American Journal of Psychiatric Rehabilitation

Expert Opinion Article

Influence Of Electronic Hrm Practices On Workforce Agility Within The It Sector

SHANKAR A. P.1*, Dr. ANNAMALAI SOLAYAPPAN[2], Dr. JOTHI JAYAKRISHNAN[3]

[1*]Research Scholar (Part-Time), Roll No: 1811130045, Department of Business Administration, Annamalai University, Annamalai Nagar, Tamilnadu, India.
[2]Assistant 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
[3]Professor, Department of Business Administration, Annamalai University, Annamalai Nagar, Tamilnadu, India.

ABSTRACT
To examine the Influence of Electronic HRM Practices on Workforce Agility within the IT Sector. Primary data were collected from employees of five leading IT companies located in Thiruvananthapuram, Kerala -TCS, UST, Infosys, Wipro, and TMDL using a structured questionnaire developed on a five-point Likert scale. A total of 430 valid responses were obtained through convenient sampling. Structural Equation Modelling (SEM) was employed as the main statistical technique to examine the causal relationships, model fit. It was inferred that e-HRM practices positively influences Workforce Agility and Organizational Culture. Similarly, Organizational Culture positively influences Workforce Agility.

Keywords: *e-HRM Practices, Workforce Agility, Organizational Culture and Information* Technology

INTRODUCTION

According to the 2006 HCM Survey, IT firms have expanded the possibilities of HRM applications. Companies employed strategic applications including payroll management (49%), performance management (52%), and talent acquisition services (61%). e-HRM (Electronic Human Resource Management) has begun to be utilised on financial investments with little preference, and sales of HR technologies have been predicted to be worth US$300 billion over the previous decade (Hawkin, Stein, and Foster 2004). According to DeSanctis (1986), in the early days of Technology, it was employed for administrative activities notably for payroll processing, wherein transformational HR practises were given lower priority. Collaboration between HRM and IT has been demonstrated to be a critical success element in HRIS adoption and utilisation in the literature. Ensher (2002) "e-HRM is defined by providing its users with a variety of functions, including managing employee information for different purposes and supporting numerous HR activities, including recruitment and selection, performance management, compensation and benefits, training and development, health and safety, employee relations, retention, and policies on work-life balance." Panayaotopoulou, Vakola, and Galanaki (2007) claims that as technology advances, businesses can use information systems to manage a large number of HR processes efficiently, which in turn will help make strategically important information and knowledge more readily available so as to increase competitive advantage.

STATEMENT OF PROBLEM

No matter how sophisticated the process or ground-breaking the product that needs conception, it requires both qualitative and quantitative approaches duly backed by full range of HRM suite, hence arguably making HR as the foundation of any businesses. That being said, the abrupt market turbulence induced by Covid-19 pandemic across the globe, pose to be a critical bottleneck even to these innovative business and operating models. To ensure sustainability, organizations ought to re-engineer its processes and workforce so as to be market ready, which facilitates it to embrace change by being flexible and agile to the competitive and ever-changing work culture. These changes have necessitated a greater demand of HRM personnel as well, who are energetic, enthusiastic, knowledgeable, competent as well as efficient, to operate efficient digital tools and alternatives to best manage departmental activities as well as to ensure the resilient functioning of HRMS within organizations.

OBJECTIVES OF THE STUDY

- To examine the Influence of Electronic HRM Practices on Workforce Agility within the IT Sector.
- To predict Workforce Agility through Electronic HRM practices and Organizational Culture.

RESEARCH METHODOLOGY

The study employed a descriptive research design to examine the Influence of Electronic HRM Practices on Workforce Agility within the IT Sector. Primary data were collected from employees of five leading IT companies located in Thiruvananthapuram, Kerala -

TCS, UST, Infosys, Wipro, and TMDL using a structured questionnaire developed on a five-point Likert scale. A total of 430 valid responses were obtained through convenient sampling. The constructs for Electronic HRM practices and workforce agility were measured using standardized items and verified for reliability and validity before analysis. Structural Equation Modeling (SEM) was employed as the main statistical technique to examine the causal relationships, model fit, and the overall impact of Electronic HRM practices on workforce agility. SEM enabled the researcher to assess both direct and indirect effects among the variables, offering a comprehensive understanding of how digital HR systems influence agility in the IT workforce.

Reliability

Reliability of individual factor's was assessed by examining the loadings of associated factors on their respective latent constructs in PLS modelling (Hulland, 1999). Reliability of each variable was assessed through Fornell and Larcker's (1981) measure of composite reliability in addition to Cronbach's (1951) alpha. This measure is preferred over Cronbach's alpha because it offers a better estimation of variance shared by the respective indicator (Hair et al., 2006). In this study composite factor reliability coefficient of the constructs ranged from 0.949 to 0.968 as shown in the below Table, which met the standard of 0.70 as suggested by Fornell and Larcker (1981).

Table No-1: Reliability Value

S.NO	Scales	Composite Reliability
1	e-HRM Practices	0.968679
2	Organizational Culture	0.949306
3	Workforce Agility	0.966255

The factor loading, Cronbach alpha, composite reliability and Average Variance Extracted (AVE) values calculated by PLS algorithms were tabulated in Table:2.

Table No-2: Cronbach alpha, Composite reliability and AVE

Latent variables	Cronbach's Alpha	Composite Reliability	AVE
e-HRM Practices	0.966	0.968	0.510
Organizational Culture	0.940	0.959	0.613
Workforce Agility	0.963	0.966	0.572

Convergent validity

Convergent and discriminant validities are two fundamental aspects of construct validity. Convergent validity refers to how closely the new scale is related to other variables and other measures of the same construct. Not only should the construct correlate with related variables but it should not correlate with dissimilar, unrelated ones. A determination along the latter lines is referred to as discriminant validity (de Vet et al., 2011; Streiner et al., 2015). Convergent validity is achieved only when the variance extracted values are more than 0.5. Thus, the results of the test reveals that the variance extracted for the items ranged from 0.510 to 0.613 which is shown in the above table. It is inferred that, the constructs namely Electronic HRM, Organizational Culture and Workforce Agility satisfied the convergent validity.

Discriminant Validity

Discriminant Validity determines whether the constructs in the model are highly correlated among them or not. It compares the Square Root of AVE of a particular construct with the correlation between that construct with other constructs. The value of Square Root of AVE should be higher that the correlation. Discriminant validity is the degree to which two conceptually similar concepts are distinct. The empirical test is again the correlation among measures, but this time the summated scale is correlated with a similar, but conceptually distinct, measure. Now, the correlation should be low, demonstrating that the summated scale is sufficiently different from the other similar concept. Discriminant validity ensures that the scale is sufficiently different from other similar concepts to be distinct. The discriminant validity is satisfied when the AVE values are more than 0.5 and the diagonal elements are higher than the off-diagonal values (i.e. the square root of AVE) in the respective rows and columns. Thus, from the table below, it is clear that, the constructs namely Electronic HRM, Organizational Culture and Workforce Agility possess discriminant validity.

Table No-3: Discriminant Validity Results (Fornell-Larcker Criterion)

	e-HRM	Org. Culture	Workforce Agility
e-HRM	0.714		
Org. Culture	0.645	0.782	
Workforce Agility	0.630	0.298	0.756

Interpretation

From the above table it is clear that, the diagonal elements are higher than the off-diagonal elements and thus the constructs namely e-HRM, Organizational Culture and Workforce agility confirms the discriminant validity. It is inferred that, each of the scales used for measuring are different from each other and thus the structural path for the same can be validated.

Structural Model Analysis

Hypothesis was tested by computing path coefficient (β) whereas R2 measured a construct's percentage variation that is explained by the model (Wixom& Watson, 2001). The Conceptual model shows that the (R2) between e-HRM and Workforce agility was reported as 0.630. It suggested that positive variance of 63 percent in workforce agility was explained by e-HRM practices in the measurement model. It can be also be inferred that if there is 100-point increase in the e-HRM practices, 63-point increase on workforce agility will be observed. Similarly, (R2) between e-HRM and Organizational Culture was reported as 0.645. It suggested that positive variance of 64.5 percent in Organizational Culture was explained by e-HRM practices in the measurement model. It can be also be inferred that if there is 100-point increase in the e-HRM practices, 63-point increase on Organizational Culture will be observed. Similarly, (R2) between Organizational Culture and Workforce Agility was reported as 0.298. It suggested that positive variance of 29.8 percent in Workforce Agility was explained by Organizational Culture in the measurement model. It can be also be inferred that if there is 100-point increase in the Organizational Culture, 29.8-point increase on Workforce Agility will be observed. The statistical significance of path coefficient (β) between these latent constructs is measured by T statistics reported in bootstrapping.

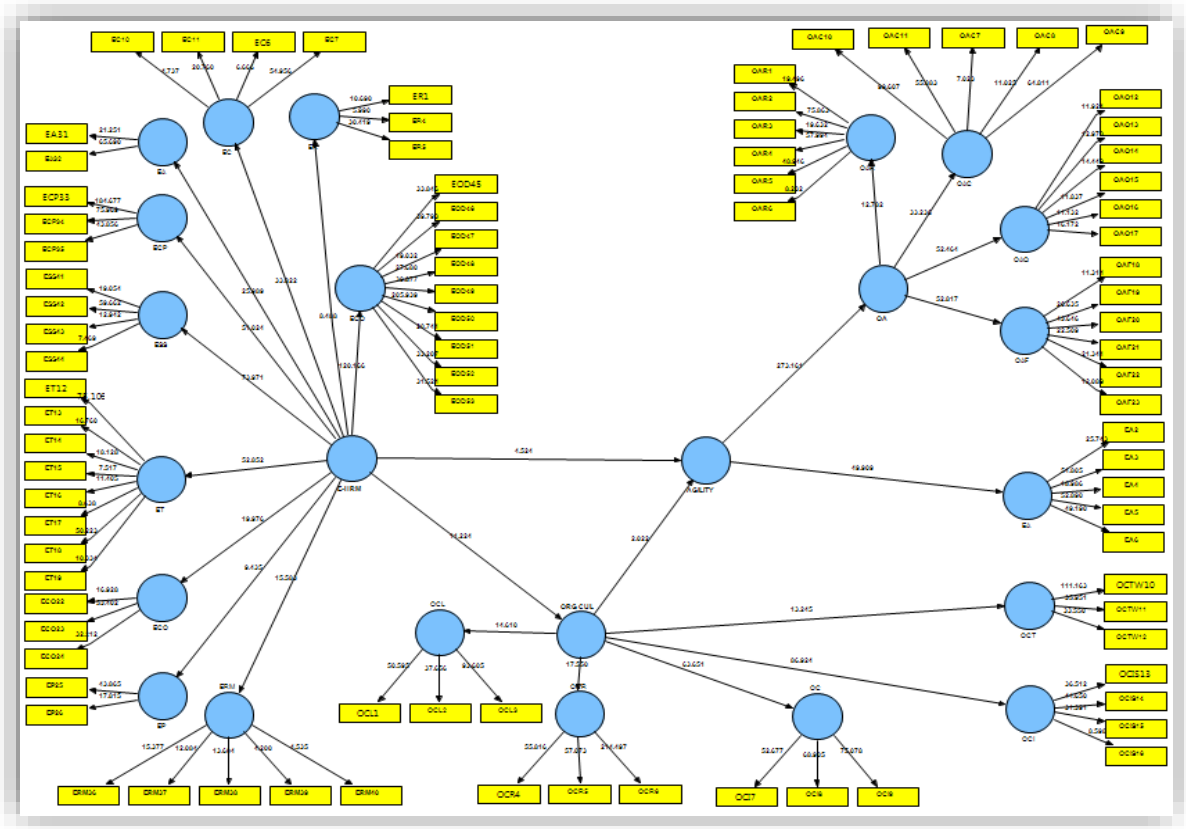

Figure-1: Influence of e-HRM practices on Workforce Agility

Table No-4: Path coefficient along with their bootstrap values, "T" values

Path	Original sample (O)	T statistics (|O/STERR|)	Result
E-HRM -> Workforce Agility	0.630416	4.623794	(p<0.05) Significant
E-HRM -> Org. Culture	0.645553	11.986092	(p<0.05) Significant
Org Cul -> Workforce Agility	0.298406	2.087180	(p<0.05) Significant

Interpretation

The relationship between e-HRM Practice, Organizational Culture and Workforce Agility was significant because path coefficients between these three latent constructs are significant as T = 4.623 for e-HRM → Workforce Agility; T= 11.986 for e-HRM → Organizational Culture and T= 2.087 for Organizational Culture → Workforce Agility. (Table value is supposed to be significant if it is more than 1.96 at α (significance level) of 0.05). Since T value is greater than 1.96 indicating that the proposed path between e-HRM Practice, Organizational Culture and Workforce Agility of employees is significant. Proposed hypothesis was accepted based on the above analysis. It was inferred that e-HRM practices positively influences Workforce Agility and Organizational Culture. Similarly, Organizational Culture positively influences Workforce Agility.

CONCLUSION

The study on the influence of e-HRM practices on workforce agility within the IT sector reveals that digital HR initiatives play a critical role in fostering adaptability, responsiveness, and overall employee efficiency. The findings indicate that practices such as e-training, e-performance appraisal, e-recruitment, e-compensation, and digital communication significantly contribute to workforce agility, particularly when aligned with organizational and agility objectives. While demographic factors like marital status, education, job designation, and salary package showed no significant influence, age, experience, and employee role were found to impact agility levels, highlighting the importance of customised Electronic HRM strategies to workforce characteristics. Overall, the research underscores that integrating e- HRM practices with a supportive organizational culture, backed by inclusive participation and continual monitoring, can enhance workforce agility leading to improved flexibility, collaboration, and performance in the dynamic IT environment. These insights provide valuable guidance for IT organizations seeking to leverage digital HR solutions to build a responsive and high-performing workforce.

REFERENCE

1. B. H. Wixom and H. J. Watson (2001). An Empirical Investigation of the Factors Affecting Data Warehousing Success. *MIS Quarterly*, 25(1), 16-41.
2. De Vet, H.C.W., Terwee, C.B., Mokkink, L.B. and Knol, D.L. (2011). Measurement in Medicine: A Practical Guide. Cambridge University Press, Cambridge. https://doi.org/10.1017/CBO9780511996214
3. DeSanctis, G. (1986). Human Resource Information Systems: A Current Assessment. *MIS Quarterly*, 10, 15-27. http://dx.doi.org/10.2307/248875
4. Ensher, E. A., Nielson, T. R., and Grant-Vallone E. (2002). Tales from the Hiring Line: Effects of the Internet and Technology on HR Processes. *Organizational Dynamics*, 31(3), 224-244.
5. Fornell, C., and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
6. Fornell, C., and Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, 18, 382-388. http://dx.doi.org/10.2307/3150980
7. Hair, Jr., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Pearson-Prentice Hall.
8. Hawking, P., Stein, A., and Foster, S. (2004). E-HR and Employee Self Service: A Case Study of a Victorian Public Sector Organisation. *Journal of Issues in Informing Science and Information Technology*, 1, 1019-1026. https://doi.org/10.28945/2757
9. Hulland, J. (1999). Use of Partial Least Squares (PLS) in Strategic Management Research: A Review of Four Recent Studies. *Strategic Management Journal*, 20, 195-204. https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<195::AID-SMJ13>3.0.CO;2-7
10. Panayiotopoulos L, Vakola M, and Galanaki E. (2007). e-HR Adoptions and the Role of HRM: Evidence from Greece' Personnel Review, 36, 227-294.
11. Streiner, D. L., Norman, G. R., and Cairney, J. (2015). Health Measurement Scales: A Practical Guide to Their Development and Use (5th ed.). New York: Oxford University Press. https://doi.org/10.1093/med/9780199685219.001.0001