



## The Implementation of E-HRM Practices Presents Various Challenges For Organizations

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### *Abstract*

The paper on e-HRM practices delves into the challenges that both organizations and employees encounter with the introduction of the e-HRM concept. These challenges are analyzed across four categories. As e-HRM is a dynamic concept that has been evolving over the past two decades, it enables organizations to adapt and evolve in the realm of HR. Furthermore, in addition to HR knowledge, individuals must also familiarize themselves with Artificial Intelligence (AI) due to its integration into e-HRM systems. Given that human beings are the most powerful and dynamic resource in the world, they must confront these challenges and incorporate e-HRM into their perspectives to enhance user-friendliness within the corporate environment. This entails not only learning new concepts but also unlearning outdated ones, ultimately contributing to the continuous development of HR practices within organizations.

**Keywords:** *e-HRM, management, human resource, artificial intelligence, software platforms*

### Introduction

The fourth industrial revolution has ushered in a new era of digitization, shrinking the world into a digital realm where access to information and services is at one's fingertips, facilitated by bits, bytes, and algorithmic planning. This digital transformation extends to various facets of life, including currency, which has become increasingly digitized with a focus on accessibility outside traditional governmental frameworks.

Management practices across all domains, such as finance, marketing, production, and manufacturing, have undergone scrutiny and adaptation in light of digitization. Functions traditionally carried out through manual processes, such as planning, organizing, directing, and controlling, are now heavily reliant on data sciences.

Notably, even the most intricate asset, human resources, has been subjected to digitization. Numerous software platforms host a plethora of skilled and semi-skilled human resources, contributing to a dynamic landscape where individuals are constantly eager to learn and adapt to new management techniques.

Furthermore, the advent of web scraping and data collection techniques allows organizations to gain insights not only into their internal workforce but also into external talent pools. To comprehend the intricacies of e-HRM, which involves analyzing this complex resource, it is imperative to grasp the nature and dynamics of e-HRM itself.

**Nature of e-HRM** e-HRM, short for Electronic Human Resource Management, emerged around two decades ago, marking the integration of 'E' into various business activities. Initially, defining e-HRM posed a challenge for management scholars. However, in 2009, the International Journal of Human Resource Management published a special issue dedicated to e-HRM, which eventually led to a consensus on its definition.

According to Bondarouk and Ruël (2009), e-HRM is described 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." This definition, while unbiased, emphasizes value creation, a point that has been a subject of modest research and skepticism over the years.

Nevertheless, it is acknowledged that e-HRM should aim at making HRM processes more efficient, of higher quality, and/or more invested in creating long-term opportunities. However, the 2009 definition leaves room for interpretation, especially regarding the specific forms and shapes of value creation.

Furthermore, the definition still includes Human Resource Information Systems (HRIS) that target only the HR department, which contrasts with earlier distinctions between e-HRM and HRIS. The early essence of the e-movement was about opening up data and information resources to the public, but in the case of e-HRM, it involves opening up data and information via IT-based tools and channels for the subjects of the data and information.

The field of e-HRM focuses on enhancing the understanding, design, implementation, interaction with organizational contexts, and effects of the integration mechanisms and content shared between IT and HRM. It aims to make HRM processes more efficient, of higher quality, and/or more invested in creating long-term opportunities within and across organizations for targeted employees and management beyond the HR department.

Types of e-HRM include Operational, Relational, and Transformational processes. Operational e-HRM encompasses HRM administration and supervision, such as leave and payment rolls. Relational e-HRM involves employee training and their relationship with the organization in task completion. Transformational e-HRM encompasses strategic HR activities like Knowledge Management and Strategic Re-orientation.

Organizations may adopt all three types of e-HRM or focus on specific ones based on their needs. The adoption of e-HRM processes aims to enhance HR department services, resulting in more effective and efficient HR practices. This, in turn, upholds organizational standards, reduces complaints, and fosters systemic improvement within the HR department.

## Literature Review

To understand the e-HRM challenges, it is essential to underscore the various vital papers in this regard. Identifying the e-HRM Research Challenges e-HRM research has grown extensively over the past decade and has helped to provide answers to questions such as whether e-HRM creates value (Bondarouk and Ruël 2013; Parry 2011)<sup>[47]</sup>, which factors influence e-HRM use (...), and how e-HRM can turn HRM into a strategic partner (Marler 2009). In the period 2009–2012, many papers came forward to understand the challenges of this concept. These papers all resulted from an observation of an omission in e-HRM research: respectively, the lack of a consensus definition of e-HRM and the lack of conclusive answers to whether e-HRM reduces costs (Bondarouk and Ruël 2009)<sup>[7]</sup>, the lack of diverse perspectives in e-HRM research (Ruël *et al.* 2011), the lack of international and cross-cultural research in e-HRM (Ruël and Bondarouk 2012), the lack of a chronological overview of e-HRM research (Bondarouk and Furtmueller 2012), and the lack of e-HRM research in multinational corporations (Van Geffen *et al.* 2013).

In 2009, The International Journal of Human Resource Management special issue on e-HRM. Based on a review of the research literature, concluded there with four challenges for e-HRM research (Bondarouk and Ruël 2009) [7]:

1. Clarifying the strategic ambiguity of e-HRM,
2. Conceptualizing relationships between e-HRM and human capital development,
3. The e-HRM web of delivery channels and perceptions of e-HRM, and
4. Measurement of value creation for diverse groups of users (p. 508).

The first challenge, clarifying the strategic ambiguity of e-HRM, refers to the widespread idea that e-HRM enables HR professionals to improve their performance and ‘upgrade’ themselves to the status of business partners. In this role, HR professionals are assumed to act as internal consultants to senior and line managers (Hussain *et al.* 2007). They are also assumed to create value and improve their status within their own organization by using e-HRM (Lawler and Mohrman 2003) and to support strategic decision-making based on digitized and automated personnel databases (Broderick and Boudreau 1992). In contrast to these assumed benefits for HR professionals, empirical evidence reveals a more complicated picture of what really happens. eHRM is mostly used for routine administrative HR tasks (Ball 2001) and not for strategic HR tasks in more than 50 % of the cases 636 H. Ruël and T. Bondarouk. (Hussain *et al.* 2007); it is used more for administrative goals than for analytical or decision-making support goals (Haines and Lafleur 2008). Furthermore, it brings a certain value to organizations in terms of increased efficiency, service delivery, and standardization of goals, with some evidence of transformational impact (Parry 2011; Parry and Tyson 2011) and that appropriate usage of e-HRM and HR value creation are moderately linked (Ruël and Van der Kaap 2012). However, in the latter case facilitating conditions such as support for users, high data quality, HR professionals’ technology competences, and HR policy–practices alignment seem to have a stronger direct linkage with HR value creation than usage as such (Ruël and Van der Kaap 2012). Overall, it seems that turning e-HRM into a strategic competitive advantage is not as easy and straightforward as assumed. The challenge for e-HRM research is to solve this ambiguity regarding the strategic ‘hopes’ and reality of e-HRM in organizations. One way forward regarding this issue is to build more constructively on existing research. e-HRM scholars should adopt a coherent framework or theoretical perspective from which scholars could continue step-by-step to get this issue ‘solved’. To date, this has not been the case, and e-HRM studies seem to connect with existing studies only in the discussion section of articles and papers. New studies should start from existing frameworks, Theoretical perspectives and outcomes, with the aim to reassess or improve them.

The second challenge, conceptualizing relationships between e-HRM and human capital development, refers to the growing importance of economies outside of ‘the West’ and the need for multinational corporations (MNCs) to attract and retain talent. e-HRM can be a facilitator in global talent management, especially with social media making it easy to reach beyond borders. Bondarouk and Ruël (2013)<sup>[47]</sup> found that the most attractive employers do not necessarily use social media such as LinkedIn and Facebook in an optimal way. The results of the quasi experimental research design revealed that the corporate websites are found to be more attractive than the way the same companies present themselves via social media. Another study on global talent management (GTM) and the role of social networks (Ruël *et al.* 2013) showed that graduate students do find social networks important for multinationals’ efforts to recruit talent, but HR managers are skeptical about the use of social networks for GTM and do not use it extensively for this purpose. Ruta (2009) presents a case study that showed that if HR portals are aligned with the HR strategy, this does leverage intellectual capital creation and development. Clearly, e-HRM research is facing a challenge to understand the relationship between e-HRM and human capital development and talent management, especially in view of the new ‘avenues’ of e-HRM such as social media. The latter is some sort of ‘bulk’ concept for all kinds of web-based and mobile device-based communication and interaction channels, and it is beyond doubt that these channels will develop and diversify further in the years ahead. Also on the talent management side, further developments will emerge in view of changing attitudes to the work-life balance, importance of sustainability, the aging populations in the West, changes in the very juvenile and dynamic societies in the Middle East, and the

increasing importance of multinationals from emerging economies. Luckily, e-HRM Research and Practice: Facing the Challenges Ahead 637 there are clear signs that e-HRM researchers have picked up on this challenge (Bondarouk and Olivas-Lujan 2013; Lyons and Marler 2011) [47].

The third challenge, the maturation of the e-HRM web of delivery channels, reflects developments in organizations where 'doing HR' is no longer restricted to the HR department and line managers but has diversified with the emergence of external HR service providers, HR shared service centres, and the involvement of and the responsibilities assigned to non-managerial employees. Information technology has enabled HR services to be provided relatively easily by parties outside the organizational boundaries. For example, HR shared service centres (HR SSCs) can deliver HR services to multiple organizations at the same time, while being located physically far away from the client organization. Within multinational corporations, an HR SSC may serve all its branches and subsidiaries in a geographical region. The core point of the challenge, therefore, is the multiple 'faces' of e-HRM (face-to-face, electronic device, external party electronic HR service delivery, and employees' own involvement and responsibility) and the configuration of these 'faces' in order to optimize HR processes to serve an organization's bottom line. HR SSC research has taken off to a certain extent (Farndale *et al.* 2009; Meijerink *et al.* 2013/in press) and is producing results, but much more is needed to serve HR academia and the HR practice.

**The fourth challenge**, the measurement of value creation for diverse groups of users, refers to the issue of the multiple interpretations and perceptions of the value created by e-HRM. E-HRM aims to serve a diverse group of users, from senior management to non-managerial employees. E-HRM research has so far not been able to come up with a clear set of measures/indicators for value creation per target

Group. Evidence from earlier studies indicates that it is not clear where exactly value is being created. Most of the studies seem to suggest that the actual usage by end users explains whether or not e-HRM creates value. A recent study by Ruël and Van der Kaap (2012) shows that besides e-HRM appropriation and frequency of use, organizational context, or more precisely facilitating conditions such as support from HR professionals, and HR policy-practice consistency explain e-HRM value creation significantly. E-HRM research needs to be able to come up with a defined set of outcome measures per category of users. Only this will help to clear up the vague conversation about how e-HRM is creating value. This will help future research, calm the discussion among eHRM scholars, and increase the value of e-HRM research for the practice (Bondarouk *et al.* 2011) [9].

## Conclusion

The analysis of various papers suggests that addressing the four major challenges in e-HRM requires further in-depth research. The evolution of e-HRM holds promise not only for individual organizations but also on a global scale, as HRM data becomes increasingly utilized by other corporations. However, it is crucial for organizations already utilizing e-HRM to recognize the lack of privacy in the digital world. Processes like web scraping and machine learning facilitate easier access to HRM data, potentially leading to increased employee turnover. In response, outsourcing has emerged as a popular solution.

Despite these challenges, continued research and thorough analysis can help confront them effectively. AI functions are expected to play a significant role in addressing these challenges, paving the way for the success of e-HRM. This success can manifest in various ways, including the creation of value for organizations, cost-effectiveness, and the promotion of fairness and transparency within HR departments by mitigating biases and nepotism.

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