Preface

AIM OF THIS BOOK

Information technology (IT) continues to impact HRM. For a decade now, digital possibilities have been challenging the traditional ways of delivering HRM services within business. The huge investments in IT applications for HRM lead to new rounds of intra-organisational competition, challenging HRM and making it more complex to achieve organisational performance improvements.

The e-HRM field is fed (and complicated) by two academic backgrounds: studies oriented towards IT implementation and 'pure' HRM studies. The former usually investigate the usage of IT for HR purposes and mainly focus on the growing sophistication of the technology and the qualities necessary for its adoption. Such studies usually cover topics like IT acceptance, resistance, effectiveness, equality, information security and privacy in the context of e-HRM technology usage. However, they remain silent about changes in HR practices resulting from e-HRM. HR-based e-HRM studies, on the other hand, generally only examine single e-HR practices, focusing on the changes in HR processes and functions following automation. These studies tend to avoid issues related to implementation and the ongoing use of IT.

At the same time, we do not even know where e-HRM should be placed. Is it a new and substantial research area, or the 'crossroads' of two academic domains? Theoretical complexity has practical consequences for e-HRM projects and their management. It seems increasingly unclear exactly what the advantages of e-HRM are, and to what extent e-HRM helps to attain organisational HRM goals. The one-sided, scholarly e-HRM works fail to address this lack of clarity fully and, if anything, deepen the division between the two academic domains.

In order to reduce the aforementioned confusion, this volume has set a three-fold goal:

- To achieve a state-of-the-art overview of theoretical and empirical contributions on the impact of the integration of HRM and IT on the transformation of HRM.
- To address the integration of HR- and IT-based e-HRM research.
- To identify future cutting-edge research directions.

This book is a collection of interesting chapters on the intersection between HRM and information technology, predominantly referred to as electronic HRM or e-HRM since the mid-1990s. This is not the first book on e-HRM that collates chapters by a range of different scholars from around the world, but it is the first book that may count as a milestone because it aims to present the state of e-HRM research at this point in time! Research on e-HRM started in the mid-1990s and has resulted in books, journal articles, special issues and the like. Altogether, the number of scholarly journal articles on e-HRM is currently estimated at around 250. This is an impressive amount, based on the hard and persistent work of scholars and researchers from around the world. An analysis of the articles would result in a diverse picture in terms of the nature and focus of the works, from conceptual articles to mature empirical work.

As editors, we have been involved in e-HRM research from the beginning of this century. We have done research ourselves and published worked on e-HRM. In addition, from the very start, we aimed at bringing researchers on e-HRM together in order to foster the scholarly development of research on e-HRM. This has resulted in four international, scholarly, research-oriented events in four years' time. Researchers from the UK, USA, Mexico, Germany, France, the Netherlands, Italy, Spain, Finland, Portugal,and the Middle East were brought together to share insights, discuss each others' work, set agendas for further research, and establish collaboration.

This book is one of the results of these events, but it is a very special result. It contains 25 chapters on e-HRM, showing the very diverse nature of the e-HRM research area in terms of the topics, research approaches, theoretical perspectives, levels, and unit of analysis. This diversity is the strength and the uniqueness of this book, as it is a truly useful overview of what is going on in the field of e-HRM research. Once you have gone through all the chapters, you will hopefully have many new questions from whence to continue your own e-HRM journey.

CONTENT OF THIS BOOK

In this introduction we, the editors, would like to guide you through the chapters. First of all, it is interesting to identify a number of central themes that can be found throughout the book, and which are the key topics in e-HRM research so far: *user involvement, user participation, and user adoption of e-HRM applications; design and implementation of e-HRM ; modeling; design of architectures of e-HRM systems and HR portals; e-HRM in multinational companies and global e-HRM; the role of culture; qualitative research methods as the dominant approach for empirical research; grounded theory for e-HRM-related theory development; strategic e-HRM and the transformation of the HR function; redefining the role of the HR function related to e-HRM implementation; e-recruitment; structuration theory as an approach to study e-HRM empirically;* and *human capital management and e-HRM.*

In combination with our own experience in the e-HRM research field, we derived seven e-HRM themes from the above-mentioned topics and ordered the 25 chapters in this book along them.

Section I, *e-HRM Transformation and Strategic HRM.* When it comes to expectations, it is assumed that e-HRM will spur a transformation of the HRM function in organizations, changing HRM into a truly strategic issue and the HRM function into a strategic business partner. **Chapter I,** written by Foster, immediately confronts us with this complex issue. Foster, an academician as well as an experienced consultant, observes that many organizations fail to take advantage of the transformational potential of e-HRM. He explains this idea with the concepts of sense-making and technological frames. These concepts are taken from the work of Orlikowski and Gash (1994), two scholars who have contributed heavily to the field of information technology research, and whose main work is inspired by the work of Anthony Giddens (Structuration Theory), a British sociologist. As Foster describes, the technological frames concept provides a useful analytical perspective for explaining and anticipating actions and meaning. Incongruence between frames held by different stakeholders is assumed to be a barrier to transformational change.

Interestingly, Foster applies a grounded theory approach in order to reveal the different views HR managers and line managers hold towards e-HRM technology. More specifically, there is a significant frame incongruence regarding the relevance of e-HRM for achieving transformational outcomes.

Chapter II, by Ruta, focuses on the role of e-HRM portals for intellectual capital development. Ruta starts with the observation that intellectual capital is of strategic importance to companies and that companies increasingly create HRM strategies to stimulate intellectual capital development. e-HRM

portals function as intermediating tools between employees and the HR function, and offer opportunities to customize HRM practices to the individual employee's needs and preferences. The latter aspect in particular allows HR managers to align and leverage individual performances to the company strategy. This underlines the strategic and transformational role of the HR portal.

Imperatori and De Marco's contribution, **Chapter III**, presents a study on the impact of the introduction of e-work projects on labor transformation processes. The authors observe that values such as loyalty to a company and a job for life are giving way to concepts like employability, professionalization, and entrepreneurship. E-work solutions can facilitate or inhibit this process and the psychological contract between an employee and the organization. The case studies presented provide a number of critical issues and guidelines for the design and implementation of e-work solutions.

Section II in this book is *User Involvement and User Participation*. Information systems design and implementation aim at meeting the needs of an organization. The end-users are key players in determining whether or not these needs are met as they are the ones using the systems in their day-to-day work. The extent to which end-users should be involved in the design and implementation process and how they should be involved are ongoing major topics, also in the case of e-HRM systems.

Chapter IV, by Koopman and Batenburg, starts from the assumption that user involvement and participation are important factors for information systems success. They present five case studies of governmental organizations that deployed employee self-service applications and found that the deployment success of such systems was positively related to the extent of early user involvement and participation.

Chapter V, by Guiderdoni-Jourdain and Oiry, analyzes HR intranet use by line managers in a large aeronautical firm. The results show that the managers hardly used the system since it conflicted with the dominant structures of their main activities, in which time constraints, a preference for face-to-face communication, and charisma as the basis for authority were considered important. A second version of the HR intranet was more successful when it met the expectations of the line managers. Especially the fact that the new version was coherent with the global corporate strategy increased the support of line managers for the HR intranet.

Chapter VI, written by Al-Ibraheem and Ruël, assumes that user involvement and participation in e-HRM systems developed in-house are higher than in off-the-shelf e-HRM projects. Therefore, they must also be more successful. Through a comparative case-study approach, an in-house e-HRM project and an off-the-shelf e-HRM project were compared. The results show that factors such as continuous user involvement, effective communication, and strong change management are considered more in the in-house e-HRM project, while business process reengineering, planning and vision, and project management are stressed more in the off-the-shelf e-HRM project. The in-house e-HRM project achieved increased efficiency, customer-oriented service excellence, and improved self-services.

Kuiper and Van Dijk, the authors of **Chapter VII**, describe how municipal electronic forms can be improved by adaptation. As municipalities offer more and more e-forms for citizens to place a request, adaptation of e-forms seems to be a step forward, they feel, to reduce the burden for citizens. Through an online questionnaire they surveyed the needs of citizens, municipal employees and local government organizations regarding the implementation of adaptation in municipal e-forms. All three respondent groups preferred the use of adaptation in e-forms and felt that municipal products and services could be improved by the use of adaptation.

Section III covered in this book is *e-HRM in Multinational Companies.* As globalization is maturing, multinational companies (MNC) from the West go East and vice versa, issues such as requirements analysis, development, implementation and user adoption of e-HRM systems in a globalized world are attracting increasing attention.

Chapter VIII, by Williams, Tansley, and Foster, presents a study of project teams working in a multi-national organization implementing and maintaining the HR 'pillar' of a SAP global enterprise information system. The purpose of their study was to identify the human resource information system (HRIS) skills and knowledge in the key roles for the global project and to provide suggestions for the development of project team members. The authors provide a framework which can be used as a clarification tool by those responsible for managing people working in hybrid roles on global HRIS projects.

Smale and Heikkilä, the authors of **Chapter IX**, focus on the design and implementation of a globally integrated e-HRM system within a multinational corporation. This requires the parties involved to reach some form of agreement on which HR processes to standardize and which to adapt locally. By means of a longitudinal, in-depth case study approach, data was collected on micro-political behavior in an e-HRM system project in a Finnish subsidiary of a large, European-owned MNC over a period of nearly two years. The results showed that the key areas of conflict were system design, the standardized use of English, and grey areas of the HR policy. The three key parties involved used a range of negotiation resources such as business case logic, technical know-how, internal benchmarking, local constraints, and ignorance.

Chapter X, by Ruël, aims at demonstrating how adaptive structuration theory can be of use in studying human resource information systems. By applying key concepts of the theory to a global e-HRM case study, the author shows that those concepts help to increase our understanding of the social nature of e-HRM systems.

Section IV, *E-Recruitmnet and National Culture*, is covered by three chapters. **Chapter XI**, by Puck, Holtbrügge, and Mohr, describes a study on the influence of the cultural context on the comprehensiveness with which companies in different countries make use of applicant information and selection strategies in corporate website recruiting. The results suggest that the use of the internet for management purposes is influenced by cultural factors.

Parry and Tyson, the authors of **Chapter XII**, conducted a study on the potential of e-recruitment to transform the recruitment process and the role of the resourcing team. They observed that HR practitioners are often expected to be efficient administrators of the employment relationship and to act as a strategic partner. Based on the assumption that e-HRM may be a way of achieving these dual aims as technology can both improve the efficiency of HR processes and help the HR function to become more strategic, three case studies were conducted. They showed that the use of e-recruitment can potentially have an impact on both the strategic role and the efficiency of the resourcing team.

Chapter XIII, written by Rao, addresses the role of the national culture on e-recruitment practices in India and Mexico. According to the author, the role of culture on information technology is just emerging, and internet recruiting will definitely play a prominent role as the world becomes more digitized. Further, the author suggests that practitioners and researchers would benefit from making a 'what if' chart or spreadsheet based on cultural dimension scores and adaptability to internet usage.

Section V in this book is *Modeling and Designing e-HRM Architectures.* e-HRM as a research field is an integration between IT-research and HRM-research. Both fields should mutually influence each other in order to find answers to the core research questions in the e-HRM research field. The IT-research side, in particular, can bring in a more engineering-based approach to counter-balance the social scientific-based HRM side. In this book we have four chapters that aim at providing design guidelines or architectures for e-HRM systems.

Chapter XIV, by Zacarias, Magalhães, and Tribolet, presents a bottom-up modeling framework. The framework can be used for the analysis and design of HR behaviors, starting from the assumption that the process of emergence lies at the root of the usage of technologies. The authors illustrate the way the framework should be applied and how it works out through a case study.

Furtmueller, Wilderom, and van Dijk, **Chapter XV**, propose applying the lead user method for e-service settings, a method stemming from the new product innovation literature. In their study registered applicants at an e-recruiting portal were compared with so-called lead users regarding new service idea proposals. The results showed that most users suggested social-network features they were already familiar with from other platforms, while lead users came up with more novel service solutions for different user segments.

Chapter XVI, by Laumer and Eckhardt, starts with an architecture for a next-generation holistic e-recruiting system. Based on this architecture, the authors propose to extend it by adding employer branding as a new component. They show how employer branding should be integrated in the existing architecture to develop and implement an effective employer branding strategy. As a result, Laumer and Eckhardt conclude that the newly proposed architecture is a first step towards a holistic e-HRM management system.

Guiderdoni-Jourdain, the author of **Chapter XVII**, focuses on the regulation between online HR designers and HR experts. She extends the concept of e-HRM by a systematic approach and uses it to study the interaction between the different actors involved in an e-HRM project.

Section VI in this book, covered by three chapters, is *e-HRM Use and Performance Improvement*. Fed by the numerous empirical observations of the problematic acceptance of e-HRM tools and how e-HRM tools can contribute to performance improvement, this issue demands continuous academic attention in order to increase our understanding of e-HRM user acceptance and performance improvement.

Chapter XVIII, by Bondarouk, ter Horst, and Engbers, presents a study of the acceptance of HRIS in small and medium-sized organizations (SMEs). The authors looked at this topic by investigating perceptions about the use of these systems. Four case studies were conducted, and results showed that e-HRM tools in SMEs are perceived as useful, but not easy to use. The companies involved in the study considered the use of HRIS as helping them to make HRM more effective.

Chapter XIX, written by Tahssain and Zgheib, focuses on the questions of how to improve the efficiency of HRM and enhance its status in organizations. The authors show that information technology can be of help in transforming the role of HRM departments in organizations. One of the challenges for managers nowadays is to determine the success factors for implementing HRIS.

Welicki, Piqueres Juan, Llorente Martin, and de Vega Hernandez, the authors of **Chapter XX**, present their experience in building a web-enabled workflow system for managing employee life-cycle processes. They describe how the system was able to successfully manage a large number of employee requests, brought reliability, traceability and auditability to employee life-cycle management processes. The web-enabled workflow system became a core system for supporting HRM operations.

Section VII, the final section covered in this book is what we call *Extended e-HRM Topics*. The previously described chapters cover topics that fit in a relatively narrow definition of e-HRM, namely the use of internet technology-based applications for human resource management strategy and practices implementation in organizations. However, within this definition, topics such as e-learning, trade unions and IT, virtual teams, information overload, and shared service centers do not fit very well. These are topics, though, that definitely interest researchers and practitioners within the e-HRM field. Therefore, we have given them a place in our book.

Chapter XXI describes a study on the impact of information technology on individual learning processes. The authors of this chapter, Guechtouli and Guechtouli, started with the question of whether those technologies can possibly help increase an individual's competencies in order to improve learning. By using agent-based simulation, their results showed that communication through e-mail exchange appears to make individuals learn more slowly than on a web forum.

Michaux, the author of **Chapter XXII**, presents a study aimed at identifying the main trends and international convergences when analyzing the impact of IT on unions and trade unionism, and lists the challenges, opportunities, and threats that IT poses to trade unions in industrialized countries. The author concludes that there is a tension between the opportunities and threats, which can translate into four main types of challenges posed by IT for trade unions.

Chapter XXIII, written by Parot, deals with the question of coordination in virtual teams, more specifically how the coordination in such teams takes place. The author starts from the assumption that it is either trust or control that is needed for the coordination in virtual teams. By means of a case study conducted in a high tech firm, Parot presents findings showing that coordination in virtual teams is more formalized and more control-oriented, and that the role of the project manager is essential in such teams.

Chapter XXIV is about information overload in the new world of work, written by ter Heerdt and Bondarouk. A case study conducted at Microsoft suggested that information overload is not perceived as a problem, but as a challenge and a possible future problem. Interestingly, some of the interviewees in the case study suggested that the next generation of workers, the NetGen, will be better able to handle information overload, as they may have incorporated the search strategies for finding information in a large amount of data. The results of this study also seem to contradict the popular belief that the phenomena of information overload is an increasing problem.

Finally, **Chapter XXV**, written by van Balen and Bondarouk, analyses the popular literature on HRM shared service centers. By using a grounded theory approach, the authors analyzed 34 articles in the international HRM literature for practitioners. The analysis shows that according to the popular HRM literature, brand development or service improvement motivations for deploying HR shared service centers lead to more positive impacts and a higher success rate. Solely economic motivations are not enough to achieve added value. Further, the anticipated risks are not a good predictor for eventual impacts, and finally, HR shared service centers have more positive impacts as they develop over time.

THE TARGET AUDIENCE

This book presents insights gained by leading professionals from research, consultancy, and the e-HRM projects practice. Therefore, we believe that the twenty-five chapters of this book provide useful information for academic researchers, consultancy firms, university graduates and e-HRM / HRIS practitioners.

We as editors wish you a very interesting journey through the state-of-the-art of e-HRM research.

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