

ELECTRONIC HUMAN RESOURCE MANAGEMENT(e-HRM): GROWING ROLE IN ORGANISATIONS

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ABSTRACT

The trend of business in service industry is moving towards knowledge or digital based economy. Computers have simplified the task of analyzing vast amounts of data and they can be invaluable aids in HR management, from payroll processing to record retention. With computer hardware, software, and data bases, organisations can keep records and information better as well as retrieve them with greater ease. e-HRM is the relatively new term for this IT supported HRM, especially through the use of web technology. This paper is an attempt to highlight the importance of e-HRM for the organizations. If organizations have to be successful in the competitive environment then they have to adopt new technologies like e-HRM and it is a innovative technology in managing human resources. This paper shows that e-HRM has so much objectives as well as it has a large scope and challenges to employees and employers to do their work effectively.

INTRODUCTION

Technology advancement is one of the powerful driving forces (Jovita, 2008). It has reshaped the way we play, communicate, live, work and also the way business is conducted. The technology and digital business communications improvements have changed various organisational activities. The way that organisations' perform their task is currently associated to contemporary concepts such as digital business, e-commerce, customer relationship management, human resource management etc. digital business services are being considered as pertinent and prominent parts of the organisation.

Although the IT bubble has burst, the web or internet technologies continue to fundamentally transform our world, driving globalization to a new horizon. There are now several major players that offer enterprise-wide technology solutions. This has enabled the HR function to make its business ease for technological investment. The core HR information system (HRIS) backbone offers in-built "best practices" in HR processes and the ability to apply solutions globally. HR not only has the opportunity to utilize technology, but now the means to make a convincing business ease for this investment.

New technologies allow training to occur at any time and any place. New technology includes the use of

computers, software, internet, e-mail, telecommunications, CD-ROMs and DVDs for a wide variety of applications. The internet and web allow employees to send and receive information as well as to locate and gather resources, including software, reports, photos and videos. The internet gives employees instant access to experts whom they can communicate with and to new newsgroups, which are bulletin boards dedicated to specific areas of interest, where employees can read post and respond to messages and articles.

Technology is pushing the boundaries of artificial intelligence, speech synthesis, wireless communications and networked virtual reality. Realistic graphics, dialogues and sensory cues can now be stored onto tiny, inexpensive computer chips. These advances have the potential for freeing workers from going to a specific location to work and from traditional work schedules. Many companies are taking steps to provide more flexible work schedules to protect employees' free time and to more productively use employees' work time.

e-HRM: AN INTRODUCTION

Jovita, 2008 states that HR function of an organisation is responsible for complying with the HR needs of the organisation. As with other business functions, strategies, policies and practices have to be

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implemented to ensure smooth operation of the organisation and prepare the organisation 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 organisation through web-technology based channels. The e-HRM technology provides a portal which enables managers, employees and HR professionals to view extract or alter information which is necessary for managing the HR of the organisation. Lawler and Mohrman (2003) suggest that e-HRM and its self-service characteristics can be the cheapest and fastest way to provide specific HR activities.

With e-HRM, managers can access relevant information and data, conduct analyses, make decisions and communicate with others and they can do this without consulting an HR professional unless they choose to do so. A manager who wants to make a merit pay decision may access files containing text, audio and video describing how best to make the decision. Then, the manager can access the data containing information on his or her employees. With a click of the mouse, the decision is recorded and departments are notified. Hours of processing are reduced to minutes, and much paper work is avoided by the use of this technology.

With e-HRM employees control their own personal information. They can update records when their situations change and make many decisions on their own, consulting HR professionals only when they deem it necessary. If we take an example of an employee who wishes to increase investments in a retirement plan can do so from work or home using the internet. Employees may also participate in a training programme at home after working hours. Self service for managers (MSS) and Employees (ESS) are the key concepts of the technologies.

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 paper work, 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. e-HRM

also provides the HR function the opportunity to create new avenues for contributing to organisational effectiveness through such means as knowledge management and the creation of intellectual and social capital.

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 is aimed to improve the HR system. The impact of e-HRM technology on the HR system however, is expected to be dependent on the way the technology is used. It is dependent on what and how the technology supports the HR function but also on how the technology is constructed.

HUMAN RESOURCE MANAGEMENT (HRM) AND e-HRM:

HRM has developed in recent years as a broad encompassing field of study that incorporates and synthesizes elements from personal management, organisational behavior and industrial and labor relations, building broader concepts from a variety of cognate disciplines including economics, law psychology and sociology amongst others (Poole & Warner, 1999). Thus it has become a pervasive and influential approach to the management of employment in a wide range of market economies.

Electronic human resource management (e-HRM) provides the information required to manage HR processes. These may be core employee database and payroll systems but can be extended to include such systems as e-recruitment, e-learning, performance management and reward. The system may be web-based, enabling access to be remote or online and at any time.

Although technology allows having digital services for HRM which refer as virtual HRM, this type of services are coming with four significant pressures (Lepak & Snell, 1998). They are: Focusing on strategic question of HRM, flexibility in terms of policy making and practices, efficiency and awareness of cost, service oriented towards management and employees.

MEANING OF e-HRM

People mean different things by the term "e-HRM" (Jovita, 2008). It is a web-based solution that takes advantage of the latest web application technology to deliver an online real-time Human Resource Management Solution. It is comprehensive but easy to use, feature-rich yet flexible enough to be tailored to your specific needs. It also refers to the processing and transmission of digitized information used in HRM, including text, sound and visual images, from one computer or electronic device to another. It will be able to meet the demands of today's Human Resource Management.

The term e-HRM is used to describe technology's role in enabling the transformation of solely HR activity. Instead of a centralized personnel team handling everyday tasks such as approving pay rises, sorting out training and checking holiday entitlements, these can be handled by the employees themselves or their line manager. The adoption of e-HR seeks to minimize or eliminate intervention from HR staff, allowing managers and employees to perform HR tasks directly with the self service tools. These can contrast with the shared service environment, where the service would normally be expected to be delivered by a customer service operative or other category of HR staff. In addition to e-HR and e-HRM, similar terms are used such as virtual HR (M), HR intranet, web-based HR; computer based human resource information system (CHRIS) and HR portals.

CONCEPT OF e-HRM

As defined by Kettley and Reiley (2003), a Computerized Human Resource Information System (CHRIS) consists of "a fully integrated, organisation-wide network of HR related data, information, services, databases, tools and transactions". Such a system can be described as e-HR, meaning the application of conventional, web and voice technologies to improve the HR administration, transactions and process performance. As stated by Ernst Biesalski (2001) "Electronic Human Resource Management (e-HRM) is a web-based tool to automate and support HR processes. The implementation of e-HRM is an opportunity to delegate the data entry to the employees. e-HRM facilitates the usage of HR market places (e-recruitment) and offers more self-

service to the employees. e-HRM is a collection of many different technologies". Mary Gowan (2001) has defined electronic Human Resource Management System (e-HRM System) as a web-based solution that takes advantage of the latest web application technology to deliver an online real-time human resource management solution. It is comprehensive but easy to use, feature-rich yet flexible enough to be tailored to your specific needs. Broderick and Boudreau (1992) defined Human Resource Information Systems (HRIS) as the "composite to data basis computer applications and hardware and software that are used to collect or record, store, manage, deliver, present and manipulate data for human resources". According to Ruel, Bondarouk and Loosie (2004), "e-HRM is a way of implementing HR strategies, policies and practices in organisations through a conscious and directed support of and/or with the full use of web-technology based channels".

DIFFERENCE BETWEEN e-HR AND HRIS

There is a fundamental difference between HRIS (human resource information system) and e-HR lies in the fact that HRIS are directed towards the HR department itself (Voemans & Veldhoven, 2007). Users of these systems are mainly HR staff. These type of systems aims to improve the processes within the HR department itself, in order to improve the service towards the business. With e-HR, the target group is not the HR staff but people outside this department: the employees and management. HRM services are being offered through an intranet for use by employees. The difference between HRIS and e-HR can be identified as the switch from the automation of HR services towards technological support of information on HR services. Technically speaking it can be said that e-HR is the technical unlocking of HRIS for all employees of an organisation. In our view it concerns the following e-HRM is a way of implementing HR strategies, policies and practices in organisations through a conscious and directed support of the full use of web technology based channels. The word 'implementing' in this context has a broad meaning, such as making something work, putting something into practice, or having something realized. e-HRM, therefore, is a concept - a way of "doing" HRM".

OBJECTIVES OF e-HRM

e-HRM is designed to achieve the following objectives (Jovita, 2008):

- To offer an adequate, comprehensive and on-going information system about people and jobs at a reasonable cost.
- To provide support for future planning and also for policy formulations.
- To facilitate monitoring of human resources demand and supply imbalances.
- To automate employee related information.
- To enable faster response to employee related services and faster HR related decisions.
- To offer data security and personal privacy. Data security is a technical problem that can be dealt with in several ways, including passwords and elaborate codes. In the information age personal privacy is both an ethical and moral issue.

SCOPE OF e-HRM

Following is the scope of e-HRM, highlighted by Jovita (2008):

- A decisive step towards a paperless office.
- Higher speed of retrieval and processing of data.
- Increased access to HR data and ease in classifying and reclassifying data.
- Collection of information as the basis for improving the strategic orientation of HRM.
- More consistent and higher accuracy of information/report generated.
- Fast response to answer queries.
- A higher internal profile for HR leading to better work culture.
- Establishing of streamlined, standardized and systematic procedures.
- More transparency in the system.
- Cost savings achievable through process improvements and due to reduction in duplication of efforts.
- Significant reduction of administrative burden.
- Adaptability to any client and facilitating management.
- Integral support for the management of human resources and all other basic and support processes within the company.

- A more dynamic workflow in the business process, productivity and employee satisfaction.

e-HRM CHALLENGES

Various e-HRM challenges given by Teresa and Mario (2009):

- Keeping pace with the rate of technological change: These days, technological innovations occur at a relentless pace. Keeping up is a constant challenge.
- Knowing whether and when to act: It can be difficult to determine whether a software product or system will deliver what it promises, especially given the excitement that often surrounds the launch of new HR technology. If an application has already been installed somewhere, it can be helpful to request the names of users and contact them for their reactions.
- Making choices: Evaluating technology and assessing the ability of applications to meet needs can be daunting.
- Assigning responsibility: If HR staff is too busy or not qualified to take responsibility for e-HR initiatives, HR may need to hire additional staff or, at a minimum, forge a close partnership with information technology (IT) staff.
- Deciding on the right amount of Back-End integration: Some e-HR applications stand alone. Others share a common database with the organisation's core human resources information system (HRIS).
- Controlling expenditures: Although HR technology promises to save money and has that potential, it can be a big-ticket item when indirect costs, such as customization and upgrades, are taken into account.
- Monitoring vendors: Issues about vendors' roles and performance can arise, particularly if there is no formal agreement about how service will be measured.

REVIEW OF LITERATURE

Globetronics Multimedia Technology Sdn. Bhd. (2003) stated that the leading solution for e-HRM is System Manager, HR Manager, Time Manager, Payroll Manager and Report Manager. Kettley and Reiley (2003) stated that a computerized human

resource information system consists of "a fully integrated, organization wide-network of HR-related data, information, services, databases, tools and transactions.

Bondarouk and Ruel (2005) raised a question that e-HRM contributes to HRM effectiveness or not? e-HRM is coming to a full-grown stage within organizational life. Much is assumed and expressed about the advantages of e-HRM; however scientific proof of these advantages is scarce. Regression analysis confirms that the experienced quality of e-HRM application is the only significant explanatory factor of technical and strategic HR effectiveness. Anonymous (2005) referred that e-HRM is often held up to offer many possibilities for organizations, by providing both employees and management with information simply by accessing online data. For management, electronic data storage can help to make information about employees more readily accessible.

Bhatia (2006) highlighted that electronic aspect is embodied in all the areas of HRM where there is transmission of information from one employee to another employee and from one client to the another both internally and in the processed form is highly essential in most of the functions and activities of HRM. The First European Academic Workshop: "The future of e-HRM research" (2006) focused on reflection on what can be learnt from the first five years of electronic HRM research, and to determine its future direction.

Ashwathappa (2007) explained that e-HRM is the complete integration of all HR processes based on common HR data and information and on interdependent tools and processes. Voemans and Veldhoven (2007) conducted an empirical study on e-HRM at Philips and this research suggests a multi factorial framework that can help organizations in understanding and solving difficulties of implementation with e-HRM systems, as far as attitude towards these systems is concerned.

Paauwe, Kalika and Lepak (2008) stated that e-HRM is basically a barrier not a trigger for HRM transformation. IT continues to impact the HRM function. For a decade now, digital possibilities are challenging the traditional ways of delivering HRM

services within business. The traditional two-level HRM function based on HR department and middle managers is being questioned for its (in) flexibility, rigidity, innovative capacity. Hann (2008) gave Electronic-HRM solution. The most efficient way to manage your valuable asset is e-HRM and it contains: central repository of employee data, intuitive and easy to use search functions, facilitate rapid report generation, benefit management is greatly simplified, quick payback for your investment in e-HRMs.

Armstrong (2008) stated that e-HR, meaning the application of conventional, web and voice technologies to improve HR administration, transactions and process performance. Reasons for adopting e-HR are: HR service improvement, cost-cutting and operational efficiency, the desire of the HR function to change the nature of its relationship with employees and line managers, the transformation of HR into a customer- focused and responsive function, the offer of services that fit the new world of work and are attractive to current and future staff.

Gregeby (2009) stated that e-HRM as a conceptual umbrella to the complete approach for "doing HRM". This definition has traditionally touched upon the implementation and structuring process of technology driven HR transformations and the consequence of these organizing activities in creating HR network structures throughout the organization (Strohmeier 2007). Teresa and Mario (2009) referred that in the information society, HR/HRIS managers need to deploy and mobilize the more valuable corporate resource: the human capital. HR management professionals are becoming strategic business partners in their organisations, capable of contributing to the improvement of the organisation's competitive advantage.

Nicholas (2010) stated that the term e-HR reflects the movement to deliver HR services to its customers via web-based technology. Srivastava (2010) stated that Electronic Human Resource Management (e-HRM) as an Implementation Support System (ISS) for HRM. For understanding the better skills, creative abilities and talents of human resources at a very quick time there must be a concept of e-HRM, generally e-HRM is an interface through which we can directly

communicate or know about the right talent through traverse some list or records in our personal database without creating any issue. Zafar, Shaukat and Mat (2010) stated that Classic HRM models such as those from Harvard (Beer, Spector, Lawrence, Mills & Walton 1984) and Michigan (Fombrun, Ticky, & Devana 1984) assume that HRM can only be effective if it connected to an organization's strategy. Strategic HRM assumes a direct and interactive relationship between the management of employment relationships and the organizational strategy. Ulrich (1997) tries to show that the e-component adds a new dimension that 'rocks the HR boat'. In order words, e-HRM forces 'traditional' HR professionals to re-think and redefine polices and practices and, indeed, their own profession.

CONCLUSION

Every organization is exposed to the effects of change and there is no choice to stay immune to these changes. There is a way to convert changes into opportunities to achieve success. This is successfully accomplished with the help of IT into corporate functioning. IT is responsible for dramatic changes through such revolutionary concepts like e-HRM. This paper gives many objectives of e-HRM to the organizations to achieve their targets. It gives a wider scope and challenges of e-HRM.

REFERENCES

- Ashwathappa, K. (2007). *Human Resource Management*. Tata McGraw Hill.
- Armstrong, M. (2006). *A Handbook of Human Resource Management Practice*. Kogan Page.
- Bartol, K.M. (2002). Information technology and human resource management: Harnessing the power and potential of netcentricity. *Personnel and Human Resource Management Review*, 21, 215-242.
- Beer, M., Spector, B., Lawrence, P., Mills, Q. & Walton, R. (1984). *Managing Human Assets*. The Free Press.
- Bhatia, S.K. (2006). *Human Resource Management- A Competitive Advantage*. Deep & Deep Publications Pvt. Ltd.
- Biesalski, E. (1991). Knowledge Management and E-Human Resource Management. [http://www.wikipedia.org- human resource management systems/](http://www.wikipedia.org-human resource management systems/)
- 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(3), 505-514.
- Bondarouk, T. V. & Ruel, H.J.M. (2005, Nov 4-5). Quantitative Study in a Dutch Ministry, paper presented at 4th international conference of the Dutch HRM network, Enschede, the Netherlands.
- Broderick, R. & Boudreau, J.W. (1992). Human Resource Management, information technology and the competitive edge. *Academy of Management Executive*, 6(2), 7-17.
- Fombrum, C., Ticky, N. & Devana, M. (1984). *Strategic human resource management*. John Wiley.
- Globetronics Multimedia Technology Sdn. Bhd. (2003). Retrieved from <http://www.google.com/>.
- Gowan, M. (2001). *e-HRM: An Internet Guide to Human Resource Management*. Prentice Hall.
- Gregeby, J. (2009). The use of information technology in contemporary HRM- A practice-based study of e-HRM at Sandvik Corp. Research School Management & IT, Uppsala University.
- Gupta, S.C. (2008). *Advanced Human Resource Management*. Ane Books India.
- Hahn, J. K. (2008). CPP, VHR, Vice President of HR, GHG Corporation. Retrieved from <http://www.willoughby.nsw.gov.au/>.
- Jovita, L. (2008). A Study On Electronic Human Resource Management (Ehrm): With Reference To Cognizant Technology Solutions India Private Limited. Accessed at <http://www.citeHR.com/>.
- Kettley, P. & Reiley, P. (2003). E-HR: An introduction. *IES Report*. 398.
- Lawler, E.E. & Mohrman, S.A. (2003). HR as a strategic partner: What does it take to make it happen? *Human Resource Planning*, 26, 15-29.
- 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.
- Nicholas, A. (2010). e-HR transformation Projects Within the UK Public Sector: Critical

- Success Factors. University of Chester Business School.
- Paauwe, J., Kalika, M. & Lepak, D. Second European workshop on e-HRM. (2008, May 29-30). E-HRM: Barrier or Trigger for an HRM Transformation.
 - Poole, M., & Warner, M. (1999). *The IEBM Hand Book of Human Resource Management*.
 - Ruël, H. J. M., Bondarouk, T. & Looise, J. C. (2004). E-HRM: Innovation or irritation. An explorative empirical study in five large companies on web-based HRM. *Management Review*, 15(3), 364-381.
 - Srivastava, S.K. (April, 2010). Shaping Organization with e-HRM. *International Journal of Innovation, Management and Technology*, 1(1).
 - Strohmeier, S. (2009). Concepts of e-HRM consequences: a categorisation, review and suggestion. *The International Journal of Human Resource Management*, 20(3), 529-543.
 - Strohmeier, S. & Kabst, R. (2009). Organisation adoption of e-HRM in Europe: An Empirical exploration of major adoption factors. *Journal of Managerial Psychology*, 24(6), 482-501.
 - Strohmeier, S. (2007). Research in e-HRM: Review and Implications. *Human Resource Management Review*, 17, 19-37.
 - The first European academic workshop: "The Future of Electronic HRM (e-HRM) Research", Twente University, Netherlands. (2006, Oct 25-26). Retrieved from <http://www.e-hrmresearch.org/>.
 - Torres, T. & Mario, A. (2009). *Encyclopedia of Human Resource Information Systems: Challenges in e-HRM*. Idea Group, Inc.
 - Ulrich, D. (1997). *Human Resource Champions: The Next Agenda for Adding Value and Delivering Results*. Harvard Business School Press, Boston: MA.
 - Voemans, M. & Veldhoven, M.V. (2007). Attitude towards e-HRM: an empirical study at Philips. *Personnel Review*, 36(6), 887-902.
 - Vankateswaran, N. (2007). e-HRM. Retrieved from <http://www.indianmba.com/>.
 - Zafar, J., Shaukat, M. & Mat, N. (2010). An Analysis of E-Human Resource Management Practices: A Case Study of State Bank of Pakistan. *European Journal of Social Sciences*, 15, 1.
 - <http://www.personneltoday.com/>
 - <http://www.indianmba.com/>
 - <http://www.e-hrmresearch.org/>
 - <http://www.google.com/>
 - <http://www.ideas.repec.org/>
 - <http://www.icfaipress.org>