

High-Performance of HRM Practices with Special Reference To Information Technology Industry

Dr. P. Tirumala¹, Mr. V Harsha Vardhan², Mr. Firozkhan.I.Pathan³, Dr.T.Vinod Kumar⁴

¹Associate Professor, Department of Science & Humanities, Lendi Institute of Engineering & Technology
Email: tiruphd@gmail.com

²Assistant Professor, Department of MCA, SreeVidyanikethan Engineering College, Tirupati, Email:
vemuriharsha@gmail.com

³Research Scholar, Research Resources Centre (RRC) Visvesvaraya Technological University Belagavi-
590018, Email: firozkhanip@gmail.com

⁴Assistant Professor, Lendi Institute of Engineering and Technology, Jonnada, Vizianagaram, Andhra
Pradesh, Email: vinodkumar.tuduku@lendi.org

Abstract

This research paper highlights the context within which IT Industry has grown in India and the extent of human resource management practices and systems practiced in the IT Sector. In nowadays top leaders fully realize the power of information technology tools for reaching business targets. This research article main aim is to “To measure the high performance of human resource practices determinants on employee performance in IT industry”. The paper applies data reduction using Exploratory Factor Analysis (EFA) on a sample of 250 respondents drawn from 7 IT companies (Wipro, Infosys, IBM, Accenture, Dell, Capgemini and Tech Mahindra). It is found that compensation, recruitment and selection, training & development, performance appraisal and promotion are impacting significantly the employee performance. Study concluded that compensation had the highest impact on the employee performance followed by recruitment and selection, training & development, performance appraisal and promotion.

Keywords: Information Technology, Human Resources Management, Software Industry, Performance Appraisal

Introduction

Human influence in business has been constantly rising since the Industrial Revolution, even after machine and automation has increased to a great extent. There is a shift in the role of humans in business; earlier humans were more into physical part, now it is increasing on the intellect part. Technology will always help in making things simple and easy but to remain relevant and stay competitive, effective human involvement is indispensable for today's businesses. The importance of human potential for company increases proportionally with the speed of changes which appear in the business area because human capital represents a basic qualitative parameter of fruitfulness of any changes. Following that, Human Resources Management (HRM) must aim at achieving the competitiveness of the company in the field of HR by means of providing constant educational and training programs for personal development of employees.

Human Resource Management (HRM) has arisen principally in acknowledgment of the way that HR should be overseen decisively for the firm to partake in a maintainable upper hand over the opposition. HRM can be characterized as the strategies and practices expected to play out the schedules of HR in an association, for example, representative staffing, staff advancement, execution the board, pay the executives, and empowering worker inclusion in navigation. Henceforth, the banks are expected to actuate the job of HRM through the usage of Human Resource Management Practices (HRMP). HRM assumes a significant part in the making of better HR (who are the fundamental resources of the association), and maintenance of such assets, and give adaptability and the capacity to adjust to accomplish a reasonable upper hand (Khatri, 1999).

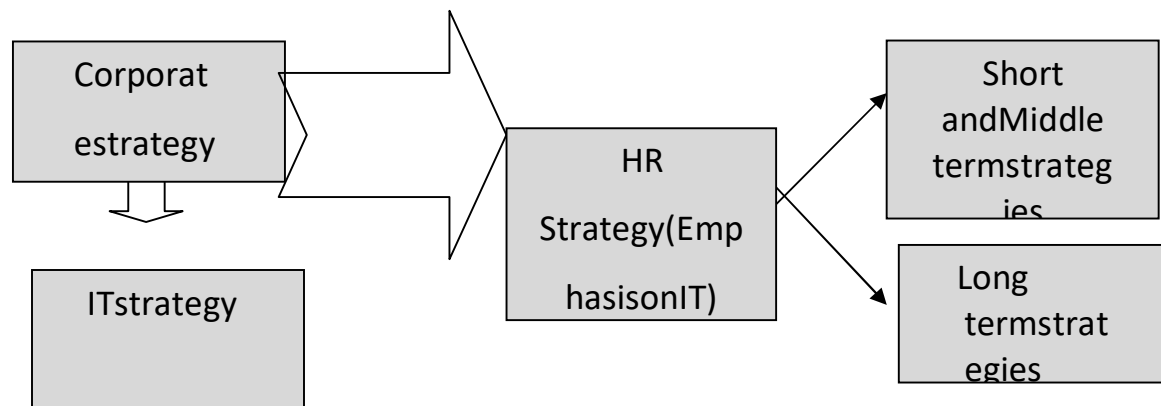


Fig1–TheFrameworkofInformationTechnologyHumanResourcesPlan

Source: SAMENI, M.K., KHOSHALHAN, F. Analysis of Human Resource Development for Information Technology and E-Commerce in Iran. IT Department, Faculty of Industrial Engineering, K.N. Toosi University of Technology, Tehran, Iran. 2006, p. 1190

The worker's exhibition is viewed as one of the elements that have an effect and job on the association's presentation, as it straightforwardly adds to the accomplishment of the association through the conduct of the person notwithstanding the presence of different variables that assistance in its prosperity (Saleh et al., 2020). Representative's conduct is formed through a heap of particular yet interrelated HRM rehearses. HRMP is utilized to quantify the exhibition of the singular working inside the association and raising the presentation of laborers by inspiring them and making rivalry among them (Ahmad and Schroeder, 2003). The aim of this paper is to measure the high performance of human resource practices determinants on employee performance in IT industry.

Review of Literature

De Miranda Castro et al. (2020) considered the NHRM practices in organizational structure lead to good quality of working environment synchronized with the strategies of organizations. NHRM practices have elements of skills to deal with new situations. Also, organizational approach to focus on innovation, embrace change, and solving problems with new ideas.

Santangelo and Pini (2011) explain that NHRM practices create responsibility, flexibility, creativity, autonomy, and participation in production, avoiding traditional practices such as recruiting, selection training, and career paths. As well as their proposals present that information technology integrating with NHRM practices can achieve innovative performance contributing to reducing mistakes and risks. Indeed, researchers demonstrated the empirical association connecting NHRM practices and innovation performance at organizations' planning. NHRM practices give significance to individual systems and reduce bureaucratization.

Appelbaum, Bailey et al (2000) The Ability, Motivation and Opportunity (AMO) model is valuable to clarify the connection between availability for change and representatives' singular presentation. AMO systems suggest that to guarantee the representative's optional exertion, three components should be set up: 1. workers should have the vital abilities, 2. they need the proper inspiration, and 3. businesses should offer them the chance to take an interest.

Ma Prieto and Pérez-Santana, (2014) Capacities allude to information and abilities that workers have stress the significance of the capacity aspect asserting that without capacity neither inspiration nor opportunity will add a lot to execution, despite the fact that the two aspects are critical. Capacity improving practices plan to purchase abilities and additionally upgrade the current workers' abilities.

Al Harazneh and Sila (2021) Technology implementation in organizations has enabled the adoption and undertaking of innovations and the influence of web-based HR on the HRM system force implemented by HR professionals of behavioral, intention, and position. WB6 as developing countries should follow the path of producing innovative

pioneering changes in IT applications. The population is aimed at the telecommunications sector in WB6. The research literature suggests telecommunications sector as the main sector that invests in human assets and pursues constant innovation

Objectives

- To analyze the human resource practices determinants in selected IT Companies
- To measure the impact of human resource practices determinants on employee performance in selected IT Companies

Hypothesis

- There is no significant relationship between HR practices determinants and employee performance in selected 7 software companies

Research Methodology

For the purpose of the study, 250 employees were selected as a responding unit. The sampling population for the study was chosen on the basis of convenient random sampling technique. Respondents were the software employees. The primary data have been collected from the respondents based on interaction with them which included in-depth discussions and self-completing questionnaire. Primary data collected from selected seven IT companies Wipro, Infosys, IBM, Accenture, Dell, Capgemini and Tech Mahindra and Secondary data collected from Companies website and other published sources.

Data Analysis and Interpretation

Table 1: Reliability Statistics

Cronbach's Alpha	No of Items
0.891	22

The table 1, states that internal consistency of the questionnaire of 21 questions with a value of the Cronbach's Alpha is 0.891, which shows that data is 89.1 percent reliable.

Exploratory Factor Analysis

Table 2 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.912
Approx. Chi-Square	1203.100
Bartlett's Test of Sphericity	df
Sig.	.000

The table 2 denotes before proceeding for factor analysis the eligibility of the data has to be tested by conducting KMO- Bartlett's test. This test is a measure of sampling adequacy and multivariate normality among variables. The KMO value in this study is $0.912 > 0.5$ which says that the sample taken is adequate. Bartlett's Test of Sphericity value is $0.000 < 0.05$, indicating multi normality among variables. Hence Factor Analysis is considered as an appropriate technique for further analysis of the data.

Eigen Values

The initial components are the numbers of the variables used in the Factor Analysis. However, not all the 25 variables will be retained. In the present research, only the 8 factors will be extracted by combining the relevant variables. The Eigen values are the variances of the factors. The total column contains the Eigen value. The first factor will always account for the most variance and hence have the highest Eigen values. The next factor will account for as much of the leftover variance as it can and the same will continue until the last factor. In the present research, the first 5 factors explain 61.861 per cent of the variance. The rotation sums of the squared loading represent the distribution of the variance

after the varimax rotation with Kaiser Normalization. The varimax rotation tries to maximize the variance of each of the factor.

Table.3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.414	33.698	33.698	7.414	33.698	33.698	4.032	18.327	18.327
2	2.393	10.876	44.574	2.393	10.876	44.574	3.250	14.772	33.100
3	1.486	6.755	51.329	1.486	6.755	51.329	2.510	11.409	44.509
4	1.187	5.397	56.725	1.187	5.397	56.725	2.050	9.319	53.828
5	1.130	5.136	61.861	1.130	5.136	61.861	1.767	8.033	61.861
6	.893	4.059	65.920						
7	.852	3.871	69.791						
8	.780	3.545	73.336						
9	.703	3.195	76.531						
10	.603	2.741	79.272						
11	.513	2.331	81.603						
12	.489	2.224	83.827						
13	.474	2.153	85.980						
14	.454	2.063	88.043						
15	.429	1.949	89.992						
16	.405	1.839	91.831						
17	.369	1.679	93.510						
18	.359	1.631	95.141						
19	.324	1.471	96.613						
20	.293	1.332	97.945						
21	.253	1.152	99.096						
22	.199	.904	100.000						

Extraction Method: Principal Component Analysis.

On the basis of Varimax Rotation with Kaiser Normalization, 5 factors have been extracted. Each factor is constituted of all those variables that have factor loadings greater than 0.5. 22 variables were clubbed into 5 factors. 5 factors were extracted from the 22 variables used in the study. These 5 extracted factors explained 61.861 percent of the variability in human resource practices determinants in the table 3.

Rotated Component Matrix

Table 4 represents Rotated Component Matrix represents the rotated factor loadings, which are the correlations between the variables and the factors. The factor column represents the rotated factors that have been extracted out of the total factor. These are the core factors, which have been used as the final factor after data reduction.

Table4: Rotated Component Matrix^a

Statements	Component				
	1	2	3	4	5
Presence of equitable external salary	.913				
Presence of clearly written and operational training policy	.812				
Presence of equitable internal salary	.911				

My performance is better than that of my colleagues with similar qualifications	.799				
Presence of continuous training needs assessment	.781				
My performance is better than that of employees with similar qualifications in other organizations	.811				
The performance of my organization is better than that of other organizations	.711				
Presence of written and operational recruitment and selection policy		.810			
Presence of clear job description and specification		.819			
High role of merit in recruitment and selection exercise		.911			
Presence of attractive salary scales that can attract qualified applicants		.614			
Presence of attractive compensation system		.819			
While shopping I try to find just the item that I am looking for			.915		
Presence of written & operational trainee-selection procedure			.855		
Presence of written and operational EPE			.912		
I go to shopping mall to buy things for my family, friends and special ones			.819		
A good store visits when it is over very quickly					
EPE result has a lot to do with personnel decisions				.917	
EPE result has a lot to do with salary				.912	
Presence of written and operational promotion policy				.713	
Provision of priority to merit in promotion decision					.818
Provision of priority to seniority in promotion decision					.796
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 22 iterations.					

The above matrix gives the correlation of the variables with each of the extracted factors. Usually, each of the variables is highly loaded in one factor and less loaded toward the other factors. To identify the variables, included in each factor, the variable with the maximum value in each row is selected to be part of the respective factor. The values have been high lightened in each of the rows to group the 22 variables into 5 core factors excluding low loading variables.

Multiple Linear Regressions

In order to access the impact of independent variables (Human Resource Practices determinants) on employee performance as a dependent variable, a method of multiple linear regressions was applied.

Table 5: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.881 ^a	.619	.510	.709	1.912

Table 5 depicts R^2 represents the coefficient of determination which lies between 0 and 1. Since the R square value is 0.619 i.e. 61.9 per cent of the explained variation is there in the employee performance in selected IT c. Durbin-Watson statistic test value is 1.912. It is close to the standard value 2. So, that the assumption has almost certainly been met.

ANOVA

Table 6: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	188.269	5	33.104	45.901	.000 ^b
Residual	122.916	215	0.147		
Total	311.185	330			

The ANOVA (Table 6) reveals that the F statistics of the regression model is statistically significant at 0.05 levels implying the goodness of fit of the regression equation. (Model is statistically significant). There is a significant relationship between HR practices determinants and employee performance in selected software companies. Then Null hypothesis rejected.

Conclusion

As far as Human Resource Planning is concerned, hardly any sample being collected is a CMM level company, which is considered as quality benchmark as far as IT industry is considered. Majority of the companies agrees that it is used majorly for forecasting human resources, to promote employees in a systematic way, for implementing skill matrix of the resources, to utilize existing manpower productively, and to take optimum utilization of human resources. Study concluded that compensation had the highest impact on the employee performance followed by recruitment and selection, training & development, performance appraisal and promotion.

References

- Agrawal, D. K. (2022). An Empirical Study On Socioeconomic Factors Affecting Producer’s Participation In Commodity Markets In India. *Journal of Positive School Psychology*, 2896-2906.
- Alqudah, I.H. Carballo-Penela, A., & Ruzo-Sanmartín, E. (2022). High-performance human resource management practices and readiness for change: An integrative model including affective commitment, employees’ performance, and the moderating role of hierarchy culture. *European Research on Management and Business Economics*, 28(1), 100177.
- Al-Safadi, M. (2016). Case study, Cairo-Oman Bank-Jordan: Improving an organization by the use of smartphones and ipads which are considered the basics of supply chain management (SCM). *Invention Journal of Research Technology in Engineering & Management*, 1(5), 11-23.
- Alzoubi, K., Aljawarneh, N. M., Alsafadi, Y., Al-Radaideh, A. T., & Altahat, S. (2020). Role of cloud computing in service quality, information quality & low costs: An empirical study on Jordanian customs. *International Journal of Academic Research in Business and Social Sciences*, 10(6), 522–532. <http://dx.doi.org/10.6007/IJARBS/v10-i6/7330>
- Appelbaum, E. Bailey, T. Berg, P. Kalleberg, A.L., & Bailey, T.A. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Cornell University Press.
- Basha, M., Singh, A. P., Rafi, M., Rani, M. I., & Sharma, N. M. (2020). Cointegration and Causal relationship between Pharmaceutical sector and Nifty—An empirical Study. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(6), 8835-8842.
- Basha, S. M., & Ramaratnam, M. S. (2017). Construction of an Optimal Portfolio Using Sharpe's Single Index Model: A Study on Nifty Midcap 150 Scrips. *Indian Journal of Research in Capital Markets*, 4(4), 25-41.
- Bos-Nehles, A. C., Van Riemsdijk, M. J., & Kees Looise, J. (2013). Employee perceptions of line management performance: applying the AMO theory to explain the effectiveness of line managers' HRM implementation. *Human resource management*, 52(6), 861-877.
- Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: is the field going in circles?. *Human Resource Management Journal*, 27(1), 1-21
- Dr Santhosh Kumar, V., & Basha, S. M. (2022). A study of Emotional Intelligence and Quality of Life among Doctors in Pandemic Covid 19. *International Journal of Early Childhood*, 14(02), 2080-2090.

- JagadeeshBabu, M. K., SaurabhSrivastava, S. M., &AditiPriya Singh, M. B. S. (2020). INFLUENCE OF SOCIAL MEDIA MARKETING ON BUYING BEHAVIOR OF MILLENNIAL TOWARDS SMART PHONES IN BANGALORE CITY. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(9), 4474-4485.
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264-1294.
- Jiménez, J. & Valle, R. S. (2005). Innovation and human resource management fit: An empirical study. *International Journal of Manpower*, 26(4), 364-381. <https://doi.org/10.1108/01437720510609555>
- Khan, M.A. (2010). Effects of human resource management practices on organizational performance: An empirical study of the oil and gas industry in Pakistan. *European Journal of Economics, Finance and Administrative Sciences*, 24(6), 157-174.
- Khatri, N. (1999). Emerging issues in SHRM in Singapore. *International Journal of Manpower*, 20(8), 516-529. <https://doi.org/10.1108/01437729910302714>
- Krishnamoorthy, D. N., & Mahabub Basha, S. (2022). An empirical study on construction portfolio with reference to BSE. *Int J Finance Manage Econ*, 5(1), 110-114.
- Mathivanan P. A study on HRM Practices in Public Sector Banks in Krishnagiri District, *IOSR journals*. 2013; 12:4.
- Mohammed, B. Z., Kumar, P. M., Thilaga, S., & Basha, M. (2022). An Empirical Study On Customer Experience And Customer Engagement Towards Electric Bikes With Reference To Bangalore City. *Journal of Positive School Psychology*, 4591-4597.
- Mohana, S., Kumari, M.R., & Subramanyam, P. (2021). Talent Management Practices and Sustainable Organizational Performance in Cement Industry.
- Murthy, B. S. R., Manyam, K., & Manjunatha, M. (2018). A Study on Comparative Financial Statement of Hatsun Agro Product Ltd (With Reference Last Five Financial Year 2013 To 2017). *International Journal for Science and Advance Research In Technology JSART*, 4, 2395-1052.
- Murthy, B. S. R., Manyam, K., Sravanth, K., & Ravikumar, M. (2018). Predicting Bankruptcy of Heritage Foods Company by Applying Altman's Z-Score Model. *INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY (IJIRT)*, 4(12).
- Peccei R, Van de Voorde K, Veldhoven MMJP. In: *HRM & Performance: Achievements and Challenges*. Paauwe J, Guest DE, Wright PM, editor. London: Wiley; 2013. HRM, well-being and performance: a theoretical and empirical review; pp. 15-46.
- Prakash, M., & Manyam, K. (2018). Changing Paradigms of Service Sector Employment in India. *INTERNATIONAL JOURNAL OF BUSINESS, MANAGEMENT AND ALLIED SCIENCES (IJBMAS)*, 5(1).
- Rajasulochana, D., & Khizerulla, M. (2022). Service Quality In SBI: An Assessment Of Customer Satisfaction On E-Banking Services. *Journal of Positive School Psychology*, 4585-4590.
- Shaik, M. B. ., M. K., T. Jaggaiah, & Mohammed Khizerulla. (2022). Financial Literacy and Investment Behaviour of IT Professional in India. *East Asian Journal of Multidisciplinary Research*, 1(5), 777-788. <https://doi.org/10.55927/eajmr.v1i5.514>
- Shaik, M. B., Kethan, M., Rani, I., Mahesh, U., Harsha, C. S., Navya, M. K., & Sravani, D. (2022). WHICH DETERMINANTS MATTER FOR CAPITAL STRUCTURE? AN EMPIRICAL STUDY ON NBFC'S IN INDIA. *International Journal of Entrepreneurship*, 26, 1-9.
- Shore, L.M., Barksdale, K. & Shore, T.H. (1995). Managerial perceptions of employee commitment to the organization. *Academy of Management Journal*, 38(6), 1593-1615.
- Travis, D.J., & MorBarak, M. E. (2010). Fight or flight? Factors influencing child welfare workers' propensity to seek positive change or disengage from their jobs. *Journal of Social Service Research*, 36(3), 188-205.
- Durgaraju, R., & Sekhar, S. C. (2021). A Perspective Research Study on the New Age Currency (The Case of Bit coin Currency System). *International Research Journal of Innovations in Engineering and Technology*, 5(2), 16.
- Rana, S. (2022). Consumer Awareness And Perception Towards Green Marketing: An Empirical Study In Bangalore City. *Journal of Positive School Psychology* <http://journalppw.com>, 6(5), 4240-4245.
- Sekhar, M. S. C., Ashalatha, D., & Gorkhe, M. (2022). Corporate Governance-Impact on Financial Performance of Selected IT Companies in Bengaluru City. *Journal of Contemporary Issues in Business and Government Vol*, 28(03).

- Sekhar, S. C., &Radha, N. (2019). Impact of globalization on msme: prospects, challenges and policy implementation on economic growth. *International Journal of Trend in Scientific Research and Development*, 3(6), 536-541.
- Karumuri, V. (2017). A theoretical framework on employee engagement. *Asia Pacific Journal of Research*, 1, 150-155.
- Kotni, V. V., &Karumuri, V. (2014). An empirical study on the identification of salesforce engagement drivers: A study of selected retail outlets in Visakhapatnam. *VV DEVI PRASAD KOTNI & VENKATESWARLU K (2014). An Empirical Study on the Identification of Salesforce Engagement Drivers: A Study of Selected Retail Outlets in Visakhapatnam. Prabandhan: Indian Journal of Management*, 7(7), 31-45.
- Venkateswarlu, K., & Prasad, P. V. (2012). A Review on employability skills. *IOSR Journal of Humanities and Social Science*, 2, 32-34.
- Karumuri, V., &Kore, G. (2021). Effective Talent Management Practices: A. *Eprajournals. Com, no. June*, 32-35.
- Karumuri, V., &Singareddi, S. (2014). Employee attrition and retention: A theoretical perspective. *Asia Pacific Journal of Research Vol: I Issue XIII*.