NON-TECHNICAL SIDE OF IMPLEMENTATION OF ELECTRONIC HRM SYSTEM
Discoursive Exploration of Line Managers ‘and Employees’ Perceptions

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Abstract: Electronic Human Resource Management (e-HRM) is coming to a more full-grown stage within organisational life. Much is assumed and expressed about its advantages, however scientific proof of these advantages is scarce. No clarity exists about the answer to the question whether e-HRM contributes to the effectiveness of HRM processes. This paper contributes to the Enterprise Information Systems field in two ways. Firstly, findings-wise, we present results from the qualitative study on the contribution of e-HRM to HRM effectiveness. The data is collected in a Dutch Ministry of the Interior and Kingdom Relations. Results show that e-HRM applications have some impacts on the HRM practices. However, e-HRM is not perceived by the users as contributing to the HRM effectiveness. Interviews with line managers and employees have revealed interesting differences in their needs and perceptions about functionalities of e-HRM applications. Secondly, in this paper we integrate two approaches, namely technology-oriented approach, and organizational processes-oriented approach. An intersection of IT- and HRM-studies reveals new possibilities both for scientific and practical implications.

1 INTRODUCTION AND RESEARCH FOCUS

Technologically optimistic voices assume that, from a technical perspective, the technical possibilities for Human Resource Management (HRM) are endless: in principal all Human Resource (HR) processes can be supported by information technologies (IT). Words are becoming even more provocative when some say that the question whether HR should become digital already is outdated: HR must become digital.

IT-supported HRM are being introduced in organizations since the mid-1990s, also known as electronic Human Resource Management (e-HRM). Its use is widely discussed in the reports of consultancy firms (e.g., Cedar Consulting, 2003). Their observation is that HRM professionals are no longer surprised by the e-HRM phenomenon; they have “grown up” and spot high interests in getting more insights in the ways how to implement e-HRM applications and how e-HRM impacts organisational life. However, while the interests in e-HRM are growing, the appreciation of e-HRM and the expectations from it seem to be decreasing (Cedar Consulting, 2003).

Academics devote more and more attention to examining e-HRM in attempts to explore this contradiction. Within a decade of its history, scientific knowledge about e-HRM had assembled several conclusive notions about the goals of e-HRM (Ruël et al, 2004), its types (Lepak and Snell, 1998), the effectiveness of different e-HRM applications, and the implementation of Human Resource Information Systems (Ball, 2001).

At the same time, it is still unclear what the full advantages of e-HRM are. Does e-HRM contribute to HRM effectiveness? Our paper presents the
results of a qualitative study on the contribution of the use of e-HRM to HRM effectiveness. The study was conducted in the Dutch Ministry of the Interior and Kingdom Relations, called further Ministry.

First we present a theoretical background of technical and non-technical e-HRM studies. A research model will be discussed after that. Then the paper will explain the research methods used. After describing findings, the final section is dedicated to conclusions, discussion and future research directions.

2 “TECHNICAL”, OR E-SIDE OF E-HRM

Beginning in the 1960s, personnel management was an early candidate for office automation in payroll, benefits administration, and employee records holding (Ball, 2001). Typically, this information was stored in flat databases being interrogated via simple key words searching. Growth in strategically focused HRM produced demands for information and communication developments in Human Resource Information Systems (HRIS). Early studies into HRIS demonstrated the “hesitant” use of HRIS by HR practitioners who perceived IT as workhorses of the personnel function (Hall and Torrington, 1998).

Empirical reports since then have indicated that the use of HRIS has become more confident although still mainly for administrative purposes, and that HRIS projects mainly remain technology-driven events, with the focus on the growing sophistication of IT. In this context, studies focus on the qualities of IT necessary for its use by HR departments (Kavanagh et al, 1990; Haines and Petit, 1997; Keebler and Rhodes, 2002; Fisher and Howel, 2004).

For example, in their survey among 152 users of HRIS, Haines and Petit (1997) found a number of individual/task, organisational and system conditions that support successful HRIS. Although the relationship with the system usage was found to be weak, the links with user satisfaction were strong. This was the case for many of the system conditions like training, documentation, presence of on-line applications, ease of use, and perceived usefulness of the system. Another quantitative study in 115 organisations actively using HRIS conducted by Ball (2001) has revealed that the organisation size is a clear determinant of whether an organisation has an HRIS at all and, second, whether it adopts certain modules (e.g. core personnel administration) over others (e.g. training and competence management). The type of HRIS is also shown to be determined by the organisational size: the smaller companies (less than 500 employees) would go for low cost and low risk HRIS, more flexible software or in-house developed (Thaler-Carter, 1998; Ball, 2001).

More recent studies into the implementation of e-HRM are shifting towards addressing the dynamic nature of the HRIS implementation and use such concepts like innovation implementation, learning, change management, Technology Acceptance Model (Keebler and Rhodes, 2002).

Incorporation of the Technology Acceptance Model (Davis et al, 1989) into e-HRM studies has resulted in notions that the use of e-HRM by the targeted employees is highly determined by the level of usefulness of the HR information technology and ease of its use (Ruta, 2005; Voermans and Van Veldhoven, 2007). The design of HRIS is considered as done but not fixed in the traditional development stage. A recent example is the study into the implementation of an HR employee portal in the Italian subsidiary of Hewlett-Packard (Ruta, 2005). The research demonstrated that the usage of HRIS increased when IT user acceptance principles were integrated with change management principles; when the IT user acceptance model focused on “what” predicted intentions to use the HR portal, while change management theory focused on “how” intentions to use the HR portal could be influenced. It was shown that by analysing the context (at both the industry and company levels), change agents managed to adopt the most appropriate actions to support the HR portal implementation.

Our concluding observation at this point is that many of the findings in the implementation of e-HRM (or HRIS) substantiate the expected relationships and dynamics of the implementation process derived from the research into IT. Therefore, due to the latest developments, implementation of e-HRM can be compared to the drifting process (Ciborra, 1996) that divides intended goals and achieved outcomes of the e-HRM implementation.

3 RESEARCH MODEL AND HYPOTHESIS

We departure from the Technology Acceptance Model (TAM) developed by Davis et al (1989) that states that users will accept and use a system if it has a significant perceived usefulness and ease of use.
People tend to use an application to the extent that they believe it will help them perform their job better. Further, people may believe that the systems are too hard to work with and that the performance benefits of usage are outweighed by the efforts required using the application.

Assuming that the use of e-HRM applications is influenced by the aforementioned determinants, we make a step further and propose to look at the link between the e-HRM use and HRM effectiveness. Companies start with e-HRM because of anticipated advantages that are expected to result in a more effective HRM. Our research model is shown below (figure 1).

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![Research model](image)

**Figure 1: Research model.**

### 4 RESEARCH METHODS

The Ministry is one of the thirteen ministries of Dutch central government. Almost 3,000 civil servants formulate policy, prepare legislation and regulations, and are responsible for the coordination, supervision and policy implementation.

In the 1990s there was a growth in the use of information and communication technology at all Dutch ministries. Almost all workspaces got personal computers; e-mail replaced messages on paper and memos; and there was access to the Internet, and Intranets were developed as an important medium for communication with the personnel. The personnel department liked to use this medium to announce news and to provide information about HR-related issues. At first, the intranet replaced paper folders and manuals for HRM, by putting it online. During the mid-1990s it became clear that there were more possibilities, like storage of data, searching for information and handling administrative processes.

In 2001-2002, the Ministry introduced Emplaza as an e-HRM tool to provide employees, line managers and HR professionals with instruments to perform their personnel tasks correctly.

Fourteen in-depth interviews were conducted, 4 with line managers and 9 with employees. Questions were asked about the use of four HR activities supported by e-tools: performance interview, personal development (competence management), 360° feedback and mobility bank. There were two reasons for our choice. From the interview with the Emplaza project leader, it became clear that the Ministry had special interests in promoting these e-HRM applications. Also, these applications were already being actively used by line managers and employees, which allowed us to conduct interviews with both groups of respondents.

Respondents were selected randomly, based on their availability and willingness to participate in the research. Five different departments participated in the study: the Document Management Department, Juridical Affairs, International Collaboration Department, IT Department, and the Knowledge and Information Centre.

### 5 FINDINGS

We conducted a qualitative study into e-HRM at the Dutch Ministry. Findings revealed through the interviews with managers and employees showed that Emplaza was perceived differently by those groups of users. And unfortunately, those differences were not fully taken into account in the content design of Emplaza. Some literature studies anticipated differences in benefits from using e-HRM for two groups of users. Thus, Lengnick-Hall and Moritz (2003) assumed that managers benefit from e-HRM by performing HR tasks without consulting HR professionals like accessing relevant managerial information, conducting overviews and analysing the personnel data, making decisions, communicating with employees, and reducing costs on HR tasks. “With a click of the mouse, the decision is recorded and other departments (such as finance) are notified. Hours of processing are reduced to minutes, and much paperwork is avoided by the use of this technology” (ibid, p. 366).

Employees were also considered as benefiting from using e-HRM by performing checks of their own personnel information, updating records, making decisions, and participating in on-line training (Lengnick-Hall and Moritz, 2003). Did our findings confirm those announced benefits? First of all, we saw an obvious difference in perceptions about Emplaza between managers and employees. In our view, managers thought more at
the level of HR policies while employees stayed at the level of ease of use of the technology.

The first general remark is worth mentioning. To become digital, HR practices have to have clear and standardized policies and rules, aligned with the latest HRM developments in the organization. And this should be achieved before starting the implementation of e-HRM.

To gain better insights, we shall specify our conclusions in two sets: the use of e-HRM and contribution of e-HRM to the HRM effectiveness.

Concerning the use of e-HRM, we should stress that Emplaza did not have any possibilities to support the different perceptions and needs of two groups of users, although managers and employees had different needs in using it. Probably Emplaza was oriented towards the ‘average’ worker without special arrangements for different categories, those who were just newcomers to the Ministry, or those at the end of their careers.

HRM policies were not clear to employees, and seemingly did not encourage them. This was perceived as one of the basic reasons for regarding Emplaza as less useful than expected.

Bothe groups of users noticed that without help it was difficult to understand Emplaza. They expected help from the Emplaza team, or written manuals, or short training courses. At the same time the project team perceive Emplaza as easy to use, that probably stopped them from providing training for the users.

The most advantageous features of Emplaza were its speed of working and the manner of completing forms. Put in other words, the operational level of support provided by Emplaza was fully appreciated while the relational level was not. Sequence and content of categories in the e-HRM applications were perceived as illogical. The most difficult application became leave administration.

Main finding concerning the effectiveness of e-tools for HRM was that while talking about HRM effectiveness, non of the interviewees linked it with the use of Emplaza. In other words, we did not find evidence revealing the contribution of the use of Emplaza to the HRM effectiveness.

Line managers emphasised using Emplaza for managing their employees (making overviews, reports, developing personnel plans). None of the managers expressed needing Emplaza for their own developments. Employees saw the on-line tools as only administrative instruments.

While managers found on-line appraisal talks very helpful, employees in contrast did not see their value for their own career development. They considered the mobility bank a meaningful tool for career development, while managers did not see its usefulness.

Both managers and employees stressed the importance of self-promotion and motivation for career development, with or without using Emplaza.

Strategic effectiveness of HRM was not attributed to the use of Emplaza. Technical effectiveness was only partly attributed to the use of Emplaza. Both managers and employees acknowledged that the personnel documents became easier to retrieve, giving good historical overviews. However, there were also opinions that to fill in the information in Emplaza took more time than before, that maybe overall it had not made a big difference in the administration of documents.

All in all, our findings suggest that there were no straightforward contribution of the use of e-HRM tools to the HRM effectiveness.

Although we have to be careful because of the limitations of the data set used, for practitioners there is a clear guideline: they should primarily focus on the quality of the e-HRM application, i.e. the content and design, instead of on the ease of use and job relevance, to make e-HRM contribute to HR effectiveness. This indicates that HRM activities are not perceived as the employees’ primary tasks.

e-HRM is a young field of academic interest. In this paper we contributed to enriching the field through building an intersection between technical and non-technical sites of e-HRM. At least one notion for the future of e-HRM research can be gleaned from this study. We should bring the message about different levels of support provided by e-HRM tools for HRM practices. Our study has shown that within the observed e-HRM tools, we could distinguish two levels, called technical and strategic.

REFERENCES


