



A STUDY ON IDENTIFICATION OF EMPLOYEES' FACTORS FOR EFFECTIVE IMPLEMENTATION OF HUMAN RESOURCE (HR) PRACTICES IN IT SECTOR

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Abstract

The Indian IT sector has 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 exploratory factor analysis shows that efficiency, enhancement, comfortability and intimacy are the employees' factors for effective implementation of Human Resource (HR) practices in IT sector. The results indicate that there is a significant difference between socio-economic characteristics of the employees and employees' factors for effective implementation of Human Resource (HR) practices. The regression analysis shows that efficiency, enhancement, comfortability and intimacy are positively and significantly influencing the overall implementation of Human Resource (HR) practices in IT sector. The IT companies should make their employees comfortable in their respective companies through adopting quality HR service, proper manpower planning, providing adequate benefits and transparent performance appraisal mechanisms.

Key Words: Employees' Factors, Exploratory Factor Analysis, HR Practices, IT Sector, Regression.

1. INTRODUCTION

The Indian IT sector has 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 (Heeks, 2006).

Despite its importance, recruiting is often quite problematic due to limited financial and material resource, lack of legitimacy as an employer-of-choice and the high number of jobs where employees typically perform multiple roles with unclear boundaries and job responsibilities. Further, although IT companies may need to acquire additional employees to fuel their growth, often recruiting strategies are sporadic or ad hoc (Sveiby and Simons, 2002).

The considerable transformations in HR practices do take place after company's inception, and that there is much left to understand about how managers decide when to change practices and how to manage these organizational transitions. These changes antagonize incumbent employees by eroding skills, altering bases of power and status, and calling cherished belief systems into question making management of these transitions and specifically managing worker performance during these transitions important.

The growing diversity in organizations implies, that individual sub groups increases in numbers and have different and sometime conflicting demands, which makes it necessary to design more focused and diverse HR-policies. With this background, the present research is attempted to study employees' factors for effective implementation of Human Resource (HR) practices in IT sector in Bangalore.

2. METHODOLOGY

Among different IT hubs in India, Bangalore city has been purposively selected for the present study. The 1200 employees of IT sector have been selected for the present study by adopting random sampling technique and the data and information pertain to the year 2014-2015. In order to examine the socio-economic characteristics of employees of IT sector, the frequency and percentage analysis have been worked out. In order to identify the employees' factors for effective implementation of Human Resource (HR) practices in IT sector, the exploratory factor analysis has been employed. In order to examine the difference between socio-economic characteristics of the employees and employees' factors for effective implementation of Human Resource (HR) practices, the ANOVA (Analysis of Variance) has been applied. In order to examine the influence of employees' factors on overall implementation of Human Resource (HR) practices in IT sector, the multiple linear regression have been employed.

3. RESULTS AND DISCUSSION

3.1. SOCIO-ECONOMIC CHARACTERISTICS OF EMPLOYEES OF IT SECTOR

The socio-economic characteristics of employees of IT sector were analyzed and the results are presented in Table-1. The results show that about 59.33 per cent of employees are males and the rest of 40.67 per cent of employees are females. It is observed that about 27.50 per cent of employees belong to the age group of 26 – 30 years followed by 31 – 35 years (24.92 per cent), 36 – 40 years (20.00 per cent), 21 – 25 years (19.83 per cent), 41 – 45 years (5.08 per cent) and above 45 years (2.67 per cent).

The results indicate that about 37.17 per cent of employees have the educational qualification of B.E. followed by B.Tech. (17.00 per cent), M.C.A. (16.00 per cent), B.Sc., / BCA. / B.Sc., (IT) (9.67 per cent), M.E. (8.75 per cent), M.Sc. (IT) (5.83 per cent) and M.Tech. (5.58 per cent). It is clear that about 45.50 per cent of employees are Software Programmers followed by Software Designers (17.50 per cent), Software Testers (13.42 per cent), Software Developers (12.83 per cent) and Software Analysts (10.75 per cent).

The results reveal that about 29.00 per cent of employees belong to the monthly salary of Rs.40,001 – Rs.50,000 followed by Rs.30,001 – Rs.40,000 (21.50 per cent), Rs.50,001 – Rs.60,000 (18.83 per cent), Rs.20,001 – Rs.30,000 (16.83 per cent) and more than Rs.60,000 (13.84 per cent). It is apparent that about 25.42 per cent of employees have the work experience of 4 – 6 years followed by 1- 3 years (23.25 per cent), 7 – 9 years (18.33 per cent), 10 – 12 years (15.42 per cent), 13 – 15 years (11.58 per cent) and above 15 years (6.00 per cent).

Table 1, Socio-Economic Characteristics of Employees of IT Sector

Socio- Economic Profile	Frequency	Percentage
Gender		
Male	712	59.33
Female	488	40.67
Age Group		
21 – 25 years	238	19.83
26 – 30 years	330	27.50
31 – 35 years	299	24.92
36 – 40 years	240	20.00
41 – 45 years	61	5.08
Above 45 years	32	2.67
Educational Qualification		
B.Sc., / BCA., / B.Sc., (IT)	116	9.67
B.E.	446	37.17
M.E.	105	8.75
B.Tech.	204	17.00
M.Tech.	67	5.58
M.C.A.	192	16.00
M.Sc. (IT)	70	5.83
Designation		
Software Developer	154	12.83
Software Designer	210	17.50
Software Programmer	546	45.50
Software Tester	161	13.42
Software Analyst	129	10.75
Monthly Income		
Rs.20,001 – Rs.30,000	202	16.83
Rs.30,001 – Rs.40,000	258	21.50
Rs.40,001 – Rs.50,000	348	29.00
Rs.50,001 – Rs.60,000	226	18.83
More than Rs.60,000	166	13.84
Work Experience		
1 - 3 years	279	23.25
4 – 6 years	305	25.42

7 – 9 years	220	18.33
10 – 12 years	185	15.42
13 – 15 years	139	11.58
Above 15 years	72	6.00

3.2 IDENTIFICATION OF EMPLOYEES' FACTORS FOR EFFECTIVE IMPLEMENTATION OF HUMAN RESOURCE (HR) PRACTICES

In order to identify the employees' factors for effective implementation of Human Resource (HR) practices in IT sector, the exploratory factor analysis has been employed. The principal component method of factor analysis has been carried out with Eigen values greater than one through varimax rotation and the results obtained through rotated component matrix are presented in Table-2. The results of Kaiser-Meyer-Olkin (KMO Test) measure of sampling adequacy (KMO = 0.842) and Bartlett's test of Sphericity (Chi-square Value = 0.0014; Significance = 0.000) indicates that the factor analysis method is appropriate.

There are four factors which are extracted accounting for a total of 76.29 per cent of variations on 15 variables. The each of the four factors contributes to 26.17 per cent, 19.44 per cent, 16.76 per cent and 13.92 per cent respectively.

Table- 2, Identification of Employees' Factors For Effective Implementation of Human Resource (HR) Practices - Exploratory Factor Analysis

Factor	Item	Rotated Factor Loadings	Eigen Value	% of Variation	Factor Name
I	Risks to accomplish objectives	0.72	2.93	26.17	Efficiency
	Significant external customer contact	0.68			
	Participation in decision making	0.79			
	Technical knowledge	0.85			
II	Leadership qualities	0.78	2.46	19.44	Enhancement
	Learning attitude	0.80			
	Training needs	0.70			
	Safety and health	0.69			
III	Quality of HR services	0.75	1.22	16.76	Comfortability
	Manpower planning and flexibility	0.68			
	Benefits and services	0.73			
	Performance appraisal	0.65			
IV	Teamwork	0.72	1.04	13.92	Intimacy
	Communication skills	0.86			
	Interpersonal relationships	0.63			
	Cumulative % of Variation	-	-	76.29	-
	Cronbach's Alpha	-	-	-	0.83

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 9 iterations.

Factor-I: From the results, it is inferred that out of 15 variables, four variables have their high, relatively tightly grouped factor loadings on factor-I.

This factor consists of:

- Risks to accomplish objectives (0.72)
- Significant external customer contact (0.68)
- Participation in decision making (0.79)
- Technical knowledge (0.85)

Hence, this factor is named as "**Efficiency**".

Factor-II: is formed with

- Leadership qualities (0.78)
- Learning attitude (0.80)
- Training needs (0.70)
- Safety and health (0.69)

These variables are named as **“Enhancement”**

Factor-III: This factor includes

- Quality of HR services (0.75)
- Manpower planning and flexibility (0.68)
- Benefits and services (0.73)
- Performance appraisal (0.65)

These variables are named as **“Comfortability”**

Factor-IV: This factor is formed with

- Teamwork (0.72)
- Communication skills (0.86)
- Interpersonal relationships (0.63)

This factor is named as **“Intimacy”**

The Cronbach’s alpha of the scale was 0.83 indicating that each measure demonstrated acceptable internal consistency. It is inferred that efficiency, enhancement, comfortability and intimacy are the employees’ factors for effective implementation of Human Resource (HR) practices in IT sector.

3.3 SOCIO-ECONOMIC CHARACTERISTICS OF THE EMPLOYEES AND EMPLOYEES’ FACTORS FOR EFFECTIVE IMPLEMENTATION OF HUMAN RESOURCE (HR) PRACTICES

In order to examine the difference between socio-economic characteristics of the employees and employees’ factors for effective implementation of Human Resource (HR) practices, the ANOVA (Analysis of Variance) has been applied and the results are presented in Table-3.

Table- 3, Difference Between Socio-Economic Characteristics of the Employees And Employees’ Factors for Effective Implementation of Human Resource (HR) Practices

Particulars	F-Value	Sig.
Gender and Employees’ Factors for Effective Implementation of Human Resource (HR) Practices	97.295	.000
Age and Employees’ Factors for Effective Implementation of Human Resource (HR) Practices	8.899	.000
Educational Qualification and Employees’ Factors for Effective Implementation of Human Resource (HR) Practices	29.658	.000
Designation and Employees’ Factors for Effective Implementation of Human Resource (HR) Practices	14.088	.000
Monthly Income and Employees’ Factors for Effective Implementation of Human Resource (HR) Practices	5.936	.000
Work Experience and Employees’ Factors for Effective Implementation of Human Resource (HR) Practices	26.805	.000

The results indicate that the F-values are significant at one per cent level indicating that there is a significant difference between socio-economic characteristics of the employees and employees’ factors for effective implementation of Human Resource (HR) practices. Hence, the null hypothesis of there is no significant difference between socio-economic characteristics of the employees and employees’ factors for effective implementation of Human Resource (HR) practices is rejected.

3.4 INFLUENCE OF EMPLOYEES' FACTORS ON OVERALL IMPLEMENTATION OF HUMAN RESOURCE (HR) PRACTICES

In order to examine the influence of employees' factors on overall implementation of Human Resource (HR) practices in IT Sector, the multiple linear regressions has been applied and the results are presented in Table-4. The employees' factors derived from exploratory factor analysis are considered as independent variables and the overall implementation of Human Resource (HR) practices is considered as dependent variable.

The results indicate that the coefficient of multiple determinations (R^2) is 0.67 and adjusted R^2 is 0.65 indicating the regression model is good fit. It is inferred that about 65.00 per cent of the variation in dependent variable (Overall Implementation of Human Resource (HR) Practices) is explained by the independent variables (Employees' Factors). The F-value of 47.438 is statistically significant at one per cent level indicating that the model is significant.

Table -4, Influence of Employees' Factors on Overall Implementation of Human Resource (HR) Practices

Employees' Factors	Regression Co-efficients	t-value	Sig.
Intercept	1.197**	9.749	.000
Efficiency (X_1)	.413**	8.563	.000
Enhancement (X_2)	.427**	9.130	.000
Comfortability (X_3)	.389**	9.725	.000
Intimacy (X_4)	.416**	9.652	.000
R^2	0.67	-	-
Adjusted R^2	0.65	-	-
F	47.438	-	.000
N	900	-	-

Note: ** Significance at one per cent level

The results show that efficiency, enhancement, comfortability and intimacy are positively and significantly influencing the overall implementation of Human Resource (HR) practices in IT sector at one per cent level. Therefore, the null hypothesis of there is no significant influence of employees' factors on overall implementation of Human Resource (HR) practices in IT sector is rejected.

4. CONCLUSION

The study reveals that majority of the employees are males and most of the employees belong to the age group of 26 – 30 years. Majority of the employees have the educational qualification of B.E. and most of the employees are Software Programmers. Majority of the employees belong to the monthly salary of Rs.40,001 – Rs.50,000 and most of the employees have the work experience of 4 – 6 years.

The exploratory factor analysis shows that efficiency, enhancement, comfortability and intimacy are the employees' factors for effective implementation of Human Resource (HR) practices in IT sector. The results indicate that there is a significant difference between socio-economic characteristics of the employees and employees' factors for effective implementation of Human Resource (HR) practices.

The regression analysis shows that efficiency, enhancement, comfortability and intimacy are positively and significantly influencing the overall implementation of Human Resource (HR) practices in IT sector.

In order to increase the efficiency of employees, IT companies should increase the technical knowledge of employees through adequate trainings and development programmes and allow their employees in decision making process. In addition, employees should make significant external customer contact and bear the risks to accomplish the objectives.

Meanwhile, the IT companies should encourage leadership qualities of employees and ensure safety and health of employees. In addition, the IT companies should identify the competency based training needs and the employees should also increase their learning attitudes.

The IT companies should make their employees comfortable in their respective companies through adopting quality HR service, proper manpower planning, providing adequate benefits and transparent performance appraisal mechanisms. Besides, the employees of IT sector should improve their teamwork, communication skills and interpersonal relationship with other employees in the companies.



REFERENCES

1. Anderson, K.K., Cooper, B.K. and Zhu, C.J., "The Effect of SHRM Practices on Perceived Firm Financial Performance: Some Initial Evidence From Australia", *Asia Pacific Journal of Human Resources*, 2007, Vol. 45, No.2, pp. 168- 179.
2. Boxall, P. and Purcell, J., "Strategic Human Resource Management: Where Have We Come From and Where Should We Be Going?", *International Journal of Management Reviews*, 2000, Vol. 2, pp.183-203.
3. Dhar J. L., "HRD through Self Development-A Hard Look", *Personnel Today*, December 1996, pp. 11- 12.
4. Geary, J.F. and Roche, W.K., "Multinationals and Human Resource Practices in Ireland: A Rejection of the 'New Conformance Thesis'", *International Journal of Human Resource Management*, 2001, Vol.12, No.1, pp.109-127.
5. Heeks, R.B., *India's Software Industry*", Sage Publication, New Delhi, 2006, pp. 23-29.
6. Kramar, M., "Strategic HRM or Managing the Employment Relationship", *International Journal of Manpower*, 1992, Vol.16, No.5, pp.6 - 21.
7. Lengnick-Hall, M. and Moritz, S., "The Impact of e-HR on the Human Resource Management Function", *Journal of Labor Research*, 2003, Vol. 24, No. 3, pp.1-3.
8. Muhammad Asif Khan, "Effects of Human Resource Management Practices on Organizational Performance – An Empirical Study of Oil and Gas Industry in Pakistan", *European Journal of Economics, Finance and Administrative Sciences*, 2010, Vol. 24, pp.157-175.
9. Okumus, F., "Towards a Strategy Implementation Framework", *International Journal of Contemporary Hospitality Management*, 2001, Vol.13, pp. 327-338.
10. Sveiby, K.E. and Simons, R., "Collaborative Climate and the Effectiveness of Knowledge Work", *Journal of Knowledge Management*, 2002, Vol.6, No.5, pp. 420-433.
11. Wright, P.M. and McMahan, G.C., "Theoretical Perspectives for Strategic Human Resource Management", *Journal of Management*, 1992, Vol.18, No.2, pp. 295-320.