets which are tied semi permanently to the firm".[14] The third definition is an extension of the second one and is offered by Barney, which includes " all assets, capabilities, organizational processes, firm attributes, information, knowledge etc controlled by a firm that enable the firm to conceive of an implement strategies that improves efficiency and effectiveness". A comparison of all the three definitions reveals that the third definition is comprehensive and all encompassing and more appropriate, it suggests that resources of an organization are invariably under the control of the organization. Thirdly, it also suggests that organizational resources are not passive, rather, they are not neutral elements; they are the factors which play a very vital role in the growth and development of the organization. Fourthly on the basis of a study of all these definitions we can say that distinctly there are three types of resources, i.e. physical capital resources, organizational capital resources, and human capital resources. Physical capital resources would include plant, technology, equipment etc whereas organizational capital resources would involve the formal and informal relations among groups within and between the organizations, and planning, organizing, directing and controlling systems and mechanisms within the organization. Human capital resources would consist of individual knowledge, skills and technical, non technical and behavioral abilities as well. Fifthly, the resources of an organization are scattered heterogeneously in the organization itself. They are mobile. They become homogeneous functionally as and when there is an external opportunity to gain sustainable competitive advantage over a competing organization.

Barney et al put forth the view that organizational resources, to have sustainable competitive advantage must meet four important criteria. To quote "...they must add positive value to the firm; they must be unique in their or rare among potential and current competitors; they must be imperfectly inimitable, and they should not be substitutable with other resources by competing firms... value: a resource should add

value to the firm by enabling it to exploit opportunities or neutralize threats in the environment...Barney also notes that sources of value change over time. Rarity: a resource should be unique or rare among current and potential competitors; resources common among large number of firms can be a source of competitive parity...Inimitability: if a resource itself or its benefits, can be imitated across firms, then it can only be a source of competitive parity, not competitive advantage...Non substitutability: "it should not be possible for the same, or strategically equivalent resources, to be deployed by other firms...[5]

Accordingly, in the present study, the researchers first undertake a discussion on the basic assumptions of the Resource Based View following the clue that the trends of analysis as have been presented by review of literature on strategic HRM management, have not clearly spelt out any studies on Human Resource Management practices in the IT Industry as such. We therefore carry out a comparison between both the theories i.e., Resource Based View and Complex Adaptive System in terms of their application of Human Resource management in Information Technology Industries in India, and offer an alternative perspective in the CAS Perspective system (Complex Adaptive Systems)

2. Literature Review

In this section an attempt has been made to present the literature review of the relevant research work done by researchers in the area of strategic human resource management, where researchers talk of HRM practices being complex and adaptive in nature- the two variables we have mooted for the CAS perspective of HR practices in the IT Industry.

Johnson (1987), states that the issues that have to be dealt with in managing the strategy of an organization are of a different nature from many of the day-to-day activities of managing. Firstly, they are likely to involve a higher degree of uncertainty. They are usually to do with decisions and actions that demands some view of the future be taken. It cannot be that managers are able to know what their future will be like; yet they must take a view about it on some basis. Clearly these sorts of decisions must be less certain than the day-to-day management of the operations of the business. Second, such decisions are likely to demand an integrated approach to managing the organization. Thus a strategic decision and the implementation of strategy are likely to involve managers in crossing the boundaries within the firm and in negotiating and coming to agreement with managers in different parts of the organization who, inevitably, are likely to have different interests and perhaps different priorities. Third, strategic decisions are likely to be decisions concerned with change. It is unlikely that managers will foresee a future in which there is no change and therefore they will have to consider how their organization should adjust to such a change. Implementing strategic decisions is therefore also likely to involve the persuasion and organization of people to change from what they are used to doing.

David Needle(1989) puts forth two significant claims i.e. Human Resources Management is distinctive in nature and managing human resources is not the responsibility of any particular individual / group in the organization, rather it is the responsibility of each and every member of the organization to conduct and manage

all of them. Further to this the researcher opines that the Human Resources Management practices of an organization needs to be looked at a framework where the complexities of managing people are worked out in a pragmatic way. T.V. Rao, Raju Rao, and Tara Yadav(2001), have comprehensively examined various HR frameworks in use in firms in Asia and abroad. Significantly, they have mentioned one framework which has direct relevance to IT Industry, i.e., software organizations, this was developed by Curtis and his team (1995), called P-CMM Approach: People Capability Maturity Model aims at providing guidance on how to improve the ability of software organizations – to attract, develop, motivate, organize ad retain the talent needed to steadily improve their software development capability. All the models discussed by Rao are theoretical models developed by management thinkers all over the world, including the integrative model developed by Rao and Pareek, for L & T.T.V. Rao et al have discussed all these frameworks in detail and then gone on to study the current status of H.R.D. structures and practices in the Indian Industry. They have *done a scorecard study in 12 companies, which represented a variety of Indian* Corporates – representing financial services, consumer products, electronics, cement, tyres and automobiles.

In this context, we note that though` the groups of researchers have conducted a study in Indian organizations, I T industry as such was not taken into consideration. Albeit following Rao's suggestion that the usefulness of these frameworks is doubtful unless implementation problems are taken care of, the researchers in the present study get motivated to undertake the study on I T industry in India.

Catherine Truss (2001), argues that RBV is overly rationalistic, unitarist and internally focused compared with that we know about organizations from sociological institutionalism perspectives. She contends that the more recent complex adaptive systems (CAS) perspective constitutes a more promising basis upon which to advance our knowledge in this area. Falling in line with the above discussion, the researcher also firmly believes that it is not enough to consider HRM practices in the IT industry, in particular, from the Resource based view of the firm alone, since the IT industry is an evolving industry, and HR practices in such an Industry have to be necessarily strategic, dynamic and flexible in nature, considering the changing business environment.

Persis Mathias (2001), states that it is hard work engaging Indian Software talent by the software industry, which is a spawning ground for IT professionals. It is also a stalking ground for companies on the hunt for prized talent which means that companies here must work extra hard to hold on to their key people. Retention of employees then is a major task before HR personnel managers. AMR (attract, motivate, retain) is a big concern in IT industry. According to the Hewitt survey done on the software companies in Bangalore, in order to meet the domestic and international demand for computer software, India plans to enhance its IT workforce to half a million personnel by 2006. The most recent statistics show that 19 of the 26 stage governments have already announced IT policies and many others have formed high level task force. Nevertheless, initiatives by the Government have proven slow to match the reality that there just aren't enough experienced IT workers to go around. Persis says that companies were often forced to place junior professionals in roles that they are not adequately qualified to manage. This has resulted in a number of problems for companies in terms of leadership, people

management, project management, client interaction and good domain knowledge. Training function assumes an important role here. Owing to talent shortage, companies are forced to groom junior professionals to take on management roles; these companies therefore focused on building capabilities in terms of leadership, people management, project management, client interaction and good domain knowledge – great emphasis is therefore placed on training and providing quick and steep growth paths.

According to this survey IT companies are doing anything and everything they can to keep hold of their best employees. Almost all companies position their people in the top quarter of the market. High performers and those with critical skills are put on an even higher pay scale – salary increases but an average of 25% employees are trying to create an environment that makes the company a best place to work. Sports and gym facilities, concierge services, high-end tools and technology are some of the other benefits these companies offer to retain their people. Some of the larger companies have also built a brand name for themselves that in itself helps to attract and retain talent. The survey recommends that employers should widen their scope from retention to engaging employees.

We surmise from this article that HR practices have necessarily to be strategic and build a culture in the organization that will foster innovation and keep the employees engaged and feel a sense of "belongingness" in the organization.

Tom Siekel (2002), argues that the advocates of Customer Relationship Management (CRM) have moved on to Employee Relationship Management (ERM). In fact there is software developed for the same purpose. "Siebel systems"-a soft ware product, concentrated on internal employee relationship management. This was a futuristic product, and the need of the day, where Human Resource is recognized to be the resource which will yield rich returns for a company. He states that today, a new relationship has been defined between employer and employee. It can be described as a contract through which individual needs and those of the organization are balanced. The role of leadership is to create an environment where employees take responsibility for their own learning.

This paper corroborates our contention that today the most important resource is the "people" resource and to retain good people it is necessary to have a conductive environment of trust and openness. Flexibility of HR practice is essential if empowerment and accountability are to be granted to the employees.

Kiran Karnik (2002), in the NASSCOM white papers, gives a comprehensive backdrop to the software industry in India. He talks about it being one of the fastest growing sectors in India, with a compounded annual growth rate in excess of 50%. Despite the global recession and competition emerging from countries such as China, Russia, Ireland and Israel, the Industry is likely to grow by 30%. An important contributory factor according to him has been the supportive and progressive framework provided by government policies. Though Indian IT Industry is doing well, the world wide economic show down has certainly had its impact. The statistics they provide show the growing importance of the information technology industry as we are now moving into the 4th wave – i.e. "The Knowledge Era" and the practice of HR in a knowledge driven era has assumed greater significance since we are looking

for knowledge workers today, and hence management of people has become extremely important.

Therefore, the present study concentrates on 3 pivotal functions of HR – to attract talent / people – recruitment & selection, training and development, and compensation and retention.

From the above review of literature it can be observed that many of the researchers have argued that HRM as such plays a vital role in the organization's affairs, Secondly, various components of HRM are significant and this was studied by the researchers in piece meal, meaning thereby, if a particular researcher studies the aspect of training the other researcher claims that compensation is important. All of them have taken into account either recruitment & selection or training & development or & development in piecemeal. Thirdly , two of the empirical studies, which the present researcher has studied above certainly pertain to one or the other dimensions of HRM practices not to all the aspects of HRM which the researcher proposes and also those studies are general ones not of particular cluster of IT industry. As such the researcher observes that no such integrated empirical study to HRM practices of IT industry has been made earlier.

We have perceived a gap where we aim to undertake a critical study on the current practices in HRM in IT industry in India. Thus, it is a an empirical and critical study and which, at the end makes certain observations on the three seminal areas of HRM i.e. Recruitment & Selection, Training & Development and Compensation & Retention and concludes with an examination of the proposed hypotheses.

3. Objective and Hypotheses

We perceived a gap in the literature review, on the basis of which we undertook a critical study of the HRM Practices in the IT Industry; it is a an empirical and critical study which, at the end, makes certain observations on the three seminal areas of HRM i.e. Recruitment & Selection, Training & Development and Compensation & Retention and concludes with an examination of the proposed hypotheses. The objective of the present study is to make a critical study of Human Resource Management Practices in Information Technology Industry

Hypotheses of the Study

Hypothesis I: The Human Resource Management Practices in Information Technology Industry are more likely to be complex in nature

By 'complex' the researcher means to say that HR practices in Information Technology Industry with respect to recruitment and selection, training and development, and compensation and retention are closely tied up with business policy and goals of the organization. The goals of HRM could be subjected to quantitative and strict performance measures as in the marketing or production department of an organization, in fact, the strategic tools could be used to measure performance in HRM

Hypothesis II: The Human Resource Management Practices in Information Technology Industry are more likely to be adaptive in nature

'Adaptive', in the present research work denotes that HR Practices in Information Technology industry do not freeze their policies over a long period of time. They are

able and open enough to respond to changes in the business environment. In other words, the HRM practices in this industry are in constant flux and are evolving in nature because this industry is young and growth is fast and stupendous.

4. Methodology

4.1 Sample

A list of 129 information technology companies operating throughout India, but having operations in Pune (following the directory 200-01 published by EFY, Hyderabad), was drawn out by the researchers. Out of 129 companies only those companies having more than fifty employees i.e. 94 of them were identified and questionnaires were sent to them. After repeated attempts, out of these 94 companies, 36 companies responded, many of them not responding to all of the questions. To make the study useful, we decided to cut down the sample size to 10% of the total, i.e. 15 companies. Further, the issues are so dynamic that during the study the researchers observed that they keep on floating quite often. Thus, delay in getting the data may affect the whole idea of conducting the research. In this way, on the basis of convenient sampling on 10% of IT companies, 15 companies were considered for the purpose of the current research work.

There were three important determinants of the sample size:

i IT companies who are having operations all over India but having units in Pune too.
ii IT companies having more than 50 employees
iii Cooperation from the representative of the department

i,Collection of Primary Data

The primary data was collected from the selected IT companies by conducting a survey[16] with the help of two important tools i.e. i) questionnaire and ii) interview

ii.Collection of Secondary Data

The secondary data was collected from the following sources

1 Reference Books
2 Journals
3 Company Manuals
4 Websites

We have done a qualitative study of 15 Information Technology companies after collecting field data- the respondents being the representatives of HR departments of the chosen companies.

Statistical Tools used

The tools of descriptive statistics have been used which are as follows:

1 Classification
2 Tabulation
3 Percentile calculations
4. Chi Square Test

4.2 Measures and Procedure

The Information Technology industry is a service industry. Hence the success of

such an industry is always dependent upon its ability to offer quality service to individuals and organizations. From this point of view what is very important to the IT Industry is the creativity, innovativeness, knowledge and skills of the employees who are the assets to it. The challenges to information technology industry therefore arise from its nature. Neither marketing nor financial nor even capital management; but human resource management- rather the ability to manage the human resources whose intellectual applications drive the business of information technology industry, is the challenge.

Breaking down this challenge of human resource management into its components, we propose that the thrust areas of concern in HRM as a whole are recruitment, training & development, performance management & retention of the human assets of the industry. In the following few lines, the researcher makes an attempt to delineate each of these components it is essence.

Thus the Variables measured are: *Recruitment & Selection, Training & Development, and Compensation & Retention* Under each of these chosen variables there are dimensions which are measured. The researchers have come up with 18 such dimensions.

Recruitment is the most crucial aspect of Human Resource Management of any organization as such and it is all the more important in Information Technology industry. It is essential that the best of talents available in the market are drawn to the organization and in turn the industry develops a system to match the skills and knowledge of the people recruited to the kind of desirable requirements of the industry as such. This is the most important amongst all i.e. Primus inter parus for the simple reason that the majority employees of an information technology industry as such are intellectuals i.e. talent driven employees.

Whoever the talents recruited, they assumedly, have the basic knowledge and skills which might best fit to the organizational requirement. What is now demanded is that there needs to be proper input to them which is individual specific and job specific. This brings us to the second important component i.e. training & development of the professionals working in the industry, for that is the input which helps the people in making them competent to handle responsibilities which they are supposed to do in their respective professional capacities.

The third significant area of concern for Human Resource management group is the challenge of retaining the people who are recruited and developed. In other words, retention of the employees of an I.T. organization is very crucial, for this too directly has a bearing with the growth and development of the organization. In information technology industry it is all the more challenging for all 'intellectual manpower' are heavily in demand in the job market with equally rather more than equal offer to the person who is having the relevant skill sets with adequate profile and experience.

Thus, the researcher observes that recruitment, training & development and retention are the three significant areas in Human Resource Management of an Information Technology industry.

There exists a possibility of preparing an exhaustive list of practices of HRM, but all these practices, from the point of view of the present research work, can be grouped under three broad headings, viz, 1) Recruitment and Selection, 2) Training

and Development, and 3) Compensation and Retention .Further, the variables under each set of practices can be grouped with reference to their complexity and adaptability ,as follows:

Variables of Complex HRM Practices in IT Industry

Recruitment & Selection

1 Vision of the Management
2 Well- Defined Job Responsibility
3 Offering Job plus Education
4 Fairness in the Process
5 Catch-them-young scheme
6 Bring Your Buddy(BYB) scheme

Training & Development

7 Bench cost for Induction & Training
8 On the job training
9 Technical/Behaviour training
10 Stress
11 Skills & Project centric
12 Outdoor Management Development Programme(OMDP)

Compensation & Retention

13 Above average salary
14 Office Ambience
15 Involvement in Management decision making
16 More non salary benefits
17 Employees relationship management
18 Transparent appraisal system

Variables of Adaptive HRM Practices in IT Industry

Recruitment & Selection

1. Project Dependent
2. Sourcing as per the current requirement
3. Forecast on projects
4. Referral Recruitment
5. Online Tests
6. Telephonic Interviews

Training & Development

7. Freedom for project Execution
8. Variety of assignments
9. No Close Supervision
10. Choice on working on projects and learn
11. Training as per requirement
12. Flexible Trainer's Choice

Compensation & Retention

13. Scope for Creativity on the job
14. Work Platform of Choice
15. Flexi-Timings
16. Equal Opportunity for Growth
17. Options to work in Domestic /Global units
18. Housing/Vehicle/Entertainment Allowances/Loans.

5. Results

The first Hypothesis which was proposed by the researchers was as follows:

Hypothesis I: *The Human Resource Management Practices in Information Technology Industry are more likely to be complex in Nature*

In order to prove the hypothesis, we studied 18 dimensions of the variables as mentioned above based on three aspects of HRM practices of IT Industry in India, viz, Recruitment & Selection, Training & Development and Compensation & Retention. The study was carried out in 15 IT companies having their units in Pune with an employee base of more than 50. The Primary data was collected by means of questionnaire and personal interview technique. The collected data was then classified and tabulated.

The second hypothesis, which we proposed was as follows:

Hypothesis II: *The Human Resource Management Practices in Information Technology Industry are more likely to be Adaptive in nature*

Again, to prove this hypothesis, we studied a second set of 18 dimensions under the Variables mentioned above, which covered all the three aspects of HRM practices of IT Industry in India, viz, Recruitment & Selection, Training& Development, and Compensation & Retention. The research methodology deployed was the same as in the case of the first hypothesis.

The collected data was classified and tabulated.

Sr.No.	Variables	Companies in Number	Companies in %
1	Vision of Management	15	100
2	Well defined job responsibility	15	100
3	Offering Job plus Education	4	26.67
4	Fairness in the process	15	100
5	Catch-them-young scheme	11	73
6	BYB scheme	5	33.33
7	Bench cost for Induction and Training on job	10	66.67
8	On the job Training	15	100
9	Technical /Behavioral Training on IPS	15	100
10	Stress	11	73.33
11	Skills and Project Centric	15	100
12	OMDP	9	60
13	Above Average Salary	11	73.33
14	Office Ambience	10	66.67
15	Involvement in Management Decision Making	15	100
16	More non-salary benefits	10	66.67
17	Employees Relationship Management	15	100
18	Transparent Appraisal System	15	100

Figure 1: *Complex HRM Practices*

Sr.No.	Variables	Companies in Number	Companies in %
1	Project Dependent	15	100
2	Sourcing as per the current requirement	15	100
3	Forecast on projects	5	33.33
4	Referral Recruitment	8	53.33
5	Online Tests	9	60
6	Telephonic interviews	13	86.67
7	Freedom for project execution	9	60
8	Variety of Assignments	9	60
9	No close supervision	12	80
10	Choice on working on project & learn	12	80
11	Training as per the requirement	15	100
12	Flexible Trainer's Choice	9	60
13	Scope for creativity on the job	11	73.33
14	Work Platform of Choice	12	80
15	Flexi-Timings	11	73.33
16	Equal Opportunity for Growth	15	100
17	Options to work in domestic or global unit	10	66.67
18	Housing/Vehicle/Entertainment Allowances/Loans	11	73.33

Figure 2: *Adaptive HRM Practices*

6. Discussion

Hypothesis-I

In the context of Complex HRM practices ,after performing percentile calculation it was found that 100% of the companies, i.e. all 15 complied with the vision of the management, well defined job responsibility , fairness in the process, on the job training, Technical/Behavior training on interpersonal skills , Skills & Project centric, Employees Relationship management and Transparent appraisal system i.e,1^{st}, 2^{nd}, 4^{th}, 8^{th}, 9^{th}, 11^{th}, 17^{th} and 18^{th} variable of complex HRM practices respectively. 73% of companies complied with Catch-Them- Young scheme, stress and above average salary i.e,5^{th},10^{th} and 13^{th} variable respectively, while 66.67% of companies complied with Bench cost for Induction& Training, Office Ambience, Involvement of in Management decision making and More Non- Salary benefits, i.e. 7^{th},14^{th},15^{th} and 16^{th} variables respectively. About 30% companies follow the Offering Job plus Education and BYB Scheme i.e., 3^{rd} and 6^{th} variable as a part of their HRM Practices.

Analyzed by Chi_Square[20] test the results are in conformity as well. From these findings, how far the first hypothesis is concerned, it can be concluded that majority of the companies practice such HRM practices.(out of 18 variables, except offering job plus education and BYB scheme,i.e,3^{rd} and 6^{th} variables, only which scored 26% and 33% respectively, rest all variables scored more than 6o%), which can be termed as complex in nature. Hence the hypothesis as stated earlier is proved.

Complex (HRM Practices)

	N	Mean	Std. Deviation	Chi Square
Vision of Mgmt	15	2.0000	.0001	15.00***
Job Responsibility	15	2.0000	.0001	15.00***
Job Plus Education	15	1.2667	.45774	3.26
Fairness in Process	15	2.0000	.0001	15.00***
Catch Them Young	15	1.7333	.45774	3.26
BYB	15	1.3333	.48795	1.66
Bench Cost	15	1.6667	.48795	1.66
On Job Training	15	2.0000	.0001	15.00***
Behavioral Training	15	2.0000	.0001	15.00***
stress	15	1.7333	.45774	3.26
Skill and Project	15	2.0000	.0001	15
OMD	15	1.6000	.50709	0.60
Above Av.Salary	15	1.7333	.45774	3.26
Office ambience	15	1.6667	.48795	1.66
Decision Making	15	1.6667	.48795	1.66
Non-salary Benefits	15	1.6667	.48795	1.66
Employee Relationship	15	2.0000	.0001	15
Appraisal System	15	2.0000	.0001	15.00***

Hypothesis-II

In so far as the second hypothesis is concerned, as depicted in the earlier section, after performing percentile calculations it was found that the Project Dependant, Sourcing as per the current requirement, Training as per the requirement (i.e. 1st, 2nd, 11th) variable of Adaptive HRM Practices are practiced in all 100% i.e. 15 companies.

More than 70% of the companies complied with Tele Interviews, no Close Supervision, choice in Working on projects and Learn, Scope for Creativity on the job, Work Platform of Choice, Flexi Timings and Housing/Vehicle/Entertain Allowance loan i.e. 6th,9th,10th,13th,14th,15th, and 18th variable respectively .

About 60% of companies complied with Online Tests, Freedom for Project Execution, Variety of Assignments, Flexible Trainers' choice and Options to work in domestic/global units i.e., 5th,7th, 8th 12th, and 17th variable respectively. Forecast on projects and Referral recruitment i.e., 3rd and 4th variable are followed by 33.33% and 53.33% of the companies respectively as a part of their HRM practices.

Analyzed by Chi-Square test the results are in conformity as well. Thus, it can be said that majority of the companies do follow such HRM practices which can be termed as adaptive in nature. (Almost all variables score more than 60% except forecast on Projects and Referral recruitment i.e. 3rd and 4th variable). Hence the hypothesis as stated earlier is proved.

Adaptive (HRM Practices)

	N	Mean	Std. Deviation	Chi Square
ProjectDepd	15	2.0000	.01	15.00***
Sourcg	15	2.0000	.01	15.00***
Forecast	15	1.3333	.48795	1.66
RefRecruitmt	15	1.4667	.51640	0.06
OnLineTest	15	1.5333	.51640	0.06
TeleInterview	15	1.8000	.41404	5.40*
Freedmproject	15	1.6000	.50709	0.6
VarietyAssgnmt	15	1.6000	.50709	0.6
NoClosesuprvn	15	1.8000	.41404	5.40*
Choice	15	1.8000	.41404	5.40*
Traing	15	2.0000	.01	15.00***
FlexibleTrainer	15	1.6000	.50709	0.6
Creativity	15	1.7333	.45774	3.26
Work Platform	15	1.8000	.41404	5.40*
Flexitimng	15	1.7333	.45774	3.26
Growth Opportunity	15	2.0000	.01	15.00***
OptionsToWork	15	1.6667	.48795	1.66
Housing	15	1.7333	.45774	3.26

7. Conclusion and Implications

It can be concluded that the majority of the IT companies sampled, practice such HRM practices that are *complex* in nature and a majority of the IT companies do follow such HRM practices which can be termed as *adaptive* in nature. The CAS Perspective of HRM Practice in IT Companies is thus validated. In the light of the above observations, it can be suggested that offering job plus education referral recruitment, Online and open house tests(in case of recruitment & selection), flexible training choice, skills & project centric training (in case of training & development) and lastly, transparent appraisal system, above average salary, more non-salary benefits,flexitiming and opportunity for growth are some of the selective practices which, if followed with rigor, would help managing better, the human resources of an IT company.

The Study has certain limitations as only 15 IT Companies were surveyed of a universe of 129 companies which were chosen as per the sample determinants mentioned in the study. The results and discussion pertain to these 15 companies who responded wholly. But, considering the nature of the IT Industry, the result for the 15 companies would surely be the same for the Industry as a whole.

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