

A Study of Classification of Employees in IT companies on how they perceive impact of HR practices

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Abstract— Human Resources are key to the success of any organization. Employees or human resources bring in with them essential skills and competencies which ensure organization achieves goals. Different employees perceive HR practices in a different manner depending on how those impact them. While, implementation of HR practices is same across the organization, the impact of practice and its influence on different employees in the organization would be different. In this paper, we try to classify employees of IT companies based on how they see the impact of HR practices. This study was conducted with 524 employees of 51 IT organizations across 8 cities in India. HR practices like Training and Development, Recruitment, Compensation, Rewards and Recognition, Work-life balance and Employee Engagement were studied. Cluster Analysis of the respondents helps us classify them into different groups based on how they perceive the impact of HR practices.

Keywords— Human Resources, Impact, Employee Classification, IT companies, HR Practices, Cluster Analysis, Respondents

I. INTRODUCTION

Human resources and the study of HR practices have been a part of management theories for several decades. The advent of the subfield of strategic human resource management (SHRM), devoted to exploring HR's role in supporting business strategy, provided one opportunity for demonstrating its value to the firm. The birth of the field of strategic human resource management can be dated back to 1984, when Devanna, Fombrun and Tichy extensively explored the link between business strategy and human resources.[1] HRM discipline has witnessed a great deal of change over the past 25 years. These changes represent two major transformations. The first is the transformation from being the field of personnel management to being the field of human resource management. The second is the transformation from being the field of human resource management to being the field of strategic human resource management. [2] The first transformation incorporated helped the recognition that people are an important asset in organizations and can be managed systematically. The second transformation has built on the preceding knowledge base of the discipline. This transformation is based upon the recognition that, in addition to coordinating human resource policies and practices with each other, they need to be linked with the needs of the organization. Given that these needs are reflected in the strategies of the firm, this transformation of "human resource management" came to be known as "strategic human resource management". Strategic human resource management is based upon the recognition that organizations can be more effective if their human resources are managed with human resource policies and practices that deliver the right number of people with the appropriate behaviours, the needed competencies and the necessary level of motivation to the organization. To put it another way, strategic human resource management is "the creation of linkage or integration between the overall strategic aims of business and the human resource strategy and implementation. In principle, the processes and people within the company are managed in such a way as to foster the aims of the business strategy and create an integrated approach to managing the various human resource functions, such as selection, training and reward so that they complement each other".[3]

Strategic human resource management may bring a number of benefits to the organization: [4]

- Contributing to the goal accomplishment and the survival of the company,
- Supporting and successfully implementing business strategies of the company,
- Creating and maintaining a competitive advantage for the company,
- Improving the responsiveness and innovation potential of the company,
- Increasing the number of feasible strategic options available to the company,

Participating in strategic planning and influencing the strategic direction of the company as an equally entitled member of top management, improving cooperation between the HRM department and line managers.

SHRM's widespread popularity owes much to the promise of higher organizational effectiveness achievable, through the nurturing of internally reliable bundles of human resource strategies which are appropriately linked to business strategies. [5]

Technology sector has been a key factor of India's growth and contributed immensely to the services sector in India. While individual HR practices have been studied, this study combines several HR practices and tries to discern the impact of these practices individually and in totality on the organizational performance of the IT companies in India. The following HR practices were studied during the course of this research:

1. Training and Development
2. Rewards and Recognition
3. Performance Appraisal
4. Work-life balance

5. Compensation and Benefits
6. Employee Engagement

The respondents were then classified based on their inputs for the aforementioned six HR practices. The cluster analysis of the data primarily helps us put the respondent base into two clusters – those who rate organizations High on their HR practices and those who rate their organizations Low on HR practices. We are able to also get analysis at an item level for each of the HR practice. Each of the HR practices has been evaluated on a five point likert scale with several items whose average gives overall score of each HR practice.

II. LITERATURE REVIEW

HRM practices are a way of attracting, motivating, and retaining employees to ensure the success of any organization (Schuler and Jackson, 1987). HRM practices are designed and implemented in such a way that human capital plays a significant role in achieving the goals of the organization (Delery and Doty, 1996). The appropriate use of HRM practices positively influence the level of employer and employee commitment (Purcell, 2003). HRM practices such as, training and development, performance appraisal encourage the employees to work better in order to increase the organizational performance (Snell and Dean, 1992; Pfeffer, 1998). The practices selected for this study are based on their importance in relation to the industry selected for this analysis. The practices used in this study are listed and defined as follows:

1. **Training and Development:** Training is a methodical process that enables employees to imbibe knowledge and attain skills in order to achieve their tasks effectively and efficiently with the end result being improvement in the behaviour (Armstrong, 2006). Development is typically used in management parlance to denote the identification of development needs of managerial level employees and preparing and executing developmental plans. Training and development certainly affirmatively contribute towards organizational growth. Training refers to the methods used to develop skills in the employees required to perform the job (Dessler, 2008). Most organisations consider training and development as an important factor of the human resource activity. Training can be used as a mechanism to enhance employee's performance by nurturing and developing knowledge and skills. Training can be described as an endeavour to develop additional competencies needed today or in future in order to increase the level of employee's performance (Jackson and Schuler, 2000). Training can be used as an effective tool to increase efficiency and effectiveness of employees in order to increase organizational performance (Cook and Hunsaker, 2001). Extensive training programs are conducted by organizations to enhance the employee's performance in order to achieve strategic advantage over competitors (Brown, 2005). Training programs play a significant role in achieving organizational goals (Dobson and Tosh, 1998). A desired change can be attained in employees' performance by providing them proper training (Huselid, 1995). Kirkpatrick's Model was also studied to design the questionnaire. The model refers to 4 areas of training evaluation namely, Reaction, Learning, Behaviour and Results. This research typically focuses on the results part and training methodology as well setup. Organizations can develop and enhance the quality of the current employees by providing comprehensive training and development. Indeed, research indicates that investments in training employees in problem-solving, teamwork and interpersonal relations result in beneficial firm level outcomes (Barak et al., 1999).
2. **Recruitment and Selection:** Recruitment refers to the process of announcing and advertising for the open positions within the organization. This could be internal recruitment as well as external recruitment. Recruitment sets the stage for describing the job and the skills and knowledge required to do the job as well as detailing who would be the right candidate to apply for the job. Selection refers to the process of shortlisting and finalizing the candidate to be hired through several stages. Selection process could entail written tests as well as tasks and interviews to assess and shortlist the candidate. Both recruitment and selection form an important part of HR practices since this involves getting the right fit for the job at hand. A right candidate at the right time in the right job can work wonders for the organization. At the same time, the cost of having a wrong candidate could be multi-fold and not only impact the organizational performance but also at time impact the image of the organization both internally and externally. Hence identifying the right candidate for the right job becomes critical to the success of the organization. A rigorous selection system generates a sense of elitism, creates high expectations of performance, and signals a message of importance of the people to the organization (Pfeffer, 1994). The mismatch between the person and the job can hamper performance levels, whereas a sophisticated selection system can ensure a better fit between the person's abilities and the organization's requirement. Also, selection has been found to be positively related to firm performance (Terpsra and Rozell, 1993).
3. **Performance Appraisal System:** 'What gets measured, gets done' is an important management concept and rightly so. An organization is as good as its employees and if performance of the organization has to be evaluated, performance of its employees should be evaluated. Performance Appraisal System is an essential mechanism of identifying performance parameters, communicating and aligning them to the key result areas of an employee and measuring them after a definite time period. Performance management hence becomes core to the performance of the organization. Several methods are employed to appraise employees of their performance. These include MBO (Management by Objectives), 360o feedback, descriptive essay method, bell curve, forced ranking, etc. Objectivity in appraisal process is often compromised which results in subjective evaluation of performance and hence inappropriate feedback and expectations. This results in dissatisfied employees or employees living in a state of falsehood. Organizations which employ a robust process around

employee performance appraisal are able to objectively communicate the performance feedback to the employees. Also continuous assessment of performance works better than a yearly feedback system minimizing the recency bias.

4. **Work Life Balance:** Work-life balance (WLB) refers [6] to the ability of individuals to pursue successfully their work and non-work lives, without undue pressures from one domain undermining the satisfactory experience of the other. A “good” work-life balance is defined as a situation in which workers feel that they are capable of balancing their work and non-work commitments, and, for the most part, do so [7]. Work and family are the two most important domains in a person’s life. Work-life balance is a major aspect of the quality of work and life of individuals and couples trying to manage multiple roles. In India, organizations have recognized the need for and value of Work-Life Balance policies.
5. **Compensation and Benefit:** Compensation is the end benefit that employees receive in the form of pay, wages and also some rewards like monetary exchange for the employee to enhance the Performance(Holt,1993). The compensation process is crucial and a source of contention in most organizations. It deals with rewarding people in accordance to their value in the organization. The same process is concerned with both financial and non - financial rewards. It embraces the strategies, philosophies plans and processes employed by organizations to develop and maintain reward systems. A compensation package does not necessarily mean rewarding in the monetary form. It also includes flexible benefits, medical care, work-life balance, as well as employee perks. Today’s employees not only work for the money, but also place equal emphasis on other aspects of compensation. A good compensation package ensures:
 - Retention – A compelling compensation plan helps to reduce the turnover rate of the company. Employees will be more incentivized to stay in their role and this saves potential expenses related to turnover.
 - Motivation – Compensation is the primary motivating factor for employees to continuously push themselves to strive for greater heights. It offers them a reason to work hard and keep driving towards achieving the next milestone.

On the other hand, employee performance and efficiency can be drastically affected if a good compensation package is absent. Here are a few reasons why:

- Low job satisfaction – Employees will feel underappreciated and derive low satisfaction from their job. This may lead to discontent amongst co-workers and put a dent in workplace morale.
 - Low productivity – Poor compensation induces low productivity. There is less motivation for employees to strive for excellence
 - High turnover – If the reward versus effort ratio is low, employees are incentivized to cast their sights away from their current job. Employee churn incurs a hefty cost to the company (retraining, relocating and time wasted).
6. **Employee Engagement:** Engagement is defined as the “harnessing of organization members’ selves to their work roles” (Kahn, 1990, 694). When engaged, organizational members express themselves cognitively, behaviourally, and emotionally during role performance (Kahn, 1990; Shuck and Wollard, 2010). In contrast, personal disengagement refers to the “uncoupling of selves from work roles,” during which process people withdraw and defend themselves physically, cognitively, or emotionally while performing those tasks (Kahn, 1990, p. 694). Over the past two decades, significant efforts have been made by scholars to study engagement and by practitioners to develop organization development (OD) related interventions to raise the levels of engagement among organizational members. Such strong interest is not surprising, given that engagement has been shown to be related to a number of important organizational outcomes such as job satisfaction, organizational commitment (Saks, 2006), organizational citizenship behaviour (Rurkkhumand Bartlett, 2012; Saks, 2006); intention to turnover (Shuck et al., 2011); and performance (Kim et al., 2012).

III. Research Objectives

The research was carried out with the following objectives:

1. To identify the employee response towards different HR practices.
2. To classify the respondents into clusters based on their inputs for HR practices.
3. To study the cluster centres based on the responses for HR practices.

IV. TESTING INSTRUMENT

The methodology used to arrive at the results was as following:

Phase 1:

- A pilot study using a survey questionnaire was conducted with 80 respondents of 4 different IT organizations in Delhi NCR.
- Focus group study was conducted with members of 2 organizations comprising of 10 members each.

Phase 2:

- Based on the inputs from focus group and analysis of the pilot survey, the questionnaire was further refined to incorporate parameters aligning to different HR practices.
- The questionnaire was administered in physical paper format and over google form survey. A total of 524 survey questionnaires were administered covering 8 cities and 51 companies.

V. ANALYSIS

TABLE I

STATISTICS

		Age	Gender	Marital Status	Income	Legal Status
N	Valid	524	524	524	524	524
	Missing	0	0	0	0	0

The data was filled in by 524 respondents. The demographics captured were Age, Gender, Marital Status, Income and Legal Status.

TABLE III

AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	307	58.6	58.6	58.6
	2.0	200	38.2	38.2	96.8
	3.0	17	3.2	3.2	100.0
Total		524	100.0	100.0	

The age data was taken in different intervals with '1' being '20-30', '2' being '30-40', '3' being '40-50'. As per the analysis of the data, maximum respondents were in the age bracket of 20-30 years which is 307 respondents (58.6%). This also reflects the trend in the IT sector where there are employees in this age group. There were 200 respondents which is 38.2% in the '30-40' years age group. A small group of respondents was in the '40-50' years age group which is 3.2%. This goes on to show the typical composition one may find in an IT company with a considerable junk of employees in the '20-40' years age bracket. It is also reflective of the fact that there is pyramid like structure followed by organizations with more employees at the junior level.

TABLE IIIII

GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	350	66.8	66.8	66.8
	2.0	174	33.2	33.2	100.0
Total		524	100.0	100.0	

The analysis of the data reveals that of the total number of respondents (524), 350 respondents which is 66.8% were male while 174 employees which is 33.2% were female.

TABLE IV

INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	176	33.6	33.6	33.6
	3	174	33.2	33.2	66.8
	4	174	33.2	33.2	100
Total		524	100	100	

The income data was also sought as an interval data from the respondents. The coding was done as '1' for 'Less than 25000', '2' for '25000-50000', '3' for '50000-75000' and '4' for 'More than or equal to 75000'. As can be seen from the data, this is quite spread out which shows that employees at all levels and salary groups have participated in the survey with participation in each being approximately equal to 33%.

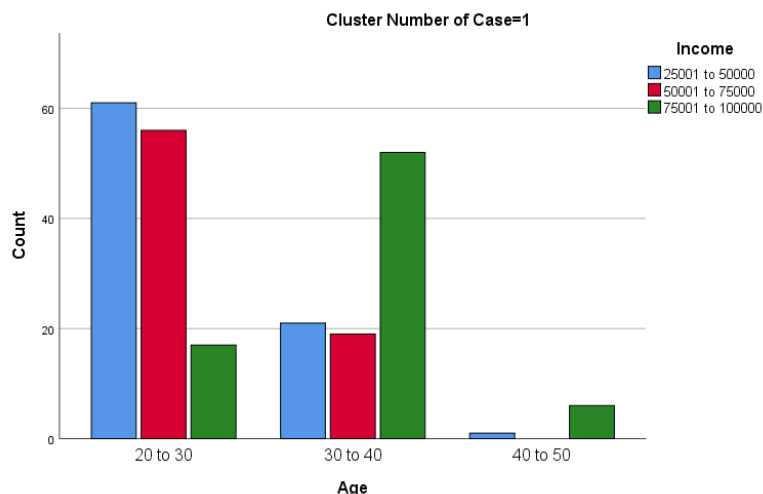
TABLE V
LEGAL STATUS

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	327	62.4	62.4	62.4
	197	37.6	37.6	100.0
Total	524	100.0	100.0	

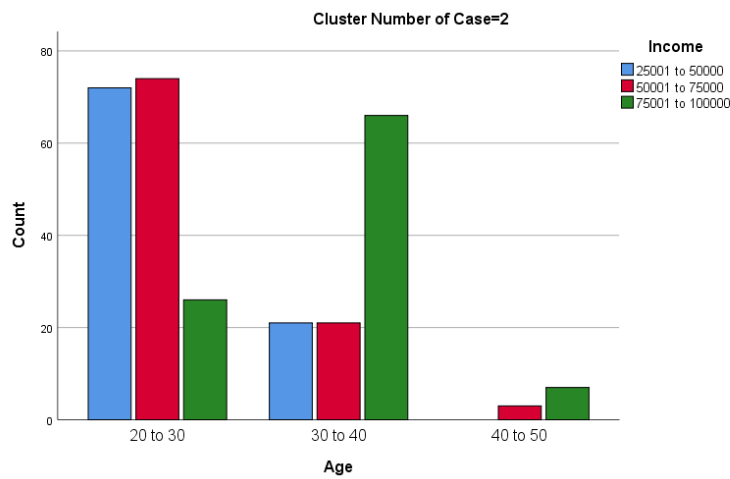
The company status was also taken and data analysed on whether the company is (1) 'Sole proprietorship', (2) 'Partnership', (3) 'Private Limited' or (4) Public Limited. The data shows that 62.4% respondents were from private limited companies while 37.6% respondents were from public limited companies. Since convenience and snowball sampling was used, this could be the reasons for employees in IT companies to be from Private and Public Limited companies. This also helps us discern that IT industry being a part of organized sector has high frequency of legal status as 'Private Limited'.

TABLE VI
CASE PROCESSING SUMMARY

	N	%
Cases Valid	524	100.0
Excluded ^a	0	.0
Total	524	100.0



Graph1: Income and Age Categorization of Cluster 1



Graph2: Income and Age Categorization of Cluster 2

Cluster Number of Case			Income			Total
			25001 to 50000	50001 to 75000	75001 to 100000	
1	Age	20 to 30	61	56	17	134
		30 to 40	21	19	52	92
		40 to 50	1	0	6	7
	Total		83	75	75	233
2	Age	20 to 30	72	74	26	172
		30 to 40	21	21	66	108
		40 to 50	0	3	7	10
	Total		93	98	99	290
Total	Age	20 to 30	133	130	43	306
		30 to 40	42	40	118	200
		40 to 50	1	3	13	17
	Total		176	173	174	523

TABLE VIII : Final Cluster Centers

Item	Questionnaire	Cluster	
		Low	High
T1	The courses provided are adequate to meet developmental goals	3	4
T2	The topics covered meet expectations of participants	2	5
T3	Sessions are organized periodically	2	4
T4	The training calendar is published in advance.	2	4
T5	Trainings provided are of sufficient duration	1	4
T6	Courses on new age technology are provided	2	4
T7	Instructors are knowledgeable	2	4
T8	Trainers are effective in delivering training	2	5
T9	Training setup provides for a comfortable learning environment	2	4
R1	The recruitment team clarified all the queries related to organization and job profile	3	4
R2	The information about the recruitment was communicated well	3	4
R3	Time management in selection process was ensured	3	5
R4	I was kept well informed about the status of my candidature	3	5
R5	The interviewers asked relevant questions	3	5
R6	Overall the recruitment process was appropriate	3	4
R7	The recruitment and selection process is unbiased	3	5
P1	Performance appraisal gives each appraisee an idea of what is expected	3	4
P2	Company's goals are communicated to the workforce	3	5
P3	The feedback provided is clearly understood.	3	4
P4	The process is timely.	3	4
P5	There is periodic review of performance.	3	4
W1	My job leaves me with enough time to pursue personal activities	3	4
W2	I spend enough time with my family	3	5
W3	I picked up a new hobby in the last 6 months	3	4
W4	My organization encourages me to take time off from work	3	4
W5	I don't tend to ignore any of my family commitments	3	5
W6	I have considerable time to socialize.	3	5
C1	I am well rewarded for my job	2	4
C2	My job gives me a good mix of financial and non-financial incentives	2	4
C3	The compensation structure is communicated well to me	3	4
C4	The policy adopted by the organization is transparent	3	4
C5	The compensation is linked to my achievements at work	3	5
C6	The goals of the company affect compensation at work	3	5
E1	I am provided with all tools essential to carry out my job	3	5
E2	My job expectations are adequately explained to me	3	5
E3	I have the opportunity to do my best every day	3	4
E4	My supervisor cares for me as a person	3	4
E5	Someone has talked to me in the last 6 months about my progress	3	5
E6	I have had the opportunity to learn and grow	3	4
E7	My opinion counts at work	3	4

The above table shows that we are clearly able to get clusters for the responses to the items depicting different HR practices. Most common cluster centres for respondents rating HR practices as 'Low' is 3 while the most common cluster for respondents rating HR practices as High is '4'.

TABLE IX : ANOVA						
Questionnaire	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
The courses provided are adequate to meet developmental goals	487.702	1	0.254	521	1923.839	0
The topics covered meet expectations of participants	781.978	1	0.192	521	4063.888	0
Sessions are organized periodically	831.83	1	0.336	521	2474.37	0
The training calendar is published in advance.	664.083	1	0.213	521	3120.135	0
Trainings provided are of sufficient duration	1091.509	1	0.205	521	5315.136	0
Courses on new age technology are provided	766.29	1	0.147	521	5206.158	0
Instructors are knowledgeable	525.266	1	0.245	521	2147.299	0
Trainers are effective in delivering training	719.321	1	0.224	521	3205.632	0
Training setup provides for a comfortable learning environment	734.806	1	0.466	521	1576.149	0
The recruitment team clarified all the queries related to organization and job profile	281.385	1	0.729	521	385.859	0
The information about the recruitment was communicated well	187.653	1	0.613	521	305.996	0
Time management in selection process was ensured	500.979	1	0.529	521	946.871	0
I was kept well informed about the status of my candidature	243.403	1	0.541	521	449.824	0
The interviewers asked relevant questions	298.093	1	0.595	521	501.159	0
Overall the recruitment process was appropriate	182.932	1	0.424	521	431.54	0
The recruitment and selection process is unbiased	236.017	1	0.631	521	374.17	0
Performance appraisal gives each appraisee an idea of what is expected	429.531	1	0.404	521	1063.074	0
Company's goals are communicated to the workforce	201.71	1	0.236	521	856.12	0
The feedback provided is clearly understood.	369.34	1	0.523	521	706.569	0
The process is timely.	180.736	1	0.241	521	751.421	0
There is periodic review of performance.	258.776	1	0.444	521	582.194	0
My job leaves me with enough time to pursue personal activities	166.183	1	0.65	521	255.565	0
I spend enough time with my family	490.433	1	0.251	521	1956.192	0
I picked up a new hobby in the last 6 months	358.22	1	0.346	521	1035.386	0
My organization encourages me to take time off from work	268.714	1	0.189	521	1424.941	0
I don't tend to ignore any of my family commitments	259.063	1	0.501	521	517.249	0
I have considerable time to socialize.	345.342	1	0.352	521	979.916	0
I am well rewarded for my job	577.114	1	0.241	521	2393.681	0
My job gives me a good mix of financial and non-financial incentives	474.911	1	0.248	521	1914.297	0
The compensation structure is communicated well to me	284.963	1	0.464	521	613.84	0
The policy adopted by the organization is transparent	199.062	1	0.2	521	994.364	0
The compensation is linked to my achievements at work	540.284	1	0.253	521	2135.907	0
The goals of the company affect compensation at work	359.68	1	0.332	521	1084.557	0
I am provided with all tools essential to carry out my job	587.44	1	0.391	521	1503.933	0
My job expectations are adequately explained to me	351.111	1	0.209	521	1681.14	0
I have the opportunity to do my best every day	126.205	1	0.262	521	481.022	0
My supervisor cares for me as a person	341.843	1	0.219	521	1559.664	0
Someone has talked to me in the last 6 months about my progress	392.65	1	0.199	521	1972.17	0
I have had the opportunity to learn and grow	34.753	1	0.371	521	93.706	0
My opinion counts at work	169.211	1	0.355	521	476.686	0

The ANOVA table above shows that the cluster classification is significant with significance value being 0 (<0.05).

TABLE X: Distances between Final Cluster Centers		
Cluster	1	2
1		11.232
2	11.232	

The above table shows that there is a considerable distance between the cluster centres of the two clusters which is 11.232.

Cluster	Low	233
	High	290
Valid		523
Missing		1

The above table shows that of the total respondent base of 524, 523 entries are valid while 1 is shown to be missing. It also tells us that the two clusters have almost similar cases favouring their membership of the cluster with 233 responses being a part of the Cluster 'Low' where respondents have rated their company's HR practices as low while 290 responses are grouped into cluster 'High' signifying that 290 respondents have rated their company's HR practices as high.

VI. FINDINGS AND CONCLUSION

The above results show we are able to clearly classify the respondents into two clusters – those who have rated the HR practices as 'Low' have their cluster centres near to '3' which is 'Neither Agree Nor Disagree' while those who have rated HR practices as 'High' have their cluster centres near to '4' which is 'Agree'. The ANOVA results also show that the cluster classification is significant. The clusters also show a significant cluster centre distance of 11.232 signifying that there is a clear demarcation of respondents into the two clusters and very little or no overlap. The cluster size is also almost similar, with cluster 'Low' having a membership count of 233 while cluster 'High' having a membership count of 290 respondents. We can hence clearly demarcate the respondents and classify them into two separate groups or clusters.

VII. SCOPE FOR FURTHER RESEARCH

This study covers several HR practices and classification of respondents into clusters based on their rating of the HR practices in their respective organizations. Further research can devise clusters based on demographics and rating of practices as High or Low. Study on location specific behaviour can also be studied. The study would then be able to tell us on which cities show diversity within the cluster of employees. Also company specific research can be carried out to see if there exists clusters of employees within the same organization based on demographics or location. This will then give insights into devising HR practices specific to the region or employee base.

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REFERENCES

- [1] Wright, Patrick M., Dunford, Benjamin B., Snell, Scott A., (2007). "Human Resources and Resource-Based View of The Firm", in: Randall S. Schuler, Susan E. Jackson, Strategic Human Resource Management, 2nd Edition, Blackwell, USA, p.76.
- [2] Schuler, Randall S., Jackson, Susan E., (2007). Strategic Human Resource Management, Blackwell Publishing, USA, p.xiii.
- [3] Gratton, Lynda et al., (1999). Strategic Human Resource Management, Oxford University Press, New York, p.7.
- [4] Brewster, Chris et al., (2000). Contemporary Issues in Human Resource Management: Gaining a Competitive Advantage, Oxford University Press, Cape Town, p. 56.
- [5] Dyer, Lee, Reeves, Todd.(1995). "Human Resource Strategies and Firm Performance: What Do We Know and Where Do We Need To Go?", The International Journal of Human Resource Management 6:3, p.657, pp.656-670.
- [6] M. Noon, and P. Blyton, The realities of work-experiencing work and employment in contemporary society (Hampshire: Palgrave, Macmillan, 2007, 3rd ed.).
- [7] F. Moore, Work-life balance: contrasting managers and workers in an MNC, Employee Relations, 29(4), 2007, 385-399.