End User Attitude towards Adoption of e-HRM in Indian Organizations

*Dr. Leenu Narang, **Mr. Dinesh Anand

ABSTRACT

Many organizations are experimenting with electronic approach towards managing human resource. In other words organizations today are following a model in which technology gets integrated into HR function to call it electronic human resource management (e-HRM). It is believed to yield numerous benefits for present day organizations. But the successful adoption of e-HRM depends on many factors that include users' resistance as one of the most important factors. The present study endeavours to measure end users' attitude towards adoption of e-HRM by Indian organizations and analyze the impact of demographics on attitude of the end users. The assumption of normality of the data was not met, hence non parametric Mann whitney U test was applied. No significant difference was found among the respondent groups on the basis of gender (p>0.05), however age (p<0.05) of the respondents and hands on experience (p<0.05) of the respondents significantly affected their attitude towards adoption of e-HRM by their organizations.

Keywords: Electronic Human Resource Management (e-HRM), Factor analysis, user attitude, Mann Whitney U-tests. `

1.   Introduction

Past has witnessed a major paradigm shift in focus of organizations from tangibles to intangibles as a source of competitive edge. Moreover global competition is pushing organizations towards innovations which in turn depends on Knowledge, skills and abilities (KSAs) of its people. In the light of HR gaining huge importance, organizations are constantly searching for ways to effectively manage them. Use of technology was found to be a possible alternative to be explored into for effective management of human resource. Many organizations have already started experimenting electronic approach towards managing human resource. In other words organizations are following a model in which technology gets integrated into HR function to be called electronic human resource management (e-HRM). In current business environment, routine tasks and problems are being simplified with the use of information technology (IT). It is believed not only to improve efficiency of HR function but also improve the organizations' bottom line by performing traditional offline HR related tasks in an online mode.

Definition

According to Voermans and van Veldhoven (2007) "The composite of databases, computer applications and hardware and software used to collect, store, manage, deliver, present and manipulate data for Human Resources". In the words of Bondarouk and Ruel (2009) "An umbrella term covering all possible integration mechanism and contents between HRM and information technologies, aimed at creating value for targeted employees and managers". e-HRM has the potential to affect both efficiency and effectiveness of the HR function. Efficiency gets improved by reducing cycle times for processing paper work, increasing data accuracy and reducing HR staff. On the other hand effectiveness is ensured by improving the capabilities of both managers and employees to make better and timelier decisions. E-HRM may give individuals greater access to information about job opportunities, compensation,

---
* Assistant Professor, Sri Aurobindo College of Commerce and management, Ludhiana. dr.leenu@gmail.com
** Assistant Professor, Guru Nanak Dev Engineering College, Ludhiana. dinesh_anand@gndec.ac.in

benefits and performance feedback, Job related knowledge etc. (Stone, Stone-Romero, and Lukaszewski, 2006).

2.   Challenges to adoption of e-HRM

The successful adoption of e-HRM depends on many factors. Researchers have made certain attempts to identify challenges or critical success factors of e-HRM. Bondarouk et al., (2017) in their review paper identified three factors affecting successful adoption of e-HRM that include technology, organization and people factors (TOP). They grouped the most essential factors for successful adoption of e-HRM under the head people factors. People factors included: top management support; user acceptance; communication and collaboration between units; HR skills and expertise; and leadership and culture. For effectiveness of e-HRM the researchers highlighted the need for employees to accept the new technology and be trained (Bondarouk et al., 2017; Sylvester et. al., 2015). Researchers have expressed concerns over change management and acceptance of technology by the end-user (Ruel et al., 2004; Reddington et al., 2005; Martin et al., 2006). One of the most important factors shaping the success of technological change is user acceptance or employee attitude (Fisher & Howell, 2004; Alwis, 2010). The present study endeavours to touch upon the people factor by measuring end users' attitude towards adoption of e-HRM by Indian organizations and analyze the impact of demographics (Gender, Age and hands on time) on attitude of the end users. Thus objective of the present study is to investigate the difference between attitude of end users' towards adoption of e-commerce on the basis of demographic variables (gender, age and hands on experience).

3.   Research Methodology

The present study is descriptive in nature. The sample for the study was chosen on the basis of snowball sampling method and composed of 70 employees of various organizations. A well structured questionnaire was developed to collect the primary data. The questionnaire was divided into two sections. The first section sought demographic information from the respondents. The second part contained few questions pertaining to the software being used and needs of end users that it caters to. Further, the responses with regard to attitude towards e-HRM have been measured using five point scales ranging from Strongly Disagree (SD) to Strongly Agree (SA). The 11 items of the questionnaire were tested for reliability and an acceptable value of Cronbach alpha i.e 0.980 is obtained. The details of demographic profile of the respondents of the present study include apart from hands on experience, their gender and age composition. Hands on experience indicates the period for which a respondent has been using e-HRM technology. Out of the total sample of 70 respondents 29 females and 41 males. Respondent age varied from 22 years to 44 years with an average of 28.16 years. The cutoff point for age was 35 years and for hands on experience 2 years.

4.   Results and Discussion

In the present study a structured questionnaire was used to seek demographic information. The respondents who were also probed about the software being used, their employer and its scope. Apart from that it contained statements pertaining to measurement of attitude of employees towards e-HRM. Respondents quoted the names of the interface, softwares or the provider of e-HRM solutions and include Manav sampada, Peoplesoft, IEMS, Workday, Finacle, Emuster, SAP, IceHRM, OrangeHRM, Oracle, Lawson software, epayslip, HR Cloud, Grey tip, Accenture portal, Afas etc. With regard to the use of e-HRM system, it was found that the system is being used in multiple ways that include applying leave, getting salary slip, to get information with respect to HR policies, for medi-claim, checking leave balances, give online skill tests, getting E-greetings, giving suggestions and getting information about internal job postings.

For further analysis Kaiser-Meyer-Olkin (KMO) – the measure of sampling adequacy was used to measure the adequacy of sample for extraction of factors. As given in the table 1, KMO is .943 which is greater than 0.6 indicating that factor analysis can be carried out (Field, 2005). Bartlett's test of sphericity was used to test the multivariate normality of the set of distributions. It was found to be significant where Chi-Square value is 1083.875, df=55, p=0.000. Anti image correlation matrix has been looked into deeply to see KMO of individual items and found all the required values above .60 indicating all the items fit well into the factor and need not to be deleted.

Table 1
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.943
Bartlett's Test of Sphericity	Approx. Chi-Square	1083.875
	Df	55
	Sig.	.000

Principal Component Analysis was carried out using Varimax rotation with Kaiser Normalization. Commonality values of 0.60 and above have been accepted for extraction of factors from 11 items of the questionnaire. Table 2 shows the communalities of each item and table 3 shows the component matrix which reveals that 83.331% variance has been explained by the single factor and average communality is greater than 0.70 so even small sample is no problem (Field, 2005, pg. 640).

Table 2
Communalities

	Initial	Extraction
attitude	1.000	.863
easytouse	1.000	.895
easytoskill	1.000	.852
resources	1.000	.851
knowledge	1.000	.749
etrainbenefit	1.000	.757
assistance	1.000	.799
futureintend	1.000	.919
lessconsult	1.000	.762
selfservice	1.000	.881
enthusiastic	1.000	.839

Extraction Method: Principal Component Analysis.

Table 3
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.166	83.331	83.331	9.166	83.331	83.331
2	.421	3.827	87.158			
3	.328	2.982	90.140			
4	.250	2.269	92.409			
5	.220	2.004	94.414			
6	.156	1.422	95.835			
7	.128	1.164	96.999			
8	.110	1.000	98.000			
9	.102	.925	98.925			
10	.076	.688	99.613			
11	.043	.387	100.000			

Extraction Method: Principal Component Analysis.

For the purpose of the present study the factor is named as attitude of employees towards e-HRM. Further the average of the responses on 11 statements was used as the dependent variable. Prior to applying t-test on the data, the assumption of normality was tested. Due to the data not being normal non parametric Mann whitney U test was applied. The results of the same are shown in tables 4, 5 and 6.

Table 4
Hypothesis Test Summary

Null hypothesis	Test	Sig.	Decision
The distribution of attitude is the same across categories of Gender.	Independent - Samples Mann-Whitney U Test	.056	Retain the Null Hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 5
Hypothesis Test Summary

Null hypothesis	Test	Sig.	Decision
The distribution of attitude is the same across categories of Age.	Independent - Samples Mann-Whitney U Test	.012	Reject the Null Hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 6
Hypothesis Test Summary

Null hypothesis	Test	Sig.	Decision
The distribution of attitude is the same across categories of hands on experience.	Independent - Samples Mann-Whitney U Test	.004	Reject the Null Hypothesis

Asymptotic significances are displayed. The significance level is .05

No significant difference was found among the groups on the basis of gender ($p > 0.05$), however age ($p < 0.05$) of the respondents and time ($p < 0.05$) since the e-HRM system is being used by the respondent (hands on experience) significantly affected their attitude. It implies that youngsters are more positive towards adoption of e-HRM. The reason might be their growth being parallel to the growth of technology and hence they are more tech savvy. Such employees may also take lesser time to learn new technology. Whereas aged employees must be counseled and motivated to start with a long term perspective and keep using the E-HRM system as learning new technology improves with practice. Also initially use of e-HRM may appear to be an added burden or no major benefit as benefits may take time to be visible rather users may find it difficult to move away from traditional practices. Thus while implementing e-HRM system in an organization due care must be given to the age composition of its employees and facilitating accordingly. Secondly focus shall be given on motivating employees for practicing the system to increase their hands on experience instead of avoiding and postponing its usage.

5. Conclusion and Limitations

Managing change is often a complex process in which contexts and their favorability play an important role for smooth transition. For some organizations e-HRM is becoming the path of least resistance from user's perspective where the credit goes to the practices followed by such organizations that makes the context favorable. Positive attitude and lesser resistance can be expected among users in organizations where they are provided with resources required to use the system, their operational grievances are dealt with effectively in no time, redundant processes and interactions are done away with to save time and facilitate self service and technology interface is user friendly. The main limitation of the present study is its sample size and sample composition. Average age of the respondents in the present study is less than thirty years. The attitudes of young employees are relevant for new technological solutions but are not representative of the entire population. Even the sample could be

balanced in terms of gender composition. Therefore more empirical findings are needed to verify effect of demographics on end users' attitude towards e-HRM systems. Hence, the results of the study can not be generalised.

References:

- Alleyne, C., Kakabadse, A., & Kakabadse, N. (2007). Using the HR intranet. *Personnel Review*, 36, 295–310.
- Alwis, A. C. D (2010). Impact of Electronic Human Resource Management on Role of Human Resource Managers. *Ekonomika A Management*, 4, 47-60.
- Field, A. (2005). *Discovering statistics using SPSS*, Second Edition, Sage Publications.
- Bondarouk, T. V., & Ruël, H. J. M. (2009). Electronic human resource Management: Challenges in the digital era, *The International Journal of Human Resource Management,* 20, 505–514.
- Bondarouk T., Parry E. and Furtmueller E. (2017). Electronic HRM: four decades of research on adoption and consequences. *The International Journal of Human Resource Management,* 28:1, 98-131, DOI: 10.1080/09585192.2016.1245672.
- Beulen, E. (2009). The contribution of a global service provider's Human Resources Information System (HRIS) to staff retention in emerging markets. *Information Technology & People*, 22, 270–288.
- Cronin, B., Morath, R., Curtin, P., & Heil, M. (2006). Public sector use of technology in managing human resources. *Human Resource Management Review*, 16, 416–430.
- Fisher, S.L. and Howell, A.W. (2004). Beyond user acceptance: examination of employee reactions to information technology systems. *Human Resource Management*, Vol. 43, Nos 2/3, 243-58.
- Haines, V. Y., & Petit, A. (1997). Conditions for successful human resource information systems. *Human Resource Management*, 36, 261–275.
- Olivas-Lujan, M. R., Ramirez, J., & Zapata-Cantu, L. (2007). E-HRM in Mexico: Adapting innovations for global competitiveness. *International Journal of Manpower*, 28, 418–434.
- Sylvester, E. O., Bamidele A.D. and Oluyemi (2015). Implementing e-HRM system in developing countries: challenges and prospects. *International Journal of Applied Information Systems*, 9(8), 38-41. ISSN: 2249-0868.
- Ruel, H., Bondarouk, T., & Looise, J. K. (2004). E-HRM: Innovation or Irritation: An explorative empirical study in five large companies on web-based HRM. *Management Revue*, 15, 364–381.
- Reddington, M., Williamson, M. & Withers, M. (2005). *Transforming HR; Creating value through people*, Elsevier, Oxford. Elesevier:Butterworth-Heinemann.
- Ma, L. and Ye, M.L. (2015). The Role of Electronic Human Resource Management in Contemporary Human Resource Management. *Open Journal of Social Sciences*, 3, 71-78. http://dx.doi.org/10.4236/jss.2015.34009
- Stone, D. L., Stone-Romero, E. F., & Lukaszewski, K. M. (2006). Factors affecting the acceptance and effectiveness of electronic human resource systems. *Human Resource Management Review*, 16, 229–244.
- Strohmeier, S. (2007). Research in e-HRM: Review and Implications. *Human Resource Management Review*, 17, 19-37. http://dx.doi.org/10.1016/j.hrmr.2006.11.002
- Voermans, M., & Van Veldhoven, M. (2007). Attitude towards E-HRM: An empirical study at Philips. *Personnel Review*, 36, 887–902.