Human Resource as a Source of Competitive Advantage in Indian Software Industry

Manorama Yadav

PhD Scholar, Uttrakhand Technical University Dehradun India
Corresponding Author: Manorama Yadav

Abstract: *In this research paper, the analysis of competitive advantage in software industries through human resources was carried out. For this research work, the primary data was collected from the randomly selected 280 employees of top four software industries through a questionnaire. The data was analyzed on SPSS 22 using multiple regression model. The result shows that the human resource management practices (recruitment and selection, training and development, motivation, job satisfaction) are positively related to performance. So human resources are the key source to get competitive advantage in software industries. Finally the study shows the fact that there is a need to develop HRMPs that can enhance the effectiveness and sustainability of software industry in India.*

Keywords: Competitive Advantage, Human Resource, Management Practices, Performance, Software Industries.

I. Introduction

Every organization must consider its employees as an important asset. Any organization can achieve competitive advantage through developing their employee's talent. Similarly, software industries strive to attract the talent, well trained and enthusiastic employees as well as dedicated to their work. Prior empirical studies revealed that successful and good effective implementation of some human resources management practices (HRMPs) empowers employees and improve their performance positively.

In India, Software industry sector plays a dynamic role in the developed and developing economies; thus, industries are expected to provide communities, a local and international market with high-skilled graduates. Hence, industries should attract and retain excellent academic and non-academic staff. As a result, this will require 'best practices' of HRM. Further, HRMPs may vary from one employee to another and from organization to another thus, it is acceptable to carry out a study to observe the effect of "best practices" of HRM on employee's performance.

Little is known about HRMPs within the Middle East region in general. There is a lack of studies demonstrating the effectiveness of HRMPs. Even though scholars consider that some HRMPs theories which initiated and established in the developed countries may apply in the context of India and many other practices are contingent upon related conditions. In this context, Tayeb (1998) denoted a number of outside factors which indirectly influence HRMPs such as (official policies, local culture and sector's system).

Yadav M.(2013) revealed that today's fast-paced economy competition is an issue of services and products. These services and products depend on the implementation of better HR strategies. This paper focuses on competitive advantage concept, strategies, HR practices and their impact on performance.

Thus, HRMPs are affected by socio-cultural values, religion, economic conditions and legal systems. Recent research in HRMPs i.e., Al-Jabari (2009) shown that selection, interview and application forms are used by approximately all organizations apart from of its sector or size. Further, at the government sector level, newly started to practice apparent criteria for recruitment, selection, training, and many other HR practices; here, civil servant bureau and different ministries in collaboration with the ministry of finance begin adaptable and coordinating a lot of aspects of HRMPs.

Based on an intensive review of the literature, insufficient empirical studies have been founded on HRMPs in developing countries. Furthermore, most of the studies have been done in the field of HRMPs and employee and organizational level performance especially in developed countries, which are concluded that the HRMPs are the important factors to predict employees performance. Unlikely, no comprehensive studies have been conducted on software industry employees' performance to examine the influence of HRMPs on employee's performance. But few studies have investigated the HRMPs in family businesses and other governmental organizations. Further, HRMPs are affected by socio-cultural values, religion, economic conditions and legal systems. Some research studies have investigated HRMPs and performance, example

---

innovative management model for performance appraisal; managerial performance of Palestinian local authorities; training and development for small and micro enterprise; the relationship between the HR practices and turnover intention; assessing the current situation for the human resources for the health sector and the relationship between HR shortages and main policy choices and strategies. Therefore, unlikely in the context of Indian software industry no research study has been conducted on employees' performance to investigate the impact of HRMPs on employee's performance.

Research Objective

The purpose of this research study is to investigate the impact of HRMPs on employee performance in attaining competitive advantage at software industries and to propose recommendations for its improvement.

Research Scope

The existing research work was conducted at the four top software industries according to NAASCOM. These results of this research may not be generalized to the other industries.
H1: The recruitment and selection have positively related with performance.
H2: The Training and development have positively related with performance.
H3: The Motivation have positively related with Performance.
H4: The Job Satisfaction has positively related with performance.

The Software Industries
HCL

HCL Infosystems Ltd is an India-based multinational company. It has its presence through service centres in all over India. The headquarter of the company is in Noida. Its manufacturing amenities are located in Pondicherry, Chennai and Uttarakhand. It was established in the year 1983.

Infosys

Infosys was founded by seven entrepreneurs namely, Nagavara Ramarao, Narayana Murthy, Nandan Nilekani, Kris Gopalakrishnan, K Dinesh, S. D. Shibulal on 2 July 1981 and N. S. Raghavan was the first employee of the company. The founders invested rs 10,000 to start the company. The company was included as "Infosys Consultants Pvt Ltd." in Model Colony, Pune as the registered office.

TCS

Tata Consultancy Services Limited (TCS) is a software company headquartered in Mumbai, India. It is the largest supplier of IT and business process outsourcing services in Asia. It has offices in 42 countries with more than 142 branches across the world. The company is scheduled on the National Stock Exchange and Bombay Stock Exchange of India.

Wipro

Wipro Ltd is a giant information technology services corporation headquartered in Bangalore, India. Wipro is one of the largest IT services provider company in India and employs more than 119,491 people worldwide as of September 2010. Azim Premji is the Chairman of the board.

II. Literature Review
HUMAN RESOURCE MANAGEMENT PRACTICES (HRMPs)

HRMPs are important for best integration for better achievement in the worldwide business environment. The courses and challenges of HRMPs have been transformed over the lifetime. Thus, HRMPs is essential for successful implementation of HR policies effectively and efficiently to attain the organizational goals. similarly, practices of HRM are important for the organization to take realistic process for improving the competence of the workforce and enhancing dedication among them. Moreover, by implementing HRMPs effectively leads to attract motivate employees in order to enhance individual and organizational level performance. There is an important concern that human resource should be considered as important assets rather than an expenditure for the organization and also as a tactical aspect which supports and basis of sustained competitive advantage.

According to Yadav M(2017), HR and organization performance can create competitive advantage in an organization by implementing efficient HRM practices. This paper also shows the IT industry scenario in India as well as of world. The paper focuses on the challenges and practices related to HR in software industries

Yadav, M(2017) studied that management is the key to reflect these rapid changes and disseminate technology into the configuration of the organization and lead competitive advantage. The HR in the organizations has knowledge, skills and experience which improves the growth of the organizations through

competitive advantage.(

Singh, K. (2004) shows that there is a significant relationship between the two human resources practices, namely, training and compensation, and perceived organizational and market performance of the firm.

After review of the earlier studies which have discussed the concept of HR practices and its association with variant variables in the organization. The researchers concluded that HR practices vary from one firm to another and from nation to another as well as the factors which influence HRMPs. These factors might be internal or external factors. These HRMPs directly or indirectly influence a number of variables inside the organization.

Recruitment & Selection

Recruitment & selection are one of the most important HRMPs. It is a procedure to find, assess, and have the correct person in the right job. A positive association has been reported among recruitment, selection, and other procedures that are used for selection of the applicants efficiently which have a noteworthy effect on the firms' income. In addition, it is the procedure of searching the applicants for service and cheering prospective candidates to apply for jobs. Carroll et al. (1999) have been divided recruitment process into four stages (a) a review of the need to employ a new employee for a vacant post, (b) job analysis, (c) job description, (d) candidate's specifications and qualifications. This selection procedure affects the employees and organizational performance.

The intention of the employer or organization is to build up a huge group of candidates during recruitment process in order to select the best candidate for the offered job position competitive process. In reviewing the literature, it has been recognized three differences between small and large firms concerning the recruitment process: (i) The number of the job positions, (ii) number of applicants and (iii) and the available fund for the recruitment process. After reviewing the previous studies, recruitment and selection are the basic HRMPs and would be used as an independent variable in this study. Accordingly, ensuring good and effective recruitment and selection process by the organization leads to improved employee performance.

Training & Development

Training and development is one of most important HR activities in any organization and supports the firm to attain its goals. Grossman and Salas (2011) showed that training is a structured task of information, skills, and attitudes guide to improving performance in a particular circumstance. Hence, training and development is the next step of recruitment and selection of employees. This procedure should engage the newly recruited and existed employees. Though, cautious selection of employees does not assurance that the new staff will execute the tasks efficiently, thus, firms should propose and implement appropriate training programs for those employees in order to attain the tasks given to them (Dessler, 2009).

Paul, A.K. and Anantharaman, R.N. (2003) revealed that sincere training administration helps to get better job performance. Task orientation and team work foretell performance.

Gupta and Singhal(1993) showed the four dimensions such as human resource planning, adequate performance appraisal mechanism, reward system, and career development.

Training and development actions permit organizations to fine-tune, be a competitor, advanced skills, innovate, develop, improve employees safety, increase service, and reach firm's goals (Salas et al., 2012). Consequently, any organization strives to compete in the global economy, differentiation on the basis of the skills, knowledge, and motivation of their workforce must realize the importance of training & development(Aguinis and Kraiger, 2009). To remain competitive, organizations must ensure that their workforce continually learns and develops regardless of the cost of learning (Salas et al., 2012).

Motivation

Motivation is fundamentally meant to facilitate behavioral alteration. It is a strength that enables an individual to perform in the track of a particular objective. According to the studies of (motivated employees are more oriented towards autonomy and freedom and are more self driven as compared to less motivated employees which lead to availing developmental opportunities more correctly. Similarly employee dedication with their jobs is more, if they are motivated as compared to less motivated employees.

M.K. Sanyal and S.B. Biswas(2014) tried to identify the relation between the appraisal implications and the performance appraisal practice in the industry towards high performance outcome to obtain a sustainable competitive advantage.

Kongala Ramprasad (2013) identified factors that could guarantee job satisfaction on the part of the employees/workforce and also enhance job performance.

Topic of motivation is more discussed in the subject of organizational behavior which contains a variety of models and theories relevant to motivation. Development and growth of employees is significantly focused.

Job Satisfaction

Job satisfaction is supposed not to have a commonly approved definition in spite of its meaning and wide practice in the field of industrial psychology and organisational behaviour, which construct it fundamental that before clear meaning is given, there is the need to consider the meaning and nature actions of human beings all around the globe (Aziri 2011).

Shaju.M and Subhashini.D(2014) observed that there is a strong correlation between the levels of job satisfaction and of Performance of an employee, in both Supervisor and Worker groups of the Automobile Industry. The main objective of this study was to investigate the impact of job satisfaction of the respondents on their performance level, it was detected that the former's impact over the concluding are more in administrator group who are holding superior position.

Numerous research scholars and authors have explained job satisfaction foundation on their views. A definition given by Hop pock states that job satisfaction is seen as any form of blend of psychological environmental as well as physiological circumstances that can make an individual confess in all sincerity that I am pleased with the service I do for a leaving. This definition means, level of job satisfaction is represented by what really causes the sensation of satisfaction. Another definition given by Vroom effective orientation of individual in respect to their task and schedules is what defines job satisfaction; this definition put much emphasis on the role played by an employee in the working place.

METHODOLOGY

This study suggests a theoretical research framework which is developed on the basis of extensive literature review. This study empirically tests the model. The Figure 1 shows the theoretical framework of this research study, has four independent variables includes recruitment and selection, training and development, motivation, job satisfaction and one dependent variable i.e. Employees' performance.

Primary data was collected from a sample size of 280 employees of 4 software industry via random probability and sampling technique. Multiple regressions were used to predict employees' performance. The collected information was examined using SPSS 22 statistical software.

The Cronbach's coefficient (α) is meant for computing the consistency of the survey measurement objects i.e., questionnaires and presented the results in Table 1. The independent and accumulative values are listed against each variable which indicates the given items are correct and reliable.

The HRMPs were measured by 40 items consisted by 4 variables i.e., (recruitment and selection, training and development, motivation, job satisfaction) the HRM policies and practices scale was developed by Demo et al. (2012). The Likert 5 points scale was used.
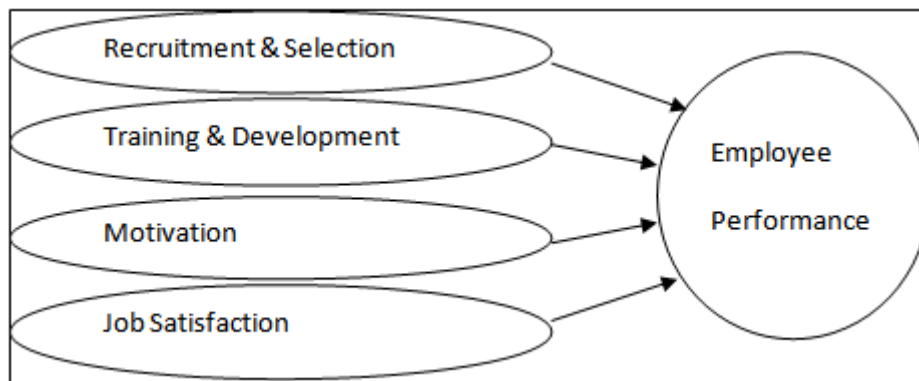

Figure 1: Research model

Table 1: Reliability analysis of variables

Variables	Questions/items	Alpha value
Recruitment and selection	10	0.95
Training and development	10	0.93
Motivation	10	0.71
Job Satisfaction	10	0.75
Employee performance	10	0.82

Overall	50	0.90

The employee performance was measured by four items scale developed by Tessema and Soeters (2006). The sample question was "I am performing well to my organization." The Likert 5 points scale was used to rank the respondents views. The scale reliability value was 0.82.

III. Results And Discussion

This research study primarily, investigated the linear relationship, the level of significance the influence of HRMPs (recruitment and selection, training and development, motivation, job satisfaction) over Employees' performance. The analysis of this study includes descriptive statistics, correlation, and multiple regressions.

In terms of respondents, Table 2 shows the demographic information of the respondents. The descriptive analysis has revealed that total of 280 employees of 4 software industries. Table 4 shows that 55.71% of the respondents were male and 44.29 % were female while Table 5 shows that respondents' years of experience less than 3 years were 30%, from 3 to 6 years were 41.79% while respondents' more than 6years of experience from 28.21%.

Table 2 Gender

Valid	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Male	156	55.71	55.71	55.71
Female	124	44.29	44.29	100
Total	280	100		

Table 3 Work experience

Valid (Years)	Frequency	Percentage	Valid Percentage	Cumulative Percentage
<3	84	30	30	30
3-6	117	41.79	41.79	71.79
>6	79	28.21	28.21	100
Total	280	100		

The purpose of this study is to explore the impact of HRMPs on employee performance and to suggest recommendations for its improvement. The findings of current research study illustrate that the HRMPs (recruitment and selection, training and development, motivation, job satisfaction) are positively related to employees' performance. The previous results support the findings of the current study. Furthermore, most of the empirical studies have been conducted in the field of HRMPs and employee performance especially developed countries, which are concluded that the HRMPs are the important factors to predict employee's performance.

Table 4: Correlation analysis

Variables	RS	TD	M	JS	P
Recruitment & Selection	1				
Training & Development	0.167**	1			
Motivation	0.542**	0.163**	1		
Job Satisfaction	0.712**	0.143**	0.416**	1	
Performance	0.742**	0.640**	0.520**	0.751**	1

Table 5: Summary of hypothesis results

Hypotheses	Correlation	Result
H1: The selection and recruitment system have a positive relationship with employee performance	0.742**	Supported
H2: The training development and education has positively related to employee performance	0.640**	Supported
H3: Motivation system has a positive relationship with employee performance	0.520**	Supported
H4: Job Satisfaction system has positively related to employee performance	0.751**	Supported
**Correlation is significant at the 0.05 level (two-tailed)		

Table 6: Regression analysis with R2

Model	R	R^2	Adjusted R^2	Standard error of the Estimate
1	0.680[a]	0.463	0.446	0.43571
[a]Predictors: (Constant). Job Satisfaction, recruitment and selection, training and development, Motivation				

Table 7: ANOVA[a]

Model	Sum of squares	df	Mean square	F	Sig.
Regression	15.688	3	5.229	27.547	0.000[a]
Residual	18.225	111	0.190		
Total	33.913	114			
Dependent variable: Employees' performance. Predictors: (Constant), Job Satisfaction, recruitment and selection, training and development, Motivation					

Similarly, firms attempt to attract the well trained and enthusiastic employees as well as committed to their work. Prior empirical studies reported that efficient execution and best practices of HRM empower employees and advance their performance positively (Shahzad et al., 2008). Therefore, it is significant that firms should improve their HRMPs by recruiting the efficient employees to improve employee's performance. Moreover, the individual suppose that HRMPs may differ from one employee to another (Shahzad et al., 2008). For this reason, it is justified to carry out a study to examine the effect of 'best practices' of HRM on employee's performance.

IV. Conclusion

The purpose of this study is to explore the impact of HRMP on employee performance and to suggest recommendations for its improvement. The findings of current research study illustrate that the HRMP (recruitment and selection, training and development, motivation, job satisfaction) are positively related to employees' performance. Employees have an important and strategic role in enhancing organization positioning in significant fields such as profit, reputation, and improving the quality work. Therefore, best practices of HRM stimulate employee's performance which in turn improves software industry performance. So, industries realize the importance of stimulating their employee's performance; many software industries are giving more attention from the top management of HRMP. Hence, it is vital that the industries should develop their HRMP to enhance their employee performance. Therefore, a study on the employees' assessment of the influence of HRMP on employees' performance with particular reference to Indian software industries context is justified.

Thus, future studies should consider a larger sample and other organizations of all level of India in order to develop a broader understanding of the HRMP and employee performance.

References

[1]. Yadav, Manorama and Yadav, V.K. (2017), A Study of Competitive Advantage by Human Resource Excellence in Indian Software Industry. Asian Journal of Research in Business Economics and Management, Vol. 7, No. 9, pp. 75-85.
[2]. Yadav, Manorama and Yadav, V.K. (2017), A Study of Challenges and Practices Related to HRM in Software Industry. Asian Journal of Management, Vol. 7, No. 9, pp. 75-85.
[3]. Demo, G., Neiva, E.R., Nunes, I., Rozzett, K. (2012), Human resources management policies and practices scale (HRMPPS): Exploratory and confirmatory factor analysis. BAR-Brazilian Administration Review, 9(4), 395-420.
[4]. Yadav, Manorama and Yadav, V.K. (2013), A Study of Human Resources as a Source of Competitive Advantage: A Research Review, COTII 2013 at AIMT Lucknow.
[5]. Singh, K. (2004). Impact of HR practices on perceived firm performance in India. . Asia Pacific Journal of Human Resources. 42(3), pp. 301- 317)
[6]. Kongala Ramprasad (2013), "Motivation and Workforce Performance in Indian industries" Research Journal of Management Sciences, ISSN 2319-1171 Vol. 2(4), 25-29, April (2013))
[7]. M.K. Sanyal and S.B. Biswas Employee Motivation from Performance Appraisal Implications: Test of a Theory in the Software Industry in West Bengal (India) Procedia Economics and Finance 11 (2014) 182 – 196)
[8]. Shaju.M and Subhashini.D(2014) A study on the impact on Job Satisfaction on Job Performance of Employees working in Automobile Industry, Punjab, India, Journal of Management Research ISSN 1941-899X 2017, Vol. 9, No. 1)
[9]. Aguinis, H., Kraiger, K. (2009), Benefits of training and development for individuals and teams, organizations, and society. Annual Review of Psychology, 60, 451-474.
[10]. Tessema, T., Soeters, J.L. (2006), Challenges and prospects of HRM in developing countries: Testing the HRM–performance link in the Eritrean civil service. The International Journal of Human Resource Management, 17(1), 86-105.
[11]. Salas, E., Tannenbaum, S.I., Kraiger, K., Smith-Jentsch, K.A. (2012), The science of training and development in organizations: What matters in practice. Psychological Science in the Public Interest, 13(2), 74-101.

[12]. Shahzad, K., Bashir, S., Ramay, M.I. (2008), Impact of HR practices on perceived performance of university teachers in Pakistan. International Review of Business Research Papers, 4(2), 302-315.
[13]. Sirat, M. (2006), Transnational higher education in Malaysia: Balancing
[14]. Dessler, G. (2009), A Framework for Human Resource Management. New Jersey: Pearson Education India. Grossman, R., Salas, E. (2011), The transfer of training: What really matters. International Journal of Training and Development, 15(2), 103-120.
[15]. Tayeb, M.H. (1998), Organizations and National Culture. London: Sage Publications.
[16]. Carroll, M., Marchington, M., Earnshaw, J., Taylor, S. (1999), Recruitment in small firms: Processes, methods and problems. Employee Relations, 21(3), 236-250.