

The Impact of Electronic Human Resource Management (E-Hrm) on Organizational Development of Scientific Research Solution at Piratiyur

M.Manimekalai^{1*}, S.Thanigaimani²

^{1*} Department of Commerce, Srimad Andavan Arts and Science College(Autonomous), Trichy - 5

² Department of Commerce, Srimad Andavan Arts and Science College(Autonomous), Trichy - 5

Available online at: www.ijcseonline.org

Abstract— The massive technological change has been resulted in wider integration of technology in different sectors and fields of work .The use of these applications /technology solutions in the human resource area is major trend that change ways how Human Resource functions are carried out. E-HRM facilitates the HR function to create dynamic and operational capabilities and contributes greatly on HRM effectiveness. This paper elaborates on E-HRM in detail on the following aspects: Introduction of E-HRM, types of E-HRM, Functions of E-HRM ,role of E-HRM, level, nature of E-HRM, advantages and disadvantages E-HRM of determinants of attitude towards and it is expected to help people understand E-HRM more comprehensively and systematically. Great changes have been brought to our economy, society, and culture with the rapid development of science and technology, especially the usage of Internet and computer technology.

Keywords— *Human Resource Management, Challenges, Digital Era*

INTRODUCTION

The gradual penetration of information and communication technology (ICT) in all facets of business is leading to multidimensional and often unpredictable changes and advancements. Except manufacturing and operations most of the functions of the organization is performed with the click of mouse and latest evolution touch screen, thus most of the business and its employee in present face many challenges and opportunities that evolve from complex nature of work and unending changes taking place in the range of work. One of the major challenges includes rapid change in work technology. One of the largest breakthroughs in the work arena is automation, and digitisation of the work and near constant technological advancement, with a definite move towards the use of technologically sophisticated ways of getting things done, hence HR function of an organization cannot remain aloof and secluded and same pattern has got to be followed for human resource management practices, henceforth new, dynamic ways of managing HR are being seen every day.

New technologies have created a new generation of employees and the organizational structure has changed. The changes are organized in a way that today the absence of organization on the www, means the loss of huge capital resources. Nowadays organizations or formally wider the businesses face many challenges such as globalization, the value chain for competitiveness and technological changes. To arise the web-based technology, the new concept of E-

HRM, entered the field of human resources. This type of management is suitable for human resource professionals to create that causes promotion in their competencies and is playing an effective role.

All organizational activities, including finance, business and personal activities in addition to saving resources, through a web-based system is achieved ,among the activities that organizations can do through the web sites, are considered as personnel matters. The present paper elaborates on electronic human resource management (E-HRM) in detail on the following aspects, namely definition of E-HRM, types of E-HRM, factors influencing utility, effectiveness of E-HRM, determinants of attitude towards E-HRM and the context for E-HRM in China. Hopefully, this paper could help readers understand E-HRM more comprehensively and systematically.

Functions

E- Employee Profile:

The E-Employee Profile web application provides a central point of access to the employee contact information and provides a comprehensive employee database solution, simplifying HR management and team building by providing an employee skills, organization chart and even pictures. E-Employee profile maintenance lies with the individual employee, the manager and the database manager. E-Employee profile consist of the following: Certification, Honor/Award, Membership, Education, Past Work Experience, Assignment Skills, Competency, Employee

Assignment Rules, Employee Availability, Employee Exception Hours, Employee Utilization, Employee tools, Job information, Sensitive job Information, Service Details, Calendar, Calendar Administration, Employee Locator.

E-Recruitment:

Organizations first started using computers as a recruiting tool by advertising jobs on a bulletin board service from which prospective applicants would contact employers. Then some companies began to take e-applications. Today the internet has become a primary means for employers to search for job candidates and for applicants to look for job. As many as 100,000 recruiting web sites are available to employers and job candidates and which to post jobs and review resumes of various types. But the explosive growth of internet recruiting also means the HR professionals can be overwhelmed by the breadth and scope of internet recruiting.

E-Recruiting Methods:

Job boards, Professional/Career, websites, Employer Websites

E-Selection:

Most employers seem to be embracing Internet recruitment with enthusiasm, the penetration of on-line assessment tools such as personality assessments or ability tests, has so far been limited. A survey has shown that although more than half respondents organizations already use either psychometric or other assessment during the recruitment process, only few of these companies use on-line assessments prior to interview. Fewer still include a core fit questionnaire in the recruitment pages of their websites.

E-Learning:

E-Learning refers to any programmed of learning, training or education where electronic devices, applications and processes are used for knowledge creation, management and transfer. E-Learning is a term covering a wide-set of applications and processes, such as web-based learning, computer-based learning, virtual class room, and digital collaboration. It includes the delivery of content via Internet, intranet/extranet (LAN/WAN), audio-and videotape, satellite broadcast, interactive TV, CD – Rom, and more. Training program provides.

Implementation of E-HRM

There are five main phases in the implementation of the E-HRM business solution.

1. Analysis (Infrastructure)

Analyzing the existing infrastructure with regard to quantity of data and classification of business activities.

2. Business processes in the company

After the existing processes have been analyzed, the options for automating these processes in the client's environment are proposed. Finally a project plan is developed based on the model of the processes identified.

3. Implementation

After the fundamental analysis of the processes in the work team, individual modules are deployed in the client's environment. With modular design a gradual implementation is possible. Company-specific functionalities are discussed with the client and built upon request.

4. Implementation and Training

A complete knowledge of the components of the solution is a key factor for successful implementation. The entire team of project managers, information technology professionals and human resources specialist are thus involved in user training and implementation.

5. Maintenance

Fast technological development and development of new modules make cooperation after the implementation indispensable. A maintenance contract typically includes:

- ❖ Technical support experts available by phone, through e-mail or on-site
- ❖ Adaptation of existing modules or development of new ones
- ❖ Application software adjustment to changes in the system environment or

Types of E-HRM:

Lepak and Snell (1998) distinguished three areas of HRM as, operational HRM, relational HRM and transformational HRM.

Operational HRM:

E-HRM is concerned with administrative function like payroll, employee personal data, etc. Operational type of HRM provides the choice between asking employees to keep their own personal data up to date through an HR website or to have an administrative force in place to do this.

Relational HRM:

E-HRM is concerned with supportive business process by the means of training, recruitment, performance management, and so forth. As to relational HRM, there is the choice between supporting recruitment and selection through a web-based application or using a paper-based approach (through advertisements, paper based application forms and letters etc.).

Transformational HRM:

E-HRM is concerned with strategic HR activities such as knowledge management, strategic re-orientation, etc. As to transformational HRM, it is possible to create a change-ready workforce through an integrated set of web-based tools that enables the workforce to develop in line with the company's strategic choices or to have paper-based materials.

Research Problem Statement:

The HR function of an organization is responsible for complying with the HR needs of the organization. As with other business functions, strategies, policies and practices have to be implemented to ensure smooth operation of the organization and prepare the organization in such a way that smooth operation can be guaranteed in the (nearby) future. Using E-HRM technology is a way of implementing these HR strategies, policies and practices. The E-HRM technology supports the HR function to comply with the HR needs of the organization through web-technology-based channels (Ruel, et.al, 2004).

The use of E-HRM technology, as it is a way to implement HR strategies, policies and practices, is expected to have an impact on how the HR function operates. Moreover, it has aimed to improve the HR system. This is in turn affected by what the organization is trying to achieve as a whole.

For the HR function, E-HRM has the potential to affect both efficiency and effectiveness. Efficiency can be affected by reducing cycle times for processing paperwork, increasing data accuracy, and reducing HR staff. Effectiveness can be affected by improving the capabilities of both managers and employees to make better, timelier decisions. EHRM also provides the HR function the opportunity to create new avenues for contributing to organizational effectiveness through such means as knowledge management and the creation of intellectual and social capital (Lengnick-Hall & Moritz, 2003, p. 366).

Past research has suggested that e-HRM can increase the efficiency of HR activities, improve HR service delivery and transform the role of the HR function into one that is more strategic. The more extensive deployment of technology and systems in the HR domain could be an additional cost to the organization (Parry, 2011, p.8).

Research Variables:

The following are the research variables:

1. The dependent variable is SRS Organizational Development.
2. The independent variable is: Electronic Human Resource Management, which is subdivided into 3 major variables:
 - a. E-Staffing (E- Recruitment, E-Selecting)
 - b. E-Training and Development
 - c. E-Compensation

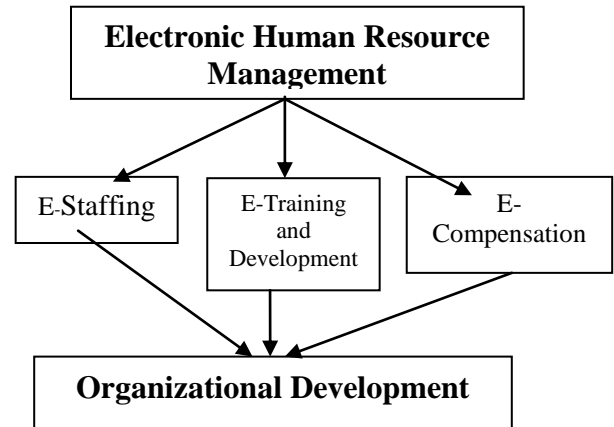
Objective of the Study

1. To identify the impact of Electronic Human Resource Management.
2. To identify the obstacles and problems that influence negatively the implementation of E-HRM.

Research Hypotheses:

There is no significant statistical relationship at level $\alpha = 0.05$ between Electronic Human Resource

Management components (E- Recruitment, E-Selecting, E-Training and Development, E-Compensation and Organizational Development in SRS.



Data Analysis:

1. E- Recruitment :

Table –I Correlation coefficient of each item of “E- Recruitment”

Sl.No.	Item	Pearson Correlation Coefficient	P-Value (Sig.)
1.	E- Recruitment leads to facilitate selection process	.631	0.000*
2.	Choosing the appropriate competencies for appointment to the various functions electronically	.608	0.000*
3.	Employment screening applications submitted electronically	.704	0.000*
4.	Using clear and effective electronic methods to select candidates for the job	.746	0.000*
5.	Using an electronic exams to test candidates for the job	.499	0.001*
6.	The use of electronic interviews as a method of choice of	.615	0.000*

	candidates for the job		
7.	Verification of well-known candidates for the job via e-mail	.631	0.000*

* Correlation is significant at the 0.05 level

The above table clarifies the correlation coefficient for each item of the "E- Recruitment" and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the items of this field are consistent and valid to be measure what it was set for.

2. The validity of E-Training and E-Development field

Table –II Correlation coefficient of each item of "E-Training and E-Development "

Sl.No.	Item	Pearson Correlation Coefficient	P-Value (Sig.)
1.	Using electronic system to guide new employees	.523	0.000*
2.	Employees participate in online courses	.742	0.000*
3	There is an effective follow-up of the performance of the staff after online training	.697	0.000*
4.	Choice the candidates for training by using electronic system	.665	0.000*
5.	Provided E-Training materials are commensurate with the needs of employees	.558	0.000*
6.	Participate in online training helps in employee benefit his colleagues at job	.719	0.000*
7.	Available specialized E-Training programs lead to increased staff efficiency	.729	0.000*
8.	E-Training reduces the gap between the theoretical and practical Reality	.643	0.000*

9.	The internet training lead to the development of staff skills in solving problems of work	.445	0.000*
10.	E-Training is important to improving functional and professional performance of the staff	.671	0.000*

* Correlation is significant at the 0.05 level

In this table find out the correlation coefficient for each item of the "E-Training and E Development " and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the items of this field are consistent and valid to be measure what it was set for.

3. The validity of E-Compensation field

Table III Correlation coefficient of each item of "E-Compensation "

Sl. No.	Item	Pearson Correlation Coefficient	P-Value (Sig.)
1.	The E-Compensation system helps to get information about the employee's salary and saving	.545	0.000*
2.	Various departments participate in the design of E-Compensation	.570	0.000*
3	Electronic leave management program provides accurate information	.516	0.000*
4.	E-Compensation system can be used easily	.722	0.000*
5.	An electronic periodic study of salaries to make sure justice salary system	.434	0.003*
6.	Commensurate increase in salaries with the rising cost of living	.697	0.000*
7.	I get what I expect from my performance compensation	.753	0.000*

	compared job		
8.	The remuneration system is linked to job performance	.756	0.000*
9.	. I am proud of my work in the	.522	0.000*
10.	. I have the desire to continue my work until retirement	.514	0.000*

* Correlation is significant at the 0.05 level

This table clarifies the correlation coefficient for each item of the “E-Compensation” and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the items of this field are consistent and valid to be measure what it was set for.

4. The validity of SRS organizational development field

Table IV Correlation coefficient of each item of “Organizational development” and the total of this field

Sl.No.	Item	Pearson Correlation Coefficient	P-Value (Sig.)
1.	E-HRM helps to manage the organizational development process	.786	0.000*
2.	E-HRM helps to achieve the organization goals	.730	0.000*
3	E-HRM helps in improving communication methods and transfer information and data between different administrative units	.747	0.000*
4.	E-HRM lead to a degree of flexibility and to adapt to the work environment variables	.751	0.000*
5.	E-HRM helps increase performance effectiveness	.603	0.003*
6.	E-HRM facilitates organizational	.802	0.000*

	development process		
7.	E-HRM affect the growth and development of workers	.744	0.000*
8.	E-HRM contribute in resolving work problems and increase coordination between the different units	.834	0.000*

* Correlation is significant at the 0.05 level

In this table shows that the correlation coefficient for each item of the “Organizational development” and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the items of this field are consistent and valid to be measure what it was set for.

The following is a summary of the conclusions that can be drawn from this study based on the research field:

1. Conclusions about E- Recruitment field: E-Recruitment affects Organizational Development in the SRS nearly 36%. This means that SRS announced for jobs available through SRS electronic job site; electronic announcement about the job is based on the job description which clearly defines the tasks and responsibilities and qualifications required of Vacant Position; employment applications are served by SRS electronic job site, Employment screening applications submitted electronically; the use of the human resources staff of an electronic system for scheduling of written exams and interviews to publicize it on SRS electronic job site;.

2. Conclusions about E-Selecting field: E-Selecting affects Organizational Development in the SRS nearly 42%. This means that SRS use of an electronic system for scheduling experience and competence of applicants for announced jobs; choose the appropriate competencies for appointment to the various functions electronically; use an electronic system for choosing the candidates for the job among those with relevant staff announced job with the department of employment contributes to saving time and effort; Use clear and effective electronic methods to select candidates for the job; Use an electronic exams to test candidates for the job; verify well-known candidates for the job via e-mail.

3. Conclusions about E-Training and E-Development field: E-Training and E-Development affects Organizational Development in the SRS nearly 55.3%. This means that SRS electronic system to guide new employees; Employees participate in online courses; chose the candidates for training by using electronic system; provide E-Training materials which commensurate with the needs of

employees; participate in online training helps in employee benefit his colleagues at job; available specialized E-training programs lead to increased staff efficiency; E-Training reduces the gap between the theoretical and practical reality; Participation in the training process via.

4. Conclusions about E-Compensation field: E-Compensation affects Organizational Development in SRS , by nearly 61%. This means that UNRWA E-compensation system helps to get information about the employee's salary and saving; various departments participate in the design of E-compensation; electronic leave management program provides accurate information; E-compensation system can be used easily; an electronic periodic study of salaries to make sure justice salary system; employees received what they have expected from their performance; managers treated employees with respect and without discrimination; employees are proud of being working in SRS ; they have the desire to continue their work until retirement; the remuneration system is linked to job performance; E-compensation system provides appropriate information about to the salary scale.

5. The study concluded that there are no differences in the response of the study sample, due to the respondents personal traits (gender, functional class).

6. The study concluded that there are differences in the response of the study sample, due to the respondent's personal traits (Age, educational qualification, program/department and years of service).

7. The study concluded that there are differences in the response of the study sample, due to the respondents age attributed to respondents with less than 35 years.

8. The study concluded that there are differences in the response of the study sample, due to the respondents educational qualification attributed to respondents with bachelor degree.

9. The study concluded that there are differences in the response of the study sample, due to the respondents program/department attributed to respondents who are working in the human resource department.

10. The study concluded that there are differences in the response of the study sample, due to the respondents residency years of service attributed to respondents who have 3- less than 9 years of service .

References

- [1]. Abu Ammouneh, Y.(2009),The reality of Electronic Human Resource Management (e-HRM) at the Palestinian universities in the Gaza strip .Master Thesis.
- [2]. Bemus, C., Henle, C. & Hogler, R. L. (1998), "Internet Recruiting and Employment Discrimination: A Legal Perspective", *Human Resource Management Review*, 8.
- [3]. Dileep K M and Ramesh M (2009), "E-Recruitment: Leveraging Technology towards Business Excellence", *Business Review*, Vol. 4, No. 1 & 2.
- [4]. Gupta C.B. (2010),"Human Resource Management", 1st Edition, Sultan Chand & Sons. New Delhi
- [5]. Kluemper, D., Rosen, P. (2009), —Future employment selection methods: evaluating social networking web sites!, *Journal of Managerial Psychology*, 24(6) pp. 567-580
- [6]. Lepak, D.P. & Snell, S.A. (1998). Virtual HR: Strategic human resource management in the 21st Century. *Human Resource Management Review*. 8(3), 215-234.
- [7]. Mathis, R. L., & Jackson, J. H. (2010). *Human resource management 12th ed*, Joseph Sabatino South-Western, Cengage Learning.
- [8]. Mondy, R & Noe, R 2005, *Human resource management*, 9th edn, Person Education international, New Jersey, USA
- [9]. Mondy, R. W. (2008). *Human Resource Management (10th ed)*. New Jersey: Pearson Prentice Hall Inc.
- [10]. Varma,S.(2010),The Implications of Implementing Electronic-Human Resource Management (e-HRM) Systems in Companies
- [11]. Voermans, M. & Van Veldhoven, M. (2007). Attitude towards E-HRM: An empirical study at Philips. *Personnel Review*. (36)6, 887-902.
- [12]. Wei, L. Q., & Lau, C. M. (2005). Market Orientation, HRM Importance and Competency: Determinants of strategic HRM in Chinese firms. *The International Journal of Human Resource Management*, 16 (10), 1901 – 1918.
- [13]. Wilson, J 2005, *Human resource development: learning & training for individuals and organizations*, 2nd edn, Kogan Page.
- [14]. Wood, S., Holman, D., & Stride, C. (2006). Human resource management and performance in UK Call Centres. *British Journal of Industrial Relations*, 44(1), 99 – 124.
- [15]. Zafar J.,Shaukat M.,&Mat N. (2010). An Analysis of E-Human Resource Management Practices: A Case Study of State Bank of Pakistan.
- [16]. www.wikipedia.org
- [17]. www.gijms.org
- [18]. www.sympiaox.org
- [19]. www.ijarems.com