

# Periodic Research

## Role of Electronic Human Resource Management (e-hrm) in Shaping Organization

### Abstract

We have now entered in an era when almost every part of our existence is affected by technological innovations due to globalization and evolution of the knowledge economy.

The use of technology in e-hrm is established for the purposes of improving HR operational processes and allowing distributed admittance to employees and managers. This paper attempts to elucidate the significant role of electronic human resource management (e-hrm) in organizations. The objective of this paper is to identify the underlying factors and prerequisites for the success of an e-hrm adoption and challenges associated with the implementation of e-hrm systems in organizations.

**Key words** e-hrm (Electronic Human Resource Management)

### Introduction

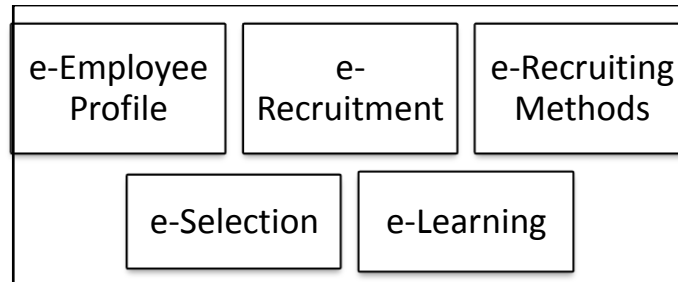
E-HRM has been defined as “a way of implementing HR strategies, policies and practices in organizations through a conscious and directed support of and/or with the full use of web-technology-based channels” (Ruel, Bondarouk and Looise, 2004, p.281) or more recently, and more broadly, as “the (planning, implementation, and) application of information systems for both networking and supporting actors in their shared performing of HR activities” (Strohmeier, 2007). E-HRM can be used for transactional activities (i.e. those that involve day-to-day transactions and record keeping); traditional HRM activities such as recruitment, selection, training, compensation and performance management; and transformational activities that add value to the organization (Thite and Kavanagh, 2008), and may be used to manage HR across the whole employee lifecycle.

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**Figure: 1 e-hrm Tools**

The term e-HR first came into use in the 1990s when e-commerce started dominating the business world (Hendrickson A. 2003 and Martin G., Redddington M. and Alexander H. 2008)Recent technological developments have made 'business at the speed of a thought' and a 'paperless office' a reality and has created a real time, information based, interactive work environment. E-HR refers to conducting human resource transactions using the internet technology (Martin G., Redddington M. and Alexander H. 2008)

### Review of Literature

Past research has suggested that e-hrm may support the HR function in becoming more efficient, improving service delivery and adopting a greater role in delivering the firm's business strategy. Lepak and Snell (1998) and Hendrickson (2003) suggested that the use of e-hrm can streamline transactional HR processes and increase efficiency. Ruel et al

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(2004) found evidence that one of the main goals of e-hrm was to produce efficiency gains or cost reductions by reducing headcount and removing administration. Martin *et al*, (2008); Lengnick-Hall and Moritz, (2003); Enshur, Nielson and Grant-Vallone, (2002); Snell, Stueber and Lepak, (2002) have supported that the use of e-hrm as a more efficient way of performing administrative HRM tasks may lead to a need for lower numbers of HR staff as the technology can perform simple tasks quickly and accurately. Organizations may therefore use e-hrm as an alternative to having the HR capacity to perform administrative or transactional tasks manually.

Two main outcomes of e-hrm that may be described as promoting differential labour activities within the HR function. Firstly, the use of e-hrm has been linked with a transformation of the HR function into one that is more strategic or that spends more time on delivering the business strategy rather than on transactional HR activities (Ruel *et al*, 2004; Hendrickson, 2003; Lepak and Snell, 1998). Marler (2009) also suggested that an important goal for e-hrm is to support the strategic orientation of the HR function. A number of authors have proposed that e-hrm may support a change in focus for the HR function from administrative tasks to HR activities that have strategic relevance, are central to organisational performance and require a deep understanding of the organization itself (Ruel *et al*, 2004; Shrivastava and Shaw, 2004; Lawler and Mohrman, 2003). This suggestion has been much debated in the literature with some authors suggesting that e-hrm has not actually realised its potential for transforming the HR function into one that is more strategic (Burbach and Dundon, 2005; Gardner, Lepak and Bartol, 2005; Tansley, Newell and Williams, 2001). A more strategic HR function may be more effective at developing resources and will therefore generate higher rents (or value). E-HRM may allow the HR function to improve the level of service that it provides to the organisation (Ruel *et al*, 2004; Hendrickson, 2003) by enabling managers and employees to manage many aspects of human resources themselves.

Lepak and Snell (1998) asserted that e-hrm can affect the "relational" aspects of HRM by providing managers and employees with remote access to HR information and increasing their ability to connect with other parts of the organisation so that they can perform HR activities themselves. Indeed, devolution of HRM activities to line managers is a commonly cited characteristic of strategic HRM (Larsen and Brewster, 2003; Whittaker and Marchington, 2003). We can therefore suggest that a positive relationship will be found between the use of e-hrm and the devolution of HR activities to line managers. In fact, sophisticated e-hrm systems often facilitate the performance of HR tasks by managers through manager self-service.

The use of e-hrm may allow the HR function time to focus on providing an effective service to the organization. In addition, e-hrm can be used to provide accurate information on which the organization can make decisions about how best to manage their employees. In addition Hendrickson (2003) suggested that e-hrm leads to IT enabled

processes such as computer-based training, that lead to new innovations in HR. E-hrm may therefore enable the HR function to improve the service that it offers to the organization (Ruel *et al*, 2004; Hendrickson, 2003). The need for the effective management of human resources and therefore a high level of service delivery from the HR department HRM might depend on how integral the firm's workforce is for its competitive advantage. Indeed, HRM has been suggested as being more important in knowledge intensive industries (Koch and McGrath, 1996). In organizations with a lot of highly qualified employees, it is essential that human resources are managed effectively.

## Objectives of The Study

Under this research problem, the following objectives have been identified.

1. To identify the underlying factors and prerequisites for the success of an e-hrm adoption.
2. To identify the challenges associated with the implementation of e-hrm systems.
3. To offer recommendations and suggestions for enhancing the effectiveness of e-hrm systems.

## Research Methodology

This descriptive Study is based on secondary data. Data are collected through internet, various websites, journals, magazines etc.

## Phases of e-Hrm

There are five main phases in the implementation of the e-hrm business solution.

### Analysis (Infrastructure)

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

### 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.

### Implementation

After a 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.

### Implementation and training

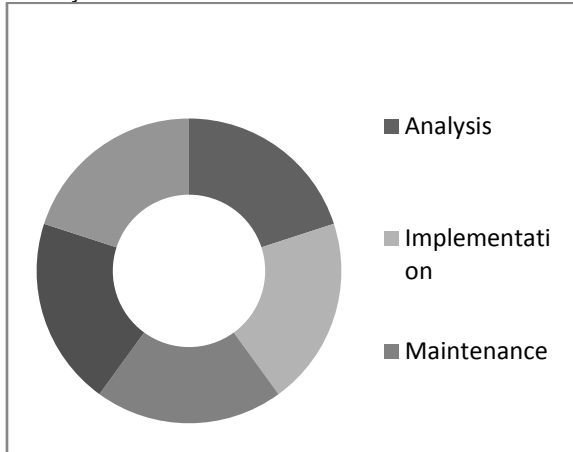
A complete knowledge of the components of the solution is a key factor for successful implementation. The entire team of project managers, information technology professionals and human resources specialist are thus involved in user training and implementation. SRCI.SI provides well planned and quality training of future users, including initial training in their work environment.

### 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 operating system
- Functionality improvement and software upgrades in the form of new versions
- Consultation about further development of the system



**Figure: 2 Phases of e-hrm Objectives of e-hrm**

E-hrm is designed to achieve the following objectives:

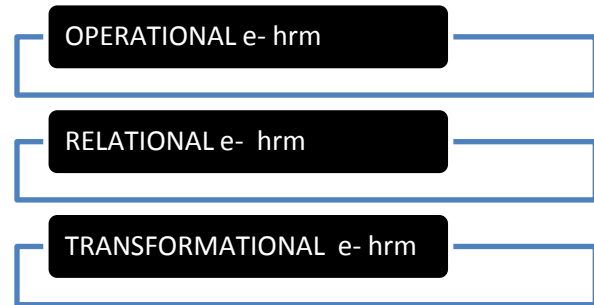
- To tender an adequate, ample and on-going information system about people and jobs at a sensible cost;
- To offer support for future preparation and also for strategy formulations;
- To facilitate monitoring of human resources demand and supply imbalance
- To offer statistics security and personal privacy;
- To allow faster rejoinder to employee related services and faster HR related decisions and;
- To mechanize employee related information.

**Scope of e-hrm**

- A significant step towards a paperless office;
- Higher speed of retrieval and dispensation of statistics;
- Vital support for the management of human resources and all other basic and support processes within the corporation;
- More consistent and higher accuracy of information/statement generated;
- Speedy response to answer queries;
- Malleability to any user and facilitating organization;
- A higher internal profile for HR leading to better work culture;
- More transparency in the system;
- A more vibrant workflow in the company procedure, productivity and employee satisfaction;
- Significant reduction of administrative burden.

**Types of e-hrm**

By reviewing the relevant literature, it is inferred that in 1998, Lepak and Snell suggested three types of e-hrm as follows:



**Figure: 3 Types of e-hrm Factors of successful e-hrm adoption**

There are a lot of factors which affect both the capability of the organization to implement e-hrm and the realization of the intended goals. These factors are of three categories: 1. Organizational (contextual) Factors 2. Actorial Factors 3. External Factors

**1. Organizational Factors**

The following factors derived from organization’s characteristics may directly cause a successful implementation of e-hrm in line with the intended goals or simply make a cost burden.

**Size:** Strohmeier and Kabst (2009)’s findings support the size of an organization has an effect on the adoption of e-hrm since larger organizations will more frequently adopt it. Ball (2001) recognized a positive relationship between the size of an organization and e-hrm and concluded the smaller companies go for lower risk. Also Ruel et al. (2004) believe e-hrm movement would be more suited and interesting for larger companies than to small or even medium-sized ones.

**Industry:** Strohmeier and Kabst (2009) assumed the sector which a company is operating may make a difference in adoption (they examined companies in different sectors across Europe) with an hypothesis based on companies with more clerical and stationary tasks will more frequently adopt e-hrm, they only found a partial evidence which says the sectorial differences in task structures significantly further or restrain e-hrm adoption.

**Public/Private:** Parry (2011) which analyzed private sector organizations or Bondarouk et al. (2009) which worked on a public sector one or an investigation on a pool of both by Strohmeier and Kabst (2009) shows more similarities than differences in IT usage as Strohmeier (2007) notifies, and stresses, of course, there are differences in terms of the type of the systems and the level of investment, but it is not a deterministic factor to give the organization an existential advantage.

**Organizational Culture:** Panayotopoulou et al. (2007) mark the organizational culture as a critical success factor for e-HR adoption. Also this is one of the factors that Pollitt (2006) try to emphasize where organizations pay too much attention on technology at the expense of other two areas: people and processes. He says “A company’s internal culture may ultimately decide the success or failure of an e-HR system.” During the four case studies which were analyzed by Olivas-Lujan (2007) the role of organizational culture in the company’s e-HR adoption; or better to say, technology adoption. For

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example, In "Smart Building" company due to the demanding corporate culture, employees are fully aware of the possibility to lose their job if they do not upgrade their skills. On the other hand, the company did not introduce the system immediately and force the employees to adopt when they did not think on a same base, but they firstly launched the e-learning to teach them how to work in the new cultural atmosphere which the company was trying to create through changing employees' mindset.

## 2. Actorial Factors

There are some factors which may cause trouble in the process of e-hrm adoption even if all the above-mentioned factors are justified. Actually these contingent factors may appear after the implementation of e-hrm.

### Previewed usefulness and ease of use

According to the Technology Acceptance Model (TAM) with its two central variables as perceived usefulness and perceived ease of use (Davis, 1989), the clients of a system would embrace the technology only if they feel it is useful for their performance and easy to work with. Voermans and Veldhoven (2007) applied this model in Philips and found out a positive attitude toward e-hrm where you can find usability and ease of use on the system. You can assume what would happen in the reserve case.

### Demographic Characteristics

Despite of the perception that links technology more to the younger and educated people, In Europe, a research by Strohmeier and Kabst (2009) which assumed the same, i.e. age, gender and education may have an effect of e-HR adoption of the employees, result neither relationship nor any influences. Voermans and Veldhoven (2007) reached the same result in Philips. Shane (2009) added another factor as 'race' and she could not find any significant difference as well.

### It skills

This is the second critical success factor proposed by Panayotopoulou et al. (2007) which emphasizes these skills would facilitate the process of adoption. Obviously for every organization which wants to walk into this process at least a minimum level of skills are required either through previously recruited skill-enabled employees (low investment) or holding training courses (high investment which needs to be justified).

## 3. External Factors

These factors are not directly derived from the organization or the people inside but the environment through which they are living and operating every day.

### National Business System

This is an interesting factor which was introduced by Strohmeier and Kabst (2009) during an investigation in Europe. They found out Eastern countries in Europe are leading e-hrm adoption whereas they assumed, it may be reverse because of the lower Gross Domestic Production (GDP) rate of these countries. So their hypothesis was just partially supported. They justify this result by referring to the big share of completely new organizations which are being created or the ones had to reinvest themselves in these countries due to their starting point after

former communist atmosphere, and their preference to implement e-HR as a new way of doing organizational tasks. So it is a good news for companies which think these kinds of movements may be damaged by their national economy and cause a failure.

### Socio-Cultural Facts:

Would you be successful by your e-recruitment system in a country or region which people strongly prefer to have a face-to-face interaction? If you definitely think it is a yes, you would be better off to take a look at Olivas-Lujan et al. (2007) research in Mexico which did not consider it as an impossible mission but tried to inform you about the varying degree of difficulties which may you face due to social, cultural, contractual, institutional or infrastructural norms.

### Advantages of e -HRM

The e-hrm business models are designed for human resources professionals and executive managers who need support to manage the work force, monitor changes and gather the information needed in decision-making. At the same time it enables all employees to participate in the process and keep track of relevant information

- Ease of recruitment, selection and assessment
- Collection and store of information regarding the work force, which will act as the basis for strategic decision-making
- Ease of administering employee records Reductions to cost, time and labour
- Integral support for the management of human resources and all other basic and support processes within the company.
- Prompt insight into reporting and analysis.
- A more dynamic workflow in the business process, productivity and employee satisfaction.
- A decisive step towards a paperless office.
- Makes the work to get over fast.

### Disadvantages OF e-hrm

- Employees and line managers' mindsets need to be changed: they have to realize and accept the usefulness of web-based HR tools.
- They generally feel that they lack the time space needed to work quietly and thoughtfully with web-based HR tools and so, if there is no need, they will not do it.
- Guaranteeing the security and confidentiality of input data is an important issue for employees in order that they should feel 'safe' when using web-based HR tools.

### Conclusion

E-hrm is a web-based tool to mechanize and maintain HR processes. E-hrm mechanism keeping all the challenges in mind can take an organization a long way towards success. The execution of e-hrm is an opportunity to delegate the data entry to the employee. To create an efficient e-Statement, Standardizing and Centralizing HR administration in an in-house service center, Assessing and ensuring the elasticity of the e-hr technology, e-Recruitment, Training, developing Data-mining tools. E-hrm facilitates the usages of HR marketplace and offers more self-service to the

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employees. E-hrm (Electronic Human Resource Management) is advance business solution which provides a complete on-line support in the management of all processes, activities, data and information required to manage human resources in a modern company. It is an efficient, reliable, easy – to use tool, accessible to a broad group of different users. E-hrm is a way of implementing HR strategies, policies, and practices in organizations through a conscious and directed support of and/or with the full use of web-technology-based channels. It covers all aspects of human resource management like personnel administration, education and training, career development, corporate organization, job descriptions, hiring process, employee's personal pages, and annual interviews with employees. Therefore e-hrm is way of doing hrm.

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