

ELECTRONIC HRM IN ITeS SECTOR

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Abstract:

Human Resource Management takes care of two main categories of functions i.e. “Managerial” and “Operative”. HRM performs managerial functions by executing operation function for the purpose of achieving organizational goals.

In past Human Resource Management (henceforth HRM) and Information Technology (henceforth IT) domains used to be seen as stand-alone divisions which cost money and they were treated as overhead expenses; but in 21st century, they more act as a single entity for managing enterprise management i.e. electronic human resource management (henceforth e-HRM). Hence, e-HRM attracted attentions of various researches for being a key point of the enterprise management and to be competitive in today’s business environment. Even though the e-HRM is a huge investment to begin with for the organizations, it can save the cost in long run and increase the effectiveness.

This paper highlights the significance of numerous options available within e-HRM and various benefits it offers, also tries to uncover the patterns of awareness, attitudes, acceptance and behaviours pertaining to IT/e-HRM amongst human resource professionals and employees in IT & IT Enabled Services (ITeS) industry for organizational advantage.

Keywords: Human Resource Management (HRM), Information Technology (IT), HR functions, Electronic Human Resource Management (e-HRM), IT Enabled Services (ITeS).

I. INTRODUCTION

Human Resource Management performs managerial functions (Planning, Organizing, Staffing, Directing and Controlling) by executing operation functions (Procurement, Development, Compensation, Maintenance and Motivation, Integration and Industrial Relation) for the purpose of achieving organizational, individual and societal goals.

Data and Information are the main drivers of the 21st century and **Information Technology** plays a role of guiding factor in a knowledge base industrial 4.0 revolution for gaining competitive business advantage and for achieving organizational goals.

The term “e-HRM” was first used in the 1990’s to reference HRM “transactions” conducted via electronically (Intranet or Internet) and it refers to doing “HR Managerial/Operative activities” by at least two individuals/actors with the help of IT/e-HRM.

E-HRM is still a relatively new research area for scholars, but there is still a well-established knowledge on the use of e-HRM. Use of e-HRM over the past decades surged due to its administrative and strategic benefits, as adoption of e-HRM is supposed to change the HRM configuration within companies. However, empirical evidence suggests that the tangible attainment of expected benefits (especially strategic transformation of the HR function), is scarce. Therefore, several authors have questioned the relevance of a deterministic view of e-HRM as change agent in itself and suggested that e-HRM is the outcome of strategic choices which HR makes. The adoption of e-HRM technology does not necessarily means organizational effectiveness. Recent literature suggests that the deployment of e-HRM can both be a predecessor of strategic HRM as the successful implementation of IT solutions depends on strategic inputs from HRM. However, E-HRM’s outcome depend on the broader context in which organizations exist. Therefore, understanding how e-HRM is to be adopted is more important.

In order to answer all the above questions and to study the conceptualization of e-HRM adoption, we treated e-HRM configuration as a combination of the actual degree of technological presence and the degree to which the technology is used to enable HRM activities.

Our study is based on a configurational approach in order to provide methodical knowledge, moreover, as recommended by Strohmeier & Kabst, we determine which factors drive the emergence of these configurations via our research design. Therefore, our research questions are:

1. Which configurational type of e-HRM implementation actually occur with both IT & HRM focus?
2. Which factors explain the occurrence of a certain configurational type of e-HRM?

The business world is changing, new technologies (internet, smartphones, etc.) have made information available 24x7. Smart phones give applicants access to countless job searching websites like monster.com, naukri.com, timesjob.com, etc. and their mobile app’s on android &/or apple platform. Most young professionals now a days use social media sites (Facebook, Twitter, etc.) v/s reading newspaper. Organizations can maximize the benefit of social media and other recruiting strategies by engaging with their customers, employees, and potential job candidates. While the mediums of past recruiting and modern recruiting are different, the strategies beneath the surface are still largely the same.

Organizations now can bypass the traditional in-person recruitment process as they are able to conduct interviews and make and assessment of the qualifications for potential candidate online. Organizations now can take advantage of new and advanced IT systems based on Artificial Intelligence (AI) and Machine Learning (ML) to gauge a potential candidate's personality, and assess their skill set as it pertains to the needs of the job.

II. LITERATURE REVIEW:

According to Ghosh & Tripathi (2018), the e-HRM's goal is to have standardized HR processes by designing a common enterprise wide HR system which can be accessed through Local Area Network (LAN)/ Wide Area Network (WAN) or through a world wide web (www)/cloud based HR system. A cloud based Human Resource Information System (HRIS) reduces the total cost of ownership and increases the system efficiency many folds. However, the implementation of a cloud-based HR system is tightly linked with the overall business strategy of a firm i.e. right objectives, correct implementation, and alignment of organizational competencies with business goals.

Broderick (1991) concludes that, IT has given organizations the opportunity to ease the job of selection process and drive efficiencies in selecting candidates who are the right fit for the right job. Organization can save lot of time by not going through each and every individual resume and let IT/AI help you select few based on skill sets, knowledge, and experience needed for the job; and select few then can be easily interviewed and vetted in person. The online method sometime does not give sufficient opportunity to selection panel/s to identify and attract necessary talent pool, and it is a possibility that candidates with more potential are left out which could have a positive impact on the overall productivity of the organization.

Lee, 2009 concludes that, IT has been a valuable tool for HR managers in helping to facilitate one of the essential HR functions i.e. communications within their organizations.

Martin, 2005 highlights that as a part of communication, HR is directly responsible for employee participation, clearly defined job roles, internal career opportunities, and extensive formal training. Although HR managers may have different methods, communication effectiveness is the key in operating and overall success of an organization.

According to Martin, Alexander, Reddington, & Pate (2006), E-HRM practices provide a more efficient way for achieving the organizational goal. Due to the advancement of IT every HR goal and task executed in more efficient manner. It is complementing each other.

Kohansal, Sadegh & Haghshenas (2016) in their research analysed that since, E-HRM acceptance depends on employees' expectation from E-HRM. Past research revealed that there is a meaningful relationship between E-HRM acceptance and value creation. Therefore, one of the reasons of using IT tools in human resources is that technology can reach them faster and it creates competitive advantage for organization. This research results confirmed the effect of E-HRM acceptance on value creation.

III. RESEARCH METHODOLOGY:

Research design to analyze "the impact of e-HRM on selected ITeS firms" was so constructed, that it takes all the aspects, unique objectives & hypothesis of the study. The research design also measures and evaluates the type of statistical measures to be applied.

The variables and influencing variables are selected on the basis of past research and found out their relationship within and between the variables are observed and studied. Some of the initial selected variables which are not showing a relationship i.e. found out a correlation due to chance are dropped down from the study. Some of the parent variables which are dependent and independent in nature are initially tested in pilot testing (a sample of 50 units) in different IT companies. The information is collected at three different levels i.e. Higher-level Managers, Middle level managers & Employees. The survey is conducted at different cities to know / access their (respondents) opinion and experience before and after the application of e-HRM.

OBJECTIVES OF THE STUDY:

E-HRM HRM is increasingly gaining importance within working organizations and many of its adherents assume and express its advantages to conduct interviews. Scientific support, however, is scarce and there is a lack of clarity regarding the contribution of e-HRM towards scientific interview methods.

THE MAIN OBJECTIVES OF THIS RESEARCH ARE:

1. To find the importance of various benefits of e-HRM practices in ITeS industry.
2. To identify the importance of human resources management electronically.
3. To classify the extent to which the ITeS companies are interested in applying e-HRM with their interest.

STATISTICAL TEST OF HYPOTHESIS: As hypothesis is a tentative assumption towards the research questions, but the assumption which an individual derived must be true assumption i.e. must be based on certain authentic facts and figures. Since, the research is descriptive in nature hence it is mainly used to describe "what is happening" and "what has been happened" and if required then highlighting the new way and new outlook to know the impact.

Hypothesis testing enables us to make probability statements about population parameter(s). A hypothesis may be defined as a proposition or a set of propositions set forth as an explanation for the occurrence of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigation or accepted as highly probable in the light of established facts.

The test of hypothesis implies the weather the assumption(s) are true or not (technically described as null hypothesis) with a view to choose between two conflicting hypotheses (null & alternative hypothesis) about the value of a population parameter such as mean.

FOLLOWING HYPOTHESIS IS THUS FORMULATED:

H₀ : The benefits offered by e-HRM practices in ITeS industry enhances probability and ease of business.

H_a : The benefits offered by e-HRM practices in ITeS industry not enhances probability and ease of business.

Based on the nature of the study and the objectives it seeks to achieve, the analytical descriptive method was used, which is based on the study of the phenomenon as it is in fact and it is concerned as a precise description and expressed in qualitative and quantitative terms. This method is not sufficient to collect the information about the phenomenon in order to investigate its manifestations and its different relations, But rather to analysis, linkage and interpretation.

IV. DATA ANALYSIS:

The study population consists of 214 employees in ITeS centers. Their functions varied among managers and heads of departments, programmers, web designers and system analysts. Table (1) shows the distribution of the sample members of ITeS centers in the various company.

Table 1: Number of IT staff members concerned with E -HRM.

Infosys	Wipro	HCL	Total summation
184	176	154	514

All the employees and staff members are highly concerned with the new implementation of E HRM.As all the major company's had opted this change.

Table 2: Components of E HRM with respect to Ease of the business.

			Sum of Squares	df	Mean Square	F	Sig.
Competence * Ease	Between Groups	(Combined)	12.854	3	4.285	18.904	.000
	Within Groups		115.597	510	.227		
	Total		128.451	513			
Work Culture * Ease	Between Groups	(Combined)	.982	3	.327	1.556	.199
	Within Groups		107.277	510	.210		
	Total		108.259	513			
Compilation * Ease	Between Groups	(Combined)	10.170	3	3.390	17.999	.000
	Within Groups		96.056	510	.188		
	Total		106.226	513			
Transparent System * Ease	Between Groups	(Combined)	35.341	3	11.780	7.460	.000
	Within Groups		805.338	510	1.579		
	Total		840.679	513			
Administration Burden * Ease	Between Groups	(Combined)	8.558	3	2.853	13.697	.000
	Within Groups		106.215	510	.208		
	Total		114.772	513			

The valid and reliable components selected for the implementation of E HRM are studied with the "Ease of operation & Ease with implementation" are studied. Analysis of variance is applied "Between & Within" is studied and the results concludes that all the variables taken for the study are found to be significant.

This concludes that implementation of E HRM facilitates Competence, Work Culture, transparency in the work and reduces administrative burden.

Table 3: Components of E HRM with respect to Competency in the business.

			Sum of Squares	df	Mean Square	F	Sig.
Work Culture * High Competence	Between Groups	(Combined)	1.781	2	.890	4.273	.014
	Within Groups		106.478	511	.208		
	Total		108.259	513			
Compilation * High Competence	Between Groups	(Combined)	.092	2	.046	.221	.802
	Within Groups		106.134	511	.208		
	Total		106.226	513			
Transparent System * High Competence	Between Groups	(Combined)	82.588	2	41.294	27.835	.000
	Within Groups		758.091	511	1.484		
	Total		840.679	513			
Administration Burden * High Competence	Between Groups	(Combined)	6.963	2	3.481	16.501	.000
	Within Groups		107.810	511	.211		
	Total		114.772	513			

The valid and reliable components selected for the implementation of E HRM are studied with the “Competence within the organization” are studied. Analysis of variance is applied “Between & Within” is studied and the results concludes that all the variables taken for the study are found to be significant.

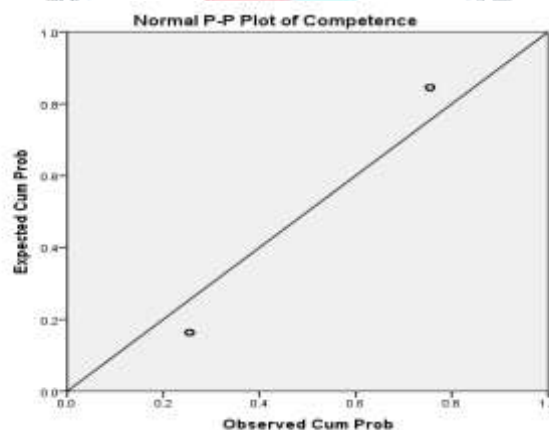
This concludes that implementation of E HRM facilitates Competence, Work Culture, Compilation, transparency in the work and reduces administrative burden.

Table 4: Components of E HRM with respect to Cost Effectiveness in the business.

		Sum of Squares	df	Mean Square	F	Sig.
Competence * Cost Effectiveness	Between Groups (Combined)	2.700	2	1.350	5.486	.004
	Within Groups	125.751	511	.246		
	Total	128.451	513			
Work Culture * Cost Effectiveness	Between Groups (Combined)	4.891	2	2.446	12.089	.000
	Within Groups	103.368	511	.202		
	Total	108.259	513			
Compilation * Cost Effectiveness	Between Groups (Combined)	26.805	2	13.402	86.232	.000
	Within Groups	79.421	511	.155		
	Total	106.226	513			
Transparent System * Cost Effectiveness	Between Groups (Combined)	6.793	2	3.396	2.081	.126
	Within Groups	833.886	511	1.632		
	Total	840.679	513			
Administration Burden * Cost Effectiveness	Between Groups (Combined)	7.632	2	3.816	18.201	.000
	Within Groups	107.140	511	.210		
	Total	114.772	513			

The valid and reliable components selected for the implementation of E HRM are studied with the “Cost Effectiveness” are studied. Analysis of variance is applied “Between & Within” is studied and the results concludes that all the variables taken for the study are found to be significant.

This concludes that implementation of E HRM facilitates Competence, Work Culture, transparency in the work and reduces administrative burden.



After the statistical analysis of the study tool, the following results were obtained:

1. IT infrastructure in the organizations involved in the study is considered to be practically sufficient for transition to electronic management, and researchers explain this because of the increasing reliance on the use of modern technologies in all areas of work.
2. Has found the existence of modern techniques in general in the components of information systems, which are the basis for electronic management in general.
3. Has found that the security equipment and software used need to be updated and developed, the management of IT does not work within a clear strategic plan and there is no named job of information security manager.
4. The existence of a project in progress to transform into electronic management systems in a medium way.
5. Provide MIS for all administrative systems in a medium way, and that these systems are moderately adequate to build an electronic management system.

V. RESEARCH RECOMMENDATIONS:

The following is a set of recommendations based on the results of the study, hoping for the administrations of the Companies concerned to study the development of e-HRM and to benefit from this field in enhancing the orientation towards electronic management. These recommendations are:

1. Providing financial support to IT centers for their importance in the process of change to e-governance.

2. Making use of Integrated computerized management information systems, and work to link to cover all administrative aspects act as a beginning to a gradual transition to electronic management.
3. Keeping abreast of the rapid changes in the field of electronic management and the tools and means of IT.
4. Developing e-HRM a key role in the success of the process of transition to electronic management.
5. Adopting internal electronic correspondence instead of paper, this contributes significantly to reduce administrative financial expenses, and the speed of completion of work.

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