E-HRM: A STRATEGIC REVIEW

ALIREZA MOOGHALI[1], MARYAM SHAFAATI MASHADI[2], ZIVAR ASADI[2]

[1] Professor. Public Administration, University of Payam-noor, Iran. E-Mail:

Mooghali@yahoo.com

[2] Master student, Public Administration, University of Payam-noor, Iran

ABSTRACT

E-Hrmis the (planning, implementation and) application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities.E-HRM is not the same as HRIS (Human resource information system) which refers to ICT systems used within HR departments. Nor is it the same as V-HRM or Virtual HRM - which is defined by Lepak and Snell as "...a network-based structure built on partnerships and typically mediated by information technologies to help the organization acquire, develop, and deploy intellectual capital.E-HRM is in essence the devolution of HR functions to management and employees. They access these functions typically via intranet or other web-technology channels. The empowerment of managers and employees to perform certain chosen HR functions relieves the HR department of these tasks, allowing HR staff to focus less on the operational and more on the strategic elements of HR, and allowing organisations to lower HR department staffing levels as the administrative burden is lightened. It is anticipated that, as E-HRM develops and becomes more entrenched in business culture, these changes will become more apparent, but they have yet to be manifested to a significant degree. A 2007 CIPD survey states that "The initial research indicates that much-commented-on development such as shared services, outsourcing and e-HR have had relatively little impact on costs or staff numbers".Today, HR is not treated as a single function. It's a collection of highly specialized capabilities each with distinct objectives, tasks and needs. There is an ever-increasing pressure on Human Resource (HR) function to support strategic goals and to focus on value adding activities. Organizations have realized the growing importance of using Information Technology (IT) in leveraging their Human Resource (HR) functions. The e-HRM revolution relies on cutting-edge information

technology, ranging from Internet-enabled human resources information systems (HRIS) to corporate intranets and portals. The driving forces are intensifying competition, need to manage workforce on a global level, to improve HR service delivery and to bring cost savings. e-HRM enables HR leaders to become architects in the development of competitive organizational social systems. This paper reviews the research work done in the field of e-HRM.

Key word: HRM, e-HRM, information system

INTRODUCTION

There are three types of E-HRM. These are described respectively as Operational, Relational and Transformational. Operational E-HRM is concerned with administrative functions - payroll and employee personal data for example. Relational E-HRM is concerned with supporting business processes by means of training, recruitment, performance management and so forth. Transformational E-HRM is concerned with strategic HR activities such as knowledge management, strategic re-orientation.(Ruël, Bondarouk, &Looise, 2004) An organisation may choose to pursue E-HRM policies from any number of these tiers to achieve their HR goals.

E-HRM is seen as offering the potential to improve services to HR department clients (both employees and management), improve efficiency and cost effectiveness within the HR department, and allow HR to become a strategic partner in achieving organizational goals.

Traditionally HR goals have been broken into three categories: maintaining cost effectiveness, the enhancement of service for internal customers, and addressing the tactics of the business. With e-HRM there is a fourth goal added to the three categories and that is the improvement of global orientation of human resource management. HR functions that e-HRM assist with are the transactional and transformational goals. Transactional goals help reduce costs and transformational goals help the allocation of time improvement for HR professionals so that they may address more strategic issues. To add to this operational benefits have become an outcome of the implementation of e-HRM. The process of payroll is an example of this, with HR being able to have more transactions with fewer problems. E-HRM has increased efficiency and helped businesses reduce their HR staff through reducing costs and increasing the overall speed of different processes. E-HRM also has relational impacts for a

business; enabling a company's employees and managers with the ability to access HR information and increase the connectivity of all parts of the company and outside organizations. This connectivity allows for communication on a geographic level to share information and create virtual teams. And finally e-HRM creates standardization, and with standardized procedures this can ensure that an organization remains compliant with HR requirements, thus also ensuring more precise decision-making (Strohmeier, 2007).

In the new millennium, the way we do business will be revolutionized by Information Technology (IT). A key partnership is being formed between the human resource and information management professionals who work hand-in-hand and serve as the guiding relationship for all future activities and decisions. Capitalizing on the latest web-based technologies, global access to human resource information should be provided to managers and employees to support a variety of management and personal decision-making purposes. Real-time information can be accessed and updated, all through a variety of global information solutions. Using a variety of web-based technologies and Internet solutions, managers and supervisors are obtaining real-time information from their desktop.

Visits to the HR office are limited to matters requiring personal consultation or management advice. The virtual official personnel folder is here. Today, HR is not treated as a single function. It's a collection of highly specialized capabilities -each with distinct objectives, tasks and needs. Today's Mantra – HR Optimization: It's about implementing new technologies that maximize efficiency, enhance return on investment, and accelerate the growth. It's about supporting your HR function; better manage resources for the greater good of organization as a whole.

The HR function of both profit and not-for-profit organizations is faced with a numerous challenges, thereby creating ambiguities and tensions in what HR delivers, how it delivers, how effectively it delivers, and to whom it delivers (Ulrich &Brockbank, 2005; Huselid et al, 2005; Paauwe, 2004). Over 90% of US organizations claim to be using web-based HR technology to support administrative operations (Cedar Crestone, 2009). The present research work attempts to define e-HRM, its key benefits and limitations and its impact on the professional standing of HR professionals.

2. Definition

There are hardly any explicit definitions available. The few available definitions (Lengnick Hall& Moritz, 2003, Ruel,

Bondarouk, 2004; Sanchez & Aguayo (2007) describe an HRIS as ‗Just a specific information system for a concrete environment of business management‖, where the word ‗just' perhaps diminishes the contribution of e-HRM. Similar functional definitions include ―The composite of databases, computer applications and hardware and software used to collect, store, manage, deliver, present and manipulate data for Human Resources‖ (Voermans& Van Veldhoven, 2007). Kovach et al (2006) also take a functional view, seeing technology as a hybrid of transaction processing and decision support, while Voermans& Van Veldhoven(2007) define e-HRM as ―The administrative support of the HR function in organizations by using internet technology‖, Strohmeier (2007) takes up the connectivity theme, describing e-HRM as ―The planning, implementation and application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities.‖ e-HRM can be defined as ―An umbrella term covering all possible integration mechanisms and contents between HRM and information technologies, aiming at creating value within and across organizations for targeted employees and

management.‖ (Bondarouk&Ruel, 2009). This is a broad definition of e-HRM. So e-HRM can be defined as an integration of People, Process and Technology. It uses web-based technology to carry out the HR functions.

Consistent with the overall integration of SAP R/3, the HR module shares information with other modules, such as Financial Accounting (FI), Controlling (CO), Production Planning and Business Workflow. The Payroll processes use Accounts Payable functions to print checks, manage payment and bank information, and process payments to tax authorities and other third-party vendors. Payroll results are also posted to General Ledger accounts for use in periodic income and expense reporting. For management accounting, information regarding employment costs can be transferred to Cost Centers with in the CO module. Employees can be assigned to Work Centers, which are used in conjunction with Production Planning. Assigned positions and reporting relationships from PD are used in Business Workflow to route purchase requisitions and other documents for approval. HR works with external systems either through certified interfaces with SAP partner products, or custom developed interfaces to customer defined systems.
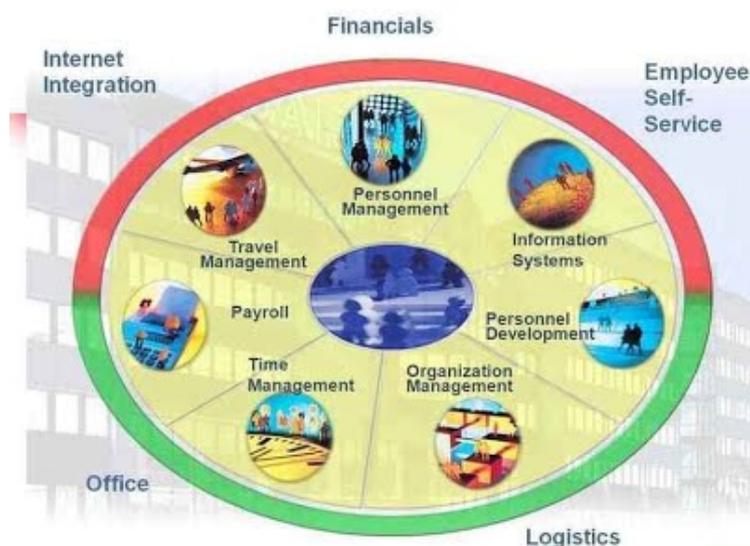
3. e-HRM drivers

The drivers of HR domain are identified at three levels (Lepak& Snell, 1998):

i. *The Operational Driver*: To make HR cost effective by reducing the HR headcount, lowering the transaction costs and brings about efficiency.

ii. *The Relational Driver*: To meet the growing demands of line managers, employees, business partners and increasingly improved levels of service.

iii. *The Strategic Driver*: To be a strategic business partner by addressing the strategic business objectives.

John Kay (2004), a British economist has argued that it is not only knowledge for innovation but also brands and reputations that are the major sustainable bases on which modern organizations and modern nation states can compete with those in the developing world. This is what he calls as *The Reputaional Driver*. In this context, legitimacy is fast extending to reputations

for ethical and sustainable practice. *(*Boxall & Purcell, 2003; Martin &Hetrick, 2006).

4. HR Transformation

The literature review shows that various studies have been done to understand how contemporary HR management teams in a number of organizations have effectively developed a set of interrelated, *internal* delivery and professional service strategies to meet the *external* challenges set by the business strategies of modern organizations and the longer-term branding and reputational drivers (Reilly &Tamkin, 2006). The first of these internal strategies is the re-organization of the HR function itself, combining so-called HR transformations. These are new HR delivery models based on a tri-partite model of shared services, centers of excellence and strategic or business partnering along the lines recommended by Ulrich &Brockbank (2005) with *outsourcing* and, in some cases, *off-shoring*

of key services, especially shared service centers (CIPD, 2005; Cooke, 2006; Reddington, Williamson & Withers, 2005). Also, information and communications technologies (ICT), is generally used in combination with HR transformations and outsourcing to rationalize or radically change HR's internal operations (CIPD, 2005; Gueutal& Stone 2005; Martin, 2005; Shrivastava& Shaw, 2004). In a study, it was observed that organizational, process reengineering and technological solutions are interdependent (Keebler, 2001). Infact it is the ever increasing reach and benefits of ICT-enabled information that have facilitated the HR transformation models (Ulrich &Brockbank, 2005). The virtual HR is a result of simultaneously reducing the numbers of specialists required to deliver HR services internally while improving the quality of these same services and developing new HR business models for innovative organizations (Taylor &LaBarre, 2006). So, it could be understood that e-HRM facilitates business re-organization as technology helps reduce the physical and hierarchical distance created by centralizing certain HR functions at the same time, however, it helps create that distance by introducing technology mediation into previous face-to-face relationships. However, despite over a decade of HR transformation approaches,

success has been mixed – a CIPD report (Reilly, Tamkin& Broughton, 2007) found that only 13% of HR functions have delivered major cost reduction through shared services has delivered and only 29% have found a major improvement in service quality.

5. Benefits

Drawing from existing literature and several case studies, there are hints about an increased productivity as a result of e-HRM. The literature indicates a reduction in HR staff, cost savings and less administrative burden due to automation (Hawking et al., 2004; Ruel et al., 2004; cited in Strohmeier, 2007). However, the savings in time as a result of e-HRM cannot be directly translated into financial benefits (Dias, 2001). Various companies have looked for an Internet based HR function to bring about the much desired cost savings (Hawking et al., 2004).The main function of HR professionals is to be a high quality service provider to the internal customers of the organization (Lepak and Snell, 1998).e-HRM can meet these relational goals by increasing timeliness and improving client service orientation. (Snell, Pedigo, and Krawiec, 1995; cited in Lepak and Snell, 1998). In their 2002 e-HR survey, Watson Wyatt laid down the four factors which support the case for e-HR: productivity improvements, cost

reductions, return on investment and better employee communications. Walker (2001) hints that for success of technology in the HR domain there needs to be a dramatic improvement in the level of service, reducing costs and allowing more time for higher value tasks. In present scenario, the HR function is expected to provide a strategic direction to the human capital management in an organization and be a strategic player in achieving organizational objectives (cited in Hawking, Stein, Foster, 2004; cited in Lepak, Bartol, Erhardt, 2005). Some researchers have observed that few organizations are investing in IT only to bring about efficiency in operational tasks. (Lawler and Mohrman, 2003; cited in Bell and Lee, 2006). It is often regarded as the critical factor in making HR a strategic function. Some researchers (Ruel et al., 2004) believe that e-HRM helps to achieve the globalization aims of the organizations. The literature mentions terms like global HRIS, GIS (global information system) (Akmanligil and Palvia, 2004), IHRM(international human resource management)(Sparrow,2007).The synergy between IT and HRM helps to establish the shared services centers for HR domain. However the differences in the laws of different countries can lead to complex situations in introducing e-HRM. Even though globalization brings about many

unknown and complex variables which pose as a major challenge(Akmanligil and Palvia,2004) yet the benefits of e-HRM for global organizations are substantial. Literature also says that e-HRM helps to create competitive advantage and align the function more closely with business/corporate strategy and the longer-term branding and reputational objectives of organizations.

6. Limiting factors

To quote the Mercer Consulting report: ―*Over half the survey respondents report that they are ineffective or very ineffective at realizing the expected ROI from technology investments. HR people openly acknowledge that they frequently under-use technology and therefore do not gain full benefit'*‖ *(Theaker& Vernon, 2006)*. Based on the existing literature, which has focused more on the benefits of e-HRM, there are certain potential negative outcomes of e-HR adoption as well. Apart from the investment factor there are high costs involved in implementing e-HR. Also to capitalize on all benefits of e-HRM there are costs involved for ―wiring the workforce‖. There are concerns over change management and technology acceptance by the end user (Reddington et al, 2005; Ruel et al, 2004, Martin et al., 2006). Change is situation-bound and often a complex process in which receptive contexts play an

important part, especially in transferring practices across international boundaries or even corporate ones. A change management model will focus on a complex set of events, activities, linguistic practices, emotions and reactions that help explain what would be needed for successful change to occur and why most such initiatives are less-than-successful in producing sustainable change (Martin & Beaumont, 2001). Nevertheless, one of the most important factors shaping the success of technological change is *user acceptance* (Fisher & Howell, 2004). Even the positive outcome of reducing the HR headcount may at times have negative impact on organization's perception and branding as well as for the HR employees who are thereby displaced. Also, HR managers have witnessed negative effects in moving from a face-to-face to a virtual and/or more distant relationship in HR and people management. It is important to mention that control and security issues will also be a challenge in moving from HR to e-HR.

7. Impact on the standing of HR professionals

In a US study which was carried out on the lines of Ulrich , surveyed HR directors of large commercial companies so as to assess the degree to which HR was a strategic business partner. This role was defined as related to development and implementation of business strategy for the organization. The results were that 41.1% of respondents were full strategic partners with only 3.4% with no role in the strategic process. It was found that use of HRIS(human resource information systems) had consistently increased over previous years (Lawler and Mohrman's 2001). A study (Hussain, Wallace and Cornelius, 2007) was done to understand the impact of use of technology in the HR function on the professional standing of HR professionals. It found that there was evidence which showed that e-HR enhances the professional standing of HR professionals. The research concluded that for senior HR professionals the strategic use of HRIS is the norm, irrespective of company size. Also the strategic use of HRIS has enhanced the perceived standing of HR professionals in their organizations. In the times of globalization and when it is increasingly becoming important for HR managers to justify their seat in the boardrooms, e-HR is a tool, which aids them in managing a global workforce, and facilitates strategic decision-making.

8. Conclusion

The focus of this study was to gain an insight into what drives organizations to move from traditional HR to e-HR. Through an extensive review of literature and discussions with HR professionals it

can be concluded that the e-HR bandwagon seems to be growing at a rapid rate which is driven by some evidence of promising practices and positive evaluations of technology. It is the efficient and effective leveraging of technologies to deliver HR solutions that bring about a convergence in human capital, processes, data and tools as a catalyst towards achieving business goals. In this context , some of the largest HR professional bodies in the world - the CIPD and the US-based Society of Human Resource Management (SHRM) have made this issue one of their key areas for research and for educating members. Re-engineering the HR function and outsourcing, progress in the form of the more transformational benefits and pay-off in terms of cost reductions seems to have been more piecemeal and problematic (Caldwell, 2004; Reilly & Williams, 2006). The paper also suffers from some limitations. The review is only restricted to work published in journals and books and the review is narrative and non statistical. However the paper is able to outline a basic framework of drivers and implications of e-HRM. This paper hopes to stimulate further debates as well as researches on this topic.

REFERENCES

Akmanligil, M. and Palvia P. (2004), Strategies for Global Information Systems Development‖. Information & Management. Vol. 42, issue 1, December 2004, pp. 45-59.

Bell, B. S., Lee, S., & Yeung, S. K. (2006). The impact of eHR on professional competence in HRM: Implications for the development of HR professionals. Human Resource Management, 45, 295-308.

Bondarouk, T. &Ruel, H. J. M. (2009) Electronic Human Resource Management: challenges in the digital era. The International Journal of Human Resource Management, 20 (3), pp. 505-514. Boxall, P. & Purcell, J. (2003) Strategy and human resource management. London: Palgrave Macmillan.

Caldwell, R. (2004). In search of strategic partners in Business Partnering: A New Direction for HR, London: CIPD pp. 6-13 CIPD (2005) HR outsourcing: the key decisions. London: Chartered Institute of Personnel and Development. Cooke, F. L (2006) Modeling an HR shared services center: experience of an MNC in the United Kingdom. Human Resource Management, 45, pp 211-228. Dias, C. (2001) corporate portals: A literature review of a new concept in information management, International Journal of Information Management, 21,pp 269-287. Fisher, S. L. and Howell, A. W 2004. Beyond user acceptance: An examination of employee reactions to information technology

systems. Human Resource Management, 43: 243-258. Gueutal, H. G. & Stone. D. L. (Eds.) (2005) The Brave New World of eHR: Human Resources in the Digital Age. San Francisco: Josey Bass. Hawking, P., Stein, A. & Foster, S. (2004) eHR and employee self service: A case study of a Victorian public sector organization. Issues in Informing Science and Information Technology, 1 pp. 1017-1026. Huselid, M. A. (1995) The Impact of Human Resource Management Practices on Turnover, Productivity and Corporate Financial Performance. Academy of Management Journal, 38 (3), pp. 365-672. Huselid, M. A., Becker, B. E. & Beatty, R. W. (2005) The Workforce Scorecard: Managing Human Capital to Execute Strategy, Boston: Mass, Harvard Business School Huselid, M. A., Jackson, S. & Schuler, R. S. (1997) Technical and strategic human resource management effectiveness as determinants of HRM performance. Academy of Management Journal, 40 (1), pp. 171-188. Hussain, Z., Wallace, J. & Cornelius, N. E. (2007) The use and impact of human resource information systems on human resource management professionals. Information & Management, 44 (1), pp. 74-89. Kay, J. (2004) The truth about markets: Why some nations are rich but most remain poor. London: Penguin Books. Keebler, T. (2001) HR outsourcing in the Internet era.

In A. J. Walker (Ed.) The technologies and trends that are transforming HR: web-based human resources. New York: McGraw Hill/Towers Perrin, pp 259-276. Kovach, K. &Cathcart, C. E. J. (1999) Human Resource Information Systems (HRIS), ―Providing business with rapid data access, information exchange and strategic advantage‖. Personnel Management, 28 (2), pp. 275-281. Lawler, E. E. &Mohrman, S. (2003) HR as a strategic partner - what does it take to make it happen? Human Resource Planning, 26 (3), pp. 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), pp. 215-234. Martin, G. (2005) Technology and people management: the opportunity and challenges. London: Chartered Institute of Personnel and Development. Martin, G., Alexander, H. & Pate, J. 2006 Using technology to transform the future of HR: an illustrated model of e-HR in Academy of Management Annual Conference, Atlanta, August 12-16, 2006 Martin, G. & Beaumont, P. B. (2001) Transforming multinational enterprises: towards a process model strategic HRM change in MNEs. International Journal of Human Resource Management, 16, 6, 34-55. Paauwe, J. (2004) HRM and performance: achieving long-term viability. Oxford: Oxford

University Press. Reddington, M., Williamson, M. & Withers, M. (2005) Transforming HR: creating value through people. Oxford: Butterworth Heinemann Reilly, P. &Tamkin, P. (2006) The changing HR function: the key questions. London: Chartered Institute of Personnel and Development. Reilly, P., Tamkin, P& Broughton, A. (2007) The Changing HR Function: Transforming HR? CIPD, London. Ruel, H. J. M., Bondarouk, T. &Looise, J. K. (2004a) E-HRM: Innovation or irritation. An explorative empirical study in five large companies on web-based HR. Management Review, 15 (3), pp. 364-380. Ruel, H. J. M., Bondarouk, T. &Looise, J. K. (2004b) E-HRM: Innovation or irritation. An explorative empirical study in five large companies on web-based HR. Management Review, 15 (3), pp. 364-381. Sanchez, J. & Aguayo, M. (2007) An approach to the satisfaction of Human Resource Information Systems (HRIS): analysis and empirical contrast. International Journal of Human Resources Development and Management, 7 (2), pp. 177-214. Shrivastava, S. & Shaw, J. B. 2004. Liberating HR through technology. Human Resource Management, 42. 201-222 Sparrow, P. R., Brewster, C., & Harris, H.(2004) Globalizing human resource management. London: Routledge. Strohmeier, S. (2007) Research in e-HRM:

Review and Implications. Human Resource Management Review, 17 (1), pp. 19- Taylor, W. C. &LaBarre, P. (2006) Mavericks at work: why the most original minds in business win. New York: William Morrow Theaker, M. & Vernon, P. (2006, July 31st) Removing the barriers to success in HR transformation. Mercer Consulting, available online at http://www.mercerhr.com/knowledgecenter /reportsummary.jhtml/dynamic/idContent/1 235040 Ulrich, D. &Brockbank, W. (2005) The HR value proposition. Boston, MA: Harvard Business School Press.

Voermans, M. & Van Veldhoven, M. (2007) Attitude towards e-HRM: An empirical study at Philips. Personnel Review, 36 (6), pp. 887-902.

Walker, A. J. (Ed.) (2001) _The technologies and trends that are transforming HR: web-based human resources'. New York: McGraw Hill/Towers Perrin. Whitley, R. 1999. Divergent Capitalisms: The Social Structuring and Change of Business Systems. Oxford: Oxford University Press.

Wright, P. M.. Gardiner, T. M. & Moynihan, L.M. (2003) The impact of HR practices on the performance of business units. Human Resource Management Journal, 13 (3), pp 21-36.

Strohmeier, S. (2007). "Research in e-HRM: Review and implications." Human

Resource Management Review 17(1): 19-37.

Ruël, H. J. M., Bondarouk, T., &Looise, J. C. (2004). E-HRM: Innovation or irritation. Utrecht: Lemma Publishers.

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.

CIPD (2007). A Barometer of HR Trends and Prospects. London: CIPD