



Impact Of e-Hrm Practices On Workforce Agility In The IT Industry

SHANKAR A. P.^{1*}, Dr. ANNAMALAI SOLAYAPPAN², Dr. JOTHI JAYAKRISHNAN³

^{1*}Research Scholar (Part-Time), Roll No: 1811130045, Department of Business Administration, Annamalai University, Annamalai Nagar, Tamilnadu, India.

²Assistant Professor, Research Supervisor, Department of Business Administration, (On Deputation from Annamalai University), Sri Subramaniya Swamy Government Arts College, Tiruttani, Tamilnadu, India-631209. Mail Id: an.solayappan@gmail.com, Mobile no: 9944222110

³Professor, Department of Business Administration, Annamalai University, Annamalai Nagar, Tamilnadu, India.

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ABSTRACT

To examine the Impact of e-HRM Practices on Workforce Agility in the IT Industry. Primary data were collected from employees working in five major IT companies located in Thiruvananthapuram, Kerala, namely: TCS, UST, Infosys, Wipro, and TMDL. The present study adopted a descriptive research design, and data collected were analysed using statistical tools & methodologies such as correlation and regression analysis. The result revealed that training, communication, appraisal, attendance, career plan, resource management, self-service, org development, recruitment, and compensation are determining the workforce agility.

Keywords: *Technology, e-HRM Practices, IT Industry and Workforce agility*

INTRODUCTION

Today's corporate operations are being challenged by digital technologies, and the old-school methods of offering HRM services is rapidly being supplanted by technology. According to DeSanctis (1986), in the early days of Technology, it was employed for administrative activities, notably payroll processing, and transformational HR practises were given less priority. Lepak and Snell (1998) "e-HRM is characterised in terms of 'virtual HR,' which includes a network-based structure built on partnerships and mediated by information technology to enable the organisation acquire, develop, and deploy intellectual capital." e-HRM is defined as a new managerial technique that has its basis on comprehending and using communication and information methods in conducting basic functions of HR management and development (Al-Kurdi, 2010). e-HRM enables the transfer and exchange of electronic HR data (Johnson D & Gueutal G, 2011). e-HRM is the use of technology in HRM activities to make it smoother for employees to engage (Rathee & Bhuntel, 2021). Salary information, employee personal information, performance assessment, orientation, employment, and business direction are all recorded in e-HRM (Findikli & Bayarcelik, 2015). Traditional document writing and long hours of HR chores are being transformed into automated, high-speed operations that assist organisations in forecasting and prospering from contextual advances, providing them with a significant market advantage. Furthermore, e-HRM provides the data required to manage HR operations (Silva & Silva Lima, 2017). e-HRM is a system for integrating HRM strategy, laws, and operations in the workplace using web-based technology (Nivlouei, 2014). e-HRM has hastened a fundamental shift in "human resources (HR)" ideas and practises within enterprises, particularly in terms of how firms "collect, keep, and develop talent."

According to Breu (2001), workforce Agility (WFA) is described as a conservational openness in a chaotic and dynamic setting. Bosco (2007), has written agility as the capacity to respond to rapid internal and external changes in the environment in a flexible and timely manner Thus, organisational agility may be attained by worker collaboration, allegiance, and competence, which are essentially derived from the worker's skills, knowledge, acuity, experiences, and intellect (Meredith & Francis, 2000). As a result, an agile workforce may be a key contributor to the realisation of an agile company, and overlooking this component may decrease the firm's agility (Hosein & Yousefi, 2012).

STATEMENT OF PROBLEM

Impact of globalization clubbed with the infusion of state of art technologies has led to global transformation of business organizations in the recent years, wherein IT sector to be specific has showcased a phenomenal remodelling and continued growth having leveraging cutting edge bleeding technologies to administer both their volatile businesses as well as allied business partnering activities.

OBJECTIVES OF THE STUDY

- To test the relationship between e-HRM practices, Organizational Culture, and Workforce Agility.
- To influence Workforce Agility through e-HRM practices and Organizational Culture.

RESEARCH METHODOLOGY

The present study adopted a descriptive research design to examine the Impact of e-HRM Practices on Workforce Agility in the IT Industry. Primary data were collected from employees working in five major IT companies located in Thiruvananthapuram, Kerala, namely: TCS, UST, Infosys, Wipro, and TMDL. Using a structured questionnaire, the researcher gathered responses from a sample of 430 employees selected through convenient sampling due to accessibility and feasibility. The instrument measured key dimensions of e-HRM practices and workforce agility using a five-point Likert scale. Collected data were further analysed using statistical tools such as correlation and regression analysis to assess the strength and direction of relationships between variables, as well as to determine the predictive influence of e-HRM practices on workforce agility.

ANALYSIS AND INTERPRETATION

Table No-1: Correlation between e-Human Resource Management and Workforce Agility

	ET	EC	EA	EAT	ECP	EHR	ESS	EOD	ER	ECS	OGR	OGC	OGQ	OGF	EMA	EHRM	OA	WA
ET	1																	
EC	.667**	1																
EA	.628**	.481**	1															
EAT	.552**	.709**	.565**	1														
ECP	.458**	.678**	.027	.598**	1													
EHR	.420**	.308**	.763**	.440**	.237**	1												
ESS	.376**	.492**	.770**	.484**	.258**	.804**	1											
EOD	.531**	.687**	.336**	.657**	.722**	.322**	.594**	1										
ER	.471**	.550**	.744**	.612**	.292**	.518**	.811**	.726**	1									
ECS	.373**	.337**	.803**	.500**	.080	.657**	.902**	.572**	.917**	1								
OGR	.329**	.494**	.661**	.509**	.266**	.550**	.866**	.669**	.874**	.853**	1							
OGC	.536**	.645**	.669**	.812**	.470**	.523**	.528**	.532**	.732**	.573**	.584**	1						
OGQ	.742**	.721**	.751**	.810**	.562**	.658**	.600**	.683**	.690**	.571**	.569**	.827**	1					
OGF	.496**	.623**	.671**	.744**	.520**	.734**	.641**	.602**	.704**	.579**	.562**	.835**	.857**	1				
EMA	.687**	.666**	.817**	.745**	.493**	.798**	.727**	.641**	.746**	.673**	.653**	.850**	.961**	.910**	1			
EHRM	.692**	.759**	.794**	.792**	.544**	.682**	.852**	.814**	.895**	.827**	.813**	.781**	.868**	.805**	.893**	1		
OA	.578**	.696**	.780**	.804**	.505**	.701**	.766**	.709**	.863**	.748**	.794**	.910**	.907**	.916**	.947**	.929**	1	
WA	.616**	.695**	.799**	.795**	.507**	.737**	.763**	.697**	.838**	.734**	.762**	.903**	.932**	.924**	.973**	.929**	.996**	1

ET- Training; EC- Communication, EA- Appraisal, EAT- Attendance, ECP- Career Plan, EHR- Human Resource, ESS- Self Service, EOD- Org Development, ER- Recruitment, ECS- Compensation, OGR- Responsiveness, OGC-Competency, OGQ-Quickness, OGF-Flexibility, EMA – Employee Agility, EHRM- Human Resource Management, OA-Organizational Agility, WA- Workforce Agility.

The above table depicts the relationship between the factors of e-HRM practices and factors of Workforce agility. The coefficient of correlation value reveals that, there is a significant relationship between the factors of e-HRM practices (Training, Communication, Appraisal, Attendance, Career Plan, Resource management, Self Service, Org Development, Recruitment, Compensation) and factors of Workforce agility (OGR- Responsiveness, OGC-Competency, OGQ-Quickness, OGF-Flexibility, organizational agility). From the above table it is inferred that higher the e-HRM practices, higher is the Workforce agility and vice versa.

Table No-2: Predicting Workforce Agility through e-HRM Practices

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.690	0.830	0.680	2.11987

The R value (0.690) indicates the relationship between the independent variable (e-HRM practices - Training, Communication, Appraisal, Attendance, Career Plan, Resource management, Self Service, Org Development, Recruitment, Compensation) and dependent variable (Workforce Agility). It is clear that, there is a significant relationship found between e-HRM practices and Workforce Agility. The R-square value depicts the amount of variation accounted in the dependent variable (Workforce Agility) by the independent variable (e-HRM practices). The above table reveals that, 83.0 percent of the variation in the dependent variable (Workforce Agility) is explained by the independent variable (Training, Communication, Appraisal, Attendance, Career Plan, Resource management, Self Service, Org Development, Recruitment, Compensation).

Table No-3: Validating significance of Model

Model		Sum of Squares	df	Mean Square	F	Sig. Value
1	Regression	96228.288	10	9622.829	21.413	.000
	Residual	1882.931	419	4.494		
	Total	98111.219	429			

The above table shows whether the amount of variation accounted by R-square is significant. It also explains the overall effect of the independent variable (e-HRM Practices) on the dependent variable (Workforce Agility) is significant. From the ANOVA value (F=21.413; P<0.01) it is concluded that the overall model is statistically significant or the independent variable have a significant effect over the dependent variable.

Table No-4: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig. Value
		B	Std. Error	Beta		
1	(Constant)	-2.291	1.602		-1.430	.153
	Recruitment	-.716	.166	.096	4.302	.000
	Compensation	-.389	.166	.079	2.341	.020
	Training	1.436	.206	.332	6.966	.000
	Communication	1.549	.136	.245	11.379	.000
	Appraisal	-.256	.126	.053	2.038	.042
	Attendance	5.882	.348	.497	16.927	.000
	Career Plan	-.061	.477	.008	-.128	.898
	Resource Management	1.043	.109	.224	9.578	.000
	Self Service	6.435	.263	1.031	24.507	.000
	Org Development	-2.725	.204	.982	-13.378	.000

Interpretation:

The regression test result reveals that, R-square value was significant with an ANOVA value of 21.413 and p-value lesser than 0.01. As per which, using the values of the coefficient (beta) from the regression coefficient table above, the estimated linear regression equation is given below:

$$Y = 2.291 + 0.096 (X_1) + 0.079 (X_2) + 0.332 (X_3) + 0.245 (X_4) + 0.053 (X_5) + 0.497 (X_6) + 0.008 (X_7) + 0.224 (X_8) + 1.031 (X_9) + 0.982 (X_{10})$$

For the above proposed model, Y represents the dependent variable (Workforce Agility) and X represents the independent variable (Training, Communication, Appraisal, Attendance, Career Plan, Resource management, Self Service, Org Development, Recruitment, Compensation). Based on beta coefficients (regression coefficients) from the above table, where; Constant (intercept), beta (0) =2.291 represents when the value of the independent variable (e-HRM Practices) is zero, the Workforce agility would take the value 2.291. Beta (1) indicates that one unit increase in the e-recruitment results in 0.096 units increase in the Workforce Agility and t value = 4.302 (with P-value = 0.00 <0.05) is also significant. Beta (2) indicates that one unit increase in the e-compensation results in 0.079 units increase in the Workforce Agility and t value = 2.341 (with P-value = 0.00 <0.05) is also significant. Beta (3) indicates that one unit increase in the e-training results in 0.332 units increase in the Workforce Agility and t value = 6.966 (with P-value = 0.00 <0.05) is also significant. Beta (4) indicates that one unit increase in the e-communication results in 0.245 units increase in the Workforce Agility and t value = 11.379 (with P-value = 0.00 <0.05) is also significant. Beta (5) indicates that one unit increase in the e-appraisal results in 0.053 units increase in the Workforce Agility and t value = 2.038 (with P-value = 0.00 <0.05) is also significant. Beta (6) indicates that one unit increase in the e-attendance results in 0.497 units increase in the Workforce Agility and t value =16.927 (with P-value = 0.00 <0.05) is also significant. Beta (8) indicates that one unit increase in the e- resource management results in 0.224 units increase in the Workforce

Agility and t value = 9.578 (with P-value = 0.00 <0.05) is also significant. Beta (9) indicates that one unit increase in the e-employee self-service results in 1.031 units increase in the Workforce Agility and t value = 24.507 (with P-value = 0.00 <0.05) is also significant. Beta (10) indicates that one unit increase in the e-organizational development results in 0.982 units increase in the Workforce Agility and t value = 13.378 (with P-value = 0.00 <0.05) is also significant. The above table depicts that, out of the total 10 factors of e-HRM, 9 factors significantly predict workforce agility except for career plan which was not found to be a significant predictor of workforce agility.

CONCLUSION

The study on the impact of e-HRM practices on workforce agility in the IT sector demonstrates that digital HR systems play a vital role in strengthening employee adaptability, responsiveness, and overall performance. The results show that e-training, e-performance appraisal, e-recruitment, e-compensation, and digital communication significantly enhance workforce agility when effectively aligned with organizational goals. While demographic factors such as marital status, education level, job designation, and salary package did not exhibit a significant influence, variables like age, work experience, and employee role were found to affect agility, emphasizing the need for tailoring e-HRM practices to different workforce groups. Overall, the study highlights that integrating e-HRM practices within a supportive organizational culture encouraging participation, communication, and continuous evaluation can substantially improve flexibility, collaboration, and performance in the fast-changing IT landscape. These findings offer meaningful insights for IT companies aiming to leverage digital HR tools to develop a more agile, responsive, and high-performing workforce.

BIBLIOGRAPHY

1. Al-kurdi, A. (2010). Human Resource Management Development-managerial development website, [Online], [Retrieved August 23, 2013]. Available:
2. <http://kenanaonline.com/users/ahmedkordy/topics/67676/posts/158040>.
3. Bosco, C. (2007). The relationship between environmental turbulence, workforce agility and patient outcomes. Ph.D. Dissertation, College of Nursing, The University of Arizona, Tucson, AZ.
4. Breu, K., Hemingway, C. J., Strathern, M., and Bridger, D. (2001). Workforce Agility: The New Employee Strategy for the Knowledge Economy. *Journal of Information Technology*, 17(1), 21-31.
5. DeSanctis, G. (1986) Human Resource Information Systems: A Current Assessment. *MIS Quarterly*, 10, 15-27. <http://dx.doi.org/10.2307/248875>
6. E Silva, M. S. A., and Lima, C. G. S. (2018). The Role of Information Systems in Human Resource Management. In *Management of Information Systems London: IntechOpen*. 113-126. <https://doi.org/10.5772/intechopen.79294>
7. Findikli, M. F., and Bayarcelik, E. B. (2015). Exploring the Outcomes of Electronic Human Resource Management (e-HRM). *Procedia Social and Behavioral Sciences*, 207, 424-431. <https://doi.org/10.1016/j.sbspro.2015.10.112>
8. Hosein, Z. Z. and Yousefi, A., (2012). The Role of Emotional Intelligence on Workforce Agility in the Workplace. *International Journal of Psychological Studies*; 4, (3), 48-61.
9. Johnson, R. D., and Gueutal, H. G. (2011). Transforming HR through Technology: The Use of e-HR and HRIS in Organizations. Society for Human Resource Management. <https://www.shrm.org/hr-today/trends-and-forecasting/special-reportsandexpertviews/Documents/HR-Technology.pdf>
10. Lepak, D.P. and Snell, S.A. (1998) Virtual HR: Strategic Human Resource Management in the 21st Century. *Human resource Management Review*, 8, 215-234. [http://dx.doi.org/10.1016/S1053-4822\(98\)90003-1](http://dx.doi.org/10.1016/S1053-4822(98)90003-1)
11. Meredith, S., and Francis, D. (2000). Journey Towards Agility: The Agile Wheel Explored. *TQM Magazine*, 12(2), 137-143.
12. Nivlouei, F. B. (2014). Electronic Human Resource Management System: The Main Element in Capacitating Globalization Paradigm. *International Journal of Business and Social Science*, 5(2), 147-159.
13. Rathee, Rupa and Bhuntel, Renu. (2021). A Study on Employee Perception about the Use of e-HRM in IT. *SCMS Journal of Indian Management*, 37-47.